SIRIUS

Operating Instructions

QUASIMIDI

Synthesizers made in Germany

Contents

Contents

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSON$

IMPORTANT SAFETY INSTRUCTIONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

1. Read all the intructions before using the product.
2. Do not use this product near water - for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
3. This product should be used only with a cart or stand that is recommended by the manufacturer .
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. Avoid using the product where it may be affected by dust.
8. The product should be connected to a power-supply of the type described in the operating instructions or as marked on the product.

9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
10. Do not tread on the power -supply cord.
11. Do not pull the cord but hold the plug when unplugging.
12. When setting up with any other instruments, the procedure should be followed in accordance with instruction manual.
13. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
14. The product should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the product; or
    C. The product has been exposed to rain; or
    D. The product does not appear to operate normally or exhibits a marked change in performance; or
    E. The product has been dropped, or the enclosure dammaged.
15. Do not attempt to service the product beyond that described in the user -maintanance instructions. All other servicing should be referred to qualified personnel.

SAVE THESE INSTRUCTIONS

In addition to the "IMPORTANT SAFETY INSTRUCTIONS" on the previous page please note the following:

Connecting to the Mains:

- Do not connect the unit to a socket which is already feeding other units that can cause interference (for instance electric motors, light controls, fridges etc.)

- The heat generated by the mains adapter is completely normal.

- Whenever you intend to connect the Sirius to other units, first turn off all units. This will prevent possible malfunctions and damage to speakers and other equipment.

Installation:

- Using the unit close to heavy power sources (or other units containing larger mains transformers) can cause "humming" or other electrical interference.

- The unit might cause disturbances to television and radio. Do not set up your unit near any of these receivers.

- Do not expose the unit to extreme temperatures (like for instance direct sun light in a closed vehicle or extreme frost in winter). The unit could be damaged or the varnish on the casing might disintegrate.

Maintenance:

- To clean the unit wipe it with a soft, dry or damp cloth. To remove persistent stains you can use a damp cloth and a neutral cleaning agent. Wipe the unit dry afterwards.

- Never use Petrol, Thinner, Alcohol or similar cleaning agents to clean your unit. These can dissolve the markings and varnish and might deface the casing.

Repairs and Data:

- Please remember that you might lose the memory of your unit when you send it in for repair. Important information should therefore be stored on a different MIDI-unit (for instance Sequencer). Although every care is taken when repairing your unit it can happen, especially when work to the storage/memory or affiliated groups is necessary, that information is lost. Please note that it is not possible for us to restore lost data.

Important Notes

Storage Protection:
- The memory of the unit is secured with a Lithium battery (CR 2025). The storage contents will remain even when the unit is switched off. Depending on how it is treated, the battery will last for several years. Should you have to exchange it, please contact our Service-Department. Please make sure that the old batteries are disposed of properly. Batteries of all kinds do not belong in the domestic trash, as they contain dangerous heavy metals.

Additional precautions:

- Please consider that the storage contents can also be irrevocably lost through mal-function or improper use. Important data should therefore be stored regularly on another MIDI-unit (for instance a sequencer)

- For these cases we point out that it is not possible to restore lost data.

- Treat the keys and dials as well as the connection sockets with care - improper use can lead to mal-functions.

- Never press or hit the buttons or the display hard.

- Whenever you are connecting or unconnecting cables, always pull the plug itself, do not pull the cable. This will avoid short-circuits and cable damage.

- Should you wish to transport the unit, it is best to use the original carton (including the polystyrene inlays)

The CE-Sign on our products declares that our electrical devices are in conformity with the EN 55014 and EN 50082-1 (in accordance with 89/336 EMC- and EEC directive). The manufacturer also declares the conformity of above mentioned product with the actual required safety standards.

Introduction:

Dear Sirius-owner,

With the Sirius you have acquired a very user-friendly synthesizer. In the past, you had to spend a lot of money on many different types of equipment before you could create and record an entire musical composition. This is a fact which we paid a lot of attention to when designing the Sirius. To this end, we have combined several exciting machines into one all-purpose unit.
In the Sirius you will find everything you need to write and record your own music: a sequencer, a drum computer, 3 polyphonic synthesizers,
an arpeggiator, a vocoder, a beat-recognition system and even two effects units. The Sirius is therefore a complete and compact studio for very little expense.
It does not matter whether you are a newcomer or have advanced knowledge of such musical instruments. The unit has been designed with user-friendliness as a priority, enabling everyone to reach their desired musical goals fast! The flexibility of the Sirius guarantees endless pleasure and surprises. Be it the versatile connection possibilities of the integrated vocoder or the brilliant real time possibilities of the filter and arpeggiator stages, the Sirius will definitely inspire the creative and experimental sound designing side in everyone who uses it. The Sirius is programmed for endless fun!

You will soon realise that the Sirius, with its many useful functions and simplicity of operation, is the perfect partner in your day to day musical life. Naturally we have devoted a lot of thought to live performance as well, and have equipped the Sirius with numerous possibilities for real time operation and management. Your audience will be thrilled.

In order to get to know your Sirius as fast as possible you should work through this manual step by step and try out the individual functions directly on the machine (learning by doing). Not only will this save you a dry and dusty week of reading, it will also guarantee that you miss none of the exciting functions available to you.

But enough talk!
Everyone here in the Quasimidi Team wishes you lots of fun working with your new synthesizer.

This symbol points out the numerous tips you will find in this manual.

Text marked with this symbol should be paid particular attention to.

Caution:
The use of the Sirius preset motifs and patterns for your own music production is granted only to Quasimidi Sirius owners.

The commercial distribution of Sirius preset-sound and preset-pattern samples on Sampling-CD, Internet, Disc or any other media without permission of the Quasimidi-Musikelektronik GmbH is strictly prohibited.

We would like to thank Stefan Skaliks for the friendly support on the Beta-Test.

Unpacking and connecting

What is in the box?

The box in which the Sirius is delivered contains the following parts:

- the Sirius
- the external mains adapter
- this manual
- a guarantee registration form
- 1 goose neck microphone
- 2 jack-jack audio cables
- 2 jack-phono(RCA) adapters

external mains adapter

Unpacking:

Caution: Do not use a knife or any other sharp metal object when removing the Sirius from its packing.

The Sirius is secured in the packing with polystyrene moulded inlays. Take the Sirius together with these polystyrene moulded inlays out of the box and put it on an even surface. Caution - the mains adapter is packed in a small cardboard box located in a hollowed-out section in the side of one of the polystyrene inlays. After you have removed the mains adapter you can then carefully take off the polystyrene inlays and take the Sirius out of the plastic bag. Now you can install the Sirius in its future place of work.

Important: The box in which the Sirius is delivered is ideal for transportation. Should you wish to transport the Sirius, you won´t have any packing problems. In the unlikely event of a repair, the Sirius should be sent to Quasimidi in its original packaging. Should Quasimidi receive a unit for repair without the original packaging, QUASIMIDI will return the repaired unit in replacement packaging at the owner's expense, as only this packaging can guarantee safe transport. Transport damages due to improper packaging will not be compensated by QUASIMIDI.

Connecting the mains adapter:

Remove the mains adapter from the box. Plug the big plug into the mains socket. Plug the small plug at the other end of the cable into the power supply socket, protruding slightly from the rear panel of the Sirius and located immediately next to the on/off switch. It is marked as follows:

10,5V DC, 1,5 A

Caution: Please use the original mains adapter provided only for running your Sirius. Only this adapter guarantees both perfect functioning and damage protection of the Sirius.

What else do you need to get going?

In order to hear the Sirius you will need an amplifier. Several appliances can be used: Stereo Systems with auxiliary inputs, Mixers connected to an Amplification system, Instrument Amplifiers or simply Headphones. The respective cables are included with the Sirius. The enclosed jack-jack cables can be used with the usual mixers or instrument amplifiers. The jack-phono(RCA) adapters allow a problem-free connection to a stereo system (provided it has auxiliary inputs such as CD, AUX, DAT etc.) or to any other DJ-Mixer.

The Rear Panel

| CARRIER-IN | ANALYSE-IN | GAIN | AUDIO-LEFT | AUDIO-RIGHT | FOOTSWITCH | MIDI-THRU | MIDI-OUT | MIDI-IN |

Carrier-input for the Vocoder | Analyse-input for the Vocoder with a Gain-knob | to amp or mixer | Footswitch connection | copy of the MIDI-IN | MIDI-keyboard or computer

alternative inputs for the Beat-Recognition-System

10,5V DC / 1,5 A — POWER ON / OFF

power supply

Connecting the goose neck microphone:
First plug the enclosed goose neck microphone into the XLR input which is located at the top right of the front panel of the Sirius.

How do I connect the Sirius?
On the back of the Sirius you will find two 6,3mm (1/4") jack sockets, the stereo output pair. These sockets are marked audio-left and audio-right. The amplifier, stereo system or mixing desk will be connected to these outputs. You will need a mixing desk if you wish to run other instruments apart from the Sirius through the amplifier or stereo system. The 5-pin din sockets which you will also find on the rear panel are for the transmission of MIDI information and do not output any audio signal (sound). A more detailed explanation of the MIDI-connections can be found in the chapter called: "The Sirius and MIDI".

The following is a detailed description of how to connect the Sirius to the three types of audio equipment we have already mentioned. A detailed connection plan can also be found on the page after next (Page 11):

1.) Connecting the Sirius to a stereo system:
First turn off your stereo system and the Sirius. You will need the two enclosed jack-jack cables and the two jack-phono(RCA) adapters to make this connection. Not all of the auxiliary inputs at the rear of your stereo amplifier are suitable for connecting the Sirius. Choose one of the following possibilities:

1.) AUX or Auxiliary
2.) LINE
3.) CD
4.) DAT
5.) TAPE IN or TAPE PLAY

Totally unsuitable for the connection of the Sirius is the PHONO input of your stereo amplifier, as this input has a pre-amp and is constructed for your record player. This input would distort the sound of the Sirius.
Put the two jack cables in the AUDIO-LEFT/RIGHT socket of the Sirius. Connect the jack-phono(RCA) adapters to the other end of the cables. Now you can connect the cables to the stereo amplifier.
Turn the volume dial of the stereo and the MASTER-VOLUME dial of your Sirius to minimum. Now first switch on the Sirius and then the stereo system. Turn the input selector on your stereo amplifier to the input you chose when connecting the Sirius. Now turn the MASTER VOLUME dial of the Sirius to Maximum. Press the START-Key of the Sirius (located in the SEQUENCER section on the front panel) to start a sequence. Carefully turn up the volume of your stereo system to the desired level. In order to avoid damage to your speakers due to the deep bass frequencies the Sirius is able to create you might have to lower the bass level on your stereo amplifier.

Unpacking and connecting

2.) Connecting the Sirius to a mixing desk:

If you are connecting the Sirius to a mixing desk you must use the LINE INPUTS. The microphone inputs of most mixing desks are unsuitable for connection to the Sirius - the high output level will cause distortion. Most microphone inputs are also equipped with XLR sockets which are only very rarely used for connecting instruments. (By the way, the microphone input on the front panel of the Sirius is a XLR socket.)

Before you attempt to make any audio connections turn all your equipment off. Then connect the two audio outputs of the Sirius (AUDIO-LEFT/RIGHT, located on the rear panel) to two of the inputs on the mixing desk. Turn the MASTER-VOLUME control of the Sirius to maximum and the GAIN-CONTROL (sometimes referred to as "INPUT SENSITIVITY") of the mixing desk to MINIMUM. The TONE CONTROL (or "EQUALISATION") of the mixing desk should be in the same position on both channels. You are best-off choosing a neutral setting for the tone control / equalisation (if possible, the tone control or equalisation should be switched out) so that the sound of the Sirius will not be changed.
The pan control of the two channels should be set to the exact opposite of each other:
left channel -> hard left, right channel -> hard right) in order to hear true stereo. Should your mixing desk have stereo inputs, these settings are already made.
Slide the stereo mix faders of the mixing desk back to MINIMUM.

Now turn on first the Sirius and then the mixing desk. Press both the demo Keys of the Sirius at the same time (located below the large round VALUE/TEMPO-dial on the right of the front panel) and chose a demo song using one of the Number-Keys marked 1-16, which you will find directly above the Keyboard.

Set the Gain control of the mixing desk so that the level showing on the channels' individual level meters is below the peak level (if the meters are "in the red", the level is too high and distortion will occur!). If your mixing desk does not have individual level meters for each channel, turn up the stereo mix faders (master level faders) of the desk so you are able to hear any distortion which may be occurring and turn down the GAIN control accordingly. Instead of a gain control some desks only give a choice between LINE and MIC sensitivity. In this case turn the input selector to LINE. Should even the smallest gain setting of the mixing desk result in distortion, turn down both the MASTER-VOLUME and OVERBLAST controls on the Sirius respectively. Generally you should always choose the highest possible setting of your sound source (in this case the Sirius) and turn down the mixing desk accordingly to achieve the optimum sound to noise ratio. Once the mixing desk been calibrated to the Sirius you can set the stereo mix faders of your mixing desk to your preferred setting.

3.) Connecting the Sirius to an amplifier:

Should you wish to connect your Sirius to an instrument or Keyboard amplifier you should firstly turn all the equipment off. Then connect the Sirius' audio outputs (AUDIO-LEFT/RIGHT, located on the rear panel) to the audio inputs of your amplifier.
Turn the volume control and, if there is one, gain control on your amplifier to minium and the MAIN-VOLUME control on the Sirius to maximum. Switch on the Sirius first and then the amplifier.
On the Sirius press both demo Keys simultaneously (they are located on the right of the front panel directly below the large round VALUE/TEMPO- dial) and choose a demo song from the Number-Keys 1-16, which you will find directly above the Keyboard. Carefully adjust the gain control of the amplifier to just below the level where distortion occurs. Then adjust the overall volume of the amplifier to the desired setting.

4.) Operating the Sirius with headphones:

The Sirius has a headphone output on the far right of the front panel.

Caution: Should you use headphones please note that extensive blasting of your eardrums can result in permanent damage to your hearing.
In this case it is necessary to see a doctor.

The headphones should have an impedance of at least 32 ohm.

Now you're almost there!. You may have noticed that on the rear panel of your Sirius there are additional sockets. There is another 6,3mm (1/4") jack socket for a foot pedal and three MIDI sockets: IN, OUT and THRU.

The Sirius is able to communicate with any other MIDI device via these MIDI sockets. You can for example connect a MIDI Keyboard, a sound expander, a MIDI sequencer or a computer with Midi sequencing software etc.

MIDI allows you to control your Sirius from other midi devices or to control other midi devices from your Sirius. You can also dump all the information in the Sirius' memory onto a computer where it can then be saved onto a disk or hard drive in case the Sirius' internal memory should prove too small for you.

An important point which is unfortunately very often misunderstood:

MIDI transmits control information only from one MIDI device to another. It does not transmit any audio signal (sound). Should you have several devices connected to each other via MIDI you will still have to connect the audio outputs of each device to an amplifier or mixing desk separately. You will find more about connecting MIDI devices in the chapter called: "The Sirius and MIDI".

In addition there are two more 6,3 mm (1/4") jack sockets marked CARRIER-IN and ANALYSE-IN on the rear panel of your Sirius. These sockets can be used to run the Vocoder of the Sirius with an external sound source (for example drum computer, synthesizer, sampler etc.) Either of the two sockets can also be used to carry the trigger signal for the beat-recognition system. A detailed description can be found in the relevant chapter of this manual.

This diagram shows you how to connect the audio section of the rear panel of your Sirius. The two audio outputs (AUDIO-LEFT/RIGHT) are connected to the inputs of two adjacent channels on your mixing desk . In order to keep the stereo quality of the Sirius the pan control of these channels should be set to opposite positions i. e. channel 1 hard left, channel 2 hard right. Should your mixing desk consist of stereo channels, no such setting of the panorama will be necessary.
In order to work with the beat-recognition system the signal from the CD player has to get to the CARRIER-input or the ANALYSE-input of the Sirius. The simplest solution is to connect the headphone output of the CD player to the CARRIER-IN or ANALYSE-IN. This enables the Sirius to receive the trigger signal even when the CD-player has been muted on the mixing desk. Better mixing desks offer the possibility to send the trigger signals of the CD player via the AUX-sends or EFFECT-sends. This connection is also recommended if the CD-player does not have any headphone output or if you want to use a record player (with pre-amplifier) as the trigger source.

Getting started

Initialise and Calibrate:

Now that you have connected your Sirius properly you are probably itching to hear it. Before you switch it on for the first time you should however initialise it and calibrate the performance aids for safety reasons. The memory of the Sirius will be deleted and all parameters will revert to their original settings.

(In future you will only have two reasons to initialise your Sirius: 1. When the Sirius Service Department tells you to do so or, 2. If you want to reset the Sirius to its original factory settings.)

When you turn on the Sirius for the first time you should hold down the WRITE-Key and turn on the POWER ON/OFF switch on the rear panel.
The following message will appear on the display:

```
Initialize All?
 [ok]  [cancel]
```

Now press the left-hand Key under the display (F1-Key) to confirm, and your Sirius will be initialised. This procedure is shown on the display by a status bar. Once the initialisation is complete the Sirius will ask you to calibrate the pitch-bend and the modulation wheels. The display shows the following:

```
Set Wheels-> min
 [OK]  [cancel]
```

Now turn the modulation wheel down all the way and hold the pitch-bend wheel at its lowest position. Press the left Key under the display (F1-Key). The following message appears:

```
Set Wheels-> MAX
 [OK]
```

Repeat this procedure by bringing the wheels to their highest position. Again confirm with the F1-Key. This will bring you to a test menu. Here you can test if the calibration was successful.

```
Wheels-Test:  64
 [OK]   [retry]
```

When the pitch-bender is released it should show 64, its top setting 127, the lowest 0. The modulation wheel should show 0 in its lowest position (at the bottom) and 127 in its highest position (at the top). Confirm once again by pressing the left-hand Key below the display (F1 Key). The Sirius is ready to go.

NB: Should the calibration not show the desired result you can repeat the procedure by pressing the right-hand Key under the display (F3-Key)

Listening to Demo-Songs:

In order to sweeten the reading of this manual we have given the Sirius 16 Demo-Songs. 40 minutes of music of different musical styles await you to give you a small insight into the sound possibilities of the Sirius. All demo songs were exclusively programmed with the internal functions of the Sirius. Why not listen to the pieces while you are studying the manual?

To hear the songs the Sirius has to be switched to demo-mode. Press both keys named DEMO below the VALUE/TEMPO-dial control.

After pressing the two Keys the normal display of the Sirius says good bye with an elegant wave and disappears to the right. The display now shows that the Sirius is in demo mode:

```
         *** DEMO ***
         1: Saturn
```

Now you only need to listen. The 16 Demo -Songs are played one after the other. After the last song it will start again from the beginning. You can also choose the demo songs separately. Press any of the Number-Keys 1-16 located directly above the Keyboard. To make it easier to choose, here is a short description of each demo-song:

1.) Saturn: A driving song with clear Drum & Bass and jungle elements.

2.) VOC Grov: An unusual name for this sparse groove. Please note that the rhythmic synth line is bubbling directly from the vocoder.

3.) Danceflr: This song takes you directly to the disco. With the Sirius your songs should find their way into the charts too.

4.) Hip&Funk: A Song proving that QUASIMIDI-instruments do not only produce "Techno". This demo song has already thrilled the American audience at the NAMM-SHOW '98 in Los Angeles and increased demand for the Sirius in the US!

5.) Tricky: House-heavy track with a strong stress on the Off-Beat and interesting filtersweeps.

6.) Elektro1: Kraftwerk did not have the advantage of owning a Sirius 20 years ago. Now they do!!

7.) AlienJam: Not really from this world. Although only at a modest pace of under 130 BPM this Goa-number with house influence will push your legs to the limit. Pay attention to the clever use of the vocoder.

8.) Elektro2: And because it was so fabulous, another bit of Kraftwerk.

9.) Prodigy: This demo-song's name speaks for itself. Boxed up break-beats, off the wall synths and a lot of effects give it an essential drive.

10.) Oldschol: A demo for the nostalgic people amongst the synthesizer brotherhood. In the past this was known as "The Berlin School".

11.) DanceNow: Commercial dance number. Here there is only a vocal line missing to bring it to chart success. Be our guest - do one yourself!

12.) Atmosphe: Modern, synthetic sound structures with a light ambient-touch.

13.) Tetsuo: Driving but still melodic Dancefloor-demo with a memorable refrain.

14.) VocodeX: Another Dance-demo processed by the vocoder.

15.) SpaceAce: Several parts of an experimental electronic session with trance elements and some Phatt-beats.

16.) Motivate: A trip round the current club scene: a bit of trance, some house, some acid and the techno soup bubbling away...

To exit the demo-mode press the EXIT-Key on the top right of the display.

Getting started

A round trip of the front panel of your Sirius:

The individual control panels on the front panel of the Sirius are clearly divided. The following diagram gives you an overview of the most important functions of the Sirius.

The elements and sections in detail:

As the diagram above is only a rough guide we would like to briefly introduce the individual elements and sections separately . A detailed description of the grouped functions like the Vocoder, the Sequencer or the Synthesizer can be found in the relevant chapters in this manual.

The Keyboard:

The Keyboard is mainly used to play notes on the synthesizer. You also have the possibility to mute individual tracks and to transpose a whole pattern (changing the overall musical Key of the pattern). These functions are available on the first two octaves of the Keyboard.

The Edit Panel and Display Panel:

The Display Panel is for communication with the Sirius. It contains the display and the Keys which enable you to move around the display's menus.

The three Keys below the display will now be referred to in this manual as the F1, F2 and F3 Keys. Depending on which menu has been chosen, these Keys perform different functions. If there is no edit or write menu shown on the display, the F2-Key activates the RANDOMIZE-mode which creates new sounds with an intelligent random-algorithm.

The EDIT-Key opens the edit menu of the Sirius. The WRITE-Key opens the WRITE -menu of the Sirius in which all memory and Init functions can be found. The RECALL-Key recalls the original version of an edited sound. The EXIT-Key quits the edit menu you were just working in. The PAGE/BANK-Keys allow you to scroll through the pages in the edit menu. In addition you can chose from the Sound libraries of the Sirius with these Keys when you're not working in any of the edit menus.

The VALUE/TEMPO-dial:

The VALUE/TEMPO-dial is a so called infinite dial control. With this control the values in the edit menus are changed. It is also used to change the tempo of the sequencer.

The Master-Section:

The master section holds functions which affect the Sirius as a whole.

The most important function is without doubt the MASTER-VOLUME control which adjusts the overall volume (output level) of the Sirius. Below this control you will find the headphone socket. The headphone volume is also adjusted with the MASTER-VOLUME-control.

The control marked SPECIAL-LOOP TRACK-FADER allows you to adjust the volume of the special-loop tracks. When the Sirius is in Record mode you can adjust the volume of the metronome with this control.

The OVERBLAST-control is located right next to it. It allows you to lift up the high (treble) and low (bass) ends of the Sirius sounds. You could probably compare this function to the 'loudness' control on most stereo systems. Above these two controls there are two Keys, both of which can perform several functions.

The SHIFT/TAP-TEMPO KEY serves first of all as a shift-Key. If you press it down you can perform functions which do not have their own designated Key by using the other Sirius Keys . A list of these functions can be found in the appendix of this manual. The TAP-TEMPO KEY allows you to adjust the tempo or pace of the sequencer by tapping it four times at the desired tempo.

With the SYNC-EXTERN KEY you can select whether the Sirius is to be synchronised to an external MIDI device or to an audio signal. When the Key is constantly lit the Sirius is waiting to be synchronised to an external MIDI device. When the Key is blinking you have activated the BEAT-RECOGNITION-SYSTEM and you can synchronise the Sirius to an audio signal.

When you press both Keys at the same time, the DEMO-mode of the Sirius will be activated. This mode allows you to listen to the Demo-songs of the Sirius. In order to quit the demo-mode press the EXIT-Key to the right of the display.

The Sequencer Panel:

The Sequencer panel controls the main functions for the sequencer. This panel will remind you of a cassette deck and basically gives you the same functions: RECORD, START, STOP, REW and FWD.

Choosing your sound from the Categories Section:

This section lets you select specific sounds from the sound categories provided. The original sounds of the Sirius are already divided into specific categories of Sirius factory sounds. If, for example, you would like to play wide sounds (Pads), simply press the PAD-SOUNDS Key. On the left of the Keys you will find sound categories for your drum tracks (Parts 1-4), on the right you will find the sound categories for the synthesizer tracks (Parts 5-7). Inside each of these sound categories there is a library of 16 sounds which you can choose using the number Keys 1-16 directly above the Keyboard. As the Sirius offers several sound banks, each of these categories is available several times. The PAGE/BANK-Keys in the edit section allow you to move from one bank of sounds to another.

The Number Keys:

The Number-Keys 1-16 directly above the Keyboard allow you to perform a number of different tasks. The most important feature here is the ability to choose whether you want sounds, patterns or songs. This choice is made by pressing one of the three selection Keys on the far left hand side. The selection you have made is indicated by the lit Key.

				VELOCITY			GATE-TIME	

SOUND SELECT   PATTERN SELECT   SONG SELECT   1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16

PATTERN   BREAK   SPECIAL LOOP TRACKS

With these three Keys you decide what you want to choose using the number Keys.

You also need to use these Keys to enter notes in the Drumgrid Record-mode, the Step Record-mode and the Arpeggiator, or to fly in breaks and special -loop-tracks.

The Mixer Panel:

This section is not only built like a mixing desk but also works like one! Apart from the selection block for the Part-Keys and Number-Keys, the mixer consists of seven dials above each Part-Key, each dial with its respective Part-Key works as a pair. Each part (track) of the Sirius is controlled by one of these pairs. The dial controls allow you to set the volume, the pan position as well as the value for the FX-sends of a Part (track).

The row of Keys allows you to select the separate Parts of the Sirius in order to, for example, play them on the Keyboard or to edit them. The Part-Keys also allow you to select individual parts/tracks or to pass them on to an external MIDI device.

With these Keys you select the functions which are to be performed by the mixer section

MIXER

LEVEL   PANORAMA   FX1/FX2

PART SELECT   PART MUTE   PART/SEQ. TO MIDI   KICK/BD   SNARE   HIHAT   PERCUSSION   SYNTH 1   SYNTH 2   SYNTH 3

The Synthesizer Section:

The synthesizer-section is the heart of the Sirius. Here all the important sound creating elements are available to you. The section is built just like a classic analogue synth. From left to right you will find the modulator (LFO), the oscillators, the filter (VCF) as well as the amplifier (VCA). The diagrams on the right-hand side of the synthesizer section illustrate the behaviour of the Envelope Generator macros for VCF and VCA.

MODULATOR	OSCILLATORS	RESONANCE-FILTER	AMPLIFIER	EG-MACROS

MOD.-MACRO   WAVE-MACRO   GLIDE   LPF 24 dB   CUTOFF   ENV.-MOD   VCA LEVEL   RELEASE   0

MOD.-DEPTH   DETUNE   FILTER-OVERDRIVE   LPF 12 dB   Q-FACTOR   VCF-EG MACRO   VCA-EG MACRO   32

MOD.-RATE   HPF 12 dB   64

OCTAVE-DOWN   OCTAVE-UP   KEY-TRACKING   VCF-DYN.   VCA-DYN.   96

127

The Vocoder section:

This section controls the main functions of the Vocoder which are the switching on and off of the Vocoder, selecting Vocoder presets, adjusting the volume as well as the routing of ANALYSE and CARRIER signals. The Vocoder section works closely with the mixer section. To adjust the separate filter frequencies of the vocoder, for example, you would use the controls of the mixer while holding down the VOCODER-Key. With the row of Keys on the mixer, the separate tracks of the Sirius can be routed to the ANALYSE or CARRIER signal. You select the 16 vocoder presets using the Number-Keys 1-16 while holding down the VOCODER-Key.

The Microphone connector:

This socket is for connecting the goose neck microphone. The microphone is automatically activated when you select one of the 16 vocoder-presets. Please note that the microphone socket is immediately de-activated as soon as you connect a cable to the ANALYSE-IN socket on the rear panel of the Sirius.

MICROPHONE CONNECTOR

The Footswitch Socket:

Although this socket is not located on the front panel of the Sirius we would like to briefly go into it at this point.
The reason for this is that a footswitch is a so called 'performance aid' with which the sound of the Sirius can be influenced in real time. Other performance aids are the modulation wheel and the pitch bender.

This socket requires a footswitch with an on/off switch. The footswitch should be connected prior to powering up the Sirius. When the Sirius is turned on it will automatically recognise the polarisation of the footswitch. Pedals which send continuous information (for example volume pedals) are not suitable for connection to this socket.

Once you have found the right footswitch you can try the following:
hold down a PAD on the Keyboard and step on the footswitch. If you now let go of the note you are holding down on the Keyboard, the sound will keep on playing until you release the pedal. This is called a Sustain-footswitch.

The second function of the footswitch enables you to transpose arpeggios. When you step on the footswitch while the Arpeggiator is running and stay put, the Arpeggio will continue to play out normally. When you now press any note on the Sirius Keyboard the pitch of the whole Arpeggio will change.

FOOTSWITCH

The two wheels on the left of the front panel of the Sirius are often referred to as performance aids. They allow you to change the sound while playing, particularly useful in a live situation. Each wheel has its own functions.

The Pitch-Bend Wheel:

The Pitch-Bend Wheel, also known as the Pitch-Bender, allows you to change the pitch while you are playing. If you release the wheel it automatically returns to its central position. If you move it downwards the pitch of the sound will get lower. If you move it upwards it will become higher. Each sound of the Sirius can be allocated an individual pitch-bend setting.

MOD.-WHEEL
ASSIGN

Programming Key for the Modulation wheel

Pitch-Bend Wheel

Modulation Wheel

PITCH
BEND

MODULATION
WHEEL

The Modulation Wheel:

The Modulation Wheel allows you, as the name says, to modulate sound. In synthesizer language modulation means the generating of a continuous change of the sound characteristics while playing. This could be for example the generating of vibratos or the opening of a filter. A lot of synthesizers only allow you to control one parameter with each wheel. Not so with the Sirius. You can allocate up to five sound parameters of the Synthesizer section to the modulation wheel simultaneously. This enables you to create very complex and interesting soundscapes and layers.

How to programme the Modulation Wheel:

The MOD-WHEEL ASSIGN-Key has several important functions. If you have assigned one or more sound parameters from the synthesizer section to the modulation wheel in order to process your chosen sound, this Key will be lit. This Key also allows you to delete a MOD-WHEEL ASSIGN or to programme a new one. You can do this by holding the key down. The display will show the following message:

```
Mod-Wheel-Assign
    [Clear]
```

If you now press the Key F1 below the display the current settings of the modulation wheel will be deleted. Once you release the Key the MOD-WHEEL-ASSIGN message on the display disappears. The Modulaton Wheel is now ready for re-programming. The assigning of parameters is very simple: Hold down the MOD-WHEEL-ASSIGN -key and turn the dial of the parameter which is to be assigned to the modulation wheel. The display shows a change in value. This value shows the positive and negative deviation of the parameter relative to the value stored in the sound. This deviation can now be performed by the Modulation wheel. You can repeat this until you have assigned five different parameters to the Modulation Wheel. Should you want to assign one of the MACRO-controls to the modulation wheel please note that you are then assigning several parameters at one time. For example the two EG-MACRO-Keys control 4 parameters each.

Experts tip:

Apart from the parameters from the syntehesizer section the parameters from the Mixer section can also be assigned to the Modulation Wheel. The procedure is the same. You can yield particularly good results if for example you assign FX-sends when you have chosen a delay as an effect. Check it out!

Tip

Playing the Sounds of the Sirius:

By now you must be starving to hear the sounds of the Sirius. Once you have left the demo-mode by pressing the EXIT-Key you will see the following on the display:

```
A71:SyncSynt 160
(STOPPED)_____
```

This means the following: 'A' indicates the bank from which the sound comes - '71' indicates the number of the sound within that bank. After the colon comes the sound name, in this case "SyncSynt".

On the right of the display you see a number, in this case "160" which is indicating the current speed or tempo of the internal sequencer. In the lower part of the display you see the word "STOPPED" which means that at present the sequencer is not running.

The seven bars to the right symbolise the separate Parts(tracks) of the Sirius. If you now play the Keyboard you will hear the sound shown on the display. The fifth bar of the part-display will show a level reading. This is basically indicating that part 5 (SYNTH-1) is active. You will notice that the Part-key in the mixer-section is also lit up, verifying the display's information.

The sound categories:

Now let's look at the CATEGORIES section which allows you to choose the sound categories. You will note that the CATEGORIES-Key named "SOLO-SOUNDS" is lit up. We have deliberately divided the sounds into these different categories because it makes the selection of particular sounds so much easier. The drum-sound categories (parts 1-4) are on the left of the CATEGORIES-Keys in orange print. The synthesizer-sound categories (parts 5-7) are printed in white on the right. With the help of the number Keys 1-16 directly above the keyboard you can choose one of 16 sounds from the selected sound category. You can immediately play it on the keyboard. The display will directly show you sound name, storage bank and library number.

The sound banks and libraries:

The synthesizer-sounds are spread over three fixed ROM banks (A, B and C) and a USER-bank. After listening to all categories and sounds on bank "A" you will have to change to the next bank. You can do this two ways: Use either the PAGE/BANK-Key in the edit section or press the Categories-Key you have selected one more time. Every time you press the Categories-Key you change banks.

Playing Drum-Sounds:

In order to play any drum-sounds you have to select the Drum-Part you want to listen to first. You select the parts with the Part-Keys (1-4) in the mixer section. You will find these Keys directly below the first four Mixer-section dials. Make sure that these Keys are selected by checking if the PART-SELECT Key on the left of the mixer is lit. If not, press it down. Now choose the part for which you want to hear the sounds. You select the different sounds exactly like you selected the synthesizer sounds. But note that there is only one ROM and one USER bank for each drum-part.

There are 96 different ROM-sounds available in every drum-part (kick, snare, hihat and percussion). This equals 384 drum sounds all together.

The synthesizer -Parts consists of 3 banks with 96 sounds each, 288 synthesizer-sounds in total. All in all the Sirius has 672 factory sounds ready for you to use.
In addition the Sirius offers you 480 User-storage spaces for sounds programmed by yourself. There are 96 storage spaces each for the kick, snare, hihat, percussion and synth parts .

The fixed storage space for the factory-sounds of the Sirius is called ROM (Read Only Memory). It can not be deleted or overwritten. The USER-storage space for your own programmed sounds is called RAM (Random Access Memory).

How do I listen to the pre-programmed patterns of the Sirius?

There are 142 factory-programmed patterns in the Sirius, the ROM-patterns.
These patterns cannot be deleted or overwritten and serve as a basic stock of new grooves and
USER-patterns. You can combine them randomly to form new songs.

You can also use the separate motifs of these ROM patterns to create new ones. These patterns also
give you an excellent overview of the musical and stylistic versatility of the Sirius. In order to listen to
the patterns systematically proceed as follows:

Press the EDIT-Key next to the display. With the PAGE/BANK-Key you choose page 2 of the menu.
Now select the Edit-pattern menu by pressing the F1 Key.

```
Select Edit  <2>
[Pattern] [Mix]
```

Press the F1 Key once again to access the menu for the ROM- and USER patterns.

```
Select Pattern
[Rom]    [User]
```

Here you can choose which pattern-type you want to listen to. If you haven«t created any patterns
yourself yet, the USER-pattern section will be empty. Use the F1-Key to select the area of the ROM-
pattern:

```
Load ROM-Pattern
Pattern:055 [ok]
```

Once you have selected this page on the menu the sequencer of the Sirius will start up. Now you
can scroll through the 142 factory-programmed patterns using the VALUE/TEMPO-dial.

Once you have selected a pattern which you want to have a closer look at, press the F2 Key (OK) to
get to the EDIT-PATTERN menu. Now you can look at single tracks closely, store new motifs or put
other ROM or USER-motifs into the pattern.

The Synthesizer

Creating sounds:
We showed you how to access the factory sounds in the section "Playing the sounds of the Sirius".
Now we will show you how to create your own sound with the synth parts 1,2 & 3 (Part-Keys 5-7 on
the mixer section). This procedure also applies to the drum parts (Part-Keys 1-4 on the mixer section)
- even drum-parts are given a complete synthesizer!

We are sure that by now you have already started following your basic instincts: turning controls,
pressing knobs in the synthesizer section, hitting the Randomizer.... Thanks to the macro-controls
and the simple design of the Sirius' front panel, the "learning by doing" or "hands-on" approach will
be easy and fun.
The Sirius is actually offering you many more possibilities for fine editing and sound design than the
front panel immediately suggests. Let's use the SYNTH 1 part as an example. Press the PART SELECT
Key followed by the SYNTH 1 part Key:

In order to edit this sound within the Edit-section, press the EDIT-Key and select menu page 1 with
the PAGE/BANK-Key:

```
Select Edit  |1>
[Sound] [Arpeg.]
```

The Oscillator-Section:
First we will look at the parameters available in the oscillator section:

Hit F1 thereby selecting the Edit-sound menu.

```
Edit Synt1-Sound
|1>  22: S_Saw
```

On this page you can choose one of 125 oscillator models. "22" indicates the number which is fol-
lowed by the name of the oscillator model. The setting can be changed with the VALUE/TEMPO-dial
as well as with the WAVE MACRO- control.

```
Edit Synt1-Sound
<2> Octave:    8`
```

Press the right-hand PAGE-Key once more. This brings you to page 2 of the menu. The parameter on menu page 2 allows you to set the octave range of the sound. Four different basic ranges are at your disposal. '8' means the pitch of the sound remains the same. '4' is one octave higher. '16' is one octave lower, etc.. Changes are made with the VALUE/TEMPO-dial or the Keys OCTAVE-UP and OCTAVE-DOWN in the oscillator section.

OCTAVE-DOWN   OCTAVE-UP

Pressing the right-hand PAGE-Key once more will bring you to page 3 of the edit menu, the detune page. Here you can individually detune the oscillators of the Sirius. The intensity of the de-tuning of the oscillators can vary from a fraction of a tone to a pitch difference of 24 semi tones (2 octaves). You can either use the DETUNE control in the oscillator section or the VALUE/TEMPO-dial.

```
Edit Synt1-Sound
<3> Detune: 0.38
```

On page 4, the Sirius offers you the possibility of polyphonic portamento. In the oscillator section the glide-value (or "portamento-time") can be set with the GLIDE-control, values ranging from 0 to 127. When you play a chord or note in the lowest octave of the Keyboard followed by a chord or note in the highest octave you can clearly hear how the pitch glides smoothly "to the top".

```
Edit Synt1-Sound
<4> Glide:    127
```

On page 5 of the menu you can determine if this Part in the Sirius should be played polyphonically or monophonically.
Polyphonic is the term used for a sound which can be played with many notes simultaneously, suitable for playing chords - monophonic is a sound which can only be played one note at a time.
Some parts benefit greatly from being in the monophonic mode.
Turn the parameter to the ON-position. Hold one note down in the highest octave of the keyboard and play a tune in a lower octave. When you release each note of the tune being played, the high note which you are holding down will play out.

```
Edit Synt1-Sound
<5> Monophon: ON
```

The Pitch-Envelope Generator (EGP):
Page six brings you to the Pitch Envelope Generator. This determines how the pitch of the original waveform (sound) will be changed over time.

```
Edit Synt1-Sound
<6> EGP-Mod: +24
```

A negative value will make the pitch rise up to the note you have pressed. Positive values will have the opposite effect. Try it and hear for yourself! The values range from -63 -> +63 and are changed using the VALUE/TEMPO-dial. This parameter is particularly useful for creating siren sounds, or to give the glissando characteristic of, for example, a brass section surging into the opening phrase of 'The Stripper'!
On pages 7 and 8 you can time the attack and the decay phases of the pitch envelope. A long attack means a slow gliding / sliding of the pitch up or down. The decay-phase begins as soon as the original pitch is reached.

```
Edit Synt1-Sound
<8> EGP-Dec: 113
```

The Synthesizer

The last parameter of the oscillator section is the VCF-drive. It produces an overload of the filter stage which leads to those wonderfully distorted and aggressive overdrive-sounds. Each filter in the parts of the Sirius therefore has its own distortion unit - very useful for, for instance, acid bass lines, aggressive solo sounds etc.

```
Edit Synt1-Sound
<9> VCFDrive: 27
```

The Filter-Section:

RESONANCE-FILTER

LPF 24 dB

CUTOFF   ENV.-MOD

LPF 12 dB

Q-FACTOR   VCF-EG
              MACRO

HPF 12 dB

KEY-TRACKING   VCF-DYN.

For each of the 7 parts the Sirius has its own multi-mode-filter with controllable cut-off frequencies and resonance (On the Sirius referred to as Q-factor). The cut-off frequency can be manipulated in a number of ways. You can do this for instance with the separate envelope waveform generator which generates sound changes automatically. You can also at any time "tune" the cutoff-frequency in real time with the CUTOFF-control or assign it to the modulation wheel. Like all sound parameters the filter can also be controlled from an external Midi device.

The first three Keys in the filter section allow you to select one of the filter types. A low pass filter (LPF) will only allow the frequencies below the cutoff-frequency to pass through. A high pass filter (HPF) works the other way round. The frequency curve of the filter is given in dB/octave and describes how strongly the frequencies are faded in and out before and after the cutoff-point. The 12 dB filter is a milder curve than the steep 24 dB filter and therefore sounds a bit softer. The Key track option is explained later.

Now choose a filter type with the Keys on the front-panel or use the VALUE/TEMPO-dial.

```
Edit Synt1-Sound
<10> VCFTyp:LP24
```

On the next page of the menu you can set the cut-off frequency:

```
Edit Synt1-Sound
<11> Cutoff:   0
```

and then the filter bandwidth and resonance (Q-factor):

```
Edit Synt1-Sound
<12> Qfactor: 92
```

The resonance is a factor producing an over-loading of the level of the cut-off frequency. When the resonance-values are high, such over-loading causes the filter to feed back and so generate new harmonics. The result is typically a "whistle" or "squeak" in the sound, providing it with a more cutting edge. Filters without resonance are therefore not as flexible as the Sirius-filters.

On page 13 of the menu you can set the Key-tracking. You can activate it at any time with the KEY-TRACKING-Key on the front panel. The Key-tracking allows you to control the cut-off frequency by the pitch you are playing on the Keyboard. You can for instance create sounds which become more brilliant the further up the Keyboard you move. Positive values become more brilliant, negative values more dull.

```
Edit Synt1-Sound
<13> KeyTrck:+63
```

Check it out and let your ears and taste decide.

On page 14 of the menu you will find the parameter called VCF-dynamic. The VCF-dynamic allows you to determine how the filter can be controlled through Touch-sensitivity. When for instance you enter +63 the sound will turn more brilliant the harder you hit the Keyboard. -63 obviously produces the opposite effect. You can activate this function with the VCF-DYN- Key on the front panel.

```
Edit Synt1-Sound
<14> VCF-Dyn:+63
```

How much the envelope generator influences the filter is controlled on page 15 of the edit menu via the parameter called Envelope Modulation:

```
Edit Synt1-Sound
<15> Env-Mod:+19
```

Now we come to the parameters of the waveform envelope. They can be set in two different ways. You either choose page 16-19 to enter values for attack, decay, sustain and release or you use the VCF-EG-MACRO control. There you will find 127 different waveform envelopes to control the nature of the sound (waveform). The front panel of the Sirius has diagrams showing the order in which the various waveform envelopes are placed.

The Synthesizer

Please note that the EG-MACROS for both filter and amplifier sections are not identical but are placed in order using specific criteria.

You can of course fine edit the opened macro in its single parameters:
Attack:

```
Edit Synt1-Sound
<16> EGF-Att: 64
```

Decay:

```
Edit Synt1-Sound
<17> EGF-Dec: 64
```

Sustain:

```
Edit Synt1-Sound
<18> EGF-Sus:115
```

Release:

```
Edit Synt1-Sound
<19> EGF-Rel: 64
```

The Amplifier-Section:

This section regulates the behaviour of the volume of the sound. The first parameter sets the level:

```
Edit Synt1-Sound
<20> VCA-Lev: 88
```

This is the volume information which is stored for this sound. It has nothing to do with the level settings of the mix section.

You can also control the volume with Touch-sensitivity.

```
Edit Synt1-Sound
<21> VCA-Dyn: ON
```

If you strike a note on the keyboard hard the sound will be louder than for a soft strike. You can activate and de-activate the Touch-sensitivity at any time using the VCA-DYN-Key on the front panel.

The following menu pages allow you to set the parameters of the VCA Envelope Generator (EGA). These processes are explained below:

When you hold down a note on the Sirius Keyboard you automatically start the envelope generator. During the ATTACK time the sound will increase until it has reached its maximum level. After that the DECAY time sets in, and the volume of the sound decreases until it reaches the adjustable SUS-TAIN-level. This level remains until you release the note, when the sound can either stop immediately or fade out. The duration of the fade-out is determined by the RELEASE time.

The VCA-EG-MACRO-control gives you access to the 127 pre-programmed envelopes. The amplifier section also has a RELEASE-Key which automatically applies a release-time with a length value of 64 for these VCA envelopes.

Attack:

```
Edit Synt1-Sound
<22> EGA-Att:  0
```

Decay:

```
Edit Synt1-Sound
<23> EGA-Dec: 64
```

Sustain:

```
Edit Synt1-Sound
<24> EGA-Sus: 91
```

Release:

```
Edit Synt1-Sound
<25> EGA-Rel: 64
```

The Modulator-Section:

The modulator section allows you to set the type, intensity, frequency and destination of the modulator. Every Part of the Sirius contains a low frequency oscillator (LFO) with which you can programme automatic pitch changes (vibrato), sound colour changes (filtersweeps) and volume changes (tremolo). You can also synchronise the LFO to a MIDI-clock.

```
Edit Synt1-Sound
<26> LFOWave:SIN
```

This page determines the waveform used by the LFO. The following waveforms are available to you: Sinus (SIN), Sawtooth (SWU), Inverted sawtooth (SWD), Square (SQR), Triangle (TRL) and Random (RND).
On the following page you can set the frequency of the LFO. The higher the value, the faster the rate of modulation. If you turn the VALUE/TEMPO-dial or the MOD-RATE-control almost all the way to the right you can choose the resolution of the modulator when the LFO-frequency is synchronised to a MIDI-clock (1/4 note. 1/8 note etc.).

```
Edit Synt1-Sound
<27> LFORate:1/16
```

Page 28 enables you to set the modulation intensity/depth:

```
Edit Synt1-Sound
<28> LFODpth: 10
```

The following menu pages contain the modulator destinations, i.e. which part of the synthesizer section you wish to modulate:

```
Edit Synt1-Sound
<29> LFO>VCO:   0
```

Here you can adjust how strongly you want the LFO to influence the pitch change of the oscillator. This modulation can be used for siren effects and vibratos.

The next page allows you to set modulations of the cutoff-frequency of the filter for creating, for instance, filtersweeps:

```
Edit Synt1-Sound
<30> LFO>VCF: 45
```

On page 31 you set the modulation of the amplifier section, i.e the volume:

```
Edit Synt1-Sound
<31> LFO>VCA:   2
```

The macro control in the modulation section allows you to access the pre-sets which combine the various waveforms with the destinations of the modulator. You will also find a macro to modulate the waveform Pitch Envelope. In this macro the MOD-RATE-control regulates the velocity and the MOD-DEPTH controls the intensity of the Pitch Envelope.

Pitch-Wheel and Hold-Pedal:

On the last two pages of the menu you can determine the influence of performance-aids on the sound.

```
Edit Synt1-Sound
<32> PitSens: 24
```

Here you determine how much the pitch will change when the pitch wheel is at its maximum or minimum. Value readings are in semitones, i.e. 1=1 semitone, 24=24 semitones or 2 octaves, which is the maximum available pitch change up or down.

```
Edit Synt1-Sound
<33| Holdped: ON
```

The last page of the sound edit menu determines whether a connected foot pedal/switch will control the sustain of the sound you are playing. It basically activates or de-activates the footswitch.

Random Sound:

Those of you who like surprises will love the Sirius. Simply press the RANDOM-SOUND-Key below the display, and, based on special algorithms, the Sirius will generate a totally new sound. You can then, of course, edit this sound.

```
Save Sound to 35
      ok!
```

▲   ▲   ▲

PRESS BUTTON
FOR SOUND-CREATION

RANDOM-SOUND

Storing the Sound:

Once you have edited your custom made sound you can store it on one of the 96 USER-sound memory spaces. This also allows you to access the sound via MIDI with an external Midi device using its memory number. If you want to assign a sound to one of the 7 Parts (tracks) in the Sirius, you must store the sound while the sequencer is active. Just press the WRITE-Key and confirm with [ok]. Now name it, press [ok] and choose a storage space. Press [ok] once more. Done!

The Quick-Save Function to save/store your Sound:

If you want to store your sound even faster press one of the 16 Number-keys and hold it down until the following message appears on the display:

```
Save Sound to 35
      ok!
```

Tip

As the number-Key is held, the storage space is displayed - a status bar indicates the progress of the saving process. In this example the sound was stored in User-space 35.

The parameters in the edit menu work in the same or very similar ways for the other 6 Parts (kick, snare, hihat, percussion, Synth-2 and Synth-3) as they do for the Synth-1Part.

Recall and Compare Sound:

You can at any time compare your edited sound to the original. Just press the RECALL-Key. The display will show the following:

```
**COMPARE**
```

You can exit the compare mode by either pressing the EXIT-Key or by
re-pressing the RECALL-Key. Should you have accidentally changed the sound, thereby losing the one you had created, you can recall it with the RECALL-Key.

On the next page you will find an overview of all the sound parameters of the Sirius.

The Synthesizer

Overview of the Sound-Parameters: Kick, Snare, Hihat, Synth-1, Synth-2, Synth-3:

(An overview of the parameters of the Percussion-Part you can find on page 32)

☞ Edit Sound

The paramters marked with a * can also be influenced by control-dials or keys on the front panel.

KICK/BD

OSCILLATORS
- |1⟩ **Wave-Macro***
- ⟨2⟩ **(Octave:** *not selectable*)
- ⟨3⟩ **Tune***
- ⟨4⟩ **(Glide:** *not selectable*)
- ⟨5⟩ **(Monophon:** *not selectable*)
- ⟨6⟩ **Pitch-Envelope-Modulation***
- ⟨7⟩ **Pitch-Envelope Attack***
- ⟨8⟩ **Pitch-Envelope Decay***

RESONANCE-FILTER
- ⟨9⟩ **VCF-Overdrive***
- ⟨10⟩ **VCF-Typ:** 24 dB-Lowpass, 12 dB-Lowpass, 12 dB-Highpass*
- ⟨11⟩ **Cutoff-Frequency***
- ⟨12⟩ **Q-Factor***
- ⟨13⟩ **(Key-Tracking:** *not selectable*)
- ⟨14⟩ **VCF-Dynamic-Modulation***
- ⟨15⟩ **VCF-Envelope-Modulation***
- ⟨16⟩ **VCF-Envelope Attack***
- ⟨17⟩ **VCF-Envelope Decay***
- ⟨18⟩ **VCF-Envelope Sustain***
- ⟨19⟩ **VCF-Envelope Release***

AMPLIFIER
- ⟨20⟩ **VCA-Level***
- ⟨22⟩ **VCA-Envelope Attack***
- ⟨23⟩ **VCA-Envelope-Decay***
- ⟨24⟩ **VCA-Envelope Sustain***
- ⟨25⟩ **VCA-Envelope Release***

LFO
- ⟨26⟩ **LFO-Wave***
- ⟨27⟩ **LFO-Rate:** can be synchronised*
- ⟨28⟩ **LFO-Depth***
- ⟨29⟩ **VCO (Pitch)-Modulation from LFO***
- ⟨30⟩ **VCF (Filter)-Modulation from LFO***
- ⟨31⟩ **VCA (Amplitude)-Modulation from LFO***

SNARE-Drum

OSCILLATORS
- |1⟩ **Wave-Macro***
- ⟨2⟩ **(Octave:** *not selectable*)
- ⟨3⟩ **Tune***
- ⟨4⟩ **(Glide:** *not selectable*)
- ⟨5⟩ **(Monophon:** *not selectable*)
- ⟨6⟩ **Pitch-Envelope-Modulation***
- ⟨7⟩ **Pitch-Envelope Attack***
- ⟨8⟩ **Pitch-Envelope Decay***

RESONANCE-FILTER
- ⟨9⟩ **VCF-Overdrive***
- ⟨10⟩ **VCF-Typ:** 24 dB-Lowpass, 12 dB-Lowpass, 12 dB-Highpass*
- ⟨11⟩ **Cutoff-Frequency***
- ⟨12⟩ **Q-Factor***
- ⟨13⟩ **(Key-Tracking:** *not selectable*)
- ⟨14⟩ **VCF-Dynamic-Modulation***
- ⟨15⟩ **VCF-Envelope-Modulation***
- ⟨16⟩ **VCF-Envelope Attack***
- ⟨17⟩ **VCF-Envelope Decay***
- ⟨18⟩ **VCF-Envelope Sustain***
- ⟨19⟩ **VCF-Envelope Release***

AMPLIFIER
- ⟨20⟩ **VCA-Level***
- ⟨22⟩ **VCA-Envelope Attack***
- ⟨23⟩ **VCA-Envelope-Decay***
- ⟨24⟩ **VCA-Envelope Sustain***
- ⟨25⟩ **VCA-Envelope Release***

LFO
- ⟨26⟩ **LFO-Wave***
- ⟨27⟩ **LFO-Rate:** can be synchronised*
- ⟨28⟩ **LFO-Depth***
- ⟨29⟩ **VCO (Pitch)-Modulation from LFO***
- ⟨30⟩ **VCF (Filter)-Modulation from LFO***
- ⟨31⟩ **VCA (Amplitude)-Modulation from LFO***

HIHAT

OSCILLATORS
- |1⟩ **Wave-Macro***
- ⟨2⟩ **(Octave:** *not selectable*)
- ⟨3⟩ **Tune***
- ⟨4⟩ **(Glide:** *not selectable*)
- ⟨5⟩ **(Monophon:** *not selectable*)
- ⟨6⟩ **Pitch-Envelope-Modulation***
- ⟨7⟩ **Pitch-Envelope Attack***
- ⟨8⟩ **Pitch-Envelope Decay***

RESONANCE-FILTER
- ⟨9⟩ **VCF-Overdrive***
- ⟨10⟩ **VCF-Typ:** 24 dB-Lowpass, 12 dB-Lowpass, 12 dB-Highpass*
- ⟨11⟩ **Cutoff-Frequency***
- ⟨12⟩ **Q-Factor***
- ⟨13⟩ **(Key-Tracking:** *not selectable*)
- ⟨14⟩ **VCF-Dynamic-Modulation***
- ⟨15⟩ **VCF-Envelope-Modulation***
- ⟨16⟩ **VCF-Envelope Attack***
- ⟨17⟩ **VCF-Envelope Decay***
- ⟨18⟩ **VCF-Envelope Sustain***
- ⟨19⟩ **VCF-Envelope Release***

AMPLIFIER
- ⟨20⟩ **VCA-Level***
- ⟨22⟩ **VCA-Envelope Attack***
- ⟨23⟩ **VCA-Envelope-Decay***
- ⟨24⟩ **VCA-Envelope Sustain***
- ⟨25⟩ **VCA-Envelope Release***

LFO
- ⟨26⟩ **LFO-Wave***
- ⟨27⟩ **LFO-Rate:** can be synchronised*
- ⟨28⟩ **LFO-Depth***
- ⟨29⟩ **VCO (Pitch)-Modulation from LFO***
- ⟨30⟩ **VCF (Filter)-Modulation from LFO***
- ⟨31⟩ **VCA (Amplitude)-Modulation from LFO***

SYNTH 1

OSCILLATORS
- |1⟩ **Wave-Macro***
- ⟨2⟩ **Octave***
- ⟨3⟩ **Detune***
- ⟨4⟩ **Glide***
- ⟨5⟩ **Monophon**
- ⟨6⟩ **Pitch-Envelope-Modulation***
- ⟨7⟩ **Pitch-Envelope Attack***
- ⟨8⟩ **Pitch-Envelope Decay***

RESONANCE-FILTER
- ⟨9⟩ **VCF-Overdrive***
- ⟨10⟩ **VCF-Typ:** 24 dB-Lowpass, 12 dB-Lowpass, 12 dB-Highpass*
- ⟨11⟩ **Cutoff-Frequency***
- ⟨12⟩ **Q-Factor***
- ⟨13⟩ **VCF-Key-Tracking***
- ⟨14⟩ **VCF-Dynamic-Modulation***
- ⟨15⟩ **VCF-Envelope-Modulation***
- ⟨16⟩ **VCF-Envelope Attack***
- ⟨17⟩ **VCF-Envelope Decay***
- ⟨18⟩ **VCF-Envelope Sustain***
- ⟨19⟩ **VCF-Envelope Release***

AMPLIFIER
- ⟨20⟩ **VCA-Level***
- ⟨22⟩ **VCA-Envelope Attack***
- ⟨23⟩ **VCA-Envelope-Decay***
- ⟨24⟩ **VCA-Envelope Sustain***
- ⟨25⟩ **VCA-Envelope Release***

LFO
- ⟨26⟩ **LFO-Wave***
- ⟨27⟩ **LFO-Rate:** can be synchronised*
- ⟨28⟩ **LFO-Depth***
- ⟨29⟩ **VCO (Pitch)-Modulation From LFO***
- ⟨30⟩ **VCF (Filter)-Modulation from LFO***
- ⟨31⟩ **VCA (Amplitude)-Modulation from LFO***
- ⟨32⟩ **Pitch-Bend Range**
- ⟨33| **Holdpedal**

SYNTH 2

OSCILLATORS
- |1⟩ **Wave-Macro***
- ⟨2⟩ **Octave***
- ⟨3⟩ **Detune***
- ⟨4⟩ **Glide***
- ⟨5⟩ **Monophon**
- ⟨6⟩ **Pitch-Envelope-Modulation***
- ⟨7⟩ **Pitch-Envelope Attack***
- ⟨8⟩ **Pitch-Envelope Decay***

RESONANCE-FILTER
- ⟨9⟩ **VCF-Overdrive***
- ⟨10⟩ **VCF-Typ:** 24 dB-Lowpass, 12 dB-Lowpass, 12 dB-Highpass*
- ⟨11⟩ **Cutoff-Frequency***
- ⟨12⟩ **Q-Factor***
- ⟨13⟩ **VCF-Key-Tracking***
- ⟨14⟩ **VCF-Dynamic-Modulation***
- ⟨15⟩ **VCF-Envelope-Modulation***
- ⟨16⟩ **VCF-Envelope Attack***
- ⟨17⟩ **VCF-Envelope Decay***
- ⟨18⟩ **VCF-Envelope Sustain***
- ⟨19⟩ **VCF-Envelope Release***

AMPLIFIER
- ⟨20⟩ **VCA-Level***
- ⟨22⟩ **VCA-Envelope Attack***
- ⟨23⟩ **VCA-Envelope-Decay***
- ⟨24⟩ **VCA-Envelope Sustain***
- ⟨25⟩ **VCA-Envelope Release***

LFO
- ⟨26⟩ **LFO-Wave***
- ⟨27⟩ **LFO-Rate:** can be synchronised*
- ⟨28⟩ **LFO-Depth***
- ⟨29⟩ **VCO (Pitch)-Modulation From LFO***
- ⟨30⟩ **VCF (Filter)-Modulation from LFO***
- ⟨31⟩ **VCA (Amplitude)-Modulation from LFO***
- ⟨32⟩ **Pitch-Bend Range**
- ⟨33| **Holdpedal**

SYNTH 3

OSCILLATORS
- |1⟩ **Wave-Macro***
- ⟨2⟩ **Octave***
- ⟨3⟩ **Detune***
- ⟨4⟩ **Glide***
- ⟨5⟩ **Monophon**
- ⟨6⟩ **Pitch-Envelope-Modulation***
- ⟨7⟩ **Pitch-Envelope Attack***
- ⟨8⟩ **Pitch-Envelope Decay***

RESONANCE-FILTER
- ⟨9⟩ **VCF-Overdrive***
- ⟨10⟩ **VCF-Typ:** 24 dB-Lowpass, 12 dB-Lowpass, 12 dB-Highpass*
- ⟨11⟩ **Cutoff-Frequency***
- ⟨12⟩ **Q-Factor***
- ⟨13⟩ **VCF-Key-Tracking***
- ⟨14⟩ **VCF-Dynamic-Modulation***
- ⟨15⟩ **VCF-Envelope-Modulation***
- ⟨16⟩ **VCF-Envelope Attack***
- ⟨17⟩ **VCF-Envelope Decay***
- ⟨18⟩ **VCF-Envelope Sustain***
- ⟨19⟩ **VCF-Envelope Release***

AMPLIFIER
- ⟨20⟩ **VCA-Level***
- ⟨22⟩ **VCA-Envelope Attack***
- ⟨23⟩ **VCA-Envelope-Decay***
- ⟨24⟩ **VCA-Envelope Sustain***
- ⟨25⟩ **VCA-Envelope Release***

LFO
- ⟨26⟩ **LFO-Wave***
- ⟨27⟩ **LFO-Rate:** can be synchronised*
- ⟨28⟩ **LFO-Depth***
- ⟨29⟩ **VCO (Pitch)-Modulation From LFO***
- ⟨30⟩ **VCF (Filter)-Modulation from LFO***
- ⟨31⟩ **VCA (Amplitude)-Modulation from LFO***
- ⟨32⟩ **Pitch-Bend Range**
- ⟨33| **Holdpedal**

The Percussion Sets

Compared with the other Sirius sections, the PERCUSSION Part has a special status.

This part takes up to twelve instruments simultaneously (called a percussion set). A percussion set plays in 12 voice polyphony (i.e. you can play all 12 instruments in the set simultaneously). This feature means you can double up the bass drum of the KICK-track, add a second HIHAT and let a ten-man conga band do the drumming!
Your own customised percussion sets are automatically stored in one of the 20 User storage spaces which are available.
On the one hand, you can work on the whole set the same way with the different sound parameters as you do with single sounds (waveforms). You have the same possibilities to change your sound with the SOUND-menu or in real time via the dials and Keys of the Sirius. Any parameter changes made in the sound EDIT-menu will effect all the instruments in the percussion set at the same time. When the PERCUSSION-part-Key is active the WAVE-MACRO-control allows you to jump between the 20 percussion sets in the memory.

On the other hand you can edit each single instrument of a set separately in the EDIT-menu - the following parameters are available in this mode: basic waveform, tune, level, pan, FX1 send and FX2 send. The structure of the complete percussion set is explained by the diagram on the following page. Your efforts will pay off - composing your own 12 voice percussion sets from a number of basic waveforms enables you to create some very complex grooves.

The SOUND-parameters which affect the whole percussion set are more or less the same as those available for the other 6 parts. Let us go directly to the parameters available in the EDIT-menu for the editing of the single instruments of a percussion set. You will find those in the SET-menu of the EDIT-menu.

First select the percussion set you wish to edit:
Press the PART-SELECT-Key on the mixer panel and then press the PERCUSSION -PART-Key. Now press the EDIT Key, and select menu page 1 by pressing the right hand PAGE/BANK-key. The following is displayed:

```
Select Edit  |1>
[Snd][Set][Arp.]
```

F2

Contrary to the other sections you can see here that apart from the whole percussion sound you can also edit the set's different instruments. In the SET-menu you will always be working on the percussion set you have chosen in the SOUND-menu. In order to edit any of the other 20 percussion sets just turn the WAVE-MACRO-control (you can also select the set while on page 1 of the SOUND-menu by using the CATEGORIES-keys in combination with the Number-Keys).
Now open the PERCUSSION-SET EDIT-menu by pressing the F2 Key under the display.

Important: The percussion sets do not need to be stored with the WRITE function: every change you make to one of the 20 sets will automatically be stored. (The command "STORE PERC.?" in the WRITE-menu stores only parameters affecting the sounds in the percussion set).
Unlike the other Parts, changes can not be undone by using the RECALL-Key - so think hard before you edit a percussion set!!

The Percussion Sets

Overview of the SOUND and SETUP parameters: Percussion

☞ Edit Perc-Sound

Parameters with an asterix (*)can also be influenced by controls or Keys on the front panel.

```
                PERCUSSION
             |1>  PERCUSSION-SET 1-20
             <2>  (Octave: not selectable)
O            <3>  (Tune: not selectable)
S            <4>  (Glide: not selectable)
C            <5>  Monophon
I            <6>  Pitch-Envelope-Modulation*
L            <7>  Pitch-Envelope Attack*
L            <8>  Pitch-Envelope Decay*
A
T            <9>  VCF-Overdrive*
O            <10> VCF-Typ: 24 dB-Lowpass,
R                      12 dB-Lowpass, 12 dB-Highpass*
S            <11> Cutoff-Frequenz*
R            <12> Q-Factor*
E            <13> (Key-Tracking: not selectable)
S            <14> VCF-Dynamic-Modulation*
O            <15> VCF-Envelope-Modulation*
N            <16> VCF-Envelope Attack*
A            <17> VCF-Envelope Decay*
N            <18> VCF-Envelope Sustain*
C            <19> VCF-Envelope Release*
E
-
F
I
L
T
E
R
A            <20> VCA-Level*
M            <21> VCA-Envelope Attack*
P            <22> VCA-Envelope Attack*
L            <23> VCA-Envelope-Decay*
I            <24> VCA-Envelope Sustain*
F            <25> VCA-Envelope Release*
I
E
R
             <26> LFO-Wave*
L            <27> LFO-Rate: can be synchronised*
F            <28> LFO-Depth*
O            <29> VCO (Pitch)-Modulation
                      from LFO*
             <30> VCF (Filter)-Modulation
                      from LFO*
             <31> VCA (Amplitude)-Modulation
                      from LFO*
```

Every percussion set consists of 12 percussion instruments and is playable in 12 voice polyphony. The instruments can be edited separately.

☞ Edit Set (1-20) - Note:

Instrument C#   Instrument D#   Instrument F#   Instrument G#   Instrument A#

Instrument C   Instrument D   Instrument E   Instrument F   Instrument G   Instrument A   Instrument H

C C# D D# E   F F# G G# A A# H

```
|1>  Waveform
<2>  Tune
<3>  Level
<4>  Pan
<5>  FX1Send
<6|  FX2Send
```

Choose the drum-instruments you want to edit with the Keyboard (the allocation of instruments to the keys on the keyboard, as shown in the diagram, is identical for all four octaves of the keyboard).

Choosing instruments:

When you are in the SET-menu you can determine with the keys of the Sirius keyboard which of the 12 different percussion instruments you want to edit. Apart from an overall view of the percussion section, the above diagram also shows you the order of the instruments on the keyboard. Just press one key briefly and the relevant instrument is selected for editing and appears in the display. The letter on the top right of the display shows you which key and therefore which instrument you have chosen to edit.

```
Edit Set  1 -  C
|1>  22:808HiTom
```

The Menu Pages:

Menu page 1: (basic waveform)
On page one of the menu you can select the basic sound (waveform) for the instrument. For the above example we have basic waveform 22 "808HiTom" selected. Turn the VALUE/TEMPO-dial and 256 different basic waveforms are available to you ranging from different drum instruments to exotic percussion and electronic effects.

Menu page 2: (Tune)
With the tune parameter you can tune the instrument to a higher or lower pitch (in half-tone steps).

```
Edit Set  1 -  C
<2> Tune:     -2
```

Menu page 3: (Level)
On menu page 3 you determine the output level (volume) of the instrument. Here you can regulate the relative output levels of the instruments in one percussion set.

```
Edit Set  1 -  C
<3> Level:  127
```

Menu page 4: (Panorama)
Here you can determine where the instrument will sit within the stereo picture. (NB: It is standard practise for bass drums and snares to have a central position in the stereo picture, indicated by >C< on the display).

```
Edit Set  1 -  C
<4> Pan:     >C<
```

Menu page 5 and 6: (FX1-send and FX2-send)
These parameters control the effect sends of the instruments to the first and the second Sirius effects units.

```
Edit Set  1 -  C
<5> Fx1Send:    0
```

```
Edit Set  1 -  C
<6| Fx2Send:   90
```

Important:
The effect of the settings in the Edit-SET-menu are also dependant on the settings you have chosen in the MIX-menu or selected with the dials on the MIXER section of the Sirius for the overall percussion Part. The parameters of the MIX-menu are superior. In SET however they take care of the fine-tuning of the parameter for each instrument.
Some examples: If the percussion sound is panned to the very right on the Mixer section, you will not be able to pan the single instruments to the left in the Edit-SET-menu.
If you want to allocate individual effects settings to each of the 12 instruments in the percussion set, the equivalent FX send dial in the MIX menu must at least be partially open. You can allocate different volumes to the instruments, the highest volume will however never exceed the value set in the MIXER-section.

The Write-Menu

The Write-Menu:

The WRITE-Key located next to the VALUE/TEMPO-dial opens the WRITE-menu. This menu contains all the functions relevant to storing, initialising and data-dumping.
In the following pages we will look at the functions of this menu more closely.
First press the WRITE-Key to open the menu.

```
  ____
 /    \
 \____/
[WRITE]
```

Storing/Saving:

Menu page 1 (storing sound)

Here you will find the store-function for home-created (customised) sounds to store on one of the User storage spaces. For the 7 parts of the Sirius you have the following number of sound storage spaces available:

> **96 own Kick/BD-sounds**
> **96 own Snare-sounds**
> **96 own Hihat Sounds**
> **96 own Percussion-Sounds**
> **96 own Synth-1, Synth-2 and Synth-3 Sounds**

A saved sound contains all sound parameters as well as any modulation-wheel allocations. The settings for the arpeggiator are also stored along with any of the Synth-Parts (Parts 5-7). The arpeggiator is not stored along with Parts 1-4, i.e the drum parts.

```
|1> Store Synt1?
 [ok]
```

If you want to store a sound press the F1 Key. The following sub-menu will open.

```
Name: HouseOg2
 [ok]  [cancel]
```

Here you can name the sound you wish to store. You can use either the VALUE/TEMPO-dial or the keys of the keyboard to enter letters, numbers and signs. With the PAGE/BANK-keys you can jump to the previous or to the next letter.

Space # $ & / ! ? - + * 0 1 2 3 4 5 6 7 8 9

a b c d e f g h i j k l m n o p q r s t u v w x y z { | }
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [¥]

This diagram shows you which keys to use for letters, numbers and signs when naming your sound, pattern or song.

Once you have completed entering the name press the F1 Key under the display to access to the following menu:

```
to U54(ModSequa)
  [ok]  [cancel]
```

Here you select the storage space where you want to store your sound. You select it in the same way as you selected the sound. Use the CATEGORIES-keys and the Number-keys 1-16.
You can also select the sound storage space with the VALUE/TEMPO-dial. On the last two pages of the menu you have the option to cancel the storage by pressing the F3-Key (cancel).

Experts-tip:
When storing a sound you should always use a sound category which corresponds to the type of sound you are storing. In this way you will avoid an arduous search should you want to find the sound again. This is why it is better to determine the storage space using the CATEGORIES Keys in combination with the Number Keys 1-16.

In order to find out which sound you would be overwriting you can listen to it again. If you do not want to overwrite it you merely select another storage space. Press the RECALL-Key to the right of the display and the following message will appear on the display:

```
** COMPARE **
```

If you now play the Keyboard you will hear the sound you would be overwriting on the selected storage space. By pressing the EXIT-Key you will get back to the menu where you can select the storage space. You can repeat this procedure until you have found a storage space for your sound, then press the ok Key (F1). The sound is now stored and can not be lost unless you decide to overwrite it with another sound.

The Quick-Save Function:
There is a further function available to you which will help to speed up your work with the Sirius: The Quick-Save-Function. It is recommended for instance if you have slightly modified a factory-sound to your liking and you quickly want to store it in the same storage space.
Just press one of the 16 number Keys and hold it down for 3-4 seconds. A status bar showing the storage progress will appear in the display. Once the storage has been completed, an ok-message will appear on the display. Should you release the Number-key before the status bar has completed its journey, the storage process is automatically aborted.

Menu page 2 (storage of patterns)
This function allows you to save the pattern you are currently editing. A pattern stores the number of used motifs, the used sound numbers, the settings for groove, volume, pan and FX sends as well as any current VOCODER routings. The latter is important for a problem-free use of the VOCODER in a live situation. In every user-pattern you can freely allocate the ANALYSE and CARRIER parts which are to influence the VOCODER.

```
<2> Store Patt. ?
     [Ok]
```

The Write-Menu

If you want to store a pattern, press the F1-Key.The following sub-menu will open:

```
to Pattern P43
 [ok]  [cancel]
```

You have 100 storage spaces available to save a pattern. Choose the desired storage space with the VALUE/TEMPO-dial and confirm with F1. If you press the F3-Key you will cancel the storage procedure.

Menu page 3 (storing of songs)
On this menu page you can store the selected and edited song. You have 16 song-storage spaces available. A song stores the numbers of used patterns, the allocation of the 16 Number-keys with the patterns, breaks and special-loop-tracks, the tempo of the song, the sequence of the song , the settings for the effects programmes and the settings for the vocoder.

```
<3> Store Song?
 [ok]
```

Press F1 to start saving. The following menu page will open. Here you can name your song individually.

```
Name: OldSchol
[ok]  [cancel]
```

As with the sound name, you enter the song name with the VALUE/TEMPO-dial or the Keyboard. To change to the next letter use the PAGE/BANK-Key. If you want to enter the name press the F1-Key to confirm.

```
to 10 (OldSchol)
 [ok]  [cancel]
```

On this page you can select one of the 16 song storage spaces with the VALUE/TEMPO-dial. Once you have confirmed this function with the F1-Key your song is safely stored. On the last two pages of the menu you have the option to cancel the storage procedure by pressing the F3-Key.

Menu page 4 (storing arpeggio-motions)
This page allows you to store your home-created or customised arpeggio-motions. You have 9 storage spaces available.

```
<4> Store Arpg.?
 [ok]
```

When confirmed with F1 the following sub-menu will open:

```
to Motion MOT2
 [ok]  [cancel]
```

Here you can select one of the 9 storage spaces for arpeggio motions with the VALUE/TEMPO-dial. Once you have done this you can complete the storage procedure with the F1 Key below the display. To cancel the storage procedure press the F3-Key.

Initialise:

With the following INIT-functions you can literally "hide" sounds, patterns and songs. This is very practical if you want to return to the Sirius' original factory settings in order to program or edit a sound.

Important:

Please note that sounds, patterns or complete songs will not automatically be deleted once they are initialised. The original data will only be lost once you have stored the initialised sound, pattern or song onto the same storage space. If you save your initialised data onto a different storage space, the original data will remain unchanged in its original storage space.

Menu page 5 (initialise sounds)

```
<5> Init Synth1?
 [ok]
```

Once you have started this function by pressing the F1 Key the selected part of the Sirius will be initialised. This means that all sound parameters like for instance filters, LFO, waveform envelopes are set to their neutral position.

This is very convenient when you want to programme a sound from scratch. Of course this also applies to the drum Parts 1-4. While you are in this menu page you can select any other of the sounds or drum-parts using the Part-keys, CATEGORIES-keys and Number-keys and then initialise them.

Menu page 6 (initialise patterns)

```
<6> Init Patt.?
 [ok]
```

Here you can initialise the selected pattern. This means the tracks as well as the setting of the mixer section are being set to neutral. Following the initialisation you will be working with an empty pattern.

Menu page 7 (Initialise songs)

This function allows you to initialise the selected song.

```
<7> Init Song?
 [ok]
```

Initialising a song in a way 'hides' the sequence of the song, the allocation of Number-keys and all song-relevant parameters. If you have initialised a song you still want to use, it matters not one whit. You will only permanently erase it once you have stored the empty initialised song in the same User-storage space.

The Write-Menu

Copying:

Menu page 8 (copy motifs)

With this function you can copy user-motifs to another Part or another User motif storage space. You can copy, for example, a motif located on the Synth-1 Part in the same pattern to one of the other Parts without having to replay it.

```
        <8> Copy Motif?
         [ok]
```

Press the F1-Key and the copy function will be activated.

```
        Copy Synt2 Mtf 1
         [ok]  [cancel]
```

In this sub-menu you can select a Part (track) with the Part-keys for which you want to copy a motif. With the VALUE/TEMPO-dial you can select the motif to be copied. While selecting the motif to be copied you should leave the sequencer on so you can listen to the each motif being played. Once you have selected the part and motif press the F1 Key to confirm.

```
        to Synt2 Motif 1
         [ok]  [cancel]
```

Select the part and motif storage space onto which you want to copy the motif you have chosen on the previous menu page. An asterisk (*) before the motif number signifies that the storage space is not taken up yet. Here you can also listen to the selected motif that you want to overwrite by running the sequencer. Press the F1-Key to execute the copy command. F3 allows you to cancel it.

Data-Dumping

The Sirius offers you 4 different ways of dumping data. At this point we will only be giving you a brief overview of the dumping functions. A more detailed description can be found in the chapter called "The Sirius and MIDI".

Menu page 9 (Momento Dump)

The momento-dump sends all presently set parameters of the Sirius, even those that have not been stored yet. They are: the sound setting, all system parameters from the system-menu, all common parameters (pad allocation, sequencer-tempo, groove settings, effects settings, vocoder settings, arpeggio settings) and finally Mix settings. You could call the momento dump a 'snapshot' of the current settings or status of the unit.

Menu page 10 (Sound Dump)

The sound dump sends all 480 sounds of the Sirius stored in the User bank, the settings of the percussion-sets and the arpeggiator-settings.

Menu page 11 (Song Dump)

The song-dump sends all stored user-motifs, user patterns P0-P99, the mix parameters and songs. A finished saved song contains the sequence of the song, the sequence-tempo, the groove settings, the effects settings o f FX1 and FX2, the vocoder-settings and the arpeggiator settings.

Menu page 12 (All-Dump)

When you select all-dump, a sound-dump and a song-dump are being sent immediately one after the other.

The Sequencer of the Sirius

The Sirius has a pattern-sequencer with 7 Parts or tracks.

What is a Sequencer?

The sequencer allows you to play little music pieces, called 'motifs', in various ways, which can then be put together to form a complete song.

What does the sequencer record?

The sequencer does not record the sound of the instrument which is being recorded, as does a tape recorder. It is more like a trigger: In record mode the sequencer memorizes which note or key is being played, the strength with which the note or key is hit (known as 'VELOCITY'), the length of time which the note is held down for and the point at which the note is released.

It also memorizes the movements you make on the dials and wheels of the Sirius, such as the Pitch Bender or the EG-MACROS. When you replay your 'recording' the sequencer will play back the same keys you pressed during the time of the recording. In a way, the sequencer invisibly repeats your performance in every tiny detail.

You can also record MIDI-information (for notes and controllers) which comes into the Sirius from an external Midi device via the MIDI-in socket. In the appendix of this manual you will find a table showing you which information the sequencer is able to record from an external device.

Important: The recorded songs stay stored even after you switch off the Sirius. The Sirius has a small battery supplying the storage block with power - this will have to be replaced after some years. Information on the battery and storage protection can be found in the chapter "Important Notes" at the beginning of this manual.

How is the sequencer configured?

The sequencer in the Sirius is a 7-track-sequencer:
This means up to 7 different tunes (motifs) can be played simultaneously. Every part of the Sirius (bass-drum, snare-drum, hihat, percussion set, synth-1, snyth-2, synth-3) is given its own track. Don't forget, the percussion track can play 12 different instruments at once (effectively giving you a maximum of 18 instruments playing at the same time).

Percussion-Set :
PERCUSSION-Instrument 1
PERCUSSION-Instrument 2
PERCUSSION-Instrument 3
PERCUSSION-Instrument 4
PERCUSSION-Instrument 5
PERCUSSION-Instrument 6
PERCUSSION-Instrument 7
PERCUSSION-Instrument 8
PERCUSSION-Instrument 9
PERCUSSION-Instrument 10
PERCUSSION-Instrument 11
PERCUSSION-Instrument 12

PATTERN

Part	Track
BASS-DRUM-Part	Kick-Track
SNARE-Part	Snare-Track
HI-HAT-Part	Hihat-Track
PERCUSSION-SET-Part	Perc-Track
SYNTH-1-Part	Synt1-Track
SYNTH-2-Part	Synt2-Track
SYNTH-3-Part	Synt3-Track

This principle has the advantage that you can delete or edit any track without jeopardizing any of the other (non-selected) tracks. Given the fact that even for the drums you have several tracks available you can easily change the sounds for single drum instruments such as bass-drum, snare or hihat. This you can not do with, for instance, a drum-loop in a sampler. Like this you can record one track after the other and play them back all at the same time. Even for the non-professionals it is very easy to play rhythmic, complex drum patterns. Whilst replaying you may adjust the volume, pan and effects separately for each track. Use the front panel controls of the Sirius MIXER.

So you can see that you are able to modify your musical creation at any time.

Patterns, bars and motifs:
Having the use of seven adjacent tracks is in itself very practical - but there's more!
Be honest: How would you fancy trying to play the bass-drum from the beginning to the end of an eight minute long track? Or, after a 5 minute-long performance, you make a mistake and have to start the whole thing again from the top!
More practical would be if you could play only a very few bars and then have them repeated several times. Most of the time a song consists of small repeated sections - so the sequencer of the Sirius gives you the option to separate your musical ideas into these small sections.
And so we come to the MOTIF.

What is a Motif?
In the Sirius a motif is a musical theme lying on a single sequencer track and is between one and max. 8 bars long. For instance you can put a one bar motif on the bass-drum-track (kick-track) and a 4-bar motif on the snare track and so on.

What is a pattern?
You can store the motifs of the 7 separate sequencer tracks together with other settings as a 'pattern'.

The Sequencer

What is being saved in a pattern?

You might already have noticed that the Sirius contains a total number of 242 pattern storage spaces. 142 ROM (factory) patterns are permanently installed and can not be deleted by mistake. You can, however, copy a single or several motifs into a freely editable User-pattern-storage space. User-Pattern-storage spaces can be deleted and edited.

In each of the 100 User-Pattern-storage spaces of the Sirius the motif allocations of the seven tracks are filed with their respective Sound number. You also store the so-called mix settings with the pattern. Apart from the volume settings of the 7 motifs the mix-settings contain the motif«s pan (left, centre or right) and the effects-send settings of the two effects processors FX-1 and FX-2 for each of the tracks. The internal vocoder routing is also stored with the pattern. This is very important for a problem-free live performance of the vocoder as you can freely assign the ANALYSE- and CARRIER-parts.

<table>
<tr><th colspan="11">The contents of one Pattern-Storage-Space</th></tr>
<tr><th></th><th colspan="3">Pattern-Parameter</th><th colspan="4">Mix-Parameter</th><th colspan="2">Vocoder-Routing</th></tr>
<tr><td>Track 1</td><td>Motif</td><td>Sound N°</td><td rowspan="7">Groove Factor</td><td>Level</td><td>Panorama</td><td>FX1-Send</td><td>FX2-Send</td><td>Analyse On/Off</td><td>Carrier On/Off</td></tr>
<tr><td>Track 2</td><td>Motif</td><td>Sound N°</td><td>Level</td><td>Panorama</td><td>FX1-Send</td><td>FX2-Send</td><td>Analyse On/Off</td><td>Carrier On/Off</td></tr>
<tr><td>Track 3</td><td>Motif</td><td>Sound N°</td><td>Level</td><td>Panorama</td><td>FX1-Send</td><td>FX2-Send</td><td>Analyse On/Off</td><td>Carrier On/Off</td></tr>
<tr><td>Track 4</td><td>Motif</td><td>Sound N°</td><td>Level</td><td>Panorama</td><td>FX1-Send</td><td>FX2-Send</td><td>Analyse On/Off</td><td>Carrier On/Off</td></tr>
<tr><td>Track 5</td><td>Motif</td><td>Sound N°</td><td>Level</td><td>Panorama</td><td>FX1-Send</td><td>FX2-Send</td><td>Analyse On/Off</td><td>Carrier On/Off</td></tr>
<tr><td>Track 6</td><td>Motif</td><td>Sound N°</td><td>Level</td><td>Panorama</td><td>FX1-Send</td><td>FX2-Send</td><td>Analyse On/Off</td><td>Carrier On/Off</td></tr>
<tr><td>Track 7</td><td>Motif</td><td>Sound N°</td><td>Level</td><td>Panorama</td><td>FX1-Send</td><td>FX2-Send</td><td>Analyse On/Off</td><td>Carrier On/Off</td></tr>
</table>

The Song and its Steps:

It goes without saying that you have the option to compose complete songs and store up to 16 of them in Sirius' memory block. One song can be made up from up to 100 'steps', called Song-steps. For every Song-step you define which pattern is to be heard in the step and how long it is to last (a max. of 64 bars per step is possible). The overall length of the song must not consist of more than 600 bars which would equal 20 minutes per song at a speed of 120 BPM. In a Song-step you can also determine which tracks are to be muted.
You can also dictate the transposing (varying of the pitch in fixed increments: +/- 12 half tones) of the three Synth motifs. The following settings of the complete song with its steps are stored:
the settings of the effects-processor, the tempo settings, the vocoder settings except for the internal vocoder routing. Also stored are the allocations for the 16 pads available in a song: your 8 favourite patterns on the pads 1-8, the 4 breaks patterns and 4 special loop-motifs on pads 9-16.

Recording and Editing Motifs:

Editing the motifs in the pattern:

Before you start recording a motif you should closely look at an already existing pattern with its motifs.
Press the EDIT-Key then the right-hand PAGE/BANK-Key. Now select the Edit-pattern main menu by pressing the F1-Key under the display. The display shows the following contents:

```
Select Pattern
[Rom]    [User]
```

Select USER and choose User-pattern 09 with the VALUE/TEMPO-dial. Confirm with F1 [ok] and start the sequencer with the START-Key.

```
        Select Pattern
        Pattern:P09 [ok]
```

Selected Pattern

Selected Track

```
        Edit P09 T:Synt1
        |1> Motif:ROM-55
```

Selected Motif

Press the PART-SELECT-key and select another Part (track) of the pattern. At the top right-hand corner of the display you can always see which Part (track) you have just selected, (In this example it is the Synth-1 Part).
A very practical aspect for you to consider is this: When you have activated the PART-MUTE-Key in the mixer section the PART-Keys will show the muted tracks instead of the ones selected in the display.

If you turn the VALUE/TEMPO-dial on this menu page you are selecting a different motif for your chosen track. There are 142 ROM motifs per track (non-deletable factory motifs) and 100 User-motifs available.

Expert's advice: You recognise used User-motifs by the "-" before the number and the "*" for the unused or empty ones.

Expert's advice: If you use the function Keys F1-F3 you can execute the following shortcuts:

Display showing USR ->   press F3: USR No. jumps to USR*00

Display showing USR ->   press F2 or F1: motif jumps to ROM area with same No. (I.e. Display shows USR*46 - hit F1 or F2 - display jumps to ROM-46)

Display showing ROM-00 to ROM-99 ->   press F3: motif jumps to "no" (empty motif)

Display showing ROM-100 to ROM 142 -> press F3: motif jumps to ROM-100

Display showing ROM-100 to ROM 142 -> press F1: motif number jumps back 100 ROM numbers.

You will notice that when you change the motif, only the tune or arrangement changes, not the sounds playing the tune or arrangement. This is because each of the sounds allocated to the seven Parts (tracks) have not been altered.
By holding down the PART-SELECT-Key you can scroll through the Parts (tracks) using the PART-Keys. You can also allocate different motif numbers to these Parts using the VALUE/TEMPO-dial.

Random-Motifs:
Expert's advice: Motif-Random-Selection:
Hold down the SHIFT-Key and press one of the 7 PART-Keys. The random generator sort of throws the dice and produces a new sound and a different motif for the selected part. The Sirius does not write a new motif but picks out one of the many stored ROM patterns at random. The random motif is called up with the respective sound. Should you not be able to hear anything, the Sirius has probably chosen a pattern in which not all of the 7 tracks are used.

By the way, this function is also available in the normal JAM mode, independent of the Edit-menu.

The Sequencer

Time to RECORD!
Following the dial twiddling and dice throwing we come to the most exciting part of the Edit-motif menu: the recording and editing of your own ideas.
Depending on the part you have selected with your 7 part-Keys (from kick to synth-3) the Sirius has 3 different recording modes available:

1. Realtime recording - works on all 7 Parts (tracks)
2. Step-recording - works on Parts (tracks) synth-1 to synth-3
3. Drumgrid-recording (for drum-Parts (tracks) kick, snare, hihat and percussion).

The Record mode you select depends entirely on personal taste. Each type of recording has its own particular advantages and uses.

Moving or Deleting User Memory Spaces:
Before you start recording new things you need to select an empty User motif or even a completely empty user pattern. As you know, you recognise an empty motif by the "*" sign before the motif number in the track display. If you are in the JAM mode empty tracks are also signified with an asterisk. In the following example, all 7 parts (tracks) of the selected pattern are still empty:

```
B13:TranceBS 160
(P00) +0 *******
```

Deleting all motifs in a pattern simultaneously:
Press the EDIT-key. Use the right hand PAGE/BANK-key to access page 2 of the Edit-menu. Hit the F1 key (Pattern). You will now see the following display:

```
Select Pattern
[Rom]    [User]
```

Press the F3-key and select the user area. With the VALUE/TEMPO-dial select a pattern you wish to delete (initialise). The display will show for instance:

```
 Select Pattern
Pattern:P09 [ok]
```

After confirming (ok) with the F3-key, select and edit the desired parameters. The pattern is automatically stored in the Sirius' RAM (temporary memory) block (the original user-pattern will still remain untouched in its original User-storage bank).

```
Edit P09 T:Synt1
|1> Motif:ROM-55
```

Now press the Write-key and use the PAGE/BANK-keys to select page 6:

```
<6> Init Pattern?
 [ok]
```

Confirm with key F1 and then press the EDIT-key to get back to the Edit-pattern menu.

```
Edit P09 T:Synt1
|1> Motif: no
```

As you can see now the motif information for all 7 tracks is deleted. The Sound data remains the same. Please note the following: When you leave the edit-menu by pressing the EXIT key the pattern is still not stored and will revert to the original untouched pattern when you call it up again. So don't forget to save it!!

Deleting one motif only:
If you want to delete only one motif from one track select page 3 of the Edit-pattern-menu and then press the F2-key.

```
Edit P09 T:Synt1
|3> [clear]
```

Now the motif is empty because the values of the notes have been deleted. With the VALUE/ TEMPO-dial you can enter a new motif length between 1 and 8 bars in the display . Should the motif also contain Wheel control information from the performance aids, this will also be deleted with the clear-function.

Expert's advice: It does not matter where in the menu you are, simply press one of the other Part-keys and you will select that part within the current menu.

After you have deleted the motif you will see the following on menu page 1:

```
Edit P09 T:Synt1
|1> Motif:USR*00
```

Again the "*" stands for an empty motif into which you can now record something new. You can of course only record onto a User motif-storage space as the ROM storage can only be read and not over-written.

Realtime Recording:
The Realtime record-mode records everything in real time, i.e. what you are playing whilst in Realtime record-mode. You will at this point be playing along to the beat of the metronome.

Procedure:
First you should switch the metronome to ON on page 5 of the Edit-pattern menu:

```
Edit P09 T:Synt1
<5> Metronom: ON
```

If you haven't already done so, select a User-pattern in the Edit-pattern menu and then a free motif (Menu-page 1) - example:

```
Edit P09 T:Synt1
|1> Motif:USR*00
```

Now you have two methods to choose from in order to start your recording. You either simply press the RECORD-key in the sequencer section:

Or go to menu page 6. You will see the following display:

```
Edit P09 T:Synt1
<6> [record]:NEW
```

The Sequencer

You haven't started recording yet, but when you press the RECORD-key once more or the F2 key under the display you will hear a one bar count-in (pre-count) from the metronome.

Expert's advice: You can adjust the volume of the metronome with the SPECIAL-LOOP-TRACK-FADER.

While the metronome is "ticking" away you will have one bar (4 beats) to tune into the beat. Then the recording will start and you can play your tune. By the way, your metronome will run with you until it has reached the motif end that you determined (1-8 bars). While you are recording you will see the present recording position in the motif: At the bottom left you see the bar number, after the colon is the current quarter note of the bar:

```
Edit P09 T:Synt1
  1:3  Record!
```

If the selected motif is for instance only 2 bars long you will automatically jump back to the beginning when the recording has stopped. Your 2 bar motif is now going to be repeated again and again (looped). During these repetitions you can not carry on recording. Your theme is only being replayed. The display will show the same as before.

```
Edit P09 T:Synt1
<6> [record]:NEW
```

Overdub-Recording:

You have probably already wondered what the word NEW on this menu page means. NEW shows that if you re-record a motif the existing contents will be overwritten (deleted). Press the F3-key or turn the VALUE/TEMPO-dial and you can select another option.

```
Edit P09 T:Synt1
<6> [record]:DUB
```

Here DUB means overdub mode. You add a new recording to the already existing theme in the motif. If for instance you played a note or a chord on the 1st beat of each bar and you then want something else to happen on the second beat you can do this in DUB mode. Adding things will not delete what you have already recorded, or "set".

After recording the melody you can start another overdub-recording and "tune" the dials of the synth-section. Record for instance the movement of the cut-off control or volume control via VCA-level. You obtain another interesting effect by turning the de-tune control during a normal 16th HiHat-motif.

You should definitely try this out because like this you can achieve incredibly dynamic grooves, which you can normally only play with four or more hands.
If you should notice immediately after the overdub recording that you don't like it you can cancel the last action: use the PAGE/BANK-key to change to menu page 8:

```
Edit P09 T:Synt1
<8> [delc][undo]
```

The F3-key allows you to jump between the current recording and the recording before that (undo and redo). Be careful: you can only do this in the overdub recording mode while the sequencer is still running. As soon as you stop the sequencer the undo function is not available to you anymore. If you want to delete all the recorded dial movements of a motif at once just press the F2-key DELC means: delete controller.

After the recording:
Following the recording of your motif the edit pattern menu offers you a number of parameters with which you can edit and perfect the recordings.

The Groove Factor:

On page 2 of your menu you can add a groove-factor to your recording. This will basically re-position the notes you have played using specific musical criteria and gives your melody or your rhythm more 'swing'. You can adjust the groove-factor in per-cent with the VALUE/TEMPO-dial.

```
Edit P09 T:synt1
<2> Groove:  37%
```

Using the groove factor causes your rhythm to "shuffle" or "swing" giving you the impression that a real drummer is playing. This function is particularly effective for House, HipHop and Funk styles. If you favour a more machine-orientated groove you can copy the behaviour of the old cult-drum computers from the early days of electronic music particularly well. Due to slow processors, timing variations were typical and were integral to the special character of those machines.

Quantisation:

After you finished your recording you might notice that for instance the bass drum is not exactly on the beat or that the timing of your recording is less than accurate. For such cases the sequencer of the Sirius has a function which can pull the separate notes into place on a given grid. How fine this grid is to be set can be determined on page 7 of the menu.

```
Edit P09 T:synt1
<7> [quant]:16
```

16 means here for example that your played notes will all be moved to the closest 16th of a bar. The VALUE/TEMPO-dial allows you to set the quantisation from an 8th to a 32nd of a bar. You can even quantize to triplet bar measures such as 12ths and 24ths. Totally inaccurate recordings can of course not be saved through quantization. So a certain accuracy is required when recording in realtime.

The F2 key starts the quantisation, it will also work while replaying the sequencer. You can also apply the undo function from menu page 8 should you have made a mistake.

The storage display:

On page 9 of the Edit-pattern menu you will find the information showing how much memory is still available for recording further motifs.

```
Edit P09 T:synt1
<9| Mem: 99%free
```

Recording drum-motifs with the drumgrid:

To make a recording with the drumgrid proceed as follows: first select a drum part with the Part-key of the mixer section. Only the orange coloured parts (parts 1-4) can use the Drumgrid Record mode.

We will use the percussion part in our example. First select an appropriate percussion set using the sound-select-keys (categories and Number-keys).

Then look for an empty motif (the one with the "*") or delete an already existing user-motif with the Clear-function on Edit-pattern menu page 3. Then determine the number of bars in your theme.

```
Edit P09 T: Perc
<3> [ --- ]Len:1
```

Move to menu page 4 and activate the drumgrid with the F2 key.

```
Edit P09 T: Perc
<4> [drumgrid]
```

You are now in the Drumgrid recording mode.

```
Grid: 16 | 1/1 |
Instr: 808Kick2
```

Before we start recording we would like to explain what a drumgrid is.

This diagram shows the drumgrid of a typical House groove.

A two bar theme is split into two bars each with 16 equally long sections. This forms a fixed grid in which only 16th notes can be inserted. In Techno and Dance sections you very often hear continuous hihat-lines consisting of 16th notes. By putting all the drum instruments onto this grid you get a good impression of the timing of a drum instrument. You can also verify how many drum instruments are placed in the same position in the bar. The 16 divisions of the Sirius' drumgrid are represented by the number keys 1-16 above the keyboard.

The keys 1-16 are a bar with 16 X 16th notes. The markings (bold white lines) under the 1, the 5, the 9 and the 13 on the front panel show the position of each 'on' beat.

Starting the Recording

First press the START-key of the sequencer and set the volume of the metronome with the special-loop-track fader. You should now choose a percussion set which you want to record your theme in. By tapping a key on the keyboard you activate the respective instrument. The name of the instrument will immediately turn up in the second line of the display.

Now you can start entering the notes. The keys 1 to 16 represent one bar, containing 4 beats which are divided into 16 notes (4 notes per beat or 4 'semiquavers' totalling 16 semiquavers to the bar). So you are working in a resolution of 16.

Now press some of those 16 number keys and listen to the result. You will recognize a recorded or 'SET' note because the corresponding key will be permanently lit. To remove a note you hit the corresponding key a second time. You should try setting and removing notes intensively. After a short while you will notice which grid points in the bar are the important ones.(NB: Number keys 1,5,9 and 13 are the most important. Placing a bass drum on each of these grid points gives you the classic House/Dance 'Four On The Floor' bassdrum)

The drumgrid also allows you to select different volume settings for each note. You have four different volume settings available. To select these, hold down the SHIFT-key. Now one of the keys 9 to 12 will be lit. On these 4 keys you have the volume settings, also called velocity (notice the word 'Velocity' is printed in white above these 4 number-keys!). Key 9 is the most quiet setting, key 12 the loudest one.

Expert's advice: The volumes for these 4 number-keys can be programmed in the PAD-menu described on pages 33-36.

So while you are holding down the SHIFT-key you can select one of the four programmable settings with number-keys 9-12.

The change of velocity will only effect notes which are set after the change has been made. If you want the new velocity to reflect in an already set note you have to delete this note first and then re-set it.

If your motif exceeds the selected bar length, the PAGE/BANK keys allow you to jump between the bars. Like this you can edit each bar on its own. The number of bars is displayed on the top right.

```
Grid: 16 | 1/4 >
Instr: 808Kick2
```

The Sequencer

Another useful feature of the drumgrid is that you can set another resolution of the notes while entering them. Hold down the SHIFT-key and select the desired resolution with the PAGE/BANK-key.

The following resolutions are available:

8th of a note: lowest resolution. The bar only goes up to Number-key 8.

12th of a note: This resolution is also called a triplet. This means that a bar is divided into 12 steps.

16th of a note   This is the standard setting when opening the drumgrid. The bar is divided into 16 steps.

24th of a note   This is another form of triplets. The bar now contains 24 steps.

32nd of a note   This is the highest resolution. A bar contains 32 steps. In this resolution the keys 1 to 16 only represent half a beat.

It is best to experience the different note resolutions by trying them out. For a bass drum a low resolution will certainly be sufficient. For snare-rolls or driving hihats a resolution of 32 would be appropriate.

Triplets can be combined with any other resolution in the same motif, i.e you can have a resolution of 8 for the bass drum and at the same time a resolution of 24 for the hihat.

Once you have completed the beat for one instrument in the percussion set just press another key on the keyboard to get to the next instrument of the selected percussion set. Once you have finished recording all the necessary instruments of the percussion set you exit the drumgrid by pressing the EXIT-key. Now you can select another track with the Part-keys.
In the HIHAT-section there is an option available you should take notice of:
The drumgrid in the HIHAT section gives you the choice between closed HIHAT (closed HH) and open HIHAT (open HH). Turn the VALUE/TEMPO-dial to choose between these two options. The change will be displayed.

Caution: After completing your drumgrid recording using the EXIT-key, select (if you haven't already done so), your desired drum and bass sounds. Press the WRITE-key to store the pattern including the sound number for each track in the WRITE-menu.

The Step Sequencer for the Synthesiser-Parts:
What the drumgrid is for drum and percussion parts the step-sequencer is for the synthesizer parts. When you are on page 4 of the Edit-pattern-menu and you have selected the synth-1track with the respective Part-key the following will read on the display:

```
Edit P09 T:Synt1
<4> [stepRecord]
```

The step sequencer of the Sirius functions much the same way as the old analogue units which came out in the early Eighties. As it was with these antique units, experimenting with the step-sequencer of the Sirius will keep on surprising you.
Your motto when using the step sequencer should therefore be joy in experimentation. Don't necessarily try to understand exactly what you are doing at the time.
Just let yourself be surprised by the results. For predictable melodies you still have the Realtime recording mode.

One requirement to ensure your first success with the step sequencer is an empty synth motif. Should the sequencer not be switched on yet, press the START-key. Now press the F2 or F3 key to enter the step sequencer.

```
Step:   1:1:1/16
---  V: 64 G:  6
```

Now enter the first note using the keyboard. Just press one of the keys.

```
Step:   1:1:1/16
 C4  V: 64 G:  6
```

The first step is now set. If you want to cancel / undo the note entry just repress the same key or select another key on the keyboard. Now press the PAGE/BANK-key. If you look at the display you will notice that you have jumped on to the next step (i.e. the second 16th part of the bar). You can now enter a second note with the keyboard. The current step is always indicated in the display.

```
Step:   1:1:2/16
---  V: 64 G:  6
```

The numbers in the first line of the display means: you are in the first bar - its first 1/4 - its second 16th.

The step sequencer also allows you to set a different resolution while entering the notes. To do this hold down the SHIFT-key and select the desired resolution with the PAGE/BANK-key.

As in the drumgrid recording you can set the volume for each note with the Number-keys 9-12. The velocity value is displayed in the centre of the lower line of the display as V: and then a number from 1-127. For sounds that have the filter dynamics controlled by the touch sensitivity, a change of the velocity setting will also open or close the filter. This can make the sound lighter or darker for each step.

At the bottom right of the display you can see another value: G. This stands for Gate-time which basically means the length of a note. This allows you to lengthen or shorten notes according to the resolution of the grid in which they are set. In this example the resolution is set at 16. There are four lengths available.
You allocate the note lengths with the Number-keys 13 to 16 (you will notice that 'Gate Time' is printed in white above these 4 number-keys). The length of the note depends on the selected resolution. Key 16 assigns a note length which will join the note to the next step. The display therefore shows the word "glide".

Expert's advice: You can also control the length-values of the given Gate-times of keys 13 to 15. To do this hold down the key of the note on the keyboard which you wish to lengthen and hold down PAGE/BANK-key at the same time . This will stretch the length of your note. Should the next step be empty you will be able to extend the note«s length into the next step. If the next step is not empty, and you extend the note into it, the message 'Glide' will appear in the bottom right of the display. With a chosen resolution of 16, for example, you can change the length of your note to 1/8 of a bar instantly.

The Sequencer

Play around with the step sequencer and try out its different step-parameters. As already explained the results are not always predictable. But is this not part of the attraction of electronic music? Once you have worked out your own system with the step sequencer you wont want to miss it anymore.

Tip

Expert's advice: You can at any time quantize or add a groove factor to your new motif. It does not make any difference whether you have recorded your motif in the Realtime, Drumgrid or Step Record mode.

The Mixer Settings:
Before you now save your pattern you should get to know the MIXER-section, as the mix parameters are also stored along with the pattern.

Diagram of Mix section functions:

Press the EDIT-key followed by the right-hand PAGE/BANK-key to access the Edit-mix menu.

```
Select Edit  <2>
[Pattern] [Mix]
```

Press the F3 key and you will go to Edit-mix menu page 1.

```
Edit Mix T:Synt1
|1> SeqTo:Intern
```

This menu allows you to command each Part (track) of the sequencer to either drive the respective part of the Sirius (here the synth-1 Part) or to send out MIDI information only - or both. You can set this parameter with the VALUE/TEMPO-dial. Watch the LED display in the part keys when turning the VALUE/TEMPO-dial. You can also select between Intern and MIDI with the Part-keys of the mixer panel directly. You have to make sure that you have pressed the PART/SEQ TO MIDI-key.

Allocating the Sequencer Tracks

This diagram shows the allocation of the sequencer tracks to the internal Parts and/or the MIDI-out. For this you must be switched to "Local: ON" in the system menu. "Local: OFF" means that all sequencer tracks are exclusively sent to the MIDI-out (all PART/SEQ TO MIDI-keys are lit)

Caution: The allocation of the sequencer (Internal, MIDI or Both) is not stored for each pattern individually but is valid for all patterns together. This allocation will remain in the memory of the Sirius until you next change it, even if you have turned the Sirius off. You should therefore first check out this setting should you not be able to hear anything from the sequencer. The likelihood is that the tracks are routed to the MIDI-out only.

☞ Edit Mix
  |1> SeqTo:

Key on the user panel will display:

INTERN / BOTH (intern+MIDI) / MIDI — **KICK/BD** = PART/SEQ. TO MIDI

INTERN / BOTH (intern+MIDI) / MIDI — **SNARE** = PART/SEQ. TO MIDI

INTERN / BOTH (intern+MIDI) / MIDI — **HIHAT** = PART/SEQ. TO MIDI

INTERN / BOTH (intern+MIDI) / MIDI — **PERC** = PART/SEQ. TO MIDI

INTERN / BOTH (intern+MIDI) / MIDI — **SYNTH 1** = PART/SEQ. TO MIDI

INTERN / BOTH (intern+MIDI) / MIDI — **SYNTH 2** = PART/SEQ. TO MIDI

INTERN / BOTH (intern+MIDI) / MIDI — **SYNTH 3** = PART/SEQ. TO MIDI

Edit System/Midi Local: ON <4>

S E Q U E N C E R

The BOTH setting can be selected in the Edit mix-menu only
The MIDI setting can also be activated by the PART/SEQ TO MIDI-key on the front panel.

 MIDI-Out

On menu page 2 you see which sound number has been allocated to which part:

```
Edit Mix T:Synt1
<2> A15:WaveBass
```

When you switch between parts with the PART-SELECT-keys you will soon see which sounds are assigned to which particular Part (track). Changing these sounds alone can immediately result in a new musical ideas!
On the following menu pages 3 to 6 you can determine the volume of the track in the pattern, the stereo-pan position (more to the right or left, centred or random(RND), as well as which Parts you are sending to the effects processors FX-1 and FX-2.

The parameters on menu pages 2 - 6 are stored with each pattern individually.

Saving a Pattern:

Once you have finished your pattern you can save it. Before you can do this you have to exit the drumgrid or step-sequencer by pressing the EXIT-key.
Now go to the Write menu by pressing the WRITE-key. Select page 2 of the Write-menu with the PAGE/BANK-keys. This is what it looks like:

```
<2> Store Patt.?
 [ok]
```

Press F1 [ok] to save. The display shows this:

```
to Pattern P09
[ok]  [cancel]
```

On this page you can select a User-memory space for your pattern. You do this with the EDIT VALUE/TEMPO-dial. F3 [cancel] allows you to abort. The pattern will not be saved. When you have entered your memory space press F1 [ok]. The pattern will now be stored in the selected User-memory space. Press the EXIT-key to quit the WRITE-menu.

Tip

Expert's advice:
Remember that in the pattern you only store the sound number for each of the 7 Parts. If you have created a new sound for one of the Parts during the editing of the pattern you should save this new sound (prior to saving the pattern) under a new sound number, i.e in a different User-memory space.

Patterns in a Live-Performance:

The sequencer of the Sirius can not only record and replay patterns but can do a lot more things you might have missed in other sequencing devices. Particularly with the live performer in mind, the Sirius offers you the chance to get in on the action. You can be flexible for your audience.

The Tempo:

The tempo in which you record and replay can either be set using the VALUE/TEMPO-dial or can be tapped in using the TapTempo-key. Try tapping the TAP-key rhythmically several times. You will notice that the tempo will adjust to your tapping rhythm.

When you are in the top menu level of sound-select, pattern-select or song-select, the tempo is displayed on the top right of the display. To get to this level hit the EXIT-key repeatedly until the display stops changing.
You have a further possibility to change the tempo - the Beat-Recognition-System of the Sirius.

Important: The individual tempos of the songs are stored with the song data in each of the 16 available song-memory banks.

The Number-Keys or 'Pads':
In this section we call the 16 Number-keys above the keyboard 'pads'.
You can assign different functions to the pads which later can be called up at any time during a live gig.

The favourite patterns:
The Number-keys 1-8 can store 8 patterns per song. These patterns do not necessarily have to be in the song. It can be any pattern from any of the 100 user-patterns available. In the Edit-menu you will find the menu to assign the pads. When you change to page 5 with the PAGE/BANK-keys, and confirm with the F1-key, you will see the following display:

```
Edit Pad1 Assign
|1> Pattern:P09
```

Turning the VALUE/TEMPO-dial allows you to select any user-pattern you want to allocate to Number-key 1. Proceed the same way with the other Number-keys using menu pages 2 to 8.
To play the pattern just press the Number-keys 1-8 and you will immediately start your favourite pattern. It will play/run until you press the STOP-key or any other Number-key. All 8 patterns will start in the tempo stored in the song memory containing those 8 pattern numbers. You can change the tempo at any time with the VALUE/TEMPO-dial or the TAP-TEMPO-key. You regain the original tempo by pressing the song-select key- and then selecting or entering the equivalent song number with one of the 16 Number-keys.

The Breaks:
On menu pages 9 to 16 you can assign breaks. Again you are dealing with User-patterns which will not loop endlessly but have a programmable length.
The number of bars for the breaks can be set from 1 to 8 bars. After this length the previously used pattern will automatically be recalled. With breaks like that you can bring a lot of entertaining change and tension into a live session.

Expert's advice: Make sure the contents of your breaks are thematically not too far apart from the previously played pattern.

The Special-Loop-Tracks
On menu pages 17 to 32 you can set the function of the special-loop-tracks. Special loop tracks are single motifs which, when flown in, will replace the current motif in the pattern. While pressing one of the keys 13 to 16 these motifs will replace the original motifs. You can choose from the first 99 ROM and the 99 user motifs. You can also select other sound numbers for these loop motifs.

The volume of the special loop tracks can be adjusted with the SPECIAL -LOOP-TRACK-FADER.

**SPECIAL-LOOP
TRACK-FADER**

An example (for this example we are using Pad 13):
Go to menu page 17. Here you have 4 different menu pages for pad number 13 available:

The Sequencer

Press Number-key 13. The display will show the following:

```
Edit Pad13 Assign
<17> Track:Synt3
```

On this page you can select the Part i.e. track to which the special-loop-track motif should be assigned. To do this turn the VALUE/TEMPO-dial. The right PAGE/BANK-key will take you to the next page.

```
Edit Pad13 Assign
<18> MotBnk: ROM
```

Turn the VALUE/TEMPO-dial to select the motif bank. You can choose between ROM and USER. The right PAGE/BANK-key will take you to the next page.

```
Edit Pad13 Assign
<19> Motif:   94
```

Turn the VALUE/TEMPO-dial to select the motif number. The right PAGE/BANK -key will take you to the next page.

```
Edit Pad13 Assign
<20> Sound:   U96
```

On this page you set the Sound with which you want the speical-loop-track motif to play. Again turn the VALUE/TEMPO-dial.
Proceed the same way with the other Pads. Only the numbering of the menu pages will differ from those in our example. Now that you have programmed the special loop track keys, you can store them for each song. In each of your 16 User song-storage spaces you have 4 individual loops available.

Mute and Transpose Tracks:
Before you can try the possibilities we have already mentioned, you will have to set another parameter in the SYSTEM -menu. Go to the Edit-menu and select the SYSTEM-menu.

```
Select Edit  <5|
[Pads]   [System]
```

On page 15 of the System-menu set the track-mute-parameter to the ON-position:

```
Edit System/Midi
<15> TrkMute: ON
```

The keyboard of your Sirius was given another two functions.
Apart from the Mute Part-keys you can now very comfortably mute and re-activate the single tracks

Mute   *Transpose*

The second octave of the keyboard can be used to transpose the Synth-1-3 Parts in realtime while the pattern is playing. Why not just try this function. You will be amazed how many ideas for complete songs will open up to you.

A Song develops:

With the patterns created by you you can arrange a complete song with up tp 100 separate steps called Song-steps.

What is a Song-Step?

The individual pieces of a song are called Steps. A Step relates to an individual pattern with a pre-determined length. You can also set a transposition for the three Synth-Parts within each Step. In addition you can choose whether a Part (track) should be audible or mute. To open the Edit-song menu, press the EDIT-key. With the PAGE/BANK-keys choose page 4. The display shows the following:

```
Select Edit  <4>
[Vocoder] [Song]
```

Press the F3-key [song] to open the Edit-song menu:

```
Edit S1  Bar:  1
|1> Pattern: P09
```

This is the first page of the Edit-song menu. In all the pages, the top line shows you the current position of the song.

1. Edit S1: This means that you are just in the first Song-step.

2. Bar: 1: This display indicates the actual position of your song in bar-counts.

In both instances, the bottom display line contains a parameter you are allowed to change. On page 1 you select the pattern. You can choose from 100 user-patterns. If you want to load up a ROM-pattern copy it onto a User-pattern storage space first.

Now press the right PAGE/BANK-key. You will see page 2 on the display:

```
Edit S1  Bar:  1
<2> Transp:   +0
```

On this page you set the number of tones you want one of the three synth-motifs to move up or down (called transposition).

```
Edit S1  Bar:  1
<3> Bars:      4
```

On this page you can determine how long the pattern should last, i.e. how many bars it contains. You can select between 1 and 64 bars.

```
Edit S1  Bar:  1
<4> [ins] [del]
```

This page offers you two functions: insert [ins] and delete [del]. Pressing the F2-key [ins] allows you to insert a Step. Your selected Step will be copied and positioned as the next step in the song. All the following steps move along one position (shuffle).

Caution: You can not insert when you are in the last step of a song.

When you press the F3-key [del] the selected step will be deleted. All the following steps shuffle back.

Page 5 of the Edit-song menu contains a copy function. The display shows the following:

```
Edit S1  Bar:  1
<5| [copy]to:S1
```

When you press the F2-key the selected step will be copied. The step you want to replace with the copied Step is selected using the VALUE/TEMPO-dial.
To mute single instrument sections in a step press the MUTE-key accordingly. If the key is lit up, the section is muted.
Once you have edited a step to your satisfaction press the FWD-key in the Sequencer section to get to the next step. The REW-key takes you back one step.

To store a Song:

Once you have finished your song you can store it. You do this in the Write-menu. Press the WRITE-key. Select page 3 of the Write-menu with the PAGE/BANK-keys. It looks like this:

```
<3> Store Song?
 [ok]
```

Press [ok] to store. You will see the following in the display:

```
Name: Untitled
[ok]  [cancel]
```

This page allows you to name your song. Turn the VALUE/TEMPO-dial to change the letters. The next letter you will get to with the right PAGE/BANK-key. You can also use the keyboard to name your song. The following diagram shows you where to find the letters, numbers and signs on the 'Sirius' keyboard

Space " ‡ & / ! ? – + * 0 1 2 3 4 5 6 7 8 9

a b c d e f g h i j k l m n o p q r s t u v w x y z [|]
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [¥]

You can abort all this with the F3 key [cancel]. The song will then not be stored. Once you have entered the name press the F1 key [ok]. The following confirmation will appear in the display:

```
to 1  (Untitled)
[ok]  [cancel]
```

You have to confirm once again if the selected User-memory space is definitely to be overwritten with your new song. The VALUE/TEMPO-dial allows you to select a different User-memory space. When you press [ok] the song will be stored. [cancel] allows you to abort the procedure. The song will then not be stored.
Press the EXIT-key once you have finished and want to leave the Write-menu.

Playing a song:
To play a song press the SONG-SELECT-key and select the song using one of the Number-keys 1-16. Press the START-key to start your song. One song-step will be played after the other.

If during play you press the start key once again the LED will blink in the START-key and indicates that the actual song-step has been frozen. This step will now be repeated until you repress the START-key. This is very practical in a live gig to attend to the audience; you can peacefully fine tune your performance by wildly twiddling with the filter etc.

You also have the possibility to jump complete song-steps either way. Use the FWD-(Forward) and the RWD-(rewind) key.

The Sequencer section on the front panel gives you all the functions needed to play a song.

The Arpeggiator

The arpeggiator is the most used feature to create exciting sequence-figures and also unusual melodies. Basically the arpeggiator is separated into two different units. The first unit is more or less the same in every arpeggiator type. As soon as you play one or more keys these notes will be collected from the first part of the arpeggiator-unit, meaning they will be already saved in a kind of „in-between memory". As soon as other keys will be played, this "Pool for notes" will be filled with new notes. The second unit replays these „collected notes". The special thing with this second unit is the order and rhythmic these notes will be played back with. The simplest case for instance will be that the notes of a played chord won' be played back all at once but all the single notes that are part of this chord will be given back one after the other. Especially in this second unit there are the greatest differences if you compare several arpeggiator-types. While very plain arpeggiators are playing back these kind of notes in a „settled" follow up, there are more complex arpeggiators like the SIRIUS where you are able to „edit" the variety of change-possibilities and the rhythmic that is given. In the opposite to the most common arpeggiator-types, the SIRIUS is also able to create polyphonic note-pattern. There are even more special features like for instance the chord-trigger-mode and the gater-function. All the different functions we will explain as follows.

Trying out the Sirius arpeggiator:
Basically you can use the Sirius arpeggiator on different tracks - by using the percussion-track even new rhythm-figures are possible. To get an idea how the arpeggiator is working please go ahead and try by following these steps:

1)   Use that part, the arpeggiator should play on.

2)   Use a sound that fits on fast melodies and bass-lines.

3)   Turn on the arpeggiator by using the ARPEG.-ON/OFF-button. (If this button flashes already by choosing the tone, you (discovered) selected a sound that has been saved with an activated arpeggiator.

If you are playing the keys on your Keyboard now you can hear the typical arpeggiator-lines.

The selection of manufactured arpeggio-types.

Some basic settings you can select without editing the arpeggiator. For this case you hold down the ARPEG.-ON/OFF-button and choose one of the select-buttons ranging from 1-16. In this way you get a first impression on the possibilities of the arpeggiator. Got nosy?
Then we can go on with the other possibilities the arpeggiator has.

Especially for LIVE-Performance - The arpeggiator-freeze-function:

A favorite function, that in the first place has been realized in our Synthesizer QUASAR, is the so called arpeggiator-freeze-function. This function allows transposing, meaning the movement of the sound-level (high/low) of an arpeggiator-pattern on the keyboard of the Sirius. The word „freeze" says it: the Sirius „freezes" the actually played pattern. As soon as it is „frozen", the notes you actually play won't be added to the pattern but are influencing the transposing.

You can call on this function by using a pedal (a perfect pedal for this function can be purchased with our „starter-kit". Besides the pedal our starter-kid has even more beneficial tools on the Sirius). To try out the function connect the pedal while the Sirius is „off-line" to the special pedal-input on the backside of the Sirius. Then you can turn on the Sirius again.

Choose a sound you like and that already uses the arpeggiator and just play some keys on the keyboard. If you step on the pedal now you can easily transpose the arpeggio-pattern on the keyboard. As soon as you release the pedal you can play some new notes into the arpeggiator.

Programming the arpeggiator.

For the next step we have a look at the different parameters of the arpeggiator. To do so you don't have to stop the arpeggiator but can proceed all the different changes while it is still running.
All the settings you will get to know now, the Sirius will store together with the sound-parameters, meaning that every tone is also saving Information through the arpeggiator. With a change of the sound also the arpeggiator will be completely changed.

Expert-tip: If you are very happy about a well done arpeggiator-pattern and want to hear it with another stored sound you just need to change the sound in the MIX-menu of the Sirius. In this case only the tone changes and the arpeggio-settings stay the same.

To get into the edit-menu of the arpeggiator, press the EDIT-button.
You will see the following display-announcement:

```
Select edit     I 1>
[Sound]  [Arpeg.]
```

By using the F3-button under the display you can select the arpeggiator - menu.
After pressing this button you get into the menu for editing the arpeggiator.
With the following menu-points the changes of the parameters are done with Value/Tempo Wheel.

The Arpeggiator

Menu-page 1: Arpeggiator - mode selection

```
Edit Arpeggiator
I 1 > mode. ARPEG
```

Here you can select the basic-functions of the arpeggiator. Besides the arpeggiator here you will also find the functions „GATER" and „CHORD-TRIGGER". We will take a look at these functions later. Please don't change anything on this page, yet.
Since menu-page 2 is only dealing with these two functions we will go directly to menu-page 3. To do so please use your PAGE/BANK-button.

Menu-page 3: Hold-function

```
Edit Arpeggiator
<3>  Hold:   ON
```

In the position „Hold:OFF" the arpeggiator plays only as long as you hold down the keys on the keyboard. As soon as you release one or all the keys the selected notes won't be played any longer.
The „Hold: ON"-mode is totally different. Here the arpeggiator plays the notes until you actually stop the arpeggiator. If you hold down only one key you can fill the „note-pool" with every following key you play. The others automatically play on even you just activate them with a tap on. You can select up to 16 notes. Only when you release all the keys and afterwards play some new notes the „note-pool" will be cleared and refilled with your new notes.
This mode is especially important when the arpeggio-pattern should content more notes than you actually could play with one tap on or if you need both hands for editing.

Menu-page 4: Dynamic

```
Edit  Arpeggiator
<4>Dynamic:OFF
```

Here you can set the touch sensitivity on the keys of your keyboard and decide if it will have influence on the arpeggio-sequence. If this function is put on „OFF" the notes of the running sequence will always play with full dynamic (loud). In the „ON"-position the notes will be played with the different touch sensitivities. (with free-programmed arpeggio-pattern=>Mot 1-9 this parameter won't have any influence because in free-programmed motions you can also select the dynamic-values).

Menu-page 5: Resolution

```
Edit Arpeggiator
<5> Resolutn:16
```

With this parameter you set the note-value a single step of the arpeggiator has. In the position „16" the arpeggiator plays up to 16 notes in one beat. You can also use this parameter to run the arpeggiator with the double or half amount of sequence-tempo.

Menu-page 6: Gate-time (note-length)

```
Edit Arpeggiator
<6> Gate:     64
```

This parameter decides if a note is played with staccato (=0, very short) or legato (=127, connected to next note). You can change this parameter in 128 steps.

Menu-page 7: Motion

```
Edit Arpeggiator
<7> Motion:   UP
```

The motion-parameter gives you the replay-direction of the stored notes. You can select from the following settings:

Motion -Replay Direction	Function
UP	Here the notes of the chord will be played from the lowest to the highest.
DOWN	Here the notes of the chord will be played from the highest to the lowest.
UPDW - up and down	Here the played chord will be repeatedly played up and down and back again
RND - random	With „random" the notes of the chord will be played by pure chance, without a special order.
ASGN - assign	Here the notes of a sequence are played in the order they are played on the keyboard. With the similar activated „Hold" Function and by leaving out a key, you can easily put in complete melodies. You just leave out the first note of the melody and the following you just shortly tap on.
RVSD - reversed assigned	Basically works the same way as the ASGN. Here the notes are replayed in reverse order.
ASG2 - forward and reversed assign	Has the same function as ASGN and RVSD. Here the notes will be played in the order they have been played in and then the other way around.
MOT1 bis MOT9	With these pattern you got free programmable replay-orders that also could be polyphonic. The MOT1 to MOT9 are manufactured pattern. Of course you can change these pattern any time on your behalf.

Menu-page 8: Octaves

```
Edit Arpeggiator
<8> Octaves:  2
```

Here you can select how many octaves the arpeggio-pattern should go through while playing. In the position „Octaves: 1" the notes will be only replayed in the original-soundlevel. In the position „Octaves: 2" at first the notes will be replayed in the original-soundlevel and then one octave higher. At the maximum position „Octaves:4" the pattern will be transposed in a range of 4 octaves.

Menu-page 9: Double-notes

```
Edit Arpeggiator
<9>DblNote: ON
```

In the position „DblNote: ON" all the notes will be played twice instead of once. (On the free programmable arpeggio-samples => Mot 1-9 this parameter has no influence because in the free programmable Motions the repeating of different notes will be individually set for every step.)

Menu-page 10: Length-Fit

```
Edit Arpeggiator
<10I LngFit: OFF
```

The parameter „Length-Fit" forces the sequence of the arpeggio-pattern to be suitable to a 4/4 beat. Even you start with 5 or only 3 notes the arpeggiator always starts at the beginning of the beat with the first note.

Expert-tip: Don't hesitate to experiment with the above mentioned functions while the arpeggiator is running. In this way you can hear and see the results immediately.

How to use the Gater and the Chord-Trigger ?

Let us now get back to the arpeggiator-mode on menu-page 1 of the arpeggiator. Since we learned already how to work with the arpeggiator-setting, now we go to the Gater and chord-trigger-functions. First of all please go to menu-page 1 of the arpeggiator - edit - menus.

```
Edit Arpeggiator
I1> Mode: ARPEG
```

GATER: This operating mode takes apart a single Sound or a chord. Modulations like LFO or Envelope Generators (Envelope Pitches) that are on the sound will be preserved. The rhythm of this „taking apart" (chopping up) either oscillates free or is given by one of the intern sequence-tracks. In this way the chopped pads of common Dance, Trance and Techno-music are produced. For this kind of sound-material always use Sounds with high sustain-value in the VCA- Envelope Generator, so the tone can be delayed. With short and fast oscillating sounds the tone already faded before the Gater-effect could take place.

CHORD: With the chord-trigger the chords won't be taken apart but rhythmical touched. If you for instance play a good old chord of the 70's the arpeggiator will strike this chord over and over again. For this function please use a sound with a fast attack time and a reduced release-time in the VCA-Envelope Generator so the produced effect will be absolutely clear.

By using the Value/Tempo-wheel you can select the GATER or the CHORD-Trigger functions. The following settings work for both functions the in same way:

Turn on the arpeggiator and play a chord on the keyboard. If the sequencer is stopped now you can hear the above mentioned effect with a given rhythm in the chosen tempo. Now please select page 2 of the arpeggiator-menu:

```
Edit Arpeggiator
<2> Trig:   Kick
```

If the given rhythm-pattern is to boring for you just choose any sequence-pattern on this menu-page to get your favorite rhythm. In order to do so you need to select a pattern where at least has one track has a motif on. This shouldn't be a problem with the more than 100 ROM-pattern of the Sirius. If you now start the SIRIUS and play a chord you should be able to hear the influence of the rhythm track on the chord you play.

Saving the Arpeggiator - Settings:

All the discussed parameter of the arpeggiator will be stored for every different sound. Meaning, if you want to keep a setting you also need to store a sound. In order to do so, please select in the Write-menu the menu-page 1 „Store Synth 1?".

Free-programmable-arpeggiator-pattern:

As soon as you select one of the free-programmable arpeggiator-pattern 1-9 (Edit-menu Motion: Mot 1-Mot9) as replay-direction the arpeggiator-menu will get additional menu-pages. Before you go into programming we will give you an idea of how it works:
the free-programmable motions separate a complete arpeggiator -pattern into 2-32 steps. The note-value of one step corresponds exactly with the punched in resolution-value. Is it on 16 the arpeggiator plays back 16th notes (semiquavers). If you punch in 16 steps as a pattern-length the length of the whole beat corresponds to the length of the whole pattern. For each of these steps you can decide as follows:

1.) Which of the maximum 8 notes of the note-pool should be released on the selected step-number. Here maximum 8 notes at the time could be punched in.

2.) What should be the velocity these notes should be played with.

3.) What should be the GATE-time these notes should be played with.

4.) Should this step be pulled up or delayed? This possibility works for programming especially groovy arpeggiator pattern.

The Arpeggiator

The following Graphic explains the construction the free programmable Arpeggio-pattern:

TIME → **REPEAT**

Start

| | STEP 1 | STEP 2 | STEP 3 | STEP 4 | .... | STEP 32 |

Note 1, Note 2, Note 3, Note 4, Note 5, Note 6, Note 7, Note 8

Velocity 1, Velocity 2, Velocity 3, Velocity 4

Gate 1, Gate 2, Gate 3, Gate 4

0%   -50%   +50%

postponing STEPS

Programming your own arpeggiator - pattern:

If you already selected the free-programmable pattern (Mot 1-9) you can start the programming. First of all choose menu-page 11 to punch in the length of the pattern:

```
Edit Arpeggiator
<11> MotLoop: 8
```

Here you can punch in values ranging from 2 - 32. Depending on how many steps you released with the Motion-Loop-Parameter, at menu-page 12 you can select the single steps one by one. As with all the other parameter for this action you use the PAGE/BANK-button.
In order to edit the first step, please select menu-page 12:

```
Edit Arpeggiator
<12>Step01:+0%
```

Most of the parameters are on the numbered-buttons 1-16 on the SIRIUS.

How to punch in the notes of the selected step:

With the numbered-buttons 1-8 you can activate single notes for this step or you can switch them off. „1" means the lowest on the keyboard played note will be replayed. If you activate the numbered - buttons „1" and „2", the lowest and then the directly following note will be played. Because you can select from maximum 8 numbered-buttons, chords with up to 8 notes are possible for each step. Of course you also can decide on deactivating all of the 8 numbered buttons. This of course will mean a break in your pattern.

How to select the Velocity of the chosen step:

Through the numbered buttons 9-12 you can select the velocity for each step. Of course only one of the buttons ranging from 9-12 is possible to use. The velocity will effect all the activated note-numbers equally.

CAUTION: You can hear the change of the Velocity-value through these numbered buttons only if on the selected sound the parameter VCA-DYN or VCF-DYN is turned on.

How to punch in the length of a tone on the selected step:

Using the numbered buttons 13-16 you can adjust the length of the tone (GATE-time) within four steps.

How to punch in the movement of a selected step:
In addition every step can be moved forwards or backwards by up to 50% of the selected Resolution. With a setting of +50% and a Resolution of 16th notes the whole step will be delayed by one 32nd note. Especially with extremely accurate settings these parameters will guarantee a very groovy note-release (Gate-release).

```
Edit Arpeggiator
<12> Step01: +50%
```

For each step this value is adjustable with the VALUE-wheel.

Now please choose the different steps one after the other out of the pattern and adjust them the way you want. Don't hesitate to change the number of the played notes on the keyboard or just play a whole different chord. Often your arpeggiator-pattern will change drastically. You will also find out, that selecting only two used note-numbers also a polyphonic (for instance 8-notes) chord will only release (play) 2 different notes.

How to store a User-arpeggio:

In order to be able to use your own created pattern in the future, you need to store it. the free-programmable arpeggio-pattern won't be automatically stored by storing a sound. The sounds only call up the motion-numbers 1-9. To store the new arpeggio-pattern you need to choose menu-page 4 of the write-menu. Press the Write-button and choose the menu-page 4 by using the PAGE/BANK-buttons.

The Arpeggiator

With the F1-button you will start the storing-procedure. You will see a display-announcement for selecting a storage-space.

```
to Motion 5
[ok]    [cancel]
```

The storage-spaces 1-9 you can select with the Value-wheel. Pressing the F1-button you will store the constructed pattern. The F3-button will cancel your storing-action.

How to record the arpeggiator into the intern sequencer:

Before you start using the following function you should go through the sequence-section of this manual. In the following we put our main interest on realtime-record-function.

The sequencer of the Sirius doesn't care if you are the artist playing virtuous notes into the sequencing program or if it is the arpeggiator. This means while real-time-recording you always can turn on the arpeggiator and record it into the sequencer. here it doesn't matter if the arpeggiator is in the Gater, Chord or normal mode. Everything will be recorded by the sequencer.
Because the sequencer has direct access to the sounds of the Sirius (pass the arpeggiator) you won't have to worry that your „transferred" arpeggio-pattern uses the arpeggiator directly again.

By the way:
If you just found again a really great arpeggio-pattern but you don't remember which notes you played for it, you can transfer this pattern without searching for the lost notes. Just let the arpeggiator run and select the wanted Motif-length in your sequencer-edit-menu. Than activate the realtime-record-function. While you hear the metronome your pattern is silence at first. But than it plays again in the wanted settings and will be transferred directly into your sequencer.

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The Beat-Recognition-System

Beat-Recognition-System:

Another extraordinary feature of the SIRIUS is its BEAT-RECONGITION-System. This function allows you to synchronise the Sirius to an external audio signal.

You can use the BEAT-RECOGNITION-System to create a remix of a Vinyl-record or CD with the help of additional tracks of the SIRIUS. During a live-gig you can also, in the DJ-setup, fade-in the SIRIUS using the velocity of the last song.

How does the BEAT-RECOGNITION-System work?

The tempo of a song is expressed in bpm (**b**eats-**p**er-**m**inute). A value of 120 bpm, in the case of a continuous quarter-note kick-drum, would mean that the kick-drum would beat 120 times a minute. The SIRIUS reacts with its-BEAT-RECOGNITION-system to the average frequency of a kick-drum. It analyses not only the quarter note in an audio track but works with a 16th grid. This way you can also synchronise audio-tracks where not necessarily every quarter beat is covered with a kick-drum. The BEAT-RECOGINTION-SYSTEM is constantly searching for/receiving the incoming audio-signal which allows it to recognise the smallest tempo-changes and then adjust the tempo of the SIRIUS to it. If during a rhythm pause there is no kick-drum for a long period the Sirius will continue with the tempo it has calculated. In most cases the Sirius will continue even after a pause in the exact synchronous tempo.

Operating the BEAT-RECOGNITION-system:

In order to analyse the audio material, the source of the audio (eg. a CD player) will have to be connected to the Sirius. The included Goose-neck microphone is unsuitable for this purpose. In order to control this system to the maximum use the Analyse or Carrier-input of the Sirius.

The following diagram shows you the connections for the control of the BEAT-RECOGNITON-system:

A suitable sound source will be a CD-player, a tape-deck or an old drum-computer without MIDI or Sync.-output. A record player can only be connected via a phono pre-amp. This is integrated in all HiFi-amplifiers and DJ-mixing desks. If you have a stereo system with a separate amplifier or pre-amp you can use the tape-output of the amplifier to connect a record player to the analyzer of the Sirius. (In this case connect the amplifier output labelled "REC", "To Tape" or "Tape-Out" to the Sirius. You can then route the sound source using the record-select control of the amplifier). Because you will want to hear both signals when using the BEAT-RECOGNITION-system - the signal of the synchronised Sirius and the one of the external audio material, we recommend the use of a mixing desk with at least one Effects-send.

Expert´s tip: Most DJ-mixing desks do not have an effects-send or AUX-send. These desks are on the whole unsuitable. The existence of a cross-fader is often overpriced. You're probably better-off looking around for a normal mixing desk. If you want to use a record player you can connect your HiFi-outputs to the mixing desk or to separate record-player pre-amplifiers which you can get in your local radio store for around $ 50.

Connection to a Mixing Desk with at least one Aux-send:
In the following example we will connect the Sirius, a CD-player and a mixing desk, in order to synchronise the Sirius to the CD-player and at the same time hear them through your amplifier system. First you should connect the main-output of the Sirius and the CD-player to the mixing desk as shown in the diagram. Use the Aux-send/FX-send of the mixing desk to send the signal of the CD-player to the Sirius. Open up this aux-send on the mixing desk for the CD-player only - close it for the Sirius. Then connect the outputs of the FX/AUX-sends to the Carrier- or Analyse input of the Sirius.

In order to tell the SIRIUS which input you want to use to analyse the music you have chosen, you must first select the Beat-Input in the System-menu. You find the selection in the Edit-system-menu on menu page 16:

```
Edit System/Midi
<16| BeatInp:XAn
```

In this menu please set the input to which you have connected the audio source.

XAn stands for the ANALYSE-Input
XCa stands for the CARRIER-Input

Caution: If you use the ANALYSE-input of the SIRIUS, the VOCODER can not be used with the microphone anymore.

Now switch the SIRIUS to AUDIO SYNC. with the SYNC-EXTERN-key. A constant blinking will indicate the correct selection. Press PLAY on your CD-player. The status of the Beat-Recognition system is displayed as a sign directly preceding the tempo-info.

```
1:  Saturn ?143
(P09) +0 _____
```

The Beat-Recognition-System

The following table shows you the signs and their meaning:

Signs in the Display	Meaning	What to do
⁝	The Audio signal can not be used to analyse the tempo: 1.) The input level of the signal is too high to be correctly analysed by the SIRIUS	1.) Adjust the level of the CD-player or the Aux-Send. *If you are using the Analyse-input of the Sirius, you can adjust the input sensitivity via the Gain-control on the back panel.*
No sign	The Audio signal can not be used to analyse the tempo: 1.) There is no kick drum in the Audio-track at present. 2.) The input level is too low.	1.) Wait for the kick-drum to start. 2.) Adjust the level of the CD-player or the Aux-send. *If you are using the Analyse-input of the Sirius, you can adjust the input sensitivity via the Gain-control on the back panel.*
⁑	The audio signal has identified a bass-drum to analyse the tempo. The level its suitable for the recognition. The system is working best when the dot in the display is not lit permanently but flickers regularly.	You can start tapping/entering.

A sequence of kick-drums will of course not tell the Sirius where it is in a bar.
You may also want to synchronise music pieces with a more demanding groove than a pure Four-on-the-Flour pattern.
You will have to tap the quarter beats of the music piece to start the Sirius with the TAP-key. With the information from both the tapping and the analysed kick-drum the Sirius will than calculate the actual tempo. The 5th tap will then start the internal sequencer of the Sirius.

The SIRIUS will then need approx. 3 bars to lock to the beat. During this time the synchronisation is not actually quite complete and will run 'wild'. For a live performance you should leave the tracks of the Sirius muted for this phase.
Once you have reached a successful synchronisation the tempo display of the Sirius will only change from +-1beat per minute. This shows you that the system is constantly adjusting to the tempo. Your live-performance can begin.

Do not despair if the Audio-Sync will sometimes not work right away. It is like a DJ's skill in mixing records - it takes practise! The tapping in of the tempo requires some getting used-to. If a song is badly mixed it will unfortunately sometimes happen that the frequency of the kick-drum is not separated cleanly enough - the other instruments may then influence the system in a negative way. Under these circumstances it may happen that the synchronisation fails.

For difficult cases: The Beat Offset:
Readings in our Audio-laboratory have shown that some music pieces are synchronised perfectly when it comes to the tempo but that there is a audible deviation in complicated passages.
For this purpose the Sirius has a Beat-Offset-Parameter. For external audio-synchronisaton this will be controlled using the VALUE/TEMPO-dial. If you turn the VALUE/TEMPO-dial to the right or to the left the Sirius-Groove will be shifted slightly from the audio material, either delayed or advanced against the beat. This behaviour is also called Sync.Delay. The amount of change is shown in the display.

```
    1:  Saturn .43
  Beat-Offset: +2
```

Positive values will make the Sirius play slightly earlier (advanced), negative will delay it slightly. In this way you will be able to sit in tight with these sections.

External synchronisation - synchronising additional units with the Audio-signal:
If the SIRIUS is running sync. to the beat of the Audio-signal the clock-signal generated can then be used to synchronise another synthesizer or sequencer to the SIRIUS using MIDI. You only have to connect the MIDI-OUT-socket of the Sirius to the MIDI-IN-socket of the Midi-device you wish to synchronise. On page 11 of the Edit-system-menu , you can set the parameter TX-Clock to the "ON"-position. You will also have to put all sequencers or synthesizers to external synchronisation mode.

The Effects

How to direct the Parts of the Sirius to the two effects processors?

The Mixer-section offers you the possibility to direct the sound of a Part straight to one of the Sirius' effects processors. To the left of the mixer-section control panel you can see a key marked FX1/FX2. Press this key. It should now be lit. You can now individually set the Sound of each Part which is to be sent to the effect processor FX1 using the mixer-controls. This is why this function is also called FX-send. When you press the FX1/FX2-key a second time it will flash. The controls now refer to the effect processor FX2. Now you can make the individual FX2 settings for each Part.

A further way to access the FX-sends can be found in the MIX menu of the currently selected part. This is how you get to the MIX-menu: Press the EDIT-key next to the display and immediately afterwards press the right-hand PAGE/BANK-key. You can now open the MIX-menu by pressing the F3-key. Go to menu-page 5 of the MIX-menu using the PAGE/BANK-keys. Page 5 contains the FX1-send, page 6 the FX2-send. In the display these pages look as follows:

```
Edit Mix T:Synt1
<5> Fx1Send: 127


Edit Mix T:Synt2
<6> Fx2Send: 127
```

This method is best suited to the final mix situation as you can also set all the other parameters relevant to each Part such as Pan, Sound, and Volume with greater accuracy.

CAUTION: Should you notice in the Mix-menu that instead of FX-send values you have three dotted lines and that the VALUE-TEMPO-dial does not have any effect on determining these values, you should make sure of the following:
Is the currently selected Part set as an Analyse-or Carrier-signal for the Vocoder? If the setting of the effects is more important to you than the Vocoder, you can change the routing of the vocoder. First press the Analyse, then the Carrier-key in the vocoder-section. If one or more Part-keys are lit, these parts are allocated to the Vocoder. Just press all the lit parts to turn off the keys. After that the display in the MIX menu will show the proper values again for each part you have deactivated, and you can adjust them once more with the VALUE/TEMPO-dial.

The effects can also be assigned to the VOCODER-signal. This can either be done via the Mixer-section as you do with the Parts or you can set it in the Edit-vocoder menu.

The Effects processors of the Sirius:

The SIRIUS has two independently working effects processors. They are called FX1 and FX2. Each of these processors has different reverb, echo and modulation effects available. Every Sirius-part can be proportionally routed to the effects processors with the FX1/FX2-controls in the Mixer section. Both Effects-processors can be used simultaneously with one effects-programme each.
The following listing shows you which effects programmes are available to you in the two effects processors and what they do.

The Effects Processor FX1:

Reverb effects:

Room: Here you can reconstruct small rooms ranging from a rehearsal room to a lounge.

Metallic: With a short reverb time this effect will sound as if you played your instrument through a metal tube. A long reverb time will suggest that you are in a big industrial hall.

Chamber: The Chamber-Reverb has the sound character of a large empty room.

Hall: The sound characteristics of this parameter are similar to those of a larger hall.

Cathedrl: The longest Reverb-effect in this section. It recreates the reverb character of a church and is suitable for long echoing effects.

Plate: This is a simulation of one of the oldest reverb effects. Before the digital age, people used large thin metal plates to create reverbs. The reflection of the metal plate was picked up using a microphone or sound-enhancer and then mixed back in with the original sound.

The Reverb-effects have the following parameters:

> **Level(0-127):** Here the level sent into the effect can be set. The higher the level the more the original sound is influenced, ie. the greater the amount of reverb on the sound.

> **Time (0-127):**This value determines the decay time. Imagine it as a way of enlarging or shrinking the 'room' you have placed your sound in. This extends or shortens the reverb on the sound you are sending to this effect. (eg. A small room has a small decay time, whereas a cathedral will have a much longer decay time.)

Echo Effects:

Delay: A delay allows you to create a so called echo-effect, a bit like shouting into the Grand Canyon, Grand Canyon, Grand Canyon.....! This will effect the whole stereo signal.

PanDelay: This delay makes the echo signal alternate equally from left to right.

The Echo Effects have the following Parameters available:

> **Level(0-127):** Here the level sent into the effect can be set. The higher the level the more the original sound is influenced, ie. the greater the amount of echo on the sound.

> **Time (0-127):** Here you can set the delay time of the echo. The lower the value the faster the echo comes back. The maximum delay for the two Delay-effects of FX1 is 1119 ms (milliseconds).

> **Feedback (0-127):** This value allows you to set the number of echos. In a walled courtyard you may have one echo 'slapping back' at you very quickly. In the Grand Canyon the echo would take much longer to come back, and may repeat many times.

The Effects processor FX2:

Chorus: The chorus doubles up the original signal and then sends the double back with a minimum time-delay, making it sort of 'swirl'. This makes the sound wider, fuller and 'fatter'.

SlowChor: The Slow-Chorus works the same way as the chorus.

FastChor: The delay in the Fast-Chorus is so intense that you will have a very strong swirling effect.

SuperChr: The Super chorus creates a strong swirling and phasing. The sound appears large and extremely warm.

FeedbChr: The Feedback-Chorus is a special effect influencing the sound in a dramatic way. The feedback to the input is so strong that you will get an almost metallic sound. This gives the sound a completely new character, almost robotic.

The Effects

Flanger: This effect allows you to create very spacy sounds. The flanger is based on the same principle as the chorus but creates a stronger modulation. The flanger will sound particularly interesting on the Hihat-track. Check it out with bass sounds too!!

These 'modulation' effects have the following parameters available:

> **Level(0-127):** Here the level sent into the effect can be set. The higher the level the more the original sound is influenced, ie. the greater the amount of chorusing or flange on the sound.

> **Time (0-127):** Here you can set the time delay of the Chorused signal in relation to the Original signal.

> **Feedback (0-127):** The parameter Feedback routes back the effects signal to the effects input in controllable increments. This creates feedback causing a drastic sound change.

> **Rate (0-127):** Here you can set the rate or speed of the modulation.

> **Depth (0-127):** This parameter allows you to set the depth of the modulation.

Apart from the modulation effects already mentioned, FX2 also has 2 Echo-effects available.

ShortDel: This delay creates a very short echo.

PanDelay: This delay is like the PanDelay from section FX1.

The FX 2 echo-effects have the following parameters available:

> **Level (0-127):** Here the level sent into the effect can be set. The higher the level the more the original sound is influenced, ie. the greater the amount of echo on the sound.

> **Time (0-127):** Here you can set the delay time of the echo. The lower the value the faster the echo comes back. The maximum delay for these two effects is 870 ms (milliseconds).

> **Feedback (0-127):** This value allows you to set the number of echoes.

Expert´s tip: The Reverb-, and Echo-effects in FX1 can best be explored with a Snare-sound or a short percussive Synth-sound from the "Plucked-Sound" category. The modulation effects in FX2 are best expressed in Pads or ambient sounds. It is also very interesting to try out the different chorus- and flange effects on a Hihat or Percussion track.

Expert´s tip: If you work with the delays of both FX-sections simultaneously you will have the option to mix these different delay-times which you have applied to the sounds. You can create very nice delay-grooves like this.

The Sirius-Vocoder

Vocoder-Basics:

Basically the Vocoder transmutes one audio-signal into another. This somewhat boring definition does not really describe the fascinating and almost inexhaustable sounds you can create with a Vocoder: change your voice into a polyphonic church choir or a robot version of ALF. Create impressive synthesizer sounds controlled by your voice. Your drums will learn to speak and the sound of a symphony orchestra appears as a rhythmic base for a Dancefloor-track.
The Vocoder will boost your creativity infinitely.

Modern professional producers use the Vocoder to create some of the hippest sounds of today- its origin however lies way back. In the 70's, Vocoders were relatively complicated machines which cost a five figure sum. In 1979 the "Elektor" electronics magazine (Dec. 79) predicted that "in a few years, keyboards would be fitted with a "Vocoder"-switch". Well, this prediction did not come true. But now the era of the home keyboard is far behind us, and the Vocoder in the Sirius hails the dawning of a new age.

How does the Vocoder work?

It is not necessary to go into too much detail: just imagine the Vocoder as a box with two inputs and a stereo output. One input is the "Analyse", the other the "Carrier".

Analyse-Input ●———————┌──────────────────┐

                    │   **Vocoder**   │———————● **Stereo-Output**

Carrier-Input ●———————└──────────────────┘

In order to call up the DEMO Songs, press both DEMO-keys simultaneously and select Number-Key 2.

You can now for instance connect a microphone to the Analyse-Input and connect the Carrier-Input to the audio-output of a synthesizer. If you now speak into the microphone and press a key on the synthesizer simultaneously, it will sound as if the synthesizer is talking. The pitch is not referring to the voice but to the note you are currently playing on the synthesizer. So if you are playing a melody, the synthesizer will "sing". If you play four notes simultaneously you will hear a four voices choir. The basic principle of it is the following: The Analyse-signal as well as the Carrier are being cut up into several "frequency-slices", the 'Bands' of the Vocoder. Now the "frequency-slices" of the Analyse signal are analysed and simultaneously transmitted to the respective "frequency-slices" of the Carrier. All this in real-time. You can now try to imagine the result if you don´t use a voice but a complete drum-groove as an Analyse-signal. But you might as well just listen to the Demo-Song Nr. 2 of the Sirius ("VOC Grov").

The Vocoder of the Sirius:

The Sirius has a Vocoder with 11 frequency Bandwidths and an integrated filter bank. These are not Vocoder "effects" but make up a full-blown Vocoder with numerous configuration possibilities. In many areas the functions of the SIRIUS-Vocoder go way beyond those of other systems:

Features of the Sirius-Vocoder:

-The Drum and Synthesizer sounds of the Sirius are, with their infinite manipulation possibilities, the ideal basic materials for creating unique vocoder sounds. You can use the Sirius immediately without needing any additional equipment using its seven drum- and synth-Parts, which can be internally routed as Carrier and Analyse signals, as well as being able to use the Goose-neck microphone via its integrated pre-amplifier.

- The Sirius-Vocoder offers you 16 controllable Vocoder programmes each with completely different sound characteristics. You basically have 16 different Vocoders.

- The option to feed and mix different sound sources into the Vocoder will leave you needing practically nothing more. Apart from the internal Parts and the microphone signal you can connect other, external sound sources (for instance Drum-computer, Electric guitar, whole tracks from CDs...etc.) to the Vocoder using the audio sockets at the rear of the Sirius. Several internal parts can simultaneously be used as Analyse and Carrier signals and can then be mixed with any external audio signal that the Sirius is receiving.

- For all control signals the Sirius-Vocoder offers controllable Bypass functions. This means: You can fade in the original signal of the microphone (for example your voice) and mix it with the Vocoder - effectively a mixing desk with an integrated microphone. With the effects-units of the SIRIUS you can then add a little reverb and delay.

- The integrated Filter-banks are able to perform the most delicate sound changes in the mix - or can create drastic effects which would be unthinkable with ordinary Equalisers which only effect the bass, psycho-acoustic effects, the weirdest LoFi-sounds etc.

- All Vocoder settings are storable. Although the attraction of a Vocoder is mainly due to the fact that you can repeatedly influence the sound using your voice, you can also alternate between vocoded Rhythms and vocoded Pads within one song by switching the different Vocoder routings on and off.

-Despite all these Complex possibilities, the Vocoder is easy to handle: All the basic functions of the vocoder for both external sound sources and internal Parts, such as routing for example, can be operated from the dials and keys on the front panel. You can also, of course, change settings in real time while the sequencer is running. A quiet whisper faded into a fat break beat? No problem. And all this can naturally be controlled via MIDI.

Starting immediately?
Before you try out the 11-Bandwidth-Vocoder with the microphone please note the following to ensure optimum performance:

Important: If you are using the Goose-neck microphone with the Vocoder and you are listening to the Sirius through the speakers of an audio-unit such as a stereo system or instrument amplifier, then acoustic feedback may occur.

This is particularly the case when
- the distance between microphone and loud speaker is too little or the loud speakers are faced directly towards the microphone head, or
- the overall volume of the Sirius or the volume of the amplifier of your audio-system is set too high.

Feedback at high volume can damage your hearing. We therefore advise you to use the lowest possible volume level when using a microphone or to work on headphones. For live-performances make sure that the microphone is not pointing in the direction of the PA-speakers!

The Vocoder

Presetting the Gain-Control:

The Gain-control allows you to determine the input sensitivity of the built-in microphone pre-amplifier. The control is located on the right of the rear panel of the Sirius. Turn the Gain-control to the middle setting (12 o´clock position).

If you have connected the Sirius to an audio-unit such as a stereo system or instrument amplifier, turn the volume control of your amplifier to minimum for the time being.

Easy-Mode:

The Vocoder works with 16 basic programmes which can of course be changed if required. To get a first impression these basic programmes can be tried first. The microphone is the analyse source in this "Easy-Mode". A Carrier is automatically set you only have to speak into the microphone and don´t have to press any keys on the keyboard.

Caution: The initialisation will delete the entire ram memory of the Sirius and all settings will revert to the original factory settings.

Caution: Pre-settings for the Easy Mode:

You require some pre-settings for the Easy-Mode. Should you however have initialised your Sirius as described at the beginning of this Manual and select a Song without Vocoder-settings (for example Nr.1 "Saturn") you can leave out the following procedure. Skip on to "Selecting Basic Programmes".

1. The CARRIER-EXT.-key in the VOCODER-panel of the Sirius must be switched off.

2. No Part of the Sirius must be selected as Carrier. You will recognise that the CARRIER-key in the Vocoder-panel is not lit. If the key is lit, you can change the setting as follows: When you hold down the CARRIER-key, the Part-keys under the dials in the MIXER-panel will show you which Parts are selected as Carriers. A lit key indicates that this part is a Carrier for the Vocoder. While you still hold down the CARRIER-key turn off all lit keys below the dials one after the other. Now you have de-activated all internal Carrier signals.

Selecting Basic Programs:

To select the basic programme 1 "Robot Voc" (Robot-Vocals), first hold down the Vocoder-key in the MIXER-panel. The display will show:

`Select Prg.1..16`

While you still hold down the Vocoder-key press the number key 1 - as shown in the photo.

Than say a couple of words into the Goose-neck microphone of the Sirius. You should put your mouth quite close to the microphone (see drawing!!!)

Should your Sirius be connected to a audio-unit such as a stereo system or instrument amplifier, **carefully** turn up the volume control of the amplifier until you have reached the desired volume. If you experience feedback even at very low volume-levels, try putting more distance between the Sirius and the Speakers.

You will now hear, either through your headphones or speakers, not your original voice but the voice of a seemingly unfriendly robot.
Perhaps you find that you have to speak very loudly to produce a regular robot-voice despite the fact that you have your mouth very close to the microphone. In this case turn the Gain-control on the rear of the Sirius **carefully** to the left (when facing the rear panel) until you get a balanced signal. Try to avoid over-the-level settings which you will recognise because they will be distorted.

CARRIER-IN   ANALYSE-IN   GAIN

Increasing the
input sensitivity

Gain-Control

Let´s try the other basic programmes as well: Hold down the Vocoder-key again and press one of the Number-keys from 2-14 (on 15 and 16 you have the basic programmes of the filter banks, and will hear nothing when in Easy-Mode). Programme no. 2 will change your voice for instance into a polyphonic choir. To do this start factory song no. 1 "Saturn" and add your own vocal-hooks. The pitch of the choir is not changeable in the Easy-Mode. How you change the pitch will be described in the following chapter.

Listening through the different basic programmes you will note that not all of them are good for vocals. Some programmes are designed more for use with artificial sound sources.

The Vocoder

Basic functions of the Vocoder:

Turning the Vocoder On and OFF:
The Vocoder is turned on and off with the Vocoder-key located on the MIXER-panel.

Setting the volume of the Vocoder-sound:
The output-level of the Vocoder you can change in the usual way using the MIXER-panel of the SIRIUS. Switch on the LEVEL-key in the Mixer. Now you can set the volume with the VOCODER-dial.

LEVEL-Key

Tip: The volume-changes are sent and received using MIDI information. You can automate these changes using an external sequencer.

How can I select the different Basic Programmes?
When you turn on the Vocoder the automatic Carrier (Easy-Mode) is not activated if you have already selected a Carrier. So when you change through the basic Programmes the selected Analyse- and Carrier-signals will remain routed to the Vocoder. When the percussion-track is vocoding a string sound from the Synth 1-part you can immediately check out how this will sound with different Vocoder-settings.
Try this with the factory song No. 2 "Voc Grov" playing. You will notice that in different basic programmes different frequencies of the Grooves are stressed and single instruments are emphasised or de-emphasised accordingly. Change between different basic settings of the Vocoder as follows:

First hold down the Vocoder-key on the MIXER-panel. The display shows:

```
Select Prg.1..16
```

While you still hold down the Vocoder-key you can switch between Vocoder-programs 1-16 using the Number-keys.

The following overview shows you all basic programmes of the 11 Bandwidth-Vocoder and gives you tips concerning these basic settings. Although we have said that some programmes are more suited to vocals and others more to artificial sounds, these tips should not be considered as hard and fast rules. The results depend a lot on what sound characteristics the audio-source has. So experimenting with the different basic programmes and audio-sources is the order of the day! This is what makes the Vocoder such an exciting tool: nothing says that you can not try the programme "InverseV" when your voice is being used to modulate a Synth bass.

The Basic Programs:

Basic Program	Description
particularly suitable for vocals	
1: RobotVoc	
2: ChoirVoc	
3: StrngVoc	
4: DuckVoc	with bandwidth intereaction up to the high frequencies
5: CrazyVoc	
6: FXVoc	
7: BADVoc	
Universal Vocoder	
8: ThinVoc	treble-rich vocoder
9: CutVocod	soft Vocoder with available cut off frequency filter
particularly suitable for drums	
10: InverseV	
11: HighQVoc	with high filter quality
12: FrameVoc	
13: StereoV	with extreme stereo setting
Very slow modulating Vocoder for pads	
14: SlowVoc	

The Filterbanks	
15: Filtbank	
16: BBoostFB	emphasizing the low frequencies

Caution: The Filter banks effect the chosen Carrier, the Analyse-sources are being ignored.

The Vocoder's 16 basic programmes can amongst other characteristics be distinguished by their filter-type, the filter frequency and the decay-time for each of the 11 Vocoder-Bandwidth possibilities, or 'Bands'. By the way QUASIMIDI will offer further Vocoder programmes in future.

After selecting a basic program we now feed different sounds into the Vocoder. You will soon be convinced that the SIRIUS Vocoder is much more than just a voice mutator.

The Vocoder

How can I select Analyse-signals and Carrier?

You already know that the sound of the Analyse-signal is transmuted into that of the Carrier-signal. Four keys on the MIXER-panel decide which sources are to be fed into the Vocoder (Vocoder-Routing): ANALYSE, CARRIER, CARRIER-EXT. and MICRO. The lit key indicates that the respective sources are fed into the Vocoder. A lit ANALYSE- or CARRIER-key means that at least one SIRIUS-part is selected as Analyse-signal or as Carrier-signal.

You have probably sensed already: The Sirius-Vocoder allows you to select several Analyse & Carrier-signals simultaneously. But most of the time you will obtain a better sound result when only few parts are routed to the Vocoder. Like so often in music, less is more.

Caution: The Vocoder always requires sound sources on both inputs. When you have selected only the Carrier-signal or only the Analyse-signal whilst in sequencer mode, you will not hear any Vocoder-sound. This is also the case if Carrier and Analyse-signals are not being played out at the same time.

A turned off Analyse-function does not mean that this PART is muted. The PART is just not sent to the Vocoder anymore.

Selecting Sirius-Parts as the Analyse-signal:

In order to select one or more parts of the Sirius as the Analyse-signal, first hold down the ANALYSE-key of the VOCODER-panel. The lit keys under the dials will indicate which Parts have been selected as Analyse-signals. While you still hold down the ANALYSE-key, turn on the key for the Part or Parts which you wish to use as the Analyse-signal of the vocoder. That means you chose from KICK/BD, SNARE, HIHAT, PERCUSSION and SYNTH 1-3. If you press the Part key again whilst holding down the ANALYSE-key, you turn off the Analyse-function for that Part.

A turned off Carrier-function does not mean that this PART is muted. The PART is just not sent to the Vocoder anymore.

Selecting Sirius-Parts as Carrier:

To select one or more Parts of the SIRIUS as the Carrier-signal you must first hold down the CARRIER-key on the MIXER-panel. The lit keys under the dials will indicate which Parts have already been selected as Carrier-signals. While you still hold down the CARRIER-key, turn on the key for the Part you wish to use as Carrier of the Vocoder. That means you chose from KICK/BD, SNARE, HIHAT, PERCUSSION and SYNTH 1-3. If you press the Part key again whilst holding down the CARRIER-key, you turn off the Carrier-function for that Part.

Back to the Worksong Nr 2 "Voc Grov":
When you press the ANALYSE-key the lit Part-keys tell you that the drum tracks of the Sirius are the Analyse-signals of the Vocoder. When you hold the CARRIER-key you will see that the Synth-tracks are selected as the Carriers. With playing the sequencer try and switch off the Analyse- and Carrier function of each Part separately so that you can hear the original signal. This example of Vocoder-use is somewhat classic: The pads of the Synth-Parts are rhythmatised by the Percussion- and Drum sound, creating a rhythmic pad.

Expert´s advice: Maybe you have already tried this - the Sirius gives you the option to use a Part as the Analyse-Signal and Carrier-signal simultaneously. Your imagination will decide how to use this option!

Selecting the Microphone as the Analyse-Signal:
To use the Goose-neck microphone of the Sirius as Analyse-Signal you merely have to switch-on the MICRO.-key on the Vocoder-panel. Press the key again and the Analyse-function of the microphone is switched off.

Important: If you use a microphone and an audio-unit such as a stereo system or instrument amplifier, please note the following to avoid feedback problems.

- allow sufficient distance between microphone and speakers
- use the lowest possible volume-levels
- during live-performance make sure the microphone is not pointed directly towards the PA-
  speakers.

Before you switch on, set the Gain-control to the right of the rear panel of the Sirius to the middle setting (12 o´clock position). If you are using an audio-unit such as a stereo system or instrument amplifier, turn down the volume control of the amplifier to minimum. Then turn on the microphone with the MICRO.-key as Analyse-source and carefully turn up the volume control while you speak into the microphone. Bring your mouth as close to the microphone as possible. Should you still not be able to get a regular Vocoder-sound, carefully turn the Gain-control on the rear panel to the left (when facing the rear panel), until your signal is balanced. Try to avoid overloading.

CARRIER-IN   ANALYSE-IN   GAIN

Increasing the
input sensitivity

Gain-Control

The use of the human voice is particularly well suited to illustrating once more the way the Vocoder works. First select a suitable Vocoder-basic programme, for instance Nr.2 "ChoirVoc". Turn the MICRO-key on and select a Synthesizer-sound as Carrier: For example use a soft string-sound. Play a note on the keyboard and at the same time speak into the microphone. Now play a melody. You will hear that you can control the pitch of your voice with the keyboard. If you press several keys at once you will suddenly sing with several voices.
This principle can be used in a different way: You can have a choir singing your lead vocal.

The Vocoder

Once you have experimented with the different Carriers you will notice that not all Carrier-sounds are suitable for use with the human voice. In order to obtain the best results, the sound of the Carrier should be similar to that of the human voice. Safe bets are the Sirius-waveforms SpectrAE, Mal-Choir, SuprStrg or VS_VOICE. With some waveforms you can create brilliant and original choirs, others are more for monophonic playing. Here again: EXPERIMENT! Check out the possibilities. Generally the intelligibility of the voice decreases with increasing pitch because the low frequencies within the voice are lost. The speech is generally better understood the lower down the Carrier-sound is played on the keyboard.

Tip: In the Edit-VOCODER menu you will find some more useful parameters which help you to avoid feedback and to increase vocal intelligibility. Here you can also mix in the original signal of the microphone in order to use the SIRIUS as a mixing desk with built-in effects units (see page 92).

Using other external sound sources for the Vocoder:
It can of course be very interesting to send sounds other than speech or singing through the microphone into the Vocoder. The Sirius offers the tempting option of also including your other audio-equipment in the Vocoder. So you also just bought a full Stand-Alone-Vocoder!

Important: The use of external sound sources is only recommended once you know the basic functions of the Vocoder really well.
It does not matter whether it's a synthesizer, drum-computer like the RAVE-O-LUTION 309 or CD-player, tape player, mixing desk …simply connect the audio source to the relevant 6,3mm (1/2") jack socket on the rear panel of the Sirius: A sound source that is to be used as the Carrier-signal should be connected to the CARRIER-IN socket. A sound source that is to be used as the Analyse-signal should be connected to the ANALYSE-IN. The following diagram shows an example of one such configuration.

Example: Drumloop from the 309 as Analyse-signal modulates a track from a record.

Important: The Gain-control on the back of the Sirius determines also the input sensitivity of the ANALYSE-IN. If you connect other audio equipment to this socket you should first set the Gain-control to minimum.

Set the Gain-Control to minimum first. To increase the level carefully turn it to the left.

CARRIER-IN   ANALYSE-IN   GAIN

Increasing the input-sensitivity

Gain-Control

The settings for the CARRIER.EXT.- and the MICRO-.keys can be stored in a SONG.

You can switch the external Carrier-signal on and off with the CARRIER-EXT.key on the MIXER-panel. The external Analyse-signal is controlled with exactly the same key as the microphone-signal. This means the MICRO.-key on the MIXER-panel also switches the external Analyse-signal on and off.

By the way - the Sirius-Vocoder allows you to mix internal Parts, microphone signals and external audio sources almost randomly - this is for the Analyse-signal as well as the Carrier-signal. One exception: If you have connected an audio cable to the ANALYSE-IN-socket, the MICROPHONE CONNECTOR on the front panel will be disabled.

Tip: Would you like to use your own favorite microphone? Instead of the Goose-neck microphone included with your Sirius, you can connect other dynamic microphones directly into the MICROPHONE CONNECTOR-socket (XLR-socket) of the Sirius. The ANALYSE-IN is also suitable to connect a microphone. If you want to use a condenser-microphone you will need an external phantom-power supply. Whatever Microphone you choose to use, make sure the Gain-control is sensibly adjusted to avoid feedback.

Changing the level of the individual Vocoder tracks:
You can use the change of volume of single Vocoder-tracks to create some interesting effects because you can emphasize or de-emphasize each of the 11 frequency Bandwidth (Vocoder 'Bands') which make up your complete vocoded sound. Even more interesting is performing these changes in real-time while the sequencer section is active. You can create, for example, real-time morphing of Pads or sound atmospheres. These options are made available to you using the dials of the MIXER-panel: here you can, while your sequencer is running, set the volumes for the single Vocoder-Bands. On the dials you have Vocoder-Bands 2-9 which each represent one bandwidth, from the deepest bass to the highest treble. Band-2 is the deepest bass, Band 9 the highest treble. (the other Bands are controllable only in the Edit-Vocoder menu - see page 91).

Frequency increased

BAND 2	BAND 3	BAND 4	BAND 5	BAND 6	BAND 7	BAND 8	BAND 9
KICK/BD	SNARE	HIHAT	PERCUSSION	SYNTH 1	SYNTH 2	SYNTH 3	VOCODER

You can store the Band-volume settings in a SONG.

To set the Band-volume hold down the Vocoder-key and turn the control in the MIXER-panel at the same time. The photo on the next page will make it clear to you.

The Vocoder

Controlling the Band volumes:
Hold down the VOCODER-key and
turn the dials in the MIXER panel.

Tip: You can also control the Bands of the Vocoder with an external sequencer. All dial movements can be recorded in the sequencer and then automated. This way you can for example create impressive automatic phasing effects with the Vocoder.

How does the Filter Bank work?

You will find the filterbank-programs on the Number-keys 15 and 16. When they are used the Sirius-Vocoder behaves like an equalizer with nine Bands. Because of the steepness of the filter you can make both subtle sound changes and obtain some very extreme effects- filter sweeps, which only work in the middle ranges, or impressive "formant-modulations". If you (and your neighbour) wish, you can also mercilessly overload the filter Bands. You will get the most wonderful LoFi-sounds - pumping bass drums, grinding HiHats, wicked 303-sounds.

There is one pre-requisite for selecting the sound source: the filterbank will only effect the Parts which are set as the Carrier-signals. The selected Analyse-signals will not be affected.

As usual you can set the volumes of Bands 2-9 in the MIXER-panel. Hold down the Vocoder-key and turn the controls in the MIXER-panel at the same time. Use the picture at the top of this page as a guide. The location of the Bands you can see in the diagram below:

Frequenz nimmt zu

BAND 2	BAND 3	BAND 4	BAND 5	BAND 6	BAND 7	BAND 8	BAND 9
KICK/BD	SNARE	HIHAT	PERCUSSION	SYNTH 1	SYNTH 2	SYNTH 3	VOCODER

Let´s select basic programme no. 16 "BboostFB" (hold down Vocoder-key and press Number-key 16. Select a Synth-Part as Carrier and for this part choose a Synth-bass (for instance C03 "Acid Mod"). The Part is now located at the entrance of the Filter bank. Now hold down the Vocoder-key and close the dials 1-5 and 8 completely and open up dials 6 and 7. Also play with Cutoff-control and Q-factor: Aceeeeed!

Tip: Naturally the Band volumes of the filter bank are sent and received in MIDI so that you can control the filter movements with an external sequencer.

How can I set Effects and Pan?

As the icing on the cake you can refine your Vocoder-sound with the Sirius-Effects. Mix in rhythmic delays to a speaking Groove in real-time or let your robot hold great speeches in a tiny bathroom. The procedure you already know from the description of the MIXER-panel. Above the FX1/FX2-keys of the Mixer you can select between two effects units of the Sirius. When the key is permanently lit you have selected FX1. When the key is blinking, FX2 is active. Now the dial of the Vocoder allows you to mix in the currently selected effect in real time.

You can store the effects mix and the pan settings in a SONG.

Activate FX1 or FX2 with the Mixer and mix-in the desired effects part with the VOCODER-control.

The position of the Vocoder-sound in the stereo image (ie. the pan setting) can be set as usual using the MIXER -panel. Turn on the PANORAMA-key of the Mixer. Now you can use the Vocoder dial to position the Vocoder-sound further to the left or right of the stereo picture.

Activate PANORAMA with the Mixer and determine the Stereo-position of the Vocoder-sound with the VOCODER-control.

Tip: As you already know, the Sirius allows you to automate changes of the effects mix and pan-orama via MIDI using an external sequencer. Just turn the controls and the Sirius will output the necessary midi information through the MIDI-OUT.

The Vocoder

The Vocoder Menu:

Most Parameters of the Vocoder-menu can also be set using the dials and keys on the front panel of the Sirius. There are however some parameters which can only be set in the Edit-Vocoder menu. The menu-pages of these restricted parameters are marked with a (*) in the following description of the Edit-Vocoder menu procedure.

This is how to get to the Edit-Vocoder menu: Press the EDIT-key and select page 4 of the Edit-menu with the right-hand PAGE/BANK-key. The following selection appears in the display:

```
Select Edit   <4>
[Vocoder][Song]
```

F1

Press the F1-key under the display to open the Edit-Vocoder-menu.

Menu-page 1: Vocoder Type
Here you can select the 16 different Vocoder types or programmes.

```
Edit Vocoder
|1> Typ:RobotVoc
```

The types contain different bandwidth intereaction and different filter types for the Bands.

Important: When you change between types the Band volume is also changed and you will revert to the basic factory settings as described on page 83.

Menu-page 2: Level
On page 2 you determine the output volume of the selected vocoder programme.

```
Edit Vocoder
<2> Level:   96
```

Menu-page 3: Panorama
Here you can set the Panorama (the position of the Vocoder-sound in the stereo image).

```
Edit Vocoder
<3> Pan:   L<61
```

This is really a balance function: As the single Vocoder-Bands can have different pan settings, then each Band can take up its own place in the stereo image.

Menu-page 4*: Bypass for the internal Analyse-signal
As the input signals of the Vocoder are being used as 'control' signals, their original sound is usually not sent to the main outputs and is therefore inaudible. The Bypass function on the next 4 menu-pages however allows you to mix the original sound back in from the Analyse and Carrier-sound source. By the way, the original signals are also being sent through the effects-processors of the Sirius.

On page 4 you find the Bypass-function for the **internal** Analyse-Signals of the Sirius (ie. the internal Parts of the Sirius which are being sent to the Vocoder). When for example you modulate a pad with a drumloop, you can mix in the original pad-sound with a controllable volume of 0-127.

```
Edit Vocoder
<4> AnaBypass: 96
```

Menu-page 5*: Bypass for the internal Carrier-signal
The Carrier-bypass function enables you to mix the original sound of the **internal** Carrier-Parts of the Sirius back in with the vocoded signal. When for example you modulate a pad with a drumloop, you can mix in the original pad-sound with a controllable volume of 0-127.

```
Edit Vocoder
<5> CarBypass: 60
```

Menu-page 6*: Bypass for the Microphone and external Analyse-signal
With the Bypass function on menu page 6 you can mix-in the original sound of the microphone signal and the external Analyse-signal with a controllable volume of 0-127.

Expert´s-Tip: When the Vocoder is inactive you can use the Sirius as a mixing desk which allows you to beef up your vocals or guitar solo using, for example, the reverb of a cathedral.

```
Edit Vocoder
<6> MicBypass: 30
```

Menu-page 7*: Bypass for the external Carrier-signal
The Bypass function on menu-page 7 allows you to mix-in the original sounds of the external Carrier-signal with a controllable volume of 0-127.

```
Edit Vocoder
<7> ExtBypass:  0
```

Menu-page 8 and 9: Effect-send1 / Effect-send2
These parameters control the Effect-sends of the Vocoder for the first and the second SIRIUS-Effects units.
```
Edit Vocoder
<8> FX1Send:  80
```

```
Edit Vocoder
<9> FX2Send:  10
```

Menu-page 10*: Lowpass
The Lowpass is the lowest Band of the SIRIUS-Vocoder. Here you can specifically add bass to the Parts of the Analyse-signal to, for example, emphasize the bass drum.

```
Edit Vocoder
<10> Lowpass:  0
```

Menu-page 11*: Highpass
The Highpass is the highest Band of the Sirius-Vocoder. Here you can specifically add to the treble Parts of the Analyse-signal.

The Vocoder

Tip: If you are using the microphone as Analyse-source you can emphasize (with Highpass) the sibilant qualities of the voice to increase the intelligibility (ie. the T's and S's).

```
        Edit Vocoder
        <11> Highpas:108
```

Menu-page 12-29*: Level/Panorama for the individual Bands
(The volume for Bands 2-9 can also be controlled on the front panel)
On the last 18 menu-pages you can set the volumes and the panorama settings of the other 9 frequency Bands. Yes it´s true: You can indeed select different pan-settings for every single Band! Use your Vocoder as a psycho-acoustic-processor and distribute in a filterbank-programme the high frequencies of your mix over the total width of the stereo image.
Here is an expample of the menu-page of the first Vocoder Band:

```
        Edit Voc-Band 1
        <12> Level:   98
```

```
        Edit Voc-Band 1
        <13> Pan:    L<10
```

You can store the current settings of all parameters of the Vocoder-menu in a SONG.

The Bypass-functions as well as the complete signaling of the SIRIUS-Vocoder is explained in the diagram on the following page.

Where are the Vocoder settings stored?

Important: The different basic settings of the Vocoder are stored in different storage areas. Whereas, for instance, the settings of the Bands are stored in the Song, the Vocoder-routing is stored in the Pattern. This makes sense because: it allows you during a song to change different allocations. For instance the Percussion track is modulating a pad at the beginning of the piece while this same Percussion becomes clattering metal plates at the end of the song. The different storage functions can be selected as usual with the WRITE-key to the right of the display. Select the desired storage area. The following table shows you which setting of the Vocoder is stored to which area.

Vocoder-Setting	Key	Storage Level
Vocoder ON/OFF	VOCODER	SONG
Vocoder-LEVEL		SONG
Vocoder-PANORAMA		SONG
Vocoder-FX1/FX2-Send		SONG
Selection of *internal* Analyse and Carrier-PARTS	ANAYLSE/CARRIER	PATTERN
Goose-neck micro as Analyse ON/OFF	MICRO.	SONG
external signal as ANALYSE ON/OFF	MICRO.	SONG
external signal as Carrier ON/OFF	CARRIER-EXT.	SONG
LEVEL of the Bands		SONG
PANORAMA of the Bands		SONG
Analyse-BYPASS		SONG
Carrier-BYPASS		SONG
Microphone-BYPASS		SONG
External Carrier-BYPASS		SONG

Configuration Diagram of the VOCODER:

SOURCES:

MICROPHONE/
ANALYSE-IN
socket (optional)

ANALYSE

PART 1-7

Highpass LEVEL
Lowpass LEVEL

CONTROL SIGNAL

9 Analyse-Bands

CARRIER

CARRIER-IN socket

PART 1-7

Band 1 PAN LEVEL
Band 2 PAN LEVEL
Band 3 PAN LEVEL
Band 4 PAN LEVEL
Band 5 PAN LEVEL
Band 6 PAN LEVEL
Band 7 PAN LEVEL
Band 8 PAN LEVEL
Band 9 PAN LEVEL

CARRIER Bypass LEVEL
EXTERN Bypass LEVEL
ANALYSE Bypass LEVEL
MICROPHONE Bypass LEVEL

FX2-SEND
FX1-SEND

FX-2 FX-1

OVERBLAST

Right
Audio-Out

Left
Audio-Out

Stereo-Output

The System-Menu

The System-Menu:

The System menu of the Sirius contains Parameters which allow you to change the basic settings on your SIRIUS. The factory settings have the parameters set is such a way that the Sirius functions best when acting as a stand-alone unit. A change of these Parameters may be necessary if you want to include the Sirius in a larger MIDI-Setup or you want to customize it to your personal requirements.

Caution: Changes in the System-menu should only be made once you have read and understood the following section. The explanations of the separate menu pages will always contain a reference to the factory settings. Should your Sirius sound different or behave in any way unusually after changing these system parameters, you should revert to the original factory settings.

You will get to the System menu as follows: Press the EDIT-key and select page 5 of the Edit-menu with the right PAGE/BANK-key. The following selection will appear in the display:

```
Select Edit  <5|
(Pads)  (System)
```

Press the F3 key under the display to open the System-menu.

Menu-page 1 (Master-Transpose):
The first two menu-pages allow you to change the overall tuning of the Sirius. On page 1 you find the parameter called Master-Transpose.

```
Edit System/Midi
|1> M.Transp: +0
```

This Parameter allows you to transpose the overall pitch of the Sirius by 6 semi-tones up or down. Live-keyboardists will particularly appreciate this option in a situation when for instance the Guitarist wants to play everything in E again. The factory setting is +0.

Menu-page 2 (Master-Tune):
On page 2 of the System-menu you find the parameter Master-Tune.

```
Edit System/Midi
<2> M.Tune:   +0
```

Here you can fine tune the Sirius. If the value is set to +63 the Sirius will sound one semi-tone higher than normal. If the value is set to -64 it will sound a semi-tone lower than normal. In most cases you can ignore this parameter because the Sirius has the standard western tuning as a factory setting. (ie. A = 440 Hz). The factory setting is +0.

Menu-page 3 (MIDI-Master-Channel):
The next Menu-page requires a bit more care as the MIDI-channel-allocation of the Sirius is being set.

The Parts of the Sirius have a fixed MIDI-channel allocation. For the factory setting (1) the Midi-channel allocation is as follows:

MIDI-Channel 1:	Kick
MIDI-Channel 2:	Snare
MIDI-Channel 3:	Hihat
MIDI-Channel 4:	Percussion
MIDI-Channel 5:	Synth 1
MIDI-Channel 6:	Synth 2
MIDI-Channel 7:	Synth 3

In some cases it might be necessary to change this allocation to adapt to your MIDI-setup. This you can do in the System-menu. On page 3 of this menu you find the Parameter "M.Channel". It allows you to set the Master-channel of the Sirius. In the above described factory setting it has the value 1. If you set the value to 5 for instance the allocation of the MIDI-channels will change as follows:

```
Edit System/Midi
<3> M.Channel: 5
```

MIDI-Channel 5:	Kick
MIDI-Channel 6:	Snare
MIDI-Channel 7:	Hihat
MIDI-Channel 8:	Percussion
MIDI-Channel 9:	Synth 1
MIDI-Channel 10:	Synth 2
MIDI-Channel 11:	Synth 3

Caution: The order of the Parts in relation to one another is fixed, due to the system configuration, and cannot be changed.

Menu-page 4 (Local-Off):
Another very important function can be found on page 4 of the system-menu: the Parameter Local On/Off. This parameter is often the solution for many problems that might occur when using the Sirius with an external sequencer.

```
Edit System/Midi
<4> Local:    ON
```

The factory settings of this parameter are set to ON - the only sensible setting all the time the Sirius is being used as a stand-alone unit.

```
Edit System/Midi
<4> Local:    OFF
```

If the Parameter is switched to OFF the following happens: The keyboard is separated from the sound sources within the Sirius. If you now press a key the MIDI-information "note-on" will not reach the Synthesizer of the Sirius anymore. Instead this signal will immediately be sent to the MIDI-Out socket of the Sirius. The Synthesizer is now able to receive MIDI-data only which gets to the unit via the MIDI-In socket. The next thing would of course be to connect the MIDI-Out again with the MIDI-In. This task is in most studios dedicated to the sequencer software. The advantages of such a system are clear: If for instance the Kick-Part (MIDI-channel 1) on the Sirius has been selected but in the external sequencer the Synth1-Part (MIDI-channel 5) has been selected, only the Synth 1-Part will play out when you play the keyboard. The setting Local-ON would in this instance also have the Kick-Part playing.

What is true for the Keyboard of the Sirius is also true for the Internal- Sequencer. The Position Local OFF will separate the Internal Sequencer form the internal sounds. This is always an advantage when a pattern or a song of the Sirius is to be recorded into an external sequencer. How you put this into practice will be explained a little later with some examples. (see section " Recording Sirius-Patterns and Songs into an External Sequencer")

The diagram "The Local-Off Function of the Sirius" on the following page will show the above function in detail.

The Local-OFF-function of the Sirius in a schematic diagram

LOCAL-ON

LOCAL-OFF

MIDI-IN

MIDI-OUT

Menu-page 5 (MIDI-Synchronisation):
Page 5 of the System-menu contains a parameter which can also be set on the front panel of the Sirius. Here you have 3 settings to choose from:

```
Edit System/Midi
<5> MidiSync:INT

Edit System/Midi
<5> MidiSync:EXT

Edit System/Midi
<5> MidiSync:AUD
```

In the first setting 'INT' (factory setting), the Sirius creates its own sequencer tempo with its own clock.
In the position 'EXT' the Sirius can be synchronised to an external MIDI-clock. The setting 'AUD' makes the Sirius ready to be synchronised with an audio-signal (Beat-Reconition-System). To activate the Synchronisation parameter you will not have to open the System-menu because there is a key for these 3 functions on the front panel of the Sirius. This key is marked SYNC.EXTERN/AUDIO.SYNC. If this key is not lit it means you are in the 'INT' mode. If the key is lit, the Sirius is in the 'EXT' mode. If the key is blinking the Beat-Recoginition-System is activated. This is the 'AUD' mode.

Menu-page 6-11 (Send- and Receive-Functions):
The Parameters on the following 6 menu pages are Send and Receive filters for certain MIDI-data types. There you can determine if a particular data type is to leave the Sirius through the MIDI-Out socket or to reach it via the MIDI-In socket. The abbreviations RX and TX stand for Receive and Transmit respectively.

Menu-page 6 (Receive Program-Change):

```
Edit System/Midi
<6> RxPrgChg: ON
```

In the ON setting (factory-setting) the Sirius receives MIDI-programme- change commands and Bank-change commands from external MIDI-devices (for example a sequencer like Cubase or Logic). In the OFF setting these commands are ignored.

Menu-page 7 (Receive Parameter):

```
Edit System/Midi
<7> RxParam:  ON
```

In the ON setting (factory setting) the Sirius receives sound parameter information in the form of MIDI-controller commands from external MIDI-devices. In the OFF setting the controllers will be ignored.

Menu-page 8 (Receive Start):

```
Edit System/Midi
<8> RxStart:  ON
```

In the ON setting (factory setting) the Sirius receives the start command of an external sequencer which is required for the synchronisation of all connected midi devices. (more details about Synchronisation can be found in the section "Synchronisation of the Sirius with Cubase"). The start command will be ignored in the OFF setting.

Menu-page 9 (Transmit Program-Change):

```
Edit System/Midi
<9> TxPrgChg: ON
```

In the ON-setting (factory setting) the Sirius sends MIDI-programme- change commands and Bank-change commands to external MIDI-devices (for instance other Synthesizers or expanders as well as an external sequencer). No commands will be sent in the OFF setting.

Menu-page 10 (Transmit Parameter):

```
Edit System/Midi
<10> TxParam: ON
```

In the ON-setting (factory setting) the Sirius will send sound parameters in the form of MIDI-control commands to external MIDI-devices. In the Off-setting the Control commands (for instance dial and wheel movements on the front panel of the Sirius) are not passed on to the MIDI-Out socket.

Menu-page 11 (Transmit Clock):

```
Edit System/Midi
<11> TxClock: ON
```

In the factory setting ON the Sirius will permanently send its internal MIDI-Clock information (even when the internal sequencer is stopped). In rare cases this can be unwanted. You can stop sending MIDI-Clock information by turning this parameter to the OFF-setting. More details on Synchronisation can be found in the section "Synchronisation of the Sirius with Cubase".

Menu-page 12 (SysEx-Speed):

```
Edit System/Midi
<12> SX-Spd:NORM
```

This parameter allows you to set the speed at which system-exclusive data (Momentum, Sound, Song and All-Data Dumps) is sent from the Sirius. The factory setting should work with all common Sequencing programmes and MIDI-interfaces. Apart from this setting it is also possible the speed up the TX of the data (position FAST) or to slow it down (position SLOW). To find the best TX speed it is advisable to try out all three options. If the setting FAST works with your MIDI-interface there is nothing against using it permanently - it will increase your work-speed enormously.

Caution: This parameter should only be changed by you when you have already had experience in data-Dumping different data types. More information on the different Data-Dump-types and how to transmit them you will find in the section "Data-Dumping" in the WRITE-menu section of this manual.

Menu-page 13 (Poti-Snap):

```
Edit System/Midi
<13> PotSnap:OFF
```

This parameter is about the behaviour of the dial controls on the front panel of the Sirius. Just experiment with the setting options of this parameter. These functions allow you to increase ease of operation of the Sirius and to customise it to your special requirements. In the factory setting OFF, the controls on the front panel will behave as follows:
As soon as you turn a dial the value corresponding to the control setting is called up. The resultant sound changes (for example when changing the Cutoff-frequency) can in some situations be unwanted. We have therefore provided the new Pot-Snap function to the Sirius. It is activated in its ON setting.
Now the Pots will behave as in the following example: Let's assume the Cutoff-frequency of a sound has the value 100. The Cutoff-control is however set to 20. Without Pot-Snap the cutoff frequency would immediately take on the value 20 when you move the control. A clear jump would be audible. With the activated Pot-Snap you can however move the control without hearing a jump. Only when you exceed the value 100 will the sound start to change. In order for you to know which value is set for the currently selected sound and in which direction the dial must be turned in order to find it is indicated in the display while turning the dial. For our example the display would look as follows:

```
A22:SawBass  130
->  Cutoff:  100
```

In this example the display shows you that you will have to turn the control to the right and that you will only hear a change in sound once you have passed a Cutoff-value of 100.

Menu-page 14 (Poti Info):

```
Edit System/Midi
<14> PotInfo: ON
```

This parameter lets you decide if you want to have the parameter and the relevant value displayed or not when you turn a dial. The factory setting for this function is switched to ON. The OFF setting disables this function.

Menu-page 15 (Track Mute):

```
Edit System/Midi
<15> TrkMute: ON
```

When you have come this far in the manual you will surely have noticed that the two lower octaves of the Sirius-keyboad allow you to mute and un-mute tracks as well as transpose them. The parameter on this page allows you to turn this function off. The factory setting makes this function active, and so the parameter is set to ON.

Menu-page 16 (Beat Input):

```
Edit System/Midi
<16| BeatInp:XCa
```

The parameter Beat-Input on this menu-page refers to the Beat-Recognition-System. Sirius' factory setting is set in such a way that the Beat-Recognition-System is provided with audio-material via the CARRIER-IN socket (on the rear panel of the unit). Should the audio-signal your are feeding not have the required level for the Beat-Recognition-System you can alternatively use the ANALYSE-IN socket. The Gain-control, coupled with the socket, allows you to increase the input-sensitivity of the Sirius. To activate the ANALYSE-IN-socket you have to switch the Beat-Input to Xan.

Caution: When you use the ANALYSE-IN-socket to access a sound from an external unit such as CD or Record Player, the microphone of the Sirius will be de-activated.

More about this subject can be found in the chapter describing the Beat-Recognition-System.

The Sirius and MIDI:

If you already own an expanded MIDI-device setup and have made all the connections yourself, you can probably ignore this section. Those amongst you who wish to connect a MIDI-keyboard to your computer for the first time should pay strict attention to the diagrams and explanations in this chapter.

Important: First we want to clear some facts which always lead to misunderstandings. MIDI cables only transmit Midi control information from one Midi device to another (eg. "note-on", "note length" or "note- off").
It is impossible to transmit and hear a sound (audio-signal) via a MIDI-cable. It therefore makes absolutely no sense to connect a MIDI-cable to an audio-input or output of an amplifier or mixing desk. Such connections are to be avoided at all costs because you may well damage your MIDI-device .

MIDI? What on earth is that?

MIDI is an abbreviation and it means "Musical Instruments Digital Interface". MIDI is an international standard used by most manufacturers of electronic musical instruments. This is why you can connect devices made by different manufacturers using MIDI, allowing them to 'talk' to each other. A MIDI-interface allows MIDI-devices to communicate with each other and exchange data. The transmitted data can for example contain information on the pitch, the length, the volume or the sound number which a synthesiser is to play. A MIDI-interface can administrate up to 16 MIDI channels. They function similarly to the channels of a radio or television. Data that is sent on a particular MIDI-channel can also only be received by the same channel. In a MIDI system you can send and receive on all channels simultaneously. The Sirius works on 7 MIDI-channels. It is therefore possible that the Sirius can play 7 different sounds with different melodies and rhythms at the same time. We say the Sirius has a 7-part multimode.

Connecting MIDI-Gear:

There are some rules regarding connecting MIDI-devices which you should pay strict attention to:

3 Rules

1.) The MIDI-IN socket of one device is always connected to the MIDI-OUT socket of the other device. The MIDI-OUT socket is the connection from which MIDI-data is sent from a device. The MIDI-IN socket is the connection to which MIDI data is fed to a device. The MIDI-THRU-socket takes in the arriving MIDI data and passes it on to the next device without changing it.

2.) When connecting your MIDI-devices you should make sure that you only use high-quality, proper MIDI-cables. Similar cables from your Hi-fi store (eg. tape recorder 'DIN' cables) are often not suitable because they can be wired differently.

3) MIDI-cables should never be longer than 5 metres. Data transfer via MIDI is optimal through cables up to this length. Longer MIDI-cables can cause problems.

Examples of MIDI-Connections to the Sirius:

In the following section you will find the most common MIDI-connections that are possible with the Sirius.

Important: In order to be able to hear the sound of all the instruments mentioned in the following examples, the audio-outputs of all devices must be connected to an amplifier or a mixing desk. Because most amplifiers do not allow you to hear more than one sound source at one time, a mixing desk is of course the better solution. The following diagram shows you how to connect the Sirius and other audio-equipment using a mixing desk and an amplifier. The CD-player in our example can of course be replaced or supplemented by an expander, a sound card or another synthesizer.

Just to remind you, here is a diagram of how to configure your audio connections!

This diagram shows you how to configure the audio connections of the Sirius. The two audio outputs (OUT-LEFT/RIGHT) are connected with two parallel input channels on a mixing desk To maintain the stereo integrity of the sounds of the Sirius, the pan controls of the mixing desk channels which you have used should be set to opposite positions, i.e. one hard-left and one hard-right. If your mixing desk has dedicated stereo channels, no additional setting is required for the panorama.
In order to be able to work with the Beat-Recognition-Sytsem the signal of the CD-player needs to get to the CARRIER-input of the Sirius. The simplest solution is to use the headphone output of the CD-player. In this way the Sirius can receive the trigger signal even when the CD-player is muted on the mixing desk. Better mixing desks allow you to send the trigger signal of the CD-player via the AUX-Sends or EFFECT-sends to the Sirius. Such a connection is also required when the CD-player does not have a headphone output or you want to use for instance a record player (with pre-amp) as the Trigger source.

The Sirius and MIDI

Connecting the Sirius to external Midi-devices:
Now to the MIDI-connections:

Example 1: SIRIUS + Synthesizer (Keyboard)

This example is very simple. It allows you to play the sounds of the Sirius using another keyboard or synthesizer. This can be useful when your keyboard for example offers a bigger octave range than the Sirius. In this example you can also play the Sirius normally, using its own keyboard.

⊙ **MIDI-IN**

⊙ **MIDI-OUT**

Masterkeyboard / Synthesizer

Example 2: SIRIUS + Expander
This example shows you how to connect an expander or a sound module to the Sirius. As the expander does not have a keyboard of its own you can play its sounds with the keyboard of the Sirius. You can select different settings on the devices depending on your requirements.
First select a Part of the Sirius which you want to use to play the sound you have selected in your expander. For instance, use the SYNTH-3 part. If this part is selected on the Sirius the keyboard of the Sirius is sending midi information on MIDI-channel 7 (factory setting). Now you have to set your expander so that the chosen sound is set to receive on MIDI-channel 7 (RX midi CH.7). Once this is done and you press a key on the Sirius you will hear the sound of both devices.
If you want to hear the sound of the expander only you have to turn down the volume of the selected Sirius-part in the MIX-section. If you do this it is probable that the sound of your expander will be quieter as well. This is due to the fact that the Sirius is not only sending note information from the keyboard via MIDI-OUT but also the MIDI-Controller data such as volume. This controller data is created as soon as you turn a dial or wheel on the Sirius. As the volume is a fixed MIDI-control which is the same for all MIDI instruments the expander will therefore play quieter. To solve this problem, you have two options:

1. You can set your expander so that it no longer receives any MIDI-controller information from the Sirius.

2. You can set the Sirius so that it does not send any MIDI-controller information. This is done in the system-menu of the Sirius on page 10. Set the parameter "TxParam" to OFF. In this setting the Sirius will no longer send MIDI-conroller information to the MIDI-OUT-socket.

⊙ **MIDI-IN**

Expander / Sound module / Synthesizer

This diagram shows you how to connect an expander, a sampler or any other synthesizer with MIDI to the Sirius. This way you can play the sounds of the connected device with the keyboard of the Sirius.

⊙ **MIDI-OUT**

Should the midi TX of the sequencer track of the Sirius correspond to the Midi RX of the selected part of the external device, simply activate the "Part/Sequence to MIDI"-function of the Sirius for the relevant Part.
Naturally this example will also work for a keyboard-synthesizer.

Example 3: SIRIUS + Computer

Despite the extensive possibilities of the Sirius-sequencer maybe you´d rather use your usual sequencer software. Again the Sirius is well suited to this because its synthesizer can be addressed and controlled via MIDI. Because this subject is quite extensive we´ll have to go far afield to get to some particularities resulting from a connection of Computer and MIDI. You will find a diagram for this example on the following page.

MIDI-Interfaces for the Computer:

The basic requirement for this MIDI-connection is that your computer is equipped with a MIDI-interface. The ATARI ST has the MIDI-interface built in. PC and MAC need an additional interface, usually in the form of a card or an external Midi-interface unit connected to the printer or modem-port. Modern PC-s often have a sound card built in which includes a MIDI interface. In this case you will need the MIDI connection cable that goes with the sound card (obtainable at your Computer-Specialist or the manufacturer of your sound card). Unfortunately it is important to note that the MIDI-interfaces of sound cards are not always terribly reliable. Should you plan on getting further MIDI-instruments later you should also consider the purchase of a "proper" MIDI interface. These devices often offer several MIDI-interfaces in one casing so that you are not restricted to 16 MIDI-channels anymore. There are interfaces with up to 128 MIDI-channels or 8 MIDI inputs and outputs (8 X 16 channels in, 8 X 16 channels out).

MIDI-Sequencing Software:

If you don´t have it yet, you will of course need a suitable sequencer-software to run the Sirius with a computer-setup. Here the selection is enormous. There are however certain standards in the Music-scene. The most commonly used are the products of the companies Steinberg (Cubase) and Emagic (Logic). These programmes have the advantage that they work for all computer disk formats. If a friend for instance owns Cubase for the PC and you work with an ATARI, it is no problem to swap files with these computers. It is our experience that the Steinberg programme, Cubase, is the most widely used. This is why we have chosen this programme for our examples in this manual. Often you find sequencer-programmes included in the delivery of sound cards. These "freebies" are often only slightly advanced demo-versions of more extensive programmes and are therefore restricted in their usability.

Warning: The original programmes Cubase and Logic have a copy-protection plug (dongle) or installation key. Should you be using a version without a dongle it is probably a pirate copy. The use of such a pirate copy is illegal. Very often these pirates are not fully functional and crash a lot. Do yourself and the software developers a favour and only use registered original software. This might at first be a little expensive but has the advantage that you will regularly be provided with Updates (which fix errors and provide new functions) and you can make use of the Hot-line service of the manufacturer when you have a question.

The QUASIMIDI-Hotline will not give any support on software problems to users of pirate copies.

Important: The MIDI-settings of a PC can, depending on the sound card, MIDI-interface and sequencing software being used be in some respects very complicated. Please understand that we are unable to help you with problems concerning Sound cards and computers. If you do find problems here, please consult the manufacturer of your sound card, your sequencing software or the dealer who sold you the PC.

Computer with Sequencer

PC
Atari
Mac

◎ **MIDI-IN**

◎ **MIDI-OUT**

If you have connected the Sirius according to our diagram you will only need to do one thing: Go to the system-menu of the Sirius and select page 4. Now set the parameter "Local" to OFF. More details about the parameter Local-Off you can find in the description of the System-menu earlier in this manual.

◎ **MIDI-IN**   ◎ **MIDI-OUT**

Example 4: SIRIUS + Computer + Expander

In this example we are already dealing with a small MIDI-studio. This example expands on what we have previously discussed and assumes that you have one MIDI-IN and one MIDI-OUT on your computer only.

In order for the computer to send data not only to the Sirius but also to the Expander you have to connect it to the socket MIDI-THRU on the rear panel of the Sirius. The MIDI-THRU socket passes on all Midi-data received through the MIDI-IN socket to the expander without changing it. To avoid doubled up sounds you should adjust your expander so that it will only receive on the MIDI-channels which are not already being used by the Sirius. The factory setting for those on the Sirius are MIDI-channels 1-7. Let´s assume that you have set your expander to the MIDI-channels 8 to 16. If you now want to play the sound of the expander, located on channel 8, and you are using the keyboard of the Sirius, you will have to select a free track in your sequencer-programme and set it to MIDI-channel 8. Naturally the Sirius is in this example in Local-OFF mode.

If your expander also has a MIDI-THRU socket, you can connect another expander to this. Instead of the expander or sound module you may of course connect a sampler or another midi-synthesizer.

Computer with Sequencer-software

MIDI-IN

Expander / Sound module

MIDI-IN

MIDI-OUT

MIDI-IN MIDI-OUT MIDI-THRU

Example 5: SIRIUS as Expander + Synthesizer (Keyboard) + Computer

This example corresponds more or less to the previous examples. The only difference is that now the Sirius is taking on the part of an expander. Should your master-keyboard be a synthesizer you will only pay attention to the fact that the MIDI-receive channels of the Sirius do not conflict with those of the synthesizer. The MIDI receive channels of the Sirius can be set in Edit-System menu page 3.

With this configuration you will unfortunately have to sacrifice some of the advantages of the Sirius. It is, for example, not possible to record the dial or wheel movements of the Sirius because the MIDI-OUT of the Sirius is not connected with the MIDI-IN of the computer. It is the same for the data storage using MIDI-Data-Dump. If you absolutely depend on this connection-setup you will have no choice but to change the connections before a data-Dump can be performed. In our example you would have to connect the MIDI-IN of the computer with the MIDI-OUT of the Sirius. (In a lot of cases it is not advisable to change midi connections while the equipment is still powered up.)

This configuration is also open to expansion. If you want to connect a further Midi-device in addition to the Sirius connect the MIDI-THRU of the Sirius to the MIDI-IN of the extra Midi-device.

MIDI-IN

Computer with Sequencer-software

PC
Atari
Mac

MIDI-IN

MIDI-OUT

MIDI-IN   MIDI-OUT   MIDI-THRU

Masterkeyboard / Synthesizer

The Sirius can also be used as an expander in an already existing MIDI Setup.

MIDI - Problems and Solutions:

The Computer does not receive any MIDI-data:
Incoming and outgoing MIDI-data is in most sequencer programmes indicated by a blinking dot or a moving bar. Cubase does it using two displays in the transport window.

Here incoming MIDI-data is indicated

The Transport window of Cubase

Here outgoing MIDI-data is indicated

If this shows you that MIDI-data is coming and going you can be sure that your connection is correct and the problem is somewhere in the software. When the keyboard of the Sirius is pressed and your sequencer software does not receive any MIDI-data it is unlikely that the problem lies with the Sirius. First check your connections using our diagrams. Make sure the MIDI-OUT socket of the Sirius is indeed connected to the MIDI-IN socket of the computer. If this is the case, the MIDI-cable could be defective. Exchange it and re-try.
Some sequencers have the option to turn the MIDI-inputs on and off separately. Check your programme settings to this effect. If all of this has done nothing for you, you should check the settings of your MIDI-interface and maybe get advice from the manufacturer of your interface or your sound card.

The Computer does not send MIDI-data:
Incoming and outgoing MIDI-data is in most sequencer programmes indicated by a blinking dot or a moving bar (see above). When you hit the Sirius-keyboard, the computer receives MIDI data but nothing is sent. If the MIDI-action indicator indicates outgoing data you should first check the connections using our diagrams. Make sure the MIDI-IN socket of the Sirius is really connected with the MIDI-OUT-socket of the computer. If this is the case, the MIDI-cable could be faulty. Exchange it and repeat the procedure. A lot of sequencer programmes have a so-called "MIDI-THRU" function which you can turn off. If this "MIDI-THRU" function is turned off the computer can receive MIDI-data but not transmit it to the MIDI-OUT. You should check out this function if the MIDI-action indicator does not indicate any outgoing data.

PC:
When you play the keyboard you hear a different sound than the one you selected in the Sirius:
Many sound cards have their own sound creator (for instance AWE32/64, Maxisound 64 etc.). If the sound card is duelly installed your sequencer software will give you the option to choose between two different MIDI-outputs. If you have chosen the MIDI-output which relates to the sound creator of the sound card, you will not be able to hear the Sirius anymore. In order to hear the Sirius you will have to select the MIDI-output to which you have connected the Sirius.

The Sirius and MIDI

Changing Sound banks and Sound programmes with MIDI:

The sounds of the Sirius are systematically put in order in banks containing 96 sound programmes each. For example: If you have composed a song on your sequencer software, and you want to switch to a different sound within the song, you can switch these banks and programmes using MIDI. We will explain how this is done using Cubase as an example, as here there are one or two things which need particular attention and care.

Example 1:

In our first example we want to select the synthesizer sound programme B48 of the Sirius for a complete Cubase track. In our case this is track no. 5 called "Synth-1". We assume that you have not yet created a Cubase-part, so settings apply to the complete track.

This is the track-info box

Here you enter the Bank number

Here you enter the Sound number

Here you can switch the Track info-box on and off

In this diagram pay particular attention to the trackinfo-box at the left of the display. If this box is missing press the button in the bottom left corner of the Cubase-window. The trackinfo-box will then appear. In our example only the windows "Bank" and "Prog" are important. In window "Bank" you enter the value for the bank number of the Sirius. In window "Prog" enter the sound number.
Now you will ask why you have to enter the value 256 for the B-Bank. This is a peculiarity of Cubase which in other sequencer programmes is dealt with a little more elegantly. There is however a certain system behind this which is explained in the table below. The values for the column in the Cubase display must be entered into the window "Bank" of the trackinfo-box in order to select the relevant banks of the Sirius.

To change the Synth-sound banks of the Sirius with MIDI you have to enter the following values in Cubase:

SIRIUS-Synth	CUBASE
User-Bank	0
A-Bank	128
B-Bank	256
C-Bank	384

Selecting the Drum sounds is a little easier as the Sirius has only two banks here.

To select the Drum sound Banks of the Sirius with MIDI you have to enter the following values in Cubase:

SIRIUS-Drums	CUBASE
User-Bank	0
A-Bank	128

Other sequencers allow you to sometimes change between banks with the values 0, 1, 2, 3. To discover how this works with your software, please refer to you manual or simply try it out!

Example 2:
In this example we want to allocate the sound C87 of the Sirius to a single Cubase-Part. In Cubase you are able to assign a different sound to each Cubase-Part which allows you to select a new sound in the middle of a song.

This is the Partinfo Box

Here you enter the Bank-number

Here you enter the Sound-number

Here you can switch the Partinfo Box on and off

In the diagram the Synth-1 Part is selected. It is "highlighted". As soon as a Part is selected the trackinfo-box will turn into a partinfo-box. When you now enter new values into the windows of this box they will only apply to the selected Part. In this way you can select different sounds of the Sirius for each Cubase-Part. NB: Information in the partinfo box is also copied when you copy a whole track.

The Sirius and MIDI

Data-Dumping - Storing your Data!

Very, very important! As a safety measure you should regularly 'data-Dump' (data-save) the sounds, patterns and songs you created in the Sirius to an external sequencer or MIDI-file-player. You will do yourself and your carefully composed pieces a great favour. Even professionals in the heat of the moment can delete or overwrite sounds, patterns and sometimes even whole songs! A Data-Dump is also required when the memory of the Sirius is full and you want to store your work permanently onto an external device.

The Data-Dump-functions are located in the Write-menu of the Sirius from page 8 onwards. The Sirius offers four different forms of Data-Dump:

1. Momentum-Data-Dump (Write-menu, page 9):
The Momentum-Data-Dump sends all currently set Parameters of the Sirius. Even the parameters that are not stored yet. These are: the sound setting, bank and number; all system parameters from the System menu, common-parameters (pad-allocation, sequencer-tempo, groove-settings, effects-settings, Vocoder-settings, Arpeggiator-settings) and Mix settings. You could call the Momentum-Data-Dump a 'snapshot' of the current status of the device.

2. Sound-Data-Dump (Write-menu, page 10):
The Sound data-Dump stores the maximum no. of 480 Sirius sounds which have been stored in the User-bank, the settings of the Percussion-sets and the Arpeggiator-motions.

3. Song-data-Dump (Write-menu, page 11):
The Song-data-Dump contains all stored User-motifs, User-patterns (P0-P99), Mix-parameters and songs. A finished stored song contains the sequence of the song, the Sequencer-tempo, the Groove-settings, the effects settings of FX-1 and FX-2, the Vocoder-settings and the Arpeggiator-Settings.

4. All-Data-Dump (Write-menu, page 12):
When you select All-data-Dump, a Sound- and a Song-data-Dump will be sent immediately one after the other.

How to Data-Dump:
In the following section we will explain to you step by step how you can Data-Dump Sirius data onto a computer using Cubase. This procedure should be much the same for all good-quality sequencing software, as the principle is the same.
Should you not have any sequencer-software installed on your computer you might want to use a special Back-up programme. These programmes are mainly (as shareware and freeware) available free of charge. One of those programmes is for example "Dumpster" for the PC which you can get from our home page on the Internet.
When performing a Data-Dump always make sure that the MIDI-Out socket of the Sirius is connected to the MIDI-IN socket of your computer or MIDI-inferface. Only then can the data of the Sirius get to your computer.

Basic settings for Data-Dumps to Cubase:
First you should start a new Cubase-file. Create a new track and choose the setting "Any" or "OM" for the channel. If your Cubase is set the way it is in our diagram, you are primed for Data-Dump.

A Data-Dump of the Sirius consists of so-called system-exclusive MIDI-data. It is therefore vital for an error-free Data-Dump that Cubase is in a position to take on such data. You will have to click the entry 'MIDI-filter' to be found in the Cubase-menu "Options". The following window will open:

Now click with your mouse into the circled in area on the left-hand side. When the tick has disappeared you can close the window again by clicking OK. Cubase is now ready to receive a Data-Dump.

When you click on this tick it will disappear. The SysEx data-filter is then turned off.

Now press the WRITE-key of the Sirius to open the Write-menu. With the PAGE/BANK-keys select the type of data-Dump you wish to perform, eg. the Sound-Dump:

```
<9> Send Sounds?
   [Ok]
```

The Sirius and MIDI

Now start the recording in Cubase. Once the pre-count is finished and the recording starts in Cubase press the F1 key under the Sirius-display [ok] to initiate the data-Dump. The display of the Sirius is now showing that the data-Dump is being sent. An increasing bar informs you of the progress.

```
Sending...
```

When the circled Cubase MIDI activity-indicator in the following diagram is constantly lit, the computer is receiving the data-Dump.

The transport window in Cubase

When this indicator is lit your computer is receiving MIDI-data.

Click on this button to start the recording in Cubase.

Once the data-Dump is complete, the display of the Sirius is briefly showing "ok!" and then jumps back to the previous page. A further indication that the data-Dump is completed is the activity indicator in Cubase which will now be permanently off. Cubase now allows you to save this data-Dump onto the internal hard drive of your computer or onto a floppy disk.

How does the Data-Dump get back to the Sirius?

Naturally you will at some point want to send the stored data-Dump(s) back to the Sirius. Fortunately this is much simpler than the recording. You need to have the MIDI-IN socket of the Sirius connected with the MIDI-OUT of your computer or MIDI-interface. Once you have done this, load the stored data-Dump from your hard drive or floppy into Cubase. All you have to do now is to start the replay of Cubase. As soon as Cubase is running and sending the MIDI-data the Sirius is showing the following message in the display:

```
System-Exclusive
message received
```

That´s it! You will not have to set anything to receive a data-Dump on the Sirius. Just make sure that you are receiving on the same system channel you used for data-Dumping. Setting the system channel is explained in the chapter about the System-menu of the Sirius.

The Sirius and Cubase:

The one question that is most frequently asked on our hotline refers to how our products work together with a sequencer programme. Here we were able to notice that the Steinberg Cubase programme (also recommended by us, by the way) is the most popular. We will therefore answer the most important questions using Cubase for reference. Procedure and relevant parameters can in most cases be adapted for use in other sequencer programmes (for example Logic or Cakewalk) because the functions discussed are practically a pre-requisite for any self-respecting software programme.

At this point we would like to advise that shareware-sequencers and Light- and Demo-versions have serious operational restrictions. It is possible that such programmes can not process SysEx-data (important for MIDI-data-Dump), or cannot be synchronised to external devices or perhaps cannot store files.

Caution: We urgently advise you not to work with pirate copies of Cubase or Logic. First of all it is illegal, and secondly these "Cracks" are totally unstable as both the Edit and Storage capabilities depend entirely on either a 'Dongle' or, usually in the case of Macintosh versions, an 'Authorisation Key'. You are better off investing in a licensed version of the software which will provide you with regular updates and saves you from system errors and data loss just when the pressure is *really* on.

Synchronisation of the Sirius to Cubase:

From time to time it is necessary to synchronise the Sirius with another MIDI-device (for instance a Computer with Cubase or a drum computer). This means that the connected devices will be working to one midi-clock and will therefore run at the same tempo. Another advantage of such Synchronisation is that you can start and stop the devices simultaneously.

In order to set up a synchronisation you will first have to decide which device is to drive the beat, or in other words, which device's midi-clock is controlling all the other midi devices. This device will then be the 'Master' and passes on all its clock information to the device or devices you want to synchronise it to. These secondary devices are known as 'Slaves'. The Sirius can work as Slave or Master. Which setting is best for which situation is also explained in this chapter.

Cubase offers a generous choice of different synchronisation procedures which for a non-professional can be quite confusing. You have the options to synchronise your computer with tape machines, hard disc recorders, even video decks. Sometimes External Sync sources can be formats such as SMPTE, LTC, VITC, EBU or MIDI TIMECODE (MTC) and are often used to meticulously control a number of devices simultaneously.

For our purpose (to synchronise the Sirius to Cubase) we have opted for the most simple Sync.-format: the MIDI-Clock. The MIDI-Clock consists of three important Parts: the "Start" command, the "Stop" command and the tempo of the clock itself. This clock is sending tempo information with a gap of only one-96th of a note as a synchronisation signal to the Slave(s). The Slave(s) will therefore always know exactly where the Master is within each bar of the pattern or song. Both devices are then 'running in sync'.

To try out the following examples you must connect the MIDI-IN-socket of the Sirius to the MIDI-OUT-socket of the Computer and the MIDI-IN-socket of the Computer to the MIDI-OUT socket of the Sirius.
Examples, diagrams and instructions regarding the MIDI-connection of the Sirius with a computer and other MIDI-devices can be found in the chapter called: "MIDI-connection-examples with the Sirius"

The Sirius and Cubase

The Sirius as Slave:
In order to make the Sirius a Slave you simply press the SYNC.EXTERN-key. The key should now be lit and the following is shown in the display:

```
1: Untitled EXT
(STOP)      _____
```

When you now press the PLAY-key of the Sirius you will notice that it will still start. Do not worry. This is to avoid the device being stopped by accidentally pressing the SYNC.EXTERN-key. But as long as the display shows "EXT" the Sirius is waiting for the start-command from Cubase's MIDI-clock. To get Cubase to send its MIDI-clock, select the option "synchronise" from the Options-menu. The following diagram shows you which settings you have to confirm in this menu.

In this example you can ignore the Parameters. The settings shown here can however be copied over if yours should differ.

In this window you select the MIDI-Out to which you have connected your Sirius.

Confirm the changes in this window with OK. When you now start Cubase the Sirius will also start. When you stop Cubase, the Sirius also stops. Because the Sirius understands the so-called 'Song-positon-pointer' you do not always have to start Cubase at the beginning of the song. The tempo is now set in the transport window of Cubase because Cubase is the Master.
This set-up is totally geared to synchronising a sequence of a song or a pattern in the Sirius to a Song created in Cubase.

The Sirius as Master:
Let´s now do it the other way round: Now we want the Sirius to be the Master and to start Cubase. You will have to switch the synchronisation of the Sirius back to internal (INT). To achieve this either press the SYNC.EXTERN-key twice or start and stop the internal sequencer of the Sirius with the START- and STOP-keys. Also make sure that the Parameter TxClock on page 11 of the System-menu is set to "ON" (factory setting).

The rest has to be set in Cubase. As in the previous example, open the window "synchronisation" in the Options-menu. The required settings can be seen in the diagram below:

In this window you define that Cubase is synchronised to an external Midi-clock.

In this window you set the MIDI-In to which the Sirius is connected.

After entering the parameters click OK to close the window. To activate the settings you only have to press the sync-button in the transport window.

Tempo indicator

MIDI activity indicator for in- and outgoing MIDI-data

The transport window of Cubase

When the Sync-button is pressed, Cubase can receive and work with the incoming synchronisation signal (Midi-clock).

When you now press the PLAY-key on the Sirius, Cubase is automatically started as well. Try and turn the TEMPO-dial of the Sirius or tap in a new tempo into the Sirius. You can now watch how the tempo indicator of Cubase is changing in sync with the display informaton of the Sirius. As soon as you hit the STOP-key of the Sirius, Cubase will also stop.

Recording Sirius-Pattern and -Songs into an external sequencer:

To record patterns of the Sirius with Cubase it is first of all important that you synchronise both devices to each other. This is best done by selecting the Sirius as Master like we did in our previous example. Cubase is the Slave again. If the synchronisation works as in our previous example you will only have to make one setting for the Sirius. Open page 4 of the System-edit-menu and set the Parameter "Local" to "OFF". The menu-page should now look as follows:

```
Edit System/Midi
<4> Local:    OFF
```

In this mode, note and MIDI-controller information which the sequencer of the Sirius creates is not being sent directly to the internal synthesizer of the Sirius. The Data is now being sent directly to the MIDI-OUT-socket of the Sirius and into your computer and is being 'housed' within the computer. The data can then return to the Sirius through the MIDI-OUT socket of the Computer. So make sure that the MIDI-OUT-socket of the Computer is connected to the MIDI-IN-socket of the Sirius - otherwise you will not be able to hear anything.

The Cubase is receiving and sending MIDI data when you can see the MIDI activity indicator in the transport window is active (Atari) or lit (PC and Mac).

If everything works you can start your recording. First create a Part which corresponds in length to the pattern you want to record. For the MIDI-channel of this Part select the setting "All", "Any" or "OM" (depending on your sequencer programme). When your settings look like the following in Cubase, then you have done the right thing.

When Cubase is set as in the above illustration, you can start recording.

Now click on the record-button in the transport window of Cubase. Of course Cubase won´t start yet - it is waiting for the start command from the Sirius. So now press the PLAY-key of the Sirius. Cubase will now record. To end the recording press the STOP-key of the Sirius.
Should the recorded part go beyond the right locator (is longer than the desired pattern or song length), just cut it off with the scissors from the toolbox at the desired point.

The rubber deletes Parts

The Cubase toolbox. You open it with a click on the right-hand mouse button.

The scissors allow you to cut the Part

The glue-tube allows you to paste the Parts

The X mutes the Parts

All the recorded tracks of the Sirius are now in one Part. To give every track its own part Cubase offers a practical function: Remix or demix. This function can be found in the structure-menu. To apply the function first select the Part (see background diagram) and click the function as displayed in the foreground diagram.

To demix open this menu

Before the Demix

After the Demix

Saving and Storing

What is stored and where it is stored:

1.) The Sound storage places:

For a sound, all sound parameters as well as settings of the Arpeggiator, Gaters or Chord-Triggers are stored. The Arpeggio-Motions (customised polyphonic sequences included) are however stored in specifically reserved storage places (see point 3 of this section). If you have used a self-created Arpeggio in your sound only the motion-number and the performance parameters like for instance the resolution, velocity etc. are stored there.

For the Drum and Percussion-sounds the allocation of the Arpeggiator cannot be stored. The following storage spaces are available for your sounds.

96 for Kick/BD-Sounds
96 for Snare-Sounds
96 for Hihat-Sounds
96 for Percussion-Sounds (consisting of complete Percussion-sets)
96 for Synth-Sounds

2.) Motif-Storage places:

The User-motif stores the MIDI-notes played into the Sequencer of the Sirius. User-motifs are automatically stored when you quit the drumgrids or the Realtime-Record and the Step-Record functions of the Sirius and activate the next available User-motif storage space for the selected Part. A User-motif is also the place where realtime controller sequences, like for example a recorded performance with the pitch-bend Wheel, are stored.

For the User-motifs you have **100 storage places for each of the 7 Parts** available.

3.) Arpeggiator-Motion-Storage places:

Arpeggiator-motion mode stores all the patterns of the Arpeggiator which you have performed or programmed are to be stored. This can also include polyphonic Arpeggios. In this mode you do not only store the rhythm but also the length of the Arpeggio-motion, the timing of the Steps, the Gate time and the Velocity of each step. After editing the Arpeggio-motion, it can be stored using the Write menu to one of the **9 Arpeggio-motion-storage places** available.

4.) Pattern-Storage places:

In a User-pattern you store the Motif-allocation, the Storage space numbers of the sounds used in the patterns, the Volume of the 7 Parts, the Panorama, the settings of the FX-sends as well as the Vocoder-Routing and the set Groove-factor. In every User-pattern the Routings for the internal Analyse- and Carrier-Parts can be freely allocated.

To store your own User-pattern you have **100 User-Storage places** available.

5.) Song-Storage places:

In the SIRIUS, **16 song-storage-places** are available to you. For each song- step you can store one of the 100 different user-patterns, the length of the step, the settings of the Mutes for the 7 Parts and the transposition of the Synth-Parts. In addition the following information is stored within a song: the settings of the Effects-processors, the Tempo of the Song, the chosen function for each of the 16 number-keys (pattern, breaks and special loop-tracks), the Vocoder-settings (volume and panorama position of the single Vocoder-Bands, Bypass-level Parts of the Low- and the Highpass-filter and the selected Vocoder preset).

6.) Basic Vocoder-programmes (Presets):

What are Vocoder-presets? As all the settings of the Vocoder (volume, panorama position of the single Bands, Bypass-level, Parts of the Low-and Highpass-filter and the basic programme selection) are stored in a song, this question is important. In one of the **16 basic Vocoder-programmes** (Presets) you can change the frequency, tonal quality and decay-time for each Band. These Parameters have to be set for Analyse and Carrier -signals separately. This can offer even more possibilities for experiments. Programming these functions is very complex and requires a certain amount of experience when dealing with a Vocoder, namely a full understanding of System-Exclusive-data. A list of the system exclusive data formats of the Sirius can be found in the Annex of this Manual.

Caution: When you programme the Vocoder you will always change the Vocoder Preset (programme) you have currently selected. You should therefore make sure that you do not delete or change anything you still need by mistake. The Vocoder Presets are, even after editing, not totally lost - they can be re-called by initialising.

7.) Storage places for Percussion-Sets:

You may store your own Percussion sets in one of the 20 Percussion Set Storage places. Like with the Vocoder-Presets you will overwrite one of the factory stored sounds. In a Percussion-set you store the sound, the Tuning, the volume, the panorama, the FX-send-settings as well as the allocation of the keyboard keys to each Percussion-instrument. A Percussion set consists of 12 Sounds which can be freely spread over one octave. The saving of a Percussion-Set is performed automatically by the SIRIUS as soon as you quit the selected edit level.

Caution: During the programming you will always change the currently selected Percussion-set. You should therefore make sure that you don´t delete or change anything you still need by mistake. The factory Percussion-sets are, however, not totally lost - they can be re-called by initialising.

List of Wave-Macros

Kick-Wave-Macros

0	606Bass
1	808DKick
2	808Kick1
3	808Kick2
4	808Kick3
5	808LKick
6	909Kick1
7	909Kick2
8	909Kick3
9	909Kick4
10	909Kick5
11	AmbientK
12	AnaKick4
13	BD_Shot1
14	CallKck
15	ClipKick
16	D_Kick1
17	D_Kick2
18	D_Kick3
19	D_Kick4
20	D_Kick5
21	DepKick
22	DistorBD
23	DomKick1
24	DomKick2
25	DomKick3
26	HipKick
27	KickMe
28	KickShrt
29	KicRev
30	KlickKic
31	KxiuKick
32	LinnKick
33	LngKick
34	LongBD
35	MasKick1
36	MasKick2
37	ModDyn2
38	ModKick1
39	ModKick2
40	MS_Kick
41	PDistKk1
42	PDistKk2
43	PDistKk3
44	PDistKk4
45	PDistKk5
46	PDistKk6
47	RomKick1
48	RomKick2
49	RoomBDrm
50	ShortBd
51	ShrtKck1
52	ShrtKck2
53	UniVoxBD

Snare-Wave-Macros

0	606Snar1
1	606Snar2
2	808Snar1
3	808Snar2
4	808Snar3
5	909Snar1
6	909Snar2
7	DrySnar1
8	DrySnar2
9	EfSnare1
10	EfSnare2
11	EfSnare3
12	EfSnare4
13	EfSnare5
14	FlSnare
15	HipSnar
16	IndSnar1
17	IndSnar2
18	LinSnar1
19	LinSnar2
20	LinSnar3
21	MS20Snar
22	Noise1
23	Noise2
24	Noise3
25	PCMSnare
26	PicSnare
27	PitIndSn
28	Pit606Sn
29	RomSnar1
30	RomSnar2
31	Snare1
32	Snare2
33	Snare3
34	Snare4
35	UnivoxSn
36	808Claps
37	909Claps
38	HandClap
39	DirtyClp
40	DirtClp2
41	LongClap

Hihat-Wave-Macros

0	606HiHat
1	808HHat1
2	808HHat2
3	909HHat2
4	HiHats
5	LinHHat1
6	LinHHat2
7	MS_20HH1
8	MS_20HH2
9	NatHihat
10	NHiHat_1
11	NHiHat_2
12	UniVoxHH

Synth-Wave-Macros

0	V_Sine
1	V_Triang
2	V_TrianD
3	S_Triang
4	S_TrianM
5	V_Trapez
6	V_Rect_1
7	V_Rect_2
8	V_Pulse1
9	V_Pulse2
10	V_Pulse3
11	V_Pulse4
12	V_Pulse5
13	V_Pulse6
14	V_Pulse7
15	S_Rect
16	S_Puls50
17	S_Puls70
18	V_Moog
19	V_Form_1
20	V_Form_2
21	V_Form_3
22	S_Saw
23	V_Saw_1
24	V_Saw_2
25	V_Saw_3
26	V_Saw_4
27	V_Sync1
28	V_Sync2
29	V_Sync3
30	V_Sync4
31	V_Sync5
32	V_Sync6
33	V_Sync7
34	Spectr_A
35	Spectr_B
36	Spectr_C
37	Spectr_D
38	Spectr_E
39	Spectr_F
40	Spectr_G
41	Spectr_H
42	Spectr_I
43	Spectr_J
44	Noise
45	S_TriRec
46	S_SawRec
47	S_TriSaw
48	SpectrAD
49	SpectrAE
50	SpectrAF
51	SpectrAI
52	SpectrBC
53	SpectrBF
54	SpectrBG
55	SpectrBH
56	SpectrBJ
57	SpectrCI
58	SpectrDE
59	SpectrEH
60	SpectrEJ
61	SpectrFG
62	SpectrFH
63	SpectrFI
64	SpectrFJ
65	SpectrGH
66	SpectrGI
67	SpectrGJ
68	SpectrHI
69	SpectrHJ
70	Sequenz1
71	Sequenz2
72	Sequenz3
73	Sequenz4
74	Wetbass1
75	Wetbass2
76	Sawtoot1
77	Sawtoot2
78	Sawtoot3
79	FatStack
80	FatDirty
81	HohnerSt
82	SlowOrch
83	MoogDeep
84	DeepSine
85	TB_Bass1
86	TB_Bass2
87	TB_Bass3
88	TB_VeloB
89	Sync_1
90	Sync_2
91	Up_Sync
92	MalChoir
93	Mellotrn
94	VS_Bell
95	VS_Deep
96	VS_Fat
97	VS_Spect
98	VS_Wave
99	VS_VOICE
100	Effect
101	SpecStrg
102	SuprStrg
103	SeqPad_1
104	SeqPad_2
105	ChorStrg
106	SuperFat
107	FatVoice
108	Saw_Orch
109	Fat_Solo
110	Effect_1
111	Effect_2
112	Effect_3
113	Effect_4
114	MZapBas1
115	MZapBas2
116	808TunBd
117	NoiseSeq
118	BellStrn
119	SequFat1
120	BasStrng
121	SequFat2
122	Wet_Fat
123	Hohn_Wet
124	PowrChrd

Percussion-Intruments									
0	12_Tom	50	909Snar1	102	EfSnare2	154	LinnClap	206	Ride
		51	909Snar2	103	EfSnare3	155	LinnClp2	207	Ride2
0	12_Tom	52	Ambient	104	EfSnare4	156	LinnCong	208	RingPer1
1	12_Tom_D	53	Blecher1	105	EfSnare5	157	LinnCowb	209	RingPer2
2	14_Tom	54	Blecher2	106	ElHiTom	158	LinnCrsh	210	RomKick2
3	14_Tom_D	55	CallKick	107	ElLoTom	159	LinnHHMC	211	RomKick
4	16_Tom	56	Camera_1	108	F_Drum1	160	LinnHHSC	212	RomSnar1
5	16_Tom_D	57	Camera_2	109	F_Drum2	161	LinnKCKF	213	RomSnar2
6	606Bass	58	Camera_3	110	F_Drum3	162	LinnOpHH	214	RoomBDrm
7	606CloHH	59	Camera_4	111	F_Drum4	163	LinnStck	215	Shorty_1
8	606Cymb	60	ClipKick	112	F_Drum5	164	LinnTamb	216	Shorty_2
9	606HiTom	61	CloseHat	113	F_Drum6	165	LinnTom1	217	Shorty_3
10	606HTom2	62	Cng1Mute	114	F_Drum7	166	LinnTom2	218	ShrtBDrm
11	606LoTom	63	Cng1Palm	115	F_Revs1	167	LinnOpHH	219	ShrtKick
12	606MeHat	64	Cng1Slap	116	FingSnip	168	LinSnar1	220	ShrtKck2
13	606OpnHH	65	Cng2Mute	117	FipSnap	169	LinSnar2	221	ShrtZip1
14	606Snare	66	Cng2Palm	118	FlngClp	170	LinSnar3	222	Sirene
15	808CloHH	67	Cng3Ot	119	FlSnare	171	LinTom1H	223	Snare1
16	808ClHH2	68	Cng3Palm	120	Gap_Zip2	172	LinTom1L	224	Snare2
17	808Clap	69	Cng3Slap	121	HH1Closd	173	LittlPer	225	Snare3
18	808Clave	70	CngMffl	122	HH1Open	174	LongKick	226	Snare4
19	808Cymb	71	CngMute	123	HH2Closd	175	LngKick2	227	Sp12Meta
20	808DKick	72	CngOpen	124	HH2Open	176	LoopClap	228	Sp12Tom1
21	808HiCon	73	CngOtOf	125	HighStck	177	LoopShak	229	Sp12Tom2
22	808HiTom	74	CngOtOf2	126	HipKick	178	LoopSnap	230	Sp12Tom3
23	808Kick1	75	CngOtOff	127	HipSnare	179	Lopmatic	231	SpCrash
24	808Kick2	76	CngPalm	128	Huuhh	180	Low_Zip1	232	Steam
25	808Kick3	77	CngSlap	129	IndSnare	181	MasKick1	233	Ticker
26	808LKick	78	CngSlOf	130	IndSnar2	182	MasKick2	234	Tubus
27	808LoTom	79	CngSlphd	131	Ito_Hdmt	183	Metronom	235	Udus1
28	808MeTom	80	CngTips	132	Ito_Hdot	184	ModDyn2	236	Udus2
29	808OpHH2	81	D_Kick1	133	Ito_Hds	185	Modular1	237	Udus3
30	808Rimsh	82	D_Kick2	134	Ito_Ldm	186	Modular2	238	Udus4
31	808Snar2	83	D_Kick3	135	Ito_Ldot	187	MoogZap1	239	UniBDrm
32	808Snar3	84	D_Kick4	136	Ito_Lds	188	MoogZap2	240	UniVoxCH
33	808Snare	85	D_Kick5	137	Iya_Ahdo	189	MS_20_HH	241	UniVoxOH
34	909Clap	86	DeepShak	138	Iya_Ahds	190	MS_20_Sn	242	UnivSnar
35	909CloHH	87	DeepKick	139	Iya_Hdm	191	MS_Kick1	243	808Cowbl
36	909ClHH2	88	DirtClap	140	Iya_Hdot	192	MTom	244	LittlePL
37	909Cras2	89	DirtClp2	141	Iya_Hds	193	NCHHFoot	245	LowZipLp
38	909Crash	90	DirtHH	142	Iya_Ldm	194	NClHH	246	RingPgLp
39	909HiTom	91	DistorB	143	Iya_Ldo	195	NormClap	247	RingPLp2
40	909Kick1	92	DoomKick	144	Iya_Lds	196	PDstKic1	248	Short1Lp
41	909Kick2	93	DomKick2	145	KickMe	197	PDstKic2	249	Short2Lp
42	909Kick3	94	DomKick3	146	KickShrt	198	PDstKic3	250	Short3Lp
43	909Kick4	95	DrySnar1	147	KickRev	199	PDstKic4	251	ShrtZipL
44	909Kick5	96	DrySnar2	148	KlickKic	200	PDstKic5	252	FDrum1Lp
45	909LoTom	97	DstTomHi	149	KxiuKick	201	PDstKic6	253	FDrum2Lp
46	909MeTom	98	DstTomLo	150	LFO	202	PCMSnare	254	FDrum3Lp
47	909OpHH2	99	DstTomMi	151	LinCabas	203	PicSnare	255	BlecherL
48	909Ride	100	Effect1	152	LinCrsh2	204	PowrChrd		
49	909Rimsh	101	EfSnare1	153	LinnClHH	205	Print_2		

List of Drum-Sounds

Kick-Sounds

A01	HipKick	A59	Pump909	A16	DB Snare	A74	808Snar2
A02	WetKick	A60	DancKick	A17	DirtySht	A75	808Snar3
A03	Stopped	A61	Dutch	A18	ShortBig	A76	808Snar4
A04	DeepKick	A62	Daftkick	A19	NoiseSnr	A77	808Velo
A05	Medium	A63	ZannZ BD	A20	Noname	A78	808Snapp
A06	Dirty	A64	House 1	A21	Machine	A79	808Bottm
A07	AttackBD	A65	Dist-808	A22	HighSnar	A80	808 HP
A08	Basket	A66	808 Kic2	A23	LoFiSnar	A81	Scratch!
A09	Staubig	A67	ReverbKk	A24	NoFiSnar	A82	Modulate
A10	UltraDry	A68	808XFett	A25	Hallsnd	A83	NoiseMod
A11	SuperDry	A69	808 High	A26	SniffSnd	A84	QM-High
A12	NormalKc	A70	Big 808	A27	RachgSnd	A85	Short@YY
A13	Classic	A71	BigPitch	A28	MouthSnd	A86	Effector
A14	Footkick	A72	Pitcher	A29	Fats	A87	Reverse
A15	Big Tom	A73	Fluf808K	A30	Delayed1	A88	NoSense
A16	Rockick	A74	Bumpi	A31	Delayed2	A89	DropjeBB
A17	Ultra!	A75	808Kick1	A32	Metalead	A90	Dry Drop
A18	Big Kick	A76	PunchKic	A33	Univox	A91	Blood
A19	BigDirty	A77	Deep 808	A34	606 Snar	A92	WindSnar
A20	MondoKic	A78	Gummm808	A35	606Snar2	A93	Djacka
A21	Boom	A79	Clean808	A36	DryLow	A94	1943
A22	Rat!	A80	C.P. 808	A37	MS 20Sna	A95	WirbelXT
A23	Deeper	A81	PitchKic	A38	NoiseSnr	A96	Sweepeea
A24	ClipKick	A82	ElektroK	A39	Pactroni		
A25	MelloKck	A83	ElekShot	A40	Eventtic		
A26	Pump It	A84	SFX-Kick	A41	LinnReso		
A27	NL-Kick	A85	Big \	A42	Electro		
A28	The Grid	A86	DirtySFX	A43	Snipsnar	**Hihat-Sounds**	
A29	TammBD	A87	Plusklas	A44	Ticker		
A30	Raffkick	A88	DeepEnou	A45	Cliksnar	A01	NatHiHat
A31	Blamkick	A89	HerzShlg	A46	Rollsnar	A02	RockHiht
A32	Slamkick	A90	Far Noiz	A47	Hypasnar	A03	NHiHat-1
A33	CallKick	A91	AW-Brain	A48	Noizclap	A04	Blech
A34	Pitch	A92	Lavasee	A49	909 1	A05	Highpas1
A35	Logikick	A93	Cascade	A50	909 2	A06	Highpas2
A36	ToneKick	A94	Buckhard	A51	909 High	A07	Highpas3
A37	Dindada	A95	Lift-Off	A52	909High2	A08	Highpas4
A38	Modular	A96	Calculat	A53	BadTuned	A09	ButterHH
A39	Special			A54	FilterVL	A10	JazzHat
A40	606Kick			A55	Pitch EG	A11	Luschig
A41	HardAttk			A56	PitchEG2	A12	TinHihat
A42	Staub			A57	MellwSnd	A13	Lofihat
A43	ZunchKic	**Snare-Sounds**		A58	HouseSnd	A14	DynaLinn
A44	Formant			A59	DanceSnd	A15	8.8 mono
A45	Splatt	A01	Shorty	A60	909 Snd	A16	HAT mono
A46	HiLo	A02	HipSnare	A61	Carpt909	A17	Modulate
A47	Discus	A03	Clear	A62	Short909	A18	Thor
A48	Glidekik	A04	Linn1	A63	Reso 909	A19	Shorty
A49	909 1	A05	PCM Sna1	A64	Velo 909	A20	Takethis
A50	909 2	A06	ShortSnr	A65	808 1	A21	Pitch EG
A51	909 3	A07	Reverb	A66	808 2	A22	PitchEG2
A52	909 4	A08	DeepTras	A67	DeepTund	A23	PitchEG3
A53	909 5	A09	HipHopSD	A68	Stopped	A24	PitchEG4
A54	Dirty909	A10	DrMnBsSd	A69	808 3	A25	WolligHH
A55	Dirty 2	A11	NatSnare	A70	808Hipas	A26	Agressiv
A56	Mod 909	A12	MelloSnd	A71	808Hips2	A27	Mean HH
A57	Knall:-)	A13	16 Toms	A72	HighEnd	A28	BlechHH
A58	HouseKic	A14	Egon Hal	A73	808Snar1	A29	Dirtecho
		A15	Hi Snare			A30	Highecho

A31 Glitsch	A89 Indust	A47 Swishi
A32 Slitsch	A90 ModulSnd	A48 Sritshi
A33 Univox	A91 Aua-HH	A49 Standard
A34 Dirty	A92 God-HH	A50 Mfc
A35 Natura	A93 Maybeam	A51 Westbam
A36 Modulate	A94 Vinylhat	A52 Bingo
A37 Modulat2	A95 Gongs	A53 Reverse
A38 MS 20	A96 Bubbles	A54 Short909
A39 MS 20Pit		A55 Short HP
A40 Sirius		A56 Condensd
A41 DirtyHH1	**Perc-Sounds**	A57 HopSet 1
A42 Metalic		A58 GatePerc
A43 MesserHH	A01 FilterIt	A59 GroovSet
A44 LongMS	A02 Latin	A60 FatePerc
A45 Zippi	A03 Dance	A61 Hifreq 9
A46 Crackle	A04 ShortSet	A62 Daft1Set
A47 Noizehat	A05 ResPerc	A63 Lofi 909
A48 LFO-Hatt	A06 Cut This	A64 Groov HP
A49 909 Hat	A07 Waves	A65 808 Set
A50 909 High	A08 Shatter	A66 Quasar
A51 909CutEG	A09 Percus1	A67 Short808
A52 909**-**	A10 GroovSet	A68 NewKits
A53 HipHop	A11 HouseSet	A69 Plucked
A54 Higher	A12 WierdPec	A70 Pitched
A55 LFO	A13 PowerTom	A71 Lirasis
A56 Resonanc	A14 Power	A72 Sir^ius
A57 909HP+	A15 Good For	A73 DrmBass1
A58 Short909	A16 ClapClap	A74 DanceSet
A59 Norm-909	A17 Distorto	A75 Tanz-Set
A60 Worm-909	A18 Distort2	A76 MAD-Perc
A61 909itsch	A19 Lambura	A77 Hifreq 8
A62 HAT LFO1	A20 Attack1	A78 Daft2Set
A63 HAT LFO2	A21 Attack2	A79 Lofi 808
A64 909 mono	A22 LoFi 1	A80 Groov Fx
A65 808 1	A23 LoFiPerc	A81 Electro
A66 808 2	A24 LoFi 2	A82 Modul
A67 Short808	A25 Muffelig	A83 MoreFun!
A68 Modulate	A26 Be Fxed	A84 SuperFX1
A69 RoqueY	A27 SomeFunk	A85 SuperFX2
A70 DJ"Best	A28 GrooveDT	A86 SuperFX3
A71 Tricky	A29 Maharish	A87 Animals?
A72 Remix	A30 Aborigin	A88 Help!
A73 DanceHH	A31 Poona	A89 Effekted
A74 Naturell	A32 Mahamono	A90 SatePerc
A75 808Tickl	A33 Linn Set	A91 Tablatoi
A76 SwiftHH	A34 Linn 2	A92 Strange
A77 CR-808	A35 LinnShrt	A93 L-R-U-D
A78 808 ??	A36 TotalCon	A94 ARPEG-DR
A79 Delay808	A37 DeepNois	A95 Vari FX1
A80 Bad 808	A38 X_Transf	A96 Vari Fx2
A81 Modulat2	A39 Y_Transf	
A82 PitchChg	A40 ZipZap	
A83 ShortTac	A41 Electro2	
A84 Unikat	A42 Mega-Pec	
A85 Mad HH	A43 Perfect	
A86 PingPong	A44 Mindburn	
A87 Gogo	A45 E-D-S	
A88 Q Wa Dis	A46 Pitching	

List of Synth-Sounds

Synth-Sounds
Bank A

A01	WetBass2	A58	Percular	B15	WaveBass
A02	SineBass	A59	Bottom	B16	Stopped
A03	CoolBass	A60	SequenzC	B17	DownSwep
A04	ModuloBX	A61	Into Spa	B18	Forte
A05	Mod2Bass	A62	AmbientT	B19	LuckyBas
A06	FatBoy	A63	ChorSeq!	B20	SaverSex
A07	WetLong	A64	<SynthiY	B21	303Velo
A08	Wet&Bass	A65	Arpeggio	B22	Detune!
A09	DiscoBas	A66	Trancer	B23	MixBass
A10	*Atom*	A67	Goa !	B24	ShortBas
A11	PercSine	A68	Arpeggi2	B25	Synced!
A12	ResoBass	A69	Trancer3	B26	JenY?
A13	TranceBS	A70	HardSeq!	B27	Bitterfd
A14	Filter!	A71	SyncSynt	B28	Eraser
A15	WaveBass	A72	SequenzA	B29	VoiceBas
A16	DeepBass	A73	Techno!	B30	IntroBas
A17	DirtSynt	A74	FilterS1	B31	Classic!
A18	Dirt309	A75	HighSeq2	B32	Classic2
A19	LuckyBas	A76	UpperCls	B33	VS Spect
A20	SaverSex	A77	Syncer2	B34	Fat Pad
A21	303Velo	A78	Orgelton	B35	LushSpec
A22	VeryDirt	A79	OrcSolo	B36	Hohner
A23	MixOct	A80	PulsSolo	B37	AntiSwep
A24	ShortBas	A81	VocoderC	B38	HighSwep
A25	GuitarBs	A82	Filter^!	B39	BigSwep
A26	S-Faster	A83	Zipper	B40	Strings
A27	FatDirty	A84	TinyDirt	B41	SeqPad
A28	ZapBass	A85	Swallow	B42	Tangram
A29	SawBass	A86	FXPad	B43	PolySynt
A30	PPG-Bass	A87	Psychos*	B44	FastStrg
A31	WetMoog!	A88	LushPad2	B45	HighSynt
A32	StringBs	A89	RhythmFX	B46	Long Pad
A33	Shine On	A90	Atmo	B47	Mod Pad1
A34	VS Chor	A91	Dreams	B48	Rising
A35	BrightPd	A92	AtomOrc	B49	Edgar F
A36	Shimmer	A93	Psychoa	B50	Clavinet
A37	Chor	A94	Pre Nat	B51	Bells
A38	Mellotrn	A95	Mello Up	B52	Sequent
A39	Sentinel	A96	Cult	B53	SoftSeq1
A40	TubularP			B54	ModPluck
A41	TecPad			B55	|P|C|B|
A42	Spectral	**Bank B**		B56	PercoChd
A43	GateSynt			B57	Spectral
A44	Swallow	B01	WetBass	B58	Percuter
A45	Orchestr	B02	Trancer	B59	Kraftwer
A46	Deep Pad	B03	WetFiltr	B60	Sequenz1
A47	Jet Pad1	B04	ModuloBX	B61	InMotion
A48	Big Pad	B05	Mod Bass	B62	InMotio2
A49	Picant	B06	FatBoy	B63	Sequenz1
A50	Clavonit	B07	WetLong	B64	Ancient
A51	Floating	B08	PercBass	B65	LuckySol
A52	Quintchd	B09	DiscoBas	B66	Filt Sol
A53	ShortSeq	B10	DA Hool	B67	FluteSol
A54	ModSequa	B11	SineBass	B68	SinSequ
A55	Block C	B12	XenoBass	B69	Westwoop
A56	Perco	B13	TranceBS	B70	Eastbam2
A57	Spectacu	B14	Filter!	B71	Eastbam3

B72	EastbamC	C29	Instable	C86	LFO-Pad
B73	DA Cool	C30	Bass ???	C87	FSOLbell
B74	HighSeq1	C31	Bassline	C88	UFO-Fly
B75	SynSequ	C32	309 Bass	C89	LophoLFO
B76	UpSync	C33	X-Voice	C90	SpaceAmb
B77	Syncer	C34	Koyaa	C91	Fat-Guit
B78	FatSolo	C35	StrangeP	C92	UFOworld
B79	OrcSolo	C36	Enfrhmki	C93	LFO Noiz
B80	DirtySol	C37	Rel-Pad1	C94	Funky FX
B81	Effector	C38	D.I.Auge	C95	LFOitsch
B82	Filter^!	C39	Deep-Pad	C96	GoaFix
B83	Zipper	C40	Stoffich		
B84	Organ 1	C41	WunderPD		
B85	Swallow	C42	DunePad1		
B86	FXPad	C43	Feel It!		
B87	Guitar	C44	Juno-Org		
B88	LushPad2	C45	Histring		
B89	RhythmFX	C46	Portella		
B90	Atmo	C47	Digistrx		
B91	Dreams	C48	Digichor		
B92	AtomOrc	C49	Psycorg2		
B93	ForceMa	C50	Tadavoc		
B94	Pre Nat	C51	Mellows		
B95	Mello Up	C52	Madseq		
B96	FuturSir	C53	HouseOg1		
		C54	HouseOg2		
		C55	DigiDrm		
Bank C		C56	Shibuya		
		C57	OrbitPno		
C01	Junky CP	C58	Trancer		
C02	Glider	C59	WaterSyn		
C03	Acid Mod	C60	PKS-50Bs		
C04	D+BASS	C61	SequBell		
C05	PizzaBss	C62	Banjojo		
C06	OffBeat	C63	Psycorg		
C07	DeepHaus	C64	Clavity		
C08	Funk-Man	C65	Solojam		
C09	Frogger	C66	Bigsolo		
C10	PhaseBas	C67	Hot Fat		
C11	MKS-50Bs	C68	Wheel it		
C12	UltraBas	C69	Cosmic B		
C13	Funky HK	C70	TecnoSyn		
C14	202 Bass	C71	AngelVox		
C15	Slfobass	C72	TechSeq		
C16	Mod'Bass	C73	OrbiBell		
C17	SH-X	C74	MindSolo		
C18	NovaBass	C75	VCASolo		
C19	80s Lead	C76	FSOLseq		
C20	Board	C77	Quintor		
C21	REBIRTH2	C78	Flange		
C22	80s Bass	C79	ResoLead		
C23	Pad-Bass	C80	Syncline		
C24	Bi-Bass	C81	FilterEG		
C25	Masse X	C82	Galactic		
C26	303like	C83	Kotzrobb		
C27	REBIRTH	C84	Crazykor		
C28	WeichBas	C85	SpaceChr		

List of MIDI-Controllers

Sirius MIDI-Controller List
The following list contains all sound parameters of the Sirius that can be remote controlled with a MIDI Controller. The column "Mod.Wheel Allocation" shows you which parameter can be allocated to the Modulation wheel. The column "internal recording" indicates which sound parameters can be recorded into the internal sequencer of the Sirius.

The Parameters with a "+" can only be recorded into the internal sequencer once they are allocated to the modulation wheel. Once you have done this you can record the Parameters by moving the Modulation wheel.

Controller Nr.	Function:	Mod.Wheel Allocation:	internal Recording:
1	Modulation Wheel	-	yes
5	Portamento Time (Glide)	yes	yes
7	Volume (Mix)	yes	yes
10	Panorama (Mix)	yes	yes
11	Sound-Level (VCA-Level)	yes	yes
12	Wave-Macro	-	yes
13	Octave Transpose (+-2 Octaves)	-	-
14	Tune/Detune (0,01..24 semi tones)	yes	yes
15	Filter Input Overdrive	yes	yes
16	Filter Cutoff (FC)	yes	yes
17	Filter Resonance (Q-Factor)	yes	yes
18	EG1 Attack (VCA)	yes (VCA EG MACRO)	yes
19	EG1 Decay	yes (VCA EG MACRO)	yes
20	EG1 Sustain	yes (VCA EG MACRO)	yes
21	EG1 Release	yes (VCA EG MACRO)	yes
22	Keyboard-Tracking	yes	yes
23	EG->FC amount (Env.Mod.)	yes	yes
24	Dyn->FC amount	yes	yes
25	Dyn->VCA on/off	yes	yes
26	LFO Depth	yes	yes
27	LFO Wave (0..5 = SIN..RND)	-	yes
28	LFO Rate (0,1..10 Hz)	yes	yes
29	LFO ->Pitch amount	-	yes
30	LFO ->VCF amount	-	yes
31	LFO ->VCA amount	-	yes
33	EG2 Attack (VCF)	yes (VCF EG MACRO)	+
34	EG2 Decay	yes (VCF EG MACRO)	+
35	EG2 Sustain	yes (VCF EG MACRO)	+
36	EG2 Release	yes (VCF EG MACRO)	+
37	EG3 Attack (Pitch)	yes (MOD RATE)	+
38	EG3 Decay	yes (MOD RATE)	+
39	EG3->Pitch amount	yes (MOD DEPTH)	+
40	Pitchbend Sensitivity	-	-
41	Filter-Typ (0..2 = 24dBTP..12dBHP)	-	-
64	Holdpedal	-	yes
91	FX1 (Reverb) send (Mix)	yes	+
93	FX2 (Chorus) send (Mix)	yes	+

Caution: Only for Professionals and Programmers!!

The System-Exclusive Data formats of the Sirius:

The following pages contain a list of the System-exclusive data formats of the Sirius. This list is for the advanced MIDI-programmers. If you want to programme for instance a software editor, a mixer map or an environment for the Sirius, the necessary information can be found here.

SIRIUS System-Exclusive Format:

Request Data from device:

```
Byte No.    Value       Remarks
0           F0          System Exclusive start command
1           3F          QUASIMIDI id number
2           dv          device number = System channel-1
3           27          SIRIUS id number
4           52          Request data command
5           ah          adress high
6           am          adress mid
7           al          adress low
8           dh          data count high (2 bit)
9           dm          data count mid (7 bit)
10          dl          data count low (7 bit)
11          F7          end of System Exclusive
```

Dump Data to device:

```
Byte No.    Value       Remarks
0           F0          System Exclusive start command
1           3F          QUASIMIDI id number
2           dv          device number = System channel-1
3           27          SIRIUS id number
4           44          Dump data command
5           ah          adress high
6           am          adress mid
7           al          adress low
8...        dt          data (7 bit)
xx          F7          end of System Exclusive
```

Adress Map:

```
(third byte is Adress-Offset)
00 00 00            system parameter
01 00 00            temporary common parameter
01 01 00            temporary sound/mix parameter (KICK)
01 02 00                    -"-             (SNARE)
01 03 00                    -"-             (HIHAT)
01 04 00                    -"-             (PERC)
01 05 00                    -"-             (SYNTH1)
01 06 00                    -"-             (SYNTH2)
01 07 00                    -"-             (SYNTH3)
01 08 00            reserved
...
01 0F 00                    -"-
...
01 7F 00                    -"-
```

```
02 00 00          track mutes
02 01 00          reserved
...
04 7F 00             -"-

05 00 00          kick sound  1 parameter
05 01 00             -"-   2      -"-
...               ...
05 5F 00             -"-   96     -"-

06 00 00          snare sound 1 parameter
06 01 00             -"-   2      -"-
...               ...
06 5F 00             -"-   96     -"-

07 00 00          hihat sound 1 parameter
07 01 00             -"-   2      -"-
...               ...
07 5F 00             -"-   96     -"-

08 00 00          perc sound  1 parameter
08 01 00             -"-   2      -"-
...               ...
08 5F 00             -"-   96     -"-

09 00 00          synth sound 1 parameter
09 01 00             -"-   2      -"-
...               ...
09 5F 00             -"-   96     -"-

0A 00 00          drumset 1 parameter    (drum instr 1)
0A 01 00             -"-               (drum instr 2)
...               ...
0A 0B 00             -"-               (drum instr 12)
0B 00 00          drumset 2 parameter    (drum instr 1)
...               ...
1D 0B 00          drumset 20 parameter   (drum instr 12)

1E 00 00          reserved
...
32 7F 00             -"-

33 00 00          pattern 0
33 01 00          pattern 1
...               ...
33 63 00          pattern 99

34 00 00          song 1 name
34 01 00          song 1 common
34 02 00          song 1 song event (step 1)
34 03 00             -"-          (step 2)
...               ...
34 65 00             -"-          (step 100)
35 00 00          song 2 name
…                 ...
43 65 00          song 16 song event (step 100)

44 00 00          reserved
...
53 7F 00             -"-
```

```
54 00 00          vocoder 1   band 1      coefficients
...               ...
54 00 08              -"-     band 9
...               ...
54 0A 00              -"-     reserved
54 0B 00              -"-     type
54 0B 01              -"-     highpass
54 0B 02              -"-     lowpass
54 0B 03              -"-     band 1      default level
...               ...
54 0B 0B              -"-     band 9      -"-
54 0B 0C              -"-     band 1      default pan
...               ...
54 0B 14              -"-     band 9      -"-
54 0B 15..1C          -"-     preset name
55 00 00          vocoder 2   band 1      coefficients
...               ...
63 0B 1C          vocoder 16  preset name

64 00 00          arpeggiator motion 1
65 00 00          arpeggiator motion 2
...               ...
6C 00 00          arpeggiator motion 9

6D 00 00          reserved
...
76 7F 00              -"-

77 00 00          user motif  block 0
77 01 00              -"-           1
...               ...
77 63 00              -"-           99

77 64 00          reserved
...
77 7F 00              -"-
77 7F 7F          command: clear all user motifs!

78 00 00          reserved
...
7F 7F 00              -"-
```

**Remark: vocoder data and user-motif blocks are
sent in nibble mode (high nibble first)!**

Address Offsets:

SYSTEM-Parameter:
```
00  system channel               0..15 (1..16)
01  local                        0..1  (off,on)
02  extern sync                  0..2  (off,on,audio)
03  program change input         0..1  (off,on)
04  parameter control input      0..1  (off,on)
05  program change out           0..1  (off,on)
06  parameter control out        0..1  (off,on)
07  midi clock out               0..1  (off,on)
08  metronom                     0..1  (off,on)
09  master tune                  0..64..127  (-100%..0..+100%)
0A  master transpose             58..64..70  (-6..0..+6)
0B  system excl. transmit speed  0..2  (slow,norm,fast)
0C  poti snap mode               0..1  (norm,snap)
0D  poti message                 0..1  (off,on)
0E  receive external start       0..1  (off,on)
0F  beatdetector input select    0..1(ext carrier in, mic/analyse in)
10  sequencer control(track muting) 0..1  (off,on)
11  beatdetect offset            0..16..32   (-16..0..+16/768tel)
```

COMMON-Parameter:

```
00    speed                     0..127       speed bit 1..7 (in BPM)
01    groove                    bit 4..6:    groove 0..7 (0%..100%)
                                bit 0:       speed bit 0
02    keyboard transpose        0,12         (0,+1 Octave)
03    current gate pad          0..3
04    current velocity pad      0..3
05    pad velocity 1            0..127
06    pad velocity 2            0..127
07    pad velocity 3            0..127
08    pad velocity 4            0..127
09    pad 1 pattern nb          0..99
...
14    pad 12 pattern nb         0..99
15    pad 9 fill lenght         1..8
...
18    pad 12 fill lenght        1..8
19    pad 13 motif nb           0..99
...
1C    pad 16 motif nb           0..99
1D    pad 13 motif bank         0..2  (User..Rom)
...
20    pad 16 motif bank         0..2  (User..Rom)
21    pad 13 track              0..6  (Kick..Synth3)
...
24    pad 16 track              0..6  (Kick..Synth3)
25    pad 13 sound nb           0..95
...
28    pad 16 sound nb           0..95

29    fx1 typ                   0..7  (room...pan-delay)
2A    fx1 level                 0..127
2B    fx1 time                  0..127
2C    fx1 feedback              0..127(only if fx1 typ = 6 or 7)

2D    fx2 typ                   0..7  (chorus...delay)
2E    fx2 level                 0..127
2F    fx2 feedback              0..127
30    fx2 delay                 0..127
31    fx2 rate                  0..127
32    fx2 depth                 0..127

33    overblast eq1 gain        0..127(-12..+12dB)
34    overblast eq1 freq        0..127(0..4.7kHz)
35    overblast eq2 gain        0..127(-12..+12dB)
36    overblast eq2 freq        0..127(0..18.7kHz)

37    vocoder type              0..15 (RobotVoc...BBoostFB)
38    vocoder level             0..127
39    vocoder pan               0..64..127(left..center..right)
3A    fx1 send                  0..127
3B    fx2 send                  0..127
3C    mic (analyse-in) bypass   0..127
3D    ext (carrier-in) bypass   0..127
3E    internal analyse bypass   0..127
3F    internal carrier bypass   0..127
40    mic -> vocoder analyse    0..127
41    ext -> vocoder carrier    0..127
42    reserved
43    vocoder on/off            0,1   (off,on)
44    analyse highpass          0..127
45    analyse lowpass           0..127
46    vocoder band 1 level      0..127
...
4E    vocoder band 9 level      0..127
4F    vocoder band 1 pan        0..64..127 (left..center..right)
...
57    vocoder band 9 pan        0..64..127 (left..center..right)
```

```
58  arpeggiator   byte1 bit 5..6    mode        0..2  (arp,gater,chord)
                        bit 3..4    octaves     0..3  (1..4)
                        bit 2       arpeg.on/off0,1  (off,on)
                        bit 0..1    resolution  1..3  (8,16,32)
59  arpeggiator   byte2 bit 6       double      0,1   (off,on)
                        bit 5       lenghtfit   0,1   (off,on)
                        bit 4       hold        0,1   (off,on)
                        bit 0..3    motion      0..15 (up,down...mot9)
5A  arpeggiator   byte3 bit 3..6    trig.track  0..15 (1..16)
                        bit 2..1    reserved
                        bit 0       dynamic     0,1   (off,on)
5B  arpeggiator gate    0..127(127 = legato)
```

PART-Parameter:

```
00..07 sound name
08  trackmode     bit 0..1 seq to   1..3  (INTERN, MIDI, BOTH)
                  bit 2 mono        0,1   (off,on)
                  bit 3 reserved
                  bit 4 holdpedal   0,1   (off,on)
                  bit 5 analyse     0,1   (off,on)
                  bit 6 carrier     0,1   (off,on)
09  bank nb                 0..3        (user,rom A..C)
0A  sound nb                0..95
0B  mix level               0..127
0C  pan                     2..64..124  (rnd,left..center..right)
0D  fx1 send                0..127
0E  fx2 send                0..127
0F  wave macro nb           0..xx       (depents on part)
10  tune                    0..3        (32"..4")(only on synth part)
11  detune                  0..103/104..127  (fine/coarse)
12  glide time              0..127      (0 = portamento off)
13  vca level               0..127
14  filter overdrive        0..127
15  filter typ              0..2        (24dB LP, 12dB LP, 12dB HP)
16  cutoff frequency        0..127
17  q-factor (resonance)    0..127
18  vca eg attack           0..127
19  vca eg decay            0..127
1A  vca eg sustain          0..127
1B  vca eg release          0..127
1C  vcf eg attack           0..127
1D  vcf eg decay            0..127
1E  vcf eg sustain          0..127
1F  vcf eg release          0..127
20  vcf eg vcf amount       0..64..127  (-64..0..+63)
21  dyn vcf amount          0..64..127  (-64..0..+63)
22  key vcf amount          0..64..127  (-64..0..+63)
23  pitch eg attack         0..127
24  pitch eg decay          0..127
25  pitch eg pitch amount   0..64..127  (-64..0..+63)
26  lfo wave                0..4        (Sine,UpSaw,DownSaw,Rect,Rnd)
27  lfo rate                0..120/121..127 (sync 1/16..4/1)
28  lfo depth               0..127
29  lfo pitch amount        0..127
2A  lfo vcf amount          0..127
2B  lfo vca amount          0..127
2C  pitchbend sensitivity   0..24
2D  dynamic vca amount      0,1         (off,on)
2E  modulation wheel assign1 0..127     (bit 6 is depth bit 7)
2F  mod.wheel assign1 depth  0..127
30  modulation wheel assign2 0..127     (bit 6 is depth bit 7)
31  mod.wheel assign2 depth  0..127
32  modulation wheel assign3 0..127     (bit 6 is depth bit 7)
33  mod.wheel assign3 depth  0..127
34  modulation wheel assign4 0..127     (bit 6 is depth bit 7)
35  mod.wheel assign4 depth  0..127
```

```
36   modulation wheel assign5  0..127       (bit 6 is depth bit 7)
37   mod.wheel assign5 depth   0..127
38   arpeggiator packed byte 1 (only on synth part)
39   arpeggiator packed byte 2 (only on synth part)
3A   arpeggiator packed byte 3 (only on synth part)
3B   arpeggiator gate          (only on synth part)
```

DRUM-Parameter:

```
00   bank nb                   0..1
01   instrument                0..127
02   level                     0..127
03   pan                       3..64..124       (left..center..right)
04   fx1 send                  0..127
05   fx2 send                  0..127
06   pitch                     0..127
07   reserved
```

TRACK-Parameter:

```
00   mode/bank          bit 6 carrier on  0,1        (off,on)
                        bit 5 analyse on  0,1        (off,on)
                        bit 4 reserved
                        bit 2..3 sound bank    0..3   (User,RomA..C)
                        Bit 0..1 motif bank    0..2   (user..rom)
01   sound nb                  0..95
02   motif nb                  0..99
03   mix level                 0..127
04   pan                       2,3..64..124     (rnd,left..center..right)
05   fx1 send                  0..127
06   fx2 send                  0..127
07   groove             bit 4..6: 0..7 (0..100%)
                        bit 0..3: reserved
```

SONG-EVENT-Parameter:

```
00   bars no.           1..64       (0 = end of song)
01   pattern nb         0..99
02   transpose          0..12..24   (-12..0..+12)
03   mutes              0..127      (1bit/track)
```

Function		Transmitted	Recognized
Basic Channel	Default	1-7	1-7
	Changed	1-16	1-16
Mode	Default	3b*	Mode 3b*
	Messages	x	Mode 3b, Mode 4 (M=1)*
Note Number		36-96	36-96
	True Voice		24-112
Velocity	Note On	0	0
	Note Off	x	x
Aftertouch	Keys	x	x
	Channel	x	x
Pitch Bend	MSB (7 bit)	0	0
	LSB (1 bit)	x	0
Control Change	0 Bank Change	0**	0**
	1 - 41, 91, 93	0****	0****
	64 Holdpedal	0	0
	65 Portamento on/off	x	0
Program Change		0**	0**
System Exclusive		0***	0***
System Common	Song Position	0 (Audio-Sync)	0
	Song Select	x	x
	Tune Request	x	x
System Real Time	Clock	0**	0**
	Commands	0**	0**
Aux Messages	120 All Sounds off	x	0
	121 Reset all Controller	x	0
	122 Local On/Off	x	0
	123 All Notes Off	x	x
	Active Sens.	x	x
	System Reset		

x = No
0 = Yes
* = Multi-Mode 3b: omni-off, poly. Mode 4: omni-off, mono.
** = can be set to on/off in SYSTEM-Edit
*** = Dump-Functions
**** = See manual page with MIDI-Controller-List

Diagramatic Overview of the Edit Menus

EDIT → SELECT-EDIT

SOUND-EDIT
Wave 1-125, Octave 32'-4', Detune, Glide, Mono on/off, EGP-Mod, EGP-Attack, EGP-Decay, VCF Drive, VCF Typ, Cutoff, Q Factor, Key Tracking, VCF Dynamic, Envelope Mod, EGF Attack

ARPEGGIO-EDIT
Arpeggio Mode, Trigger, Arp. Hold on/off, Dynamic on/off, Resolution, Gate Time, Motion, Octaves 1-4, Double Notes, Length Fit, Motion Loop, Step1 Time, ... Step32 Time

PATTERN-EDIT
ROM, USER, Motif, Groove, Clear Motif / Motif length, Drumgrid or Steprecord, Metronom, Realtime Record, Quantize, Delete Control / Undo, Memory

MIX-EDIT
Sequence to: Intern/MIDI/Both, Sound number, Level, Panorama, FX-1 Send, FX-2 Send

FX1-EDIT
Effect Type, Level, Time, Feedback

FX2-EDIT
Effect Type, Level, Time, Feedback, Rate, Depth

VOCODER-EDIT
Vocoder Type, Level, Panorama, Analyse Bypass, Carrier Bypass, Mic Bypass, External Bypass, FX-1 Send, FX-2 Send, Lowpass, Highpass, Band1 Level, Band1 Pan, ... Band9 Level, Band9 Pan

SONG-EDIT
Pattern Number, Transpose, Bars, insert/delete, Step copy

PADS-EDIT
PAD1 Pattern Assign, PAD2 Pattern Assign, PAD3 Pattern Assign, PAD4 Pattern Assign, PAD5 Pattern Assign, PAD6 Pattern Assign, PAD7 Pattern Assign, PAD8 Pattern-Assign, PAD9 Break-Pattern, PAD9 Break-Length, PAD10 Break-Pattern, PAD10 Break-Length, PAD11 Break-Pattern, PAD11 Break-Length, PAD12 Break-Pattern, PAD12 Break-Length

Break-PADS (PAD9 – PAD12)

SYSTEM-EDIT
Master Transpose, Master Tune, Master Channel, Local on/off, MIDI Sync, Rx Program Chg., Rx Parameter, Rx Start, Tx Program Chg., Tx Parameter, Tx Clock, SysEx Speed, Poti Snap on/off, Poti Info on/off, Track Mute on/off, Beat Input

| PAD13 Track | PAD13 Motif Bank | PAD13 Motif | PAD13 Sound | PAD14 Track | PAD14 Motif Bank | PAD14 Motif | PAD14 Sound | PAD15 Track | PAD15 Motif Bank | PAD15 Motif | PAD15 Sound | PAD16 Track | PAD16 Motif Bank | PAD16 Motif | PAD16 Sound |

Special Loop Tracks

| PAD9 Velocity | PAD10 Velocity | PAD11 Velocity | PAD12 Velocity |

Drumgrid/Stepsequencer Velocity

| EGF Decay | EGF Sustain | EGF Release | VCA Level | VCA Dynamic | EGA Attack | EGA Decay | EGA Sustain | EGA Release | LFO Wave | LFO Rate | LFO Depth | LFO>VCO | LFO>VCF | LFO>VCA | Pitch Sensitive |

| Holdped. on/off |

The Parameters in the dot-framed windows are only available in certain settings.

Key Combinations

Key combinations:

As it is not possible to provide a key or dial for every single function of the Sirius, some functions are performed by using combinations of dials and keys.

The following table will give you an overview of these functions or 'shortcuts':

Key- or dial combination	Edit level	Function
SHIFT & MOD-WHEEL ASSIGN	Can not be executed during Record or Compare	Holds down the ASSIGN-key for you. This gives you two hands to select Parameters.
SHIFT & NUMBER-key 9-12	Only in the Drumgrid	SHIFT + Number-key 9-12 selects the Velocity for the notes which are about to be played.
SHIFT & PART-key	Not in the Drumgrid, during Mod.Wheel-Assign or Compare	Random Motif-selection for the selected Part.
ARPEGGIO ON/OFF & NUMBER-key 1-16	Always	Selecting the Arpeggiator-motions.
SHIFT & PAGE/BANK	Always except the Drumgrid	This key combination allows you to transpose the keyboard in all areas. This allows you to put out high notes via MIDI. ***In the DRUMGRID you switch the Grid-resolution using these keys.***
ANALYSE & PART-keys	Only with switched-on VOCODER	You can select one or several Parts as Analyse-signal.
CARRIER & PART-keys	Only with switched-on VOCODER	You can select one or several Parts as Carrier-signal.
VOCODER ON/OFF & NUMBER-key 1-16	Always	Loading the 16 factory programmes of the VOCODER.
KEYBOARD-keys & PAGE/BANK	In the Step-edit of the Synthesizer section	This key combination allows you to adjust the length of the currently played note.
VOCODER ON/OFF & MIXER-dial	Always	This allows you to select the frequencies of the VOCODER-Bands.

Special Functions and short selection:

Many push buttons on the Sirius have other features next to their own task. They are used for example, for faster selection or to switch to defined functions. The following table gives you an overview:

Button Special Function	Edit level	Function
Part Button hold pushed (independent from Part select)	Always	As long as the Part Button stays pushed in a section, it can be edited with the control of the Synthesizer section.
Recall Button (multiple functions)	In write menu	When using this button in the write menu you can hear the tone which will be overwritten when you save a sound. Otherwise its function is to "undo" when you have switched a sound by mistake: The sound can be reversed.
PAGE/BANK-Button:	In Sound Select Mode	In the Sound Select Mode you can switch between the different sound banks with these buttons.
CATEGORIES-Buttons:	Always	This button chooses the sound categories. If you are on the category that you want, push once more and the sound bank will change.
Number-Buttons 1-16	In Drum grid	With these buttons you can put your notes into the grid.
Number-Buttons 1-16	In Arpeggiator Edit	In Arpeggio motion Edit (start menu page 12) you can turn the chosen notes on or off with buttons 1 to 8 (1=lowest and 8 highest). With buttons 9 to 12 you can adjust the step velocity. With buttons 13 to 16 you can adjust the step length.
Number-Buttons 9-16	Step-Edit of the Synthesizer sections	The buttons 9 to 12 adjust the velocity for the following note inputs. The buttons 13 to 16 chose the Gate time (step length) for the following note inputs. The value is fixed and independent from the current resolution of the step grid.
VALUE/TEMPO-wheel	Arpeggiator Edit	With the VALUE/STEP-wheel you can shift the time when a step is played referring to the "straight" beat. For example at a 8th grid and 50% the step will be played a 16th note later.
VALUE/TEMPO-wheel	Step-Record of the Synthesizer sections	The VALUE/TEMPO-wheel chooses the tone height.
VALUE/TEMPO-wheel	In the Menus	This wheel is used to change the values of the parameters.
KEYBOARD Keys	WRITE-Menu	You enter in the names of the sounds or the songs with the keys. They can also be entered with the VALUE/TEMPO-wheel.
PAGE/BANK	Drum grid and Step Recording	Choosing of the different bars in drum grid, when it is longer than a bar.
PAGE/BANK	In the Menus	Change the Menu page.

Problems and Answers

CORRECTION OF AN ERROR
As we know there unfortunately are everyday problems with Electronics musicians equipment. Naturally were are not faultless. But also we have found that a lot of problems are user error. To make your life a little easier and to reduce the load on the hot line we listed the most often reported problems. Of course you can find here an answer to all these problems.

After turning on there is nothing in the display:
1.) Is the power supply in the wall socket?
2.) Is the plug correctly inserted into the Sirius?
3.) Is the power supply getting warm? (This shows that the supply is working properly.)
4.) If the problem stays the same call QUASIMIDI.

There is no sound:
1.) Is the master volume control turned up?
2.) Is the "local" function of the Sirius (System menu on page 4) turned on?
3.) Are the audio outputs connected properly with the amplifier?
4.) Do you have mixed up the audio outputs with the "Analyze" or "Carrier" outputs?
5.) Is the amplifier adjusted correctly? The HiFi amplifiers have many different controls.
6.) Test your headphones on the stereo to see if it works.
7.) Is the volume of the parts that you want to be played turned up?

The sound is different to my adjustments:
1.) Did you save the edited sound with the write function?

There are no effects:
1.) Are the FX- sends of the effects you want to use turned up? Check the mixer control.
2.) Do you have effects applied to the effect processors?

No MIDI data and Dumps can be transferred to an external instrument or Sequencer:
1.) Are the cables connected properly?
2.) Did you select the corresponding section on PARTS/SEQ to MIDI to control an external Synthesizer?
3.) To transfer a Dump be sure that no "System-Exclusive" filter is chosen.

After transferring a dump the display shows "Memory overflow":
1.) The memory of the Sirius is full. Initialize the instrument and start the dump again.

The Vocoder has no effect on the sound or my voice?
1.) Is the Vocoder on?
2.) Did you choose an Analyze and Carrier signal?
3.) Are notes or sounds on the tracks you have chosen as Analyze or Carrier signals?
4.) Is the microphone to change your voice plugged in and turned on?
5.) Is the Gain adjusted to your voice level?

The synchronizing of external equipment or sequencers does not work:
1.) Have you made sure that the "TX-CLOCK" Parameter in the System menu of the Sirius on menu page 11 is turned on?
2.) Is the MIDI connection cable connected correctly to the external equipment?
3.) Did you select external synchronization on the external sequencer or equipment? Read their instructions.

The synchronizing of the Sirius with an external clock signal does not work:
1.) Did you activate the "Sync. Extern" function of the Sirius?
2.) Is the MIDI cable connected correctly?
3.) Is the right MIDI output of the device selected for the clock signal and is the "Transmit clock" function active?

It is not possible to synchronize the Sequencer of the Sirius with the Beat recognition:
1.) Is the "Auto sync" of the Sirius activated?
2.) Is the Audio output of the analyzing signal connected properly to the Sirius?

3.) Did you push the Tap button five times to give the Sirius the first beat?
4.) Did you adjust the volume of the analyzing equipment, that you can see a "." in the display?

HOT LINE

If you are still having problems and if you are a registered user of QUASIMIDI products you can call our free HOT LINE.

Please do not forget to send away your Warranty and Registration form, included with this operating manual.

Our Hot line can be called at the following number:

Monday to Friday 4:30 pm to 5:30 pm MET   0049 6425 930035

Please make notes so that we can exactly pin point the problem. Try to think exactly in which operating task you noticed this problem. This will reduce your telephone costs and we will be able to help you fast and efficiently.
If you are using external equipment, PC's or Software, please make sure that they are working properly and see that your MIDI equipment is correctly adjusted. Refer to the detailed chapters "The Sirius and the MIDI" and "The Sirius and Cubase". If you discover that the problem is caused by your Computer, the Software or the MIDI interface, please contact the Service department of the Manufacturer or read the pertaining manual. Especially if you have questions concerning Sequencer programs, sound cards and Midi interfaces the manufacturer can give you better advice.

Initializing and Calibration

Initializing the Sirius and calibration of the controllers:
The initializing resets the Instrument to the time of delivery. At this time all saved User data (sounds, patterns and songs and all pertaining adjustments) are cancelled. The calibration of the controllers (modulation and pitch bend wheel) is used to adjust these operating devices
There are two ways of initializing. First the pitch bend and modulation wheel can be adjusted (calibrated) without losing the memory. The second possibility is to completely clear the user memory, resetting all internal parameters and also to re-calibrate the controllers.

The initializing should only be done on advice of the Service department. Always remember the complete data will be lost.
To start the initializing you have to do the following:
When the SIRIUS is turned off hold the WRITE button, then turn on the Sirius. The following message is in the display

```
Initialize All?
(OK)   (cancel)
```

You can decide here if you want to clear memory or just calibrate the controller.

Clearing the memory and calibrating the controllers.
If you confirm (OK) a bar in the display will show how far the initializing has taken place.
When this is finished, you will be asked to calibrate the controller. See the following instructions. Do not turn your instrument off and initialize again.

Calibrating the controllers without losing data.
To calibrate the controllers without losing data, follow the directions: Push the button (F3) to initialize with (cancel). You are now in the calibration menus of the Sirius.

```
SET WHEELS- > min
(OK) (cancel)
```

Turn the modulation wheel completely down and hold the pitch bend wheel in the down position. Confirm with the left button (F1) under the display. The following display will be shown:

```
Set wheels- > MAX
(OK)
```

Repeat the last setting by putting the wheels in the upper position and press the F-1 button. Afterwards you are in the Test menu. Here you can test if the calibration was correct.

```
Wheels-Test:   64
(OK) (retry)
```

The pitch bender should show 64 when untouched, 127 at the top and 0 at the bottom. The modulation wheel should show 0 at the bottom and 127 at the top. If you do not have these values you can repeat this once again.

He who has the knowledge, is well informed!

Although this statement is not from Confucius, we would still like to use this Motto for this index. Here you will find the important overview of working around Synthesizers and Electronic music. If you memorize this list, no one will be able to impress you with his knowledge in this area. Even when you read technical magazines this list will help you understand the contents of articles much better.

Analyze - An Analyze signal (i.e. microphone) is one of the two inputs of the **--> *Vocoder***

Arpeggiator - An Arpeggiator dissolves played chords into single-tones and creates broken chords, which speed and play direction can be adjusted. Effects such as Gater and Chord trigger can also be found in the Arpeggiator Menu of the Sirius.

Attack - The fade in of an instrument. The piano has a very short Attack (percussive), as the string sound slowly fades in (slow attack). **->*Envelope***

Audio System - Name for all devices which make sound audible and amplify music (Stereos, Amplifiers, PA).

Balance ->*Panorama*

Bank-change - - >*MIDI* Controller to choose from the different **- > *Program-change*-** banks. The Sirius has 4 different Banks with each 96 Synthesizer sounds and 2 Banks with each 96 drum sounds. The Program-change-command is not capable of calling all tones, as MIDI has only 128 different programs which can be called with this command. Therefore the Bank-change-command will always be sent before the program change to call the chosen bank. Bank-change occupies the controller no. 0.

Bpm - beats per minute. One hit equals a quarter note.

Bypass - For example, if you adjust an instrument to bypass, the tones will be rerouted around the electronic sound effect. A bypass parameter can be found in the Vocoder menu of the Sirius.

Carrier - The Carrier signal is the second input of the **--> *Vocoder.*** For example, if you let your voice be analyzed by the Vocoder, you can change the pitch of your voice by using Pad sounds as a carrier.

Chord Trigger - The Chord Trigger chops the played chords, as though you would continuously strike the chords.

Chorus - Effect which gives an instrument a suspended and dimensional sound impression.

Cutoff frequency - The frequencies above the cutoff frequency are depressed by the filter.

Decay - After the **->Attack** of the **->Envelope** the Decay time sets in, and the volume, **->Cutoff frequency**, or **->pitch** of the sound decreases until it reaches the adjustable **->Sustain**-level.

Delay - Effect to produce i.e. an echo.

Demo song - The demo songs demonstrate the different sounds of the Sirius. By pushing the "Tap tempo" and the "Sync. Ext." buttons simultaneously you can start the 16 Demo songs.

Distortion - The Sirius can produce distorted sounds with help of the **->Filter overdrive**, the **->Cutoff frequency** and the **- >Q-Factor.**

Drum loop - > **Loop**

Drum set - With the Sirius you can construct your own 20 different Drum sets, each containing 12 Drum, Percussion or effect sounds**.** The drums can be found in the PERCUSSION-part ,when you turn the WAVE-MACRO control.

Dump - > **MIDI-Data-Dump**

Edit - The Sirius has different edit-levels where you can adjust all functions of the Sirius. Some of these functions can not be reached on the front panel of the Sirius.

Effect processor - An effect processor is a device that changes the sound of the instrument. Typical effects are **- >Reverb, - > Delay** and **- >Chorus.** The Sirius has two built in effect processors, that are marked **- >FX-1** and **->FX-2**, which generate different effects.

Envelope - When you hold down a note on the Sirius Keyboard you automatically start the envelope generator. During the **->Attack** time the volume, **->Cutoff frequency**, or **->pitch** of the sound will increase until it has reached its maximum level. After that the **->Decay** time sets in, and the volume, **->Cutoff frequency**, or **->pitch** of the sound decreases until it reaches the adjustable **->Sustain**-level (not available in the pitch envelope). This level remains until you release the note and the fade-out of the sound is determined by the **->Release** time (not available in the pitch envelope). The parameters of the envelopes can be simply controlled with the EG-MACRO-knobs of the Sirius.

Envelope modulation (Env.-Mod) - > **Envelope**

Equalizer - With an equalizer you can manipulate the frequencies of your mix.

Exit - This button is used to exit the chosen menus.(**->Edit**)

Expander - An expander is a synthesizer without a keyboard.

Feed back - To avoid feed back, the amplifiers should not be turned up to high when using the microphone.

Filter - The filter is a part in the Synthesizer, which creates the largest sound changes. The Sirius has three types of filters, a 24db/oct - low pass, a 12 db/oct - low pass and a 12 db/oct - high pass. Low pass filters depress the frequency area above the **- > Cutoff- frequency**. High pass filters are exactly the opposite. The terms "12db/oct" and "24db/oct" describe the rolloff characteristics of the filter. A filter with 12db is softer than a filter with 24db. You can try it out on the Sirius. An important parameter of the filters is the **- > Resonance or the Q-factor.**

Filter-overdrive - With the filter overdrive in connection with **- >Cutoff frequency** and **-> Resonance** you can create a distortion effect. You can compress the sound or make it more aggressive.

Filter sweep - Filter sweep is a filter modulation. This can be accomplished by turning the Cutoff-knob on the Sirius or by modulating the filter with the **- >LFO** or the **->Envelope.**

Flanger - Extra type of **- >Delay,** where the delay time is modulated. Depending on the delay time and the feedback adjustment the flanger creates a spacious and suspended sound.

Formant-Modulation - Every sound exists as partial tones, which determines its character. The Formant- Modulation creates a movement of the partial tones. This can be used for a suspension or a drastic change to the sounds.

Foot-pedal - The Sirius has a connection for a foot pedal. It has two functions. If the **- >Arpeggiator** is active you can hold the Arpeggio and transpose it by using the keys. The foot pedal should be hooked up before turning on the Sirius.

FX-1/FX-2 - The **- > Effect processors** provide the Sirius with **- >Reverbs, - >Delays** and modulations like **->Chorus/Flanger**.

FX-Send - This Parameter defines to which extent the sound is sent to the effect processors **(- >FX-1, FX-2).**

Gain-Control - This control is used to adjust the input sensitivity of the Analyze input (microphone input). On a mixer desk it is used to adjust the incoming signals. If the control is adjusted to high, distortion will occur.

Gater- A Gater effect causes rhythmic chopping of a sound, for example a pad sound. The gater is triggered by another track.

Glide ->Portamento

Groove - With the groove function you can shift the beats of a running sequence to different extents. Through this the rhythm starts to swing.

Hall - >Reverb

ID-Number - When transferring **-> System Exclusive data**, IDs are needed to distinguish between the several connected instruments. There is an ID for the manufacturer and the model number and additionally a special Sirius-ID (which is the same as the system-channel), so you can connect more than one Sirius.

Initialization - If you initialize, you delete all the data of the Sirius' internal memory. All the parameters are set to "factory standard".

Keyboard-Combo - Amplifier with built-in speakers.

LFO=Low Frequency Oscillator - A LFO offers various waveforms which can be used to modulate the volume, *->pitch* or *->Cutoff frequency* of a synthesizer.

Loop - a musical theme permanently repeated.

MIDI=Musical Instrument Digital Interface - Enables the communication between electronic instruments of different manufacturers. Only digital data concerning the played notes or the adjustments of an instrument are transferred, not the audible music itself. The data includes note information, controller information and *-> system exclusive data*.
Two MIDI-devices have to communicate on the same MIDI-Channels. MIDI-Multimode describes the skill to recognize more than one MIDI-channel at once. The Sirius can communicate on 7 channels at once, so it can be seen as 7 independent synthesizers.
For details see chapter "The Sirius and MIDI".

MIDI-Controller - Midi data used for changing or modulating the sound. For the Sirius, all sound parameters can be controlled via MIDI-Controllers.

MIDI-Data-Dump - A MIDI-Data-Dump is a transfer of synthesizer settings through the MIDI Interface. The transfer is done through *-> System-Exclusive data*

MIDI-In - Connector for receiving MIDI data. Connect for example the MIDI-Output of your Sirius to the MIDI-In of your computer sequencer in order to transfer data into the sequencer from the Sirius.

MIDI-Channel - There are 16 Midi-Channels, so that you can address up to 16 instruments on only one Midi-Cable. In the *-> MIDI-Polymode*, each instrument has it's own *-> receive-channel* and reacts only on notes and controllers on this channel. (additionally see *->MIDI-Multi-Mode, ->MIDI-Omni-Mode*)

MIDI-Master-Channel - The MIDI-Master-Channel has two meanings. It is the *->ID-Number* when transferring *->System-Exclusive data* and it is the first of the 7 Sirius instrument channels.

MIDI-Merger - A MIDI-Merger is able to mix two digital MIDI-Outputs for one MIDI-In.

MIDI-Multi-Mode - A synthesizer with MIDI-Multi-Mode is independently able to react to more than one *->MIDI-Channel* at once. Meaning: A synthesizer with this feature acts like several independent instruments (Sirius: 7 channels=7 instruments).

MIDI-Omni-Mode - In MIDI-Omni-Mode, the MIDI-Channel information is ignored. Only one instrument can be played through one MIDI-Cable. This can be found mainly with old synthesizers.

MIDI-Out - Connector for transmitting MIDI data. Connect it to a *->MIDI-In*.

MIDI-Polymode - see **->*MIDI-Channel***

MIDI-Thru - Connector which offers a copy of the MIDI-data coming to the **->*MIDI-In.*** Connect here the MIDI-In of a second instrument which needs the same MIDI-data.

Mixer- The Sirius has a built-in mixer that allows you to regulate for instance the volume and the panorama-position of the different parts played.

MOD-Depth - With the MOD-Depth you adjust the strength with which the **->*LFO*** affects the modulation parameter.

MOD Effects - for example Chorus, Flanger, Phaser.

MOD-Rate - The MOD-Rate adjusts the speed for modulation of the **->*LFO***. A LFO-Sync can also be adjusted on the Sirius. The MOD-Rate goes by the momentary selected Sequencer speed of the Sirius. Therefore you can adjust different LFO -speeds in proportion to the Sequencer speed.

MOD-Wheel - besides the ->Pitch-Bend Wheel the most important tool to change the sound during playing. In the Sirius, sound parameters can be assigned to the MOD-Wheel.

Mute - Sound is turned off.

Monophonic - Single voice melodies are also described as "monophonic". The opposite to monophonic is **- >*polyphonic***.

 Oscillator - The oscillator creates the **- >*Wave forms*** in a Synthesizer. It is also responsible for the audible sounds of the Synthesizer. The Sirius has two Oscillators for every Synthesizer-Part which can be detuned. That way the sound gets wider.

Over blast - A function of the Sirius, which gives a kind of loudness or Bass boost to all parts of the internal sequencer. The sound will be thicker and bass will be brought out..

PA Speakers - (PA= Public address) PA speakers are loud speakers with a very high music power. They are mostly used by live appearances.

Phaser - When the same signal is mixed in with a deferred timing, you will get a Phaser effect, which means a spacious, suspended sound.

Panorama - The panorama value determines how far a sound is moved to the left or the right of the stereo image. The Sirius has the possibility to call up a Random panorama. With this the sound switches between both speakers at random paces.

Part - A part is one of seven tracks in the Sirius in **- > *MIDI***-Multimode. Every part of the Sirius acts as an own Synthesizer.

Pitch - Sound height.

Pitch-Bend - Sound height bending. With the pitch bend wheel you can bend your played note up or down, to give your playing more expression or to imitate natural instruments.

Polyphonic- An instrument which can play more than one note at once (chords etc.) is called "polyphonic". The Sirius is 28 voiced polyphonic, you can play 28 voices at once.

Portamento - Portamento is the smooth gliding from one tone height to the next.

Potentiometer (Poti) - A turning knob for changing the sound parameters, volume, etc.

Program-change - MIDI-command to change the program and sounds of a MIDI-instrument. 128 different programs can be called with Program-change.**- >Bank-change**

Q-Factor - >Resonance

Release - The time for how long the sound is heard after the key on the keyboard is released. This is determined by the **->Envelope.**

Resonance - The resonance is a parameter, that determines the behaviour of a filter. By the resonance the frequency area around the - **> Cutoff frequency** Is raised. If the resonance is very high, the filter can be enabled to self-oscillate.

Reverb - Reverb is an effect algorithm in FX-1. Its used for the simulation of room capacity. The Sirius imitates a country church to a Cathedral and a rubber room to a wash room.

ROM Sounds - ROM sounds are permanently stored in the Sirius and can not be erased or lost.

Routing - We understand routing as a flexible switching of different signals sources. When you adjust the parameter ->**FX send** in the mixer , this part will be routed to an effect processor.

Sequence - A continuous replay of notes is called a "sequence".

Sequencer - Control unit for a synthesizer, which automatically plays back the played in or programmed **->Sequences.**

Sub menu - The different changeable areas like **- >FX-1, - >FX-2,- >Part, ->Arpeggiator** and **- >System edit** are divided into several sub menus depending on the number of parameters. The sub menus can be selected with the PAGE/BANK-buttons.

Sustain - Sustain is described as the hold level for an **->envelope.**

System exclusive data - System exclusive data are manufacture and product specific **-> MIDI** data. They transfer the sounds and system information between the same MIDI instruments or to and from a sequencer for the purpose of data recording. The transfer of this data is called MIDI data dump.

Temporary memory - The temporary memory is a data buffer where the current changes are being saved. After a **- >program change** in performance operation they are lost. Through the MIDI data dump function in the Sirius, you can transfer and save the temporary memory.

Track mute - By listening or arranging a sequencer song you would like to silent certain parts at times to be able to concentrate on the other tracks. The Sirius has several Mute functions that you can also use in live action. The way to produce Techno excitement and breaks is purposely leaving in and taking out single tracks and motives.

Transposing - When the transposing mode is turned on, you can change the pitch of the playback in the range of one octave. In the Sirius, you can find the transpose mode in the edit-system menu. Transposing during playback is called realtime transposing.

Trigger - Trigger is an impulse which can be used to create a function. For example, when you press a key on the Sirius, you trigger the **->envelope** of a sound.

Tuning - The tuning (tone frequency) defines the tone height of a sound. The higher the tone frequency in cycles per second, the higher the tone.

Turn on static - When turning on an instrument, there can be a turn on static. Make sure that the amplifier is turned on last to avoid a scratching sound.

VALUE/TEMPO-Dial - With the VALUE/TEMPO-Dial you can raise or lower the tempo of a song or the value shown in the display. The dial has no end or starting point.

VCA - Voltage controlled Amplifier. The VCA is the internal amplifier of the synthesizers.

VCA-EG-MACRO ->envelope

VCA Level - The parameter "VCA level" controls the volume of a Sirius sound.

VCF - Voltage controlled filter. The VCF is one of the most important sound features in the synthesizer.- **> filter.**

VCF-EG-MACRO - >envelope

VCO - Voltage controlled oscillator

Velocity - The volume and the sound can be controlled with the strength of the key strike.

Vibrato - The modulation of the tone height of a instrument with a ->**LFO**

Vocoder - The Vocoder has two inputs "analyze" and "carrier". The Analyze signal as well as the Carrier are being cut up into several "frequency-slices", the 'Bands' of the Vocoder. Now the "frequency-slices" of the Analyze signal are analyzed and simultaneously transmitted to the respective "frequency-slices" of the Carrier. An example for a vocoder effect is a robot voice. This type of vocoder usage can be heard in songs of the group Kraftwerk.

Vowel - The letters a, e, i, o, u.

Waveform - Collective name for oscillating forms like Sinus, Sawtooth, etc. Samples are also often called waveforms. They are produced by the *- >Oscillator*.

Write menu - In the write menu you find save, copy and *- >MIDI Data dump* functions for the Sirius.

WARRANTY REGISTRATION

Fill out the Registration card and send to the preprinted address on the front of the card.

How to Validate the Warranty:

To validate the Warranty, fill out the Warranty card and return it to Quasimidi within ten days from the date of purchase.

What is covered and what is not covered?

This Warranty covers all defects in material and workmanship for six (or twelve) months from the date of original purchase. This Warranty does not cover damage to, or deterioration of the external cabinet or internal circuitry resulting from accident, misuse, neglect, attempted unauthorized repair or failure to follow instructions in this owners manual.
This Warranty does not cover units that have been modified or altered (except an authorized QUASIMIDI modification which includes its own Warranty coverage).
This Warranty does not cover damage that may occur during shipping. Software/Firmware are not sold as is and not covered by the Warranty.

How to obtain Warranty servicing:

Return your unit to an Authorized QUASIMIDI Service center. If you are unable to locate one, write or call the QUASIMIDI Factory Service Department. We will either refer you to an Authorized Service Center or issue a Return Authorization number for factory service. Units returned to QUASIMIDI for factory service must display the Return Authorization number on the outside of the shipping carton and on all related documents, or units will be returned freight collect. The owner must pay all shipping costs to and from the factory.
Shipment of the product to QUASIMIDI is the responsibility of the owner, and should be insured by the owner for the full value of the product.

NO CLAIM FOR WARRANTY WILL BE HONORED WITHOUT PROOF OF PURCHASE

Limitations of implied Warranties and exclusion of certain damages. Any implied Warranties, including Warranties of usefulness for a particular purpose are limited in duration to the length of the Warranty.

QUASIMIDI's liability for any defective product is limited to repair or replacement of the product.

QUASIMIDI shall not be liable under any circumstances for :
1) Damages based upon inconvenience, loss of use of the unit, loss of time, interrupted operation or commercial loss.
2) Any other damages, whether incidental, consequential or otherwise, except damages which may not be excluded under applicable law.

Technical Data

Technical Data of the QUASIMIDI Sirius:

What´s in the box: Sirius, 1 x external mains adapter, 1 x Goose neck microphone, 2 x 6,3mm (1/4") jack cable, 2 x 1/4" jack to phono (RCA) adapters, this Manual, Warranty form.

Concept: Synthesizer with step and realtime sequencer, drum computer, vocoder with filter bank, beat recognition system, arpeggiator and 2 built-in independent effects processors.

Sound Generation:: DTE- Synthesis based on spectral waveforms, Subtractive synthesis with 2 Oscillators per voice, 2 ADSRs (one VCA, one VCF), 1 pitch envelope, keyboard tracking, glide, marco access for rapid sound creation. Filter: 24dB lowpass, 12db lowpass, 12db high pass. With resonance to self oscillation and overdrive.

Polyphony: 28 voices, 7-channel multi mode.

Keyboard: 49 keys, 4 octaves.

Fast-Edit Macros: For filters, amplifier envelope, modulation routing, oscillator tuning and waveform sets.

Random-Sound Creation: At the touch of a button.

Sound Storage: Instant storage in categories by single touch button. 672 ROM locations, 480 user storage for new sounds RAM locations. 20 drum sets, 256 drum and percussion instruments..

Sequencer: 7 channels (kick, snare, hihat, percussion and 3 polyphonic synthesizer channels), 142 ROM patterns, 100 RAM patterns, 16 songs. Drum programming (drum grid and realtime). Step sequencer recording with 4 levels of accent and glide per step. Real time recording for all tracks. Tempo 51-250 BPM. 8 stage groove quantize. Synchronization with MIDI clock and MIDI song position pointer. Synchronization with external audio signals (i.e. Turn tables, CD players etc.) With intelligent beat recognition system.

Vocoder: 11 channels (1 lowpass, 9 bands, 1 high pass), 16 programmable Vocoding presets including i.e.: Standard, robotic, frequency shifted, cross modulated etc.

Arpeggiator: Fully programmable. 16 (partly polyphonic) presets of arpeggiation with automatic synchronization. Gater and Chord Trigger functions. 9 storage locations for arpeggio motions.

Effects: 2 independent effect processors for reverb, delay, chorus etc. Over blast for global sound contour.

User Controls: 22 real time controls, 1 Over blast, 1 microphone gain, 70 lighted touch switches, 2 wheels (1 pitch-bend, 1 fully programmable and assignable modulation wheel), 1 VALUE/TEMPO-dial.

Display: 2X16 character LCD display with back lighting.

Connections: 4 x1/4 inch jacks (stereo out and 2 inputs), 1/4 inch jack for foot switch, 1 Midi in, 1 Midi out, 1 Midi thru, balanced XLR for microphone.

Power Source: External Power supply (included) 10.5 Volts DC, 1.5 Amps.

Dimensions: Width = 73.5 cm, Depth = 37.5 cm, Height = 11.5 cm.