XR10

16 BIT PCM DRUM MACHINE

Thank you for purchasing the Akai X10.
All details concerning various functions and notes upon uses of the XR10 are contained in this owner's manual. It is advisable to read the contents before starting operations.

Please do visit the XR10 center for more info and sounds :)

Operator's Manual

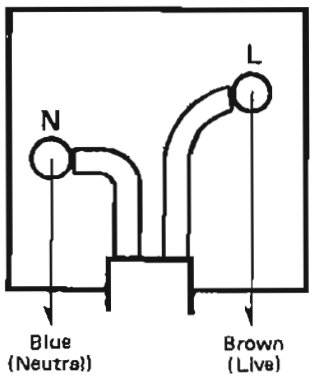
WARNING TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

1-En

FOR CUSTOMERS IN THE UK

IMPORTANT FOR YOUR SAFETY

The flex supplied with your machine will have two wires, as shown in the illustration.



IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

- Do not connect any wire to the larger pin marked E or ⏚ When wiring a plug. Ensure that all terminals are securely tightened and that no loose strands of wire exist.

6A-En

VARNING

Eftersom adaptoruttaget for likström inte är säkrat, måste en säkring insättas i kretsen mellan den yttre växelströmsadaptorn och huvudapparaten.

16-S

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation, if this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna.

Relocate the computer with respect to the receiver.

Move the computer away from the receiver.

Plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio — TV interference Problems".

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004 ~ 000 ~ 00345 ~ 4.

21B-En

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Class B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministere des Communications du Canada.

27-F

LITHIUM BATTERY.

This product uses a Lithium Battery for memory back-up. The lithium battery should only be replaced by qualified service personnel. Improper handling may cause risk of explosion.

24-En

XR10 16-Bit PCM Drum Machine Owner's Manual

Thank you for purchasing the AKAI XR10. All details concerning various functions and notes upon use of the XR10 are contained in this Owner's Manual. It is advisable to read the contents before starting operations, to completely understand the XR10 and to use it properly. Please keep the manual in a convenient location to enhance easy access. We hope that you will enjoy the XR10.

Contents

1 Before Starting Operations

To promote safe use
XR10 is supplied with power using the AC Adapter. Please use the included adapter for safe use, and do not use it for any other machine.

Power requirements
Power requirements for electrical equipment differ from area to area.
Please ensure that your machine meets the power requirements in your area.
If in doubt, consult a qualified electrican.
220V, 50Hz for Europe except UK
240V, 50Hz for UK and Australia
120V, 60Hz for U.S.A. and Canada

Turn off the power after use
Turn the power off after use to be safe and to conserve energy.
Pull the AC Adapter from the socket if the XR10 is not going to be used for a while.

How to handle the AC Adapter
Never pull the cord of AC Adapter, it may result in disconnections. Always hold the AC adapter to remove it from the socket for safety purposes and to prevent electrocutions.
Do not touch the AC Adapter with wet hands.

Prevent from spilling water or dropping metal objects in the XR10
Watch carefully especially for mischievous acts by children. Do not drop needles, hairpins, coins, metal objects, or flammable objects such as paper into the machine.
Furthermore, do not put vases or cups filled with water on or around the machine.

Reconstruction is dangerous and may result in the XR10 malfunctioing.

About the location
To promote optimal use of the XR10, be conscious of where it is placed.
The following locations are not advisable:

1. **Around heaters, heat releasing machines or in the sun.**
2. **Humid and dusty places.**
3. **Locations easily affected by vibrations.**
4. **Locations with no air circulation.**
5. **Sloped or slanted locations.**
6. **Extremely cold places.**

The XRIO's affect on other electrical equipment
The XR10 may cause TV and radio noise and interference when used close to TVs and radios. In such cases move the XR10 away from those units.

Sound volume manners
When enjoying the XR10, please have consideration for your neighbors, especially by keeping the volume down at night.

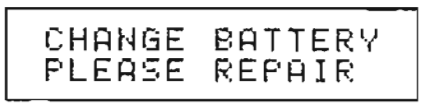
Be careful of aerosol sprays insecticides
Please be careful since insecticides may damage the surface of the panel.

How to take care of the cabinet and panel surface
Wipe dust off with a dry cloth, and if it is heavily soiled, use a small amount of dish washing soap or a neutral detergent and wipe it with a soft cloth. Refrain from using thinner, benzene or other chemicals that may damage the finish and key pads.

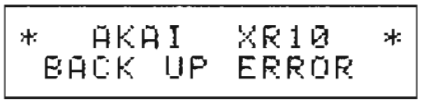
About relocating the XR10
Always disconnect the AC adapter and connections before moving the XR10.

About backup batteries

To maintain the data while the power is off, the XR10 has a built-in backup battery. The battery life is about 3 years. However, in case the voltage of this backup lithium battery is lowered, the following message will be shown when powering up the XR10:



In this case, the XR10 may malfunction due to the voltage lowered less than 2.2 V. Moreover, the data of songs, User patterns, User sounds and a part of Preset patterns may be lost if you leave the machine as it is. When this message is displayed, contact the Akai professional dealer to have the battery replaced with a new one.



Note that when this message is shown in the display unfortunately the data mentioned above will have been already lost.

After- Sales Sevice

Please consult the after-sales service department of the dealer where you purchased the XR10 for details concerning repairs during the warranty period and other after-sales servicing. If you are traveling or unable to reach that dealer, contact the nearest AKAI professional dealer.

2 Specifications

XR10 16 bit PCM Drum Machine

Sound Source
Internal Sound Sources 65 patterns
Copy Sound Sources 32 patterns

Sound Parameter (memorized)
Sound Volume: 0-31
Sound Tune: -26-+25 (100 Cent/Step)
Fine Tune: -8-+7 (6.25 Cent/Step)
Pan: L15-Center-R15
Effect Send Volume: 0-31
DCA Decay: 0-31
DCA Hold: 0-31
Sweep Decay: 0-63
Sweep Depth: 0-31
Sweep Polarity: DU (Down to Up)/UD (Up to Down)
Reverse: FW/RV
Velocity Feel: ON/OFF
Sound Select: 1-65 (only for the User sounds)

Memory Capacity
Preset Pattern: 450 varieties
(50 varieties x 3 Variations, 3 Fill-ins, 1 Intro, 1 Break, 1 Ending)
Programmable Patterns: 99 varieties
Song: 20 varieties (maximum of 99 parts)

Sound Timing Resolution: 1/384 (Fourth note = 96)

Tempo: 1 beat 40-296

Display: 16 characters x 2 lines LCD

Output Terminals
Stereo Output Jack R/L(Mono)
Effect Send Output Jack
Headphone Jack

Connection Terminals
AC Adapter Jack (12V 200mA)
MIDI Connector (In/Out)
Start/Stop Jack
Fill-in Jack

Dimensions: 350(W) x 241(D) x 68(H) (mm)

Weight: 1.7 kg

Included:
AC Adapter
Owner's Manual

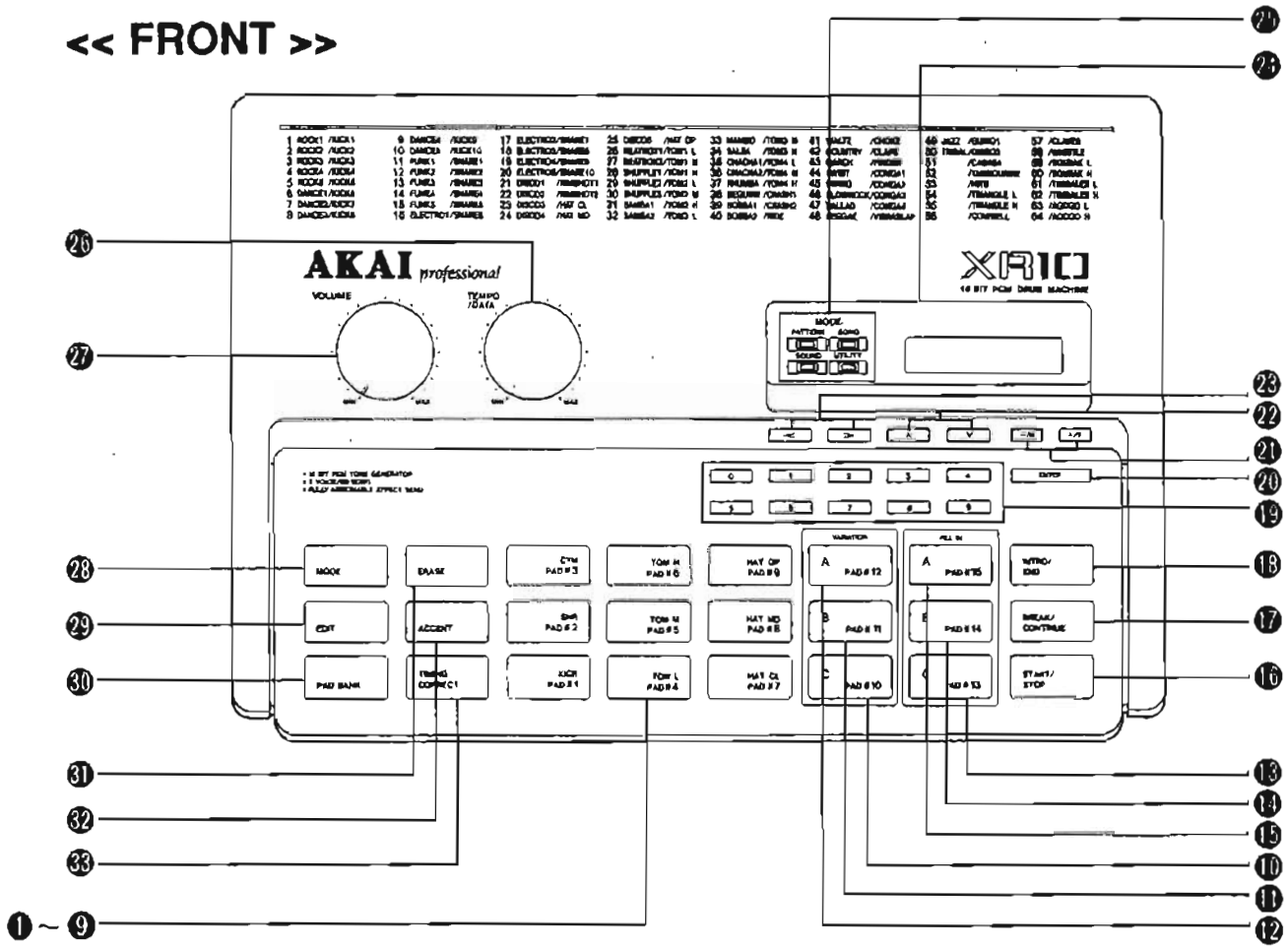
* **Specifications and descriptions are subject to change without notice.**

3 XR10 Characteristics

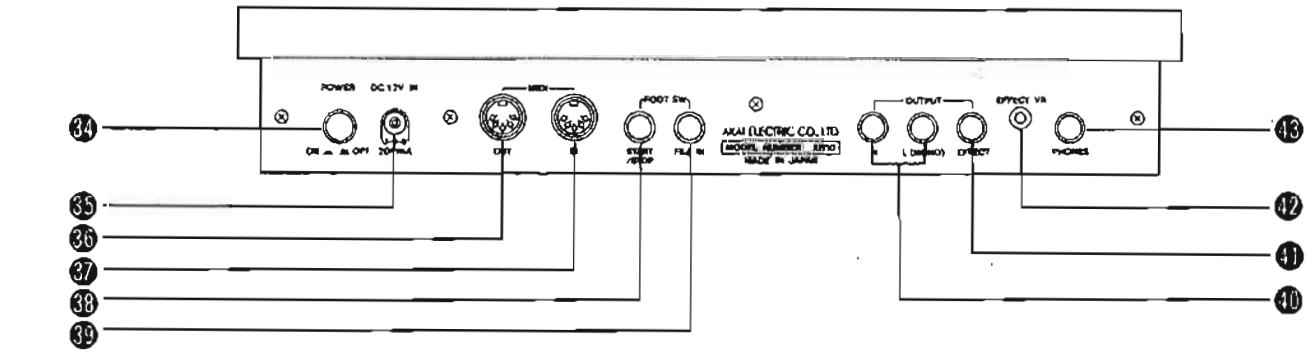
- XR10 has 65 highly-qualified internal PCM sounds processed in 16 bits, that allow you to create real drum sounds over a wide range of dynamics.
- 13 sound parameters allow you to edit these 65 sounds, then you can store them internally at the maximum of 32 as your original sounds.
- 450 Preset rhythm patterns (50 varieties x 3 Variations, 3 Fill-ins, 1 Intro, 1 Break, 1 Ending) and your original User patterns allow you to compose up to 20 songs and store them internally.
- Editing functions such as Pattern Copy , Sound Replace and, Auto Scan allows for easy making rhythm patterns.
- Accentuating each sound during rhythm pattern writing gives you a more real performance when playing it back.
- Effect Send function allows you to program the effect send level of any selected sounds.
- Start/stop of a rhythm pattern or a Fill-in can be remote controlled with an optional Foot Switch.
- High resolution (Forth note = 96) allows you to write patterns in Real time and enjoy the humanized performance when playing them back.

4 Description and Function of Various Parts

<< FRONT >>



<< REAR >>



No.	Name	No.	Name	No.	Name
1	Key Pad #1	22.	Command Key	34.	Power Switch
9	Key Pad #9	23.	Cursor Key	35.	AC Adapter Jack
10.	Key Pad #10	24.	Display	36.	MIDI Out Jack
12.	Key Pad #12	25.	Mode Display LED	37.	MIDI In Jack
13.	Key Pad #13	26.	Tempo/Data Knob	38.	Foot Switch Jack (Start/Stop)
15.	Key Pad #15	27.	Volume Knob	39.	Foot Switch Jack (Fill In)
16.	Start/Stop Button	28.	Mode Button	40.	Output Jack L/R
17.	Break/Continue Button	29.	Edit Button	41.	Effect Send Out Jack
18.	Intro/End Button	30.	Pad Bank Button	42.	Effect Send Volume Knob
19.	Ten Key	31.	Erase Button	43.	Headphone Jack
20.	Enter Key	32.	Accent Button		
21.	+/– Key	33.	Timing Correct Button		

Description and Function of Various Parts

1 - 9. Key Pad #1 - #9
Pad that outputs various sounds. It can also be used to program the pattern data during pattern write.

10 - 12. Key Pad #10 - #12
Pad that outputs various sounds (#10 - #12) that are also used for selection of Variation patterns from Type A to C.

13 - 15. Key Pad #13 - #15
Pad that outputs various sounds (#13 - #15) that are also used for selection of Fill-in pattern from Type A to C.

16. Start/Stop Button
Starts or stops a pattern or song play. Selects Ending patterns during song write.

17. Break/Continue Button
This button is used to insert the Break pattern during pattern play or to escape from the Break pattern. Furthermore, it can be used to select the Break patterns during song write.

18. Intro/End Button
This button is used to start with the Intro pattern, or to stop with the Ending pattern during pattern play. Furthermore, it can also be used to select Intro patterns during song write.

19. Ten Key
This key is used to select numbers or to set the value of parameters.

20. Enter Key
This key is used to perform the commands in combination with the Ten key.

21. +/- Key (Yes/No Key)
This key is used to move a Step sequence forward or backward during song write. Furthermore, it is also used to answer yes or no to perform various functions. Moreover, it is also used to adjust the tempo during pattern or song play.

22. Command Key
This key is used to select a command or perform other functions.

23. Cursor Key
This key is used to select a Preset or User pattern or perform other functions.

24. Display
This LCD can display up to 16 characters x 2 lines.

25. Mode LED
This LED will light to indicate the selected mode. Furthermore, it will flash according to the beat in the Pattern mode.

26. Tempo/Data Knob
This knob is used to adjust the tempo or to set the parameter value.

27. Volume Knob
This knob is used to adjust the total volume.

28. Mode Button
This button is used to alternate among the 4 modes.

29. Edit Button
This button is used to enter the pattern or song edit mode.

30. Pad Bank Button
This button is used to select a Pad Bank.

31. Erase Button.
This button is used to erase the data.

32. Accent Button
This button is used to accentuate the sounds while playing or writing.

33. Timing Correct Button
This button is used to correct the play timing of the sounds or perform other functions.

34. Power Switch
This switch is used to turn the power on or off.

35. AC Adapter Jack
This jack is used to connect the AC adapter.

36. MIDI Out Jack
This jack outputs MIDI clock and the Bulk data created by the XR10.

37. MIDI In Jack
This jack is used to input external MIDI signals.

38 - 39. Foot Switch Jack (Start/Stop) (Fill in)
These jacks are used to connect the optional foot switch.

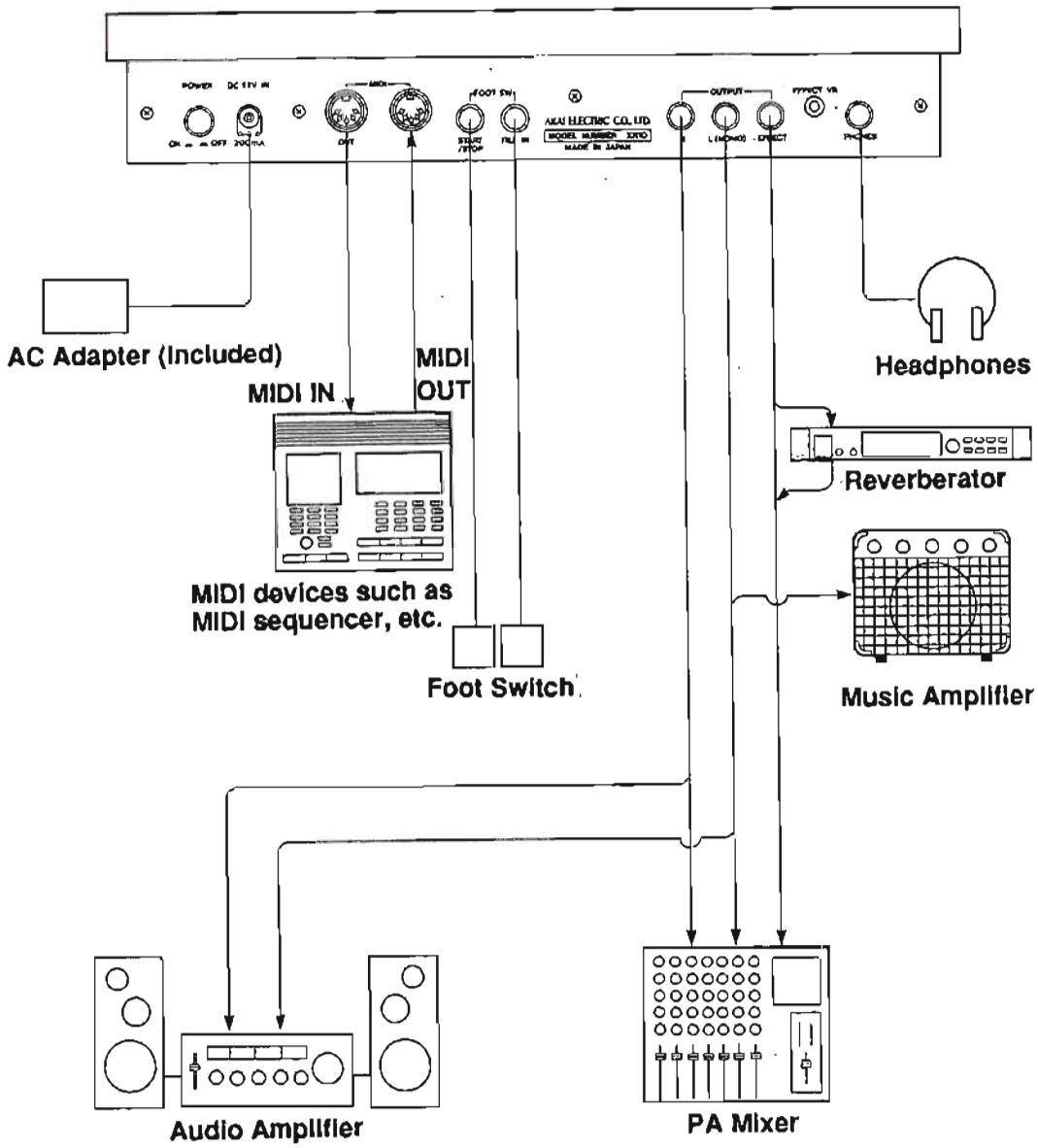
40. Output Jack L/R
These jacks outputs the sounds in stereo.

41. Effect Send Out Jack
This jack outputs the mixed sound signal to the effector or the like.

42. Effect Send Volume Knob
This knob is used to adjust the total level of the mixed sound signal output from the effect send out jack.

43. Headphone Jack
This jack is used to connect the headphone.

5 Connections

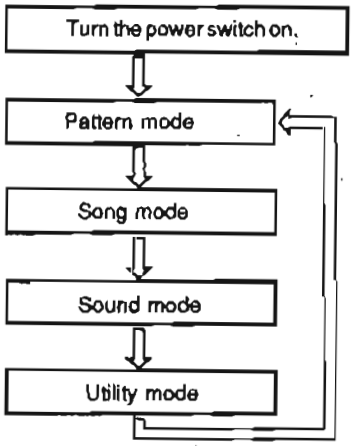


When connecting, always turn OFF the power of your system and XR10. Furthermore, when turning XR10 on or off, keep the volume of a music amp or a mixer at the minimum level never to damage speakers.

- **The XR10 doesn't have a power amplifier or speakers internally.**
- **For overseas use of XR10, use the AC adapter suited to the voltage of the country (area).**

6 About the 4 Modes of the XR10

The XR10 has 4 Modes: Pattern, Song, Sound and Utility.
Every time [MODE] is pressed, these modes are selected in order, and the corresponding LED located at the left portion of the display will light to indicate the mode is selected.



The functions of these 4 Modes are as follows:

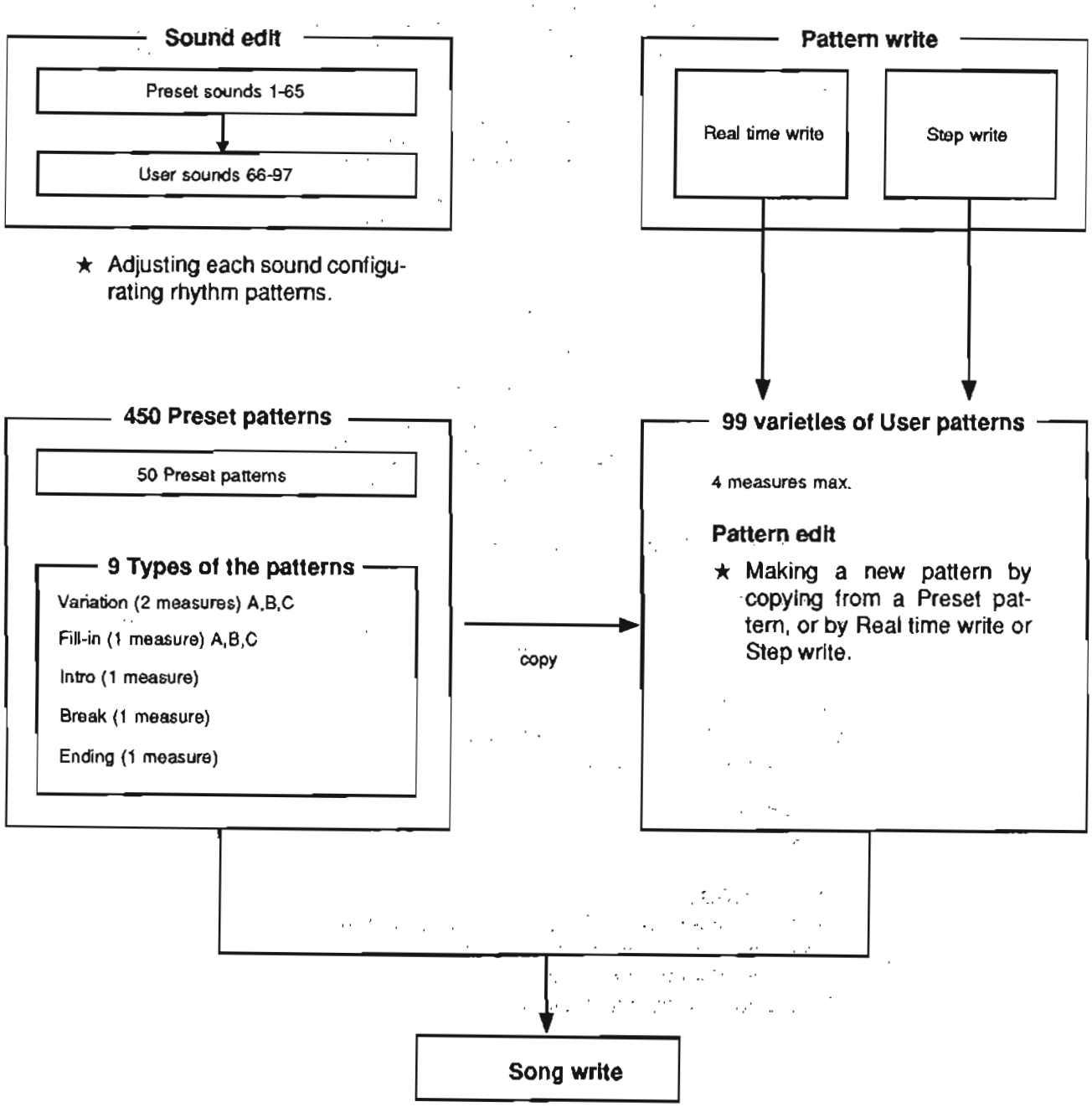
PATTERN MODE
Used to play the Preset patterns and User patterns (including manual play).
Used to write (store) User patterns.

SONG MODE
Used to play the song (including manual play).
Used to write (store) songs.

SOUND MODE
Used to edit sounds.

UTILITY MODE
Used to set the Memory Protect function to on or off.
Used to assign sounds to the Key pads.
Used to set the MIDI functions.
Used to adjust other parameters.

7 Operation Procedures for Programming Rhythm Data



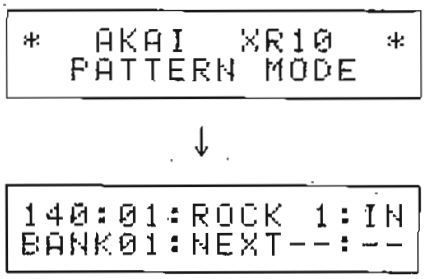
[1] Rhythm Play

1. Manual Play

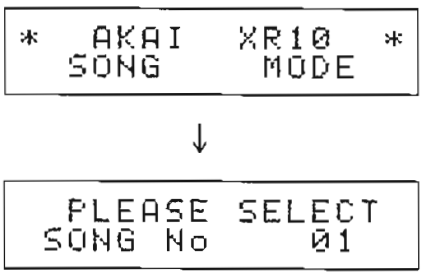
Try to play the 65 incorporate sounds (instruments) of the XR10 manually.

a. Check to see that the XR10 is properly connected to external equipment (amplifier, mixer, etc.), then turn the power switch ON.
After the following is displayed for a few seconds,

you will enter the Pattern mode, and the corresponding LED will light.

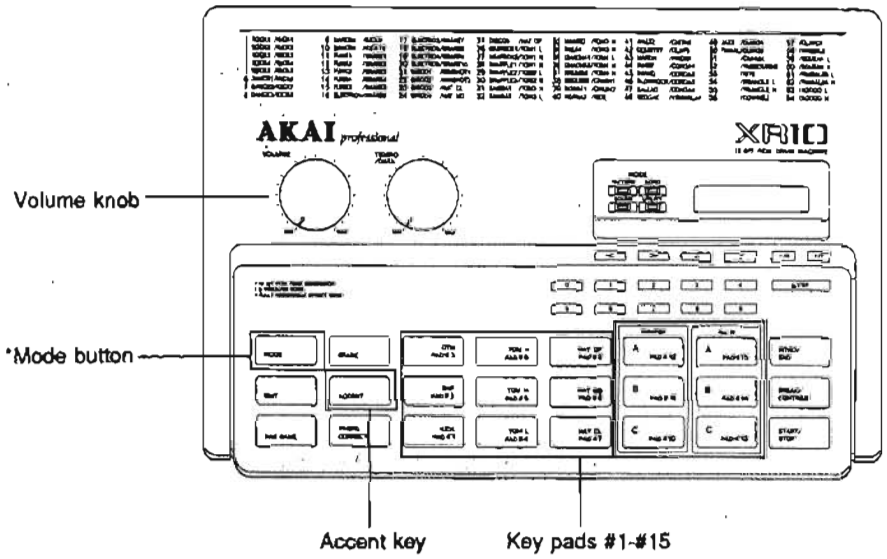


b. Next press [MODE] once. You will enter the Song mode and the corresponding LED will light.



c. Press [ENTER].

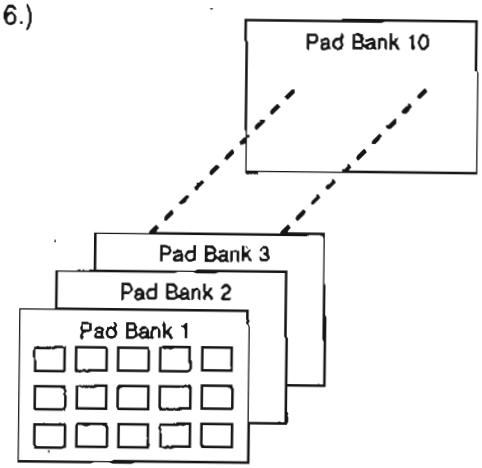
d. When any of the Key pads (#1-#15) is hit, the sound assigned to the pad will be reproduced. Furthermore, if you hit the pad (#1-#15) while pressing the ACCENT, a louder sound will be reproduced. The total volume is adjusted with the Volume knob.



* As usual, the sounds will be reproduced by hitting the key pads in any other mode (Pattern, Sound, Utility). When playing the Preset patterns, however, only the sounds assigned to the Key pads #1-#9 can be reproduced. The Key pads #10-#15 will function to select Types of the patterns (Variations A-C, Fill-ins A-C). (For more information refer to p.19).

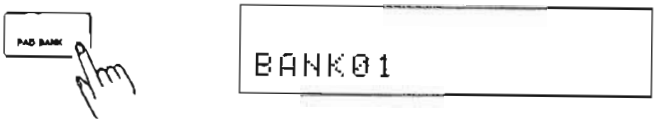
1) Pad Bank Selection

The XR10 has 10 internal Pad Banks that groups pads #1-#15 as one, thus, allowing for 65 sound patterns among the Key pads. Therefore, according to the following operations, the sounds for the Key pads #1-#15 can be alternated at a time through selection on the Pad Bank.
(Refer to A on p.16.)



Pad Bank 1-5: Fixed.
Pad Bank 6-10: Can be edited (in the Utility mode).

a. Pressing PAD BANK will select bank in order, 01 to 10, which is shown in the display.



* **Sound assignment to Pad Banks 01-05 are fixed (can't be edited). But the Pad Banks 06-10 can be programmed using the 65 Preset sounds and 32 User sounds (Refer to p.00 for details). Furthermore the selection of the Pad Bank is available in the Pattern mode and the Song mode (Refer to p.67 for details).**

Chart A: Sound Assignment to the Key Pads of the Pad Banks 1-10 (Factory Setting)

* Assignment for the banks: 1 to 5 fixed, 6 to 10 editable.

PAD / BANK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	7 KICK 7	12 SNARE 2	38 CRASH 1	26 TOM1 L	27 TOM1 M	28 TOM1 H	23 HAT CL	24 HAT MD	25 HAT OP	39 CRASH 2	41 CHOKE	40 RIDE	21 RIM 1	42 CLAPS	43 FINGER
2	3 KICK 3	15 SNARE 5	19 SNARE 9	29 TOM2 L	30 TOM2 M	31 TOM2 H	23 HAT CL	24 HAT MD	25 HAT OP	39 CRASH 2	41 CHOKE	38 CRASH 1	22 RIM 2	56 COWBELL	52 TAMB
3	6 KICK 6	13 SNARE 3	18 SNARE 8	32 TOM3 L	33 TOM3 M	34 TOM3 H	59 SQK L	60 SQK H	57 CLAVES	11 SNARE 1	20 SNARE10	51 CABASA	53 HITS	54 TRI L	55 TRI H
4	1 KICK 1	16 SNARE 6	21 RIM 1	35 TOM4 L	36 TOM4 M	37 TOM4 H	63 AGOGO L	64 AGOGO H	58 WHISTLE	62 TIMB H	44 CONGA 1	45 CONGA 2	61 TIMB L	46 CONGA 3	47 CONGA 4
5	44 CONGA 1	45 CONGA 2	52 TAMB	46 CONGA 3	47 CONGA 4	56 COWBELL	61 TIMB L	62 TIMB H	51 CABASA	50 GUIRO 2	49 GUIRO 1	48 VIBRA	63 AGOGO L	64 AGOGO H	58 WHISTLE
6	8 KICK 8	19 SNARE 9	10 KICK 10	35 TOM4 L	36 TOM4 M	37 TOM4 H	23 HAT CL	24 HAT MD	25 HAT OP	41 CHOKE	39 CRASH 2	38 CRASH 1	52 TAMB	56 COWBELL	40 RIDE
7	4 KICK 4	14 SNARE 4	38 CRASH 1	29 TOM2 L	30 TOM2 M	31 TOM2 H	23 HAT CL	24 HAT MD	25 HAT OP	41 CHOKE	40 RIDE	39 CRASH 2	53 HITS	20 SNARE 10	42 CLAPS
8	2 KICK 2	20 SNARE 10	9 KICK 9	32 TOM3 L	33 TOM3 M	34 TOM3 H	23 HAT CL	24 HAT MD	25 HAT OP	56 COWBELL	48 VIBRA	51 CABASA	59 SQK L	60 SQK H	42 CLAPS
9	5 KICK 5	17 SNARE 7	11 SNARE 1	35 TOM4 L	36 TOM4 M	37 TOM4 H	59 SQK L	60 SQK H	57 CLAVES	54 TRI L	55 TRI H	56 COWBELL	66 43-FINGR	67 43-FINGR	68 9-KICK9
10	83 65-CHOP	84 65-CHOP	85 65-CHOP	86 65-CHOP	87 65-CHOP	88 65-CHOP	89 65-CHOP	90 65-CHOP	91 65-CHOP	92 65-CHOP	93 65-CHOP	94 65-CHOP	95 65-CHOP	96 65-CHOP	97 65-CHOP

Chart A: Sound Assignment to the Key Pads of the Pad Banks 1-10 (Factory Setting)

2. Demonstration Play

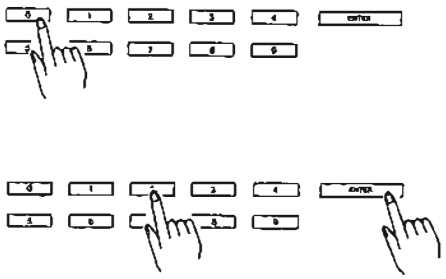
XR10 comes with factory prepared performance data that can be reproduced with the following procedure.

a. **First follow the operations a to c for "Manual Play" on p.13.**

b. **Press [START/STOP] to the demonstration play for the song number 01.**

c. **Press [START/STOP] again to stop it.**

d. **When pressing [<] or [>] key, the display shows as following. Then select song number 02 the Ten key and press [ENTER].**



e. **Repeat the operations b to c to activate the demonstration play for song number 02.**

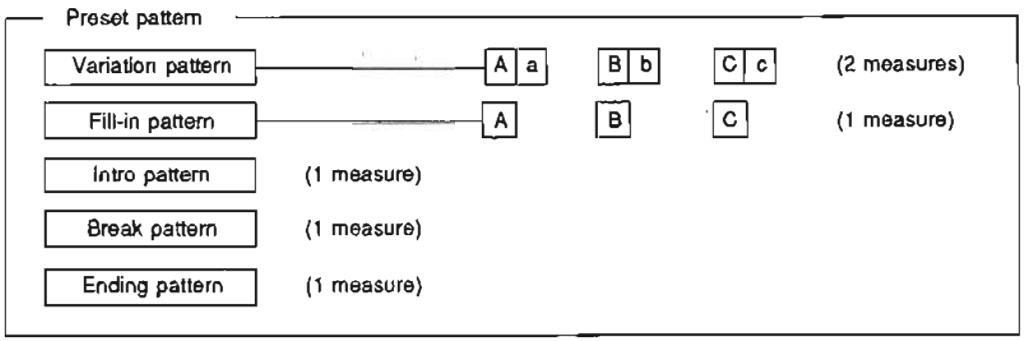
f. **To continue, select the song number 03 by exeuting the operation d to activate the demonstration play for the song number 03.**

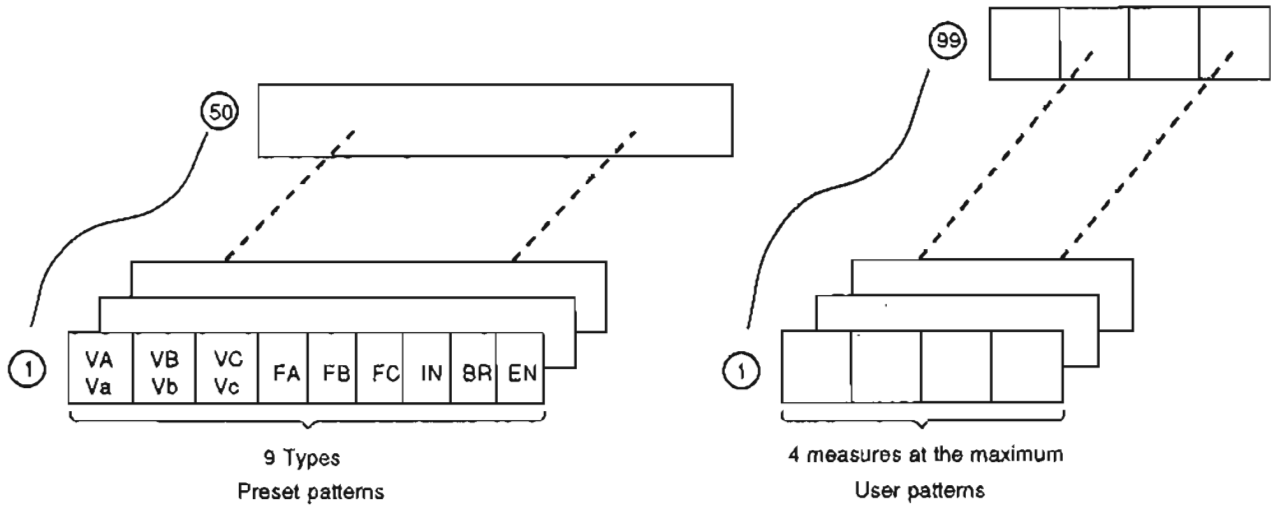
- **Hitting the Key pads #1-#15 will reproduce the sound corresponding to the Pad.**
- **3 factory prepared demonstration songs are stored in the song number 01-03 and you will be able to enjoy funky, Latin and jazzyarrangements.**
- **These demonstration songs can be erased if they are not needed.**
- **These demonstration songs consist of the User sounds 71 to 97 and the User patterns 01 to 22. Therefore, if you edit or erase these pattern and sound data carelessly, the demonstration songs will not be played correctly. (Refer to the Chart D on p.38.)**

3. Rhythm Pattern Play

Each of the XR10's Preset rhythm patterns has 3 Types of Variations, 3 Types of Fill-ins, 1 Intro, 1 Break and 1 Ending patterns, as shown below. Additionally, the User patterns 1-99 can be programmed and stored as your original patterns.

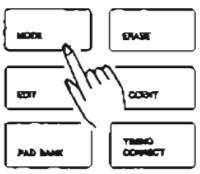
*** < and > keys will select either the Preset pattern or the User pattern.**

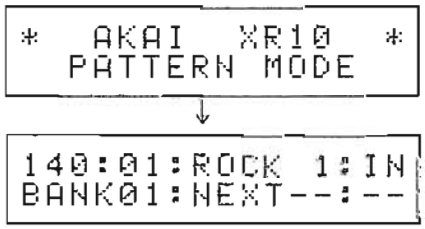




Now let's try playing a rhythm pattern.

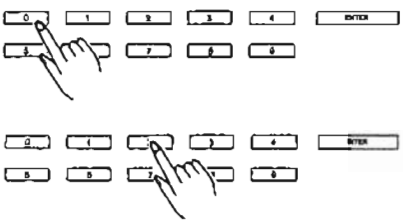
a. Press MODE for the Pattern mode.

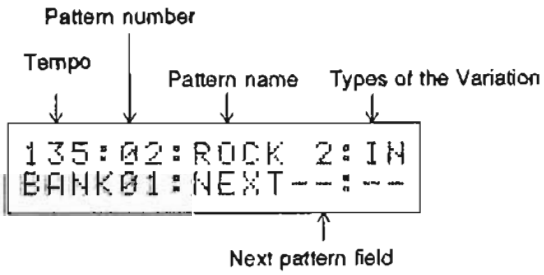




b. Select the pattern number by the Ten key, then the pattern number and name are shown in the display.

Example: To select 02 ROCK 2.

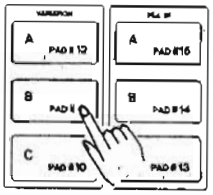


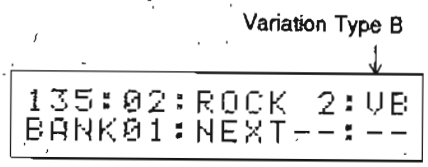


*** ^ and v keys will step the pattern number up and down.**

c. Press [Variaton] and select the Type A, B, or C.

Example: To select VB



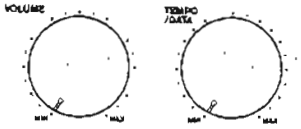


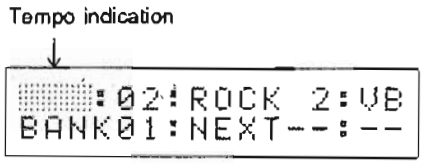
* You can select the Intro pattern only when it is stopped. (No rhythm is being played).

d. The selected rhythm pattern is played repeatedly when [START/STOP] is pressed. (The Variation pattern consists of a 2 measure phrase.)

* The Utility mode LED will flicker at every beat during play. At this time The Sound mode LED will flicker at the fist beat of a measure.

e. The tempo indication in the display will change by turning [TEMPO/DATA] knob, and the rhythm will be played in the indicated tempo. The tempo is also changed by [+/Y], [-/N] keys which adjust it in step increments (decrements).

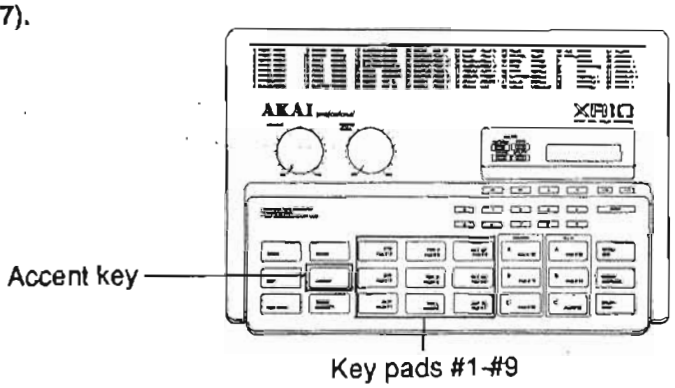




* When selecting another pattern when it is stopped (no rhythm is being played), the tempo will be set to the initial tempo (the preset one) of the selected pattern.

* When selecting another pattern during PLAY, the tempo will not be changed.

f. You can manually play the sounds for the Key pads #1-#9 to the rhythm automatically played (For more information about assigning sounds to the Key pads, refer to p.67).



* When hitting the Key pads while pressing [ACCENT], the sounds are played back louder.

* Manual play by hitting the Key pads is also available when it is stopped (Refer to p.00 for more information).

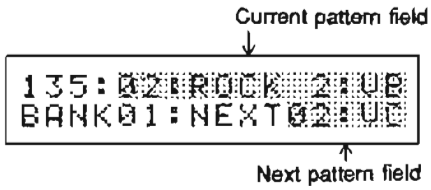
g. The performance will stop when [START/STOP] is pressed again.

1) Altering the Pattern and Variation During Play

While playing a certain pattern, you can alternate it with another Variation Type, or another different pattern and Variation.

a. When selecting a pattern and its Variation Type (the same as when stopped), the selected pattern and Type will be shown in the lower display field as the next pattern to be played.

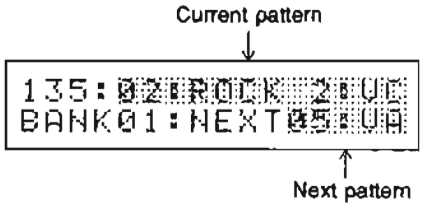
Example: When selecting VC during play of the pattern 02, VB:



b. The next pattern (02 ROCK 2: VC) will be played after completing the current pattern (02 ROCK 2: VB).

c. Try selecting a different pattern and Variation.

Example: When selecting the pattern 05, VA.

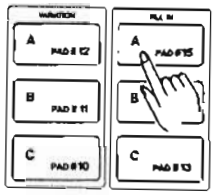


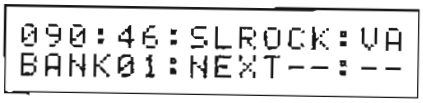
d. The next pattern (05 ROCK 5: VA) is played after completing the current pattern (02 ROCK 2: VC).

2) Inserting Fill-ins or Breaks

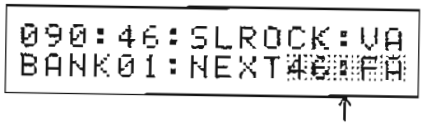
A Fill-in or a Break pattern can be inserted by pressing Fill-In A , Fill-In B, Fill-In C or BREAK/CONTINUE during play of a certain pattern.

a. Try pressing Fill-In A at the first measure of a Variation.





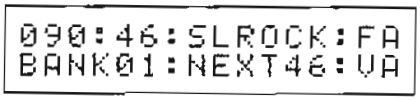
The selected Fill-In pattern is shown in the next pattern field.



Next pattern field

b. The Fill-In pattern A is played at the next beat (fourth note) and the former pattern will be resumed (46 SLROCK: VA, in this case) at the next measure.

Playing Fill-In pattern A



Returns to the previous pattern.

c. Now try pressing BREAK/CONTINUE at the second measure of the Variation pattern.

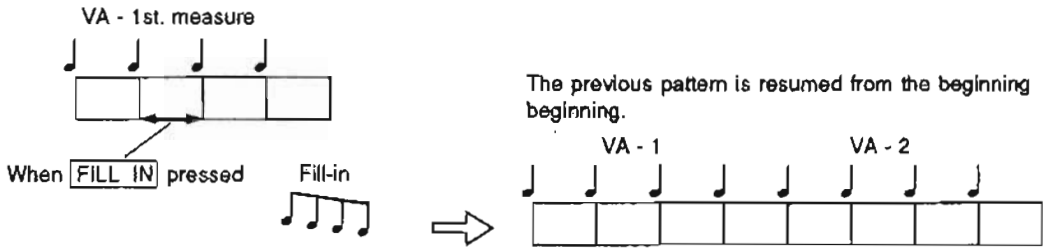
d. At the next beat (fourth note) after pressing BREAK/CONTINUE, the Break pattern will be played repeatedly until pressing the same button again. resume the previous pattern (46 SLROCK: VA, in this case) will resime at the first beat of the next measure.

Playing Break pattern

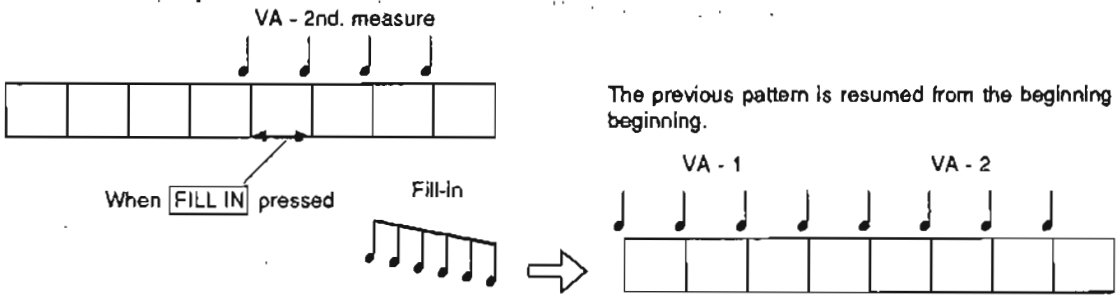
* **Fill-In and Break pattern play depends on the time of pressing these buttons as follows:**

>>The Fill-in pattern will be played at the next fourth note (beat) after pressing [Fill-In A], [Fill-In B] or [Fill-In C], then at the first beat of the next measure the previous pattern will be resumed.

Example 1

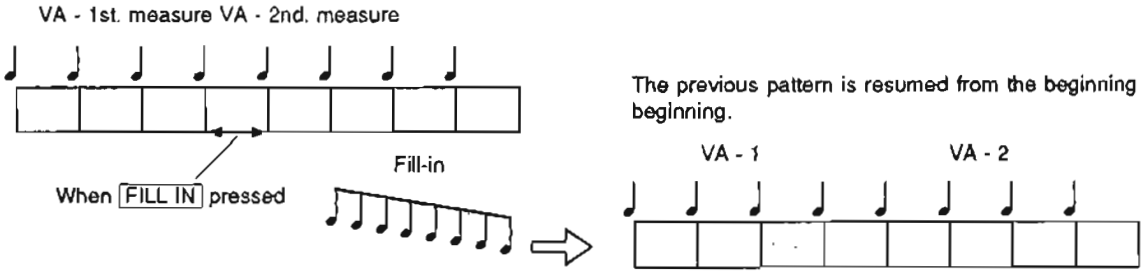


Example 2



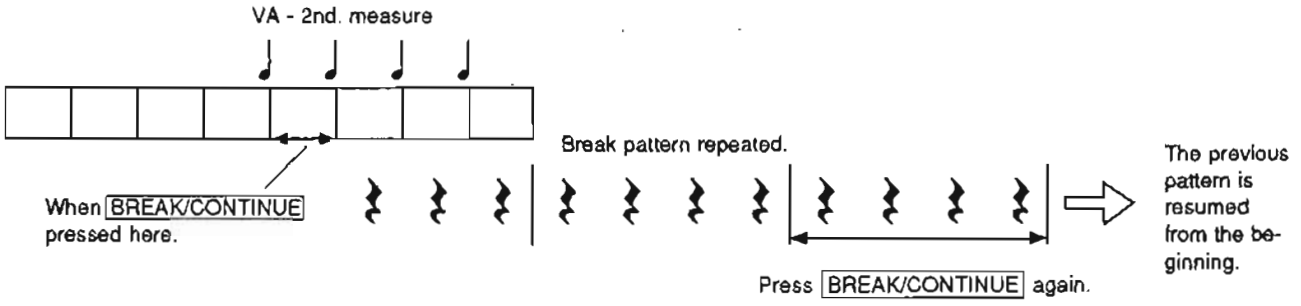
>>When inserting the Fill-in pattern in the second measure of the Variation pattern, press [Fill-In A], [Fill-In B] or [Fill-In C] at the fourth beat of the first measure.

Example 3



>>To insert a Break pattern, follow the same procedure as for the Fill-in pattern. However, the Break pattern will be repeatedly played until [BREAK/CONTINUE] is pressed again to resume the previous pattern at the first beat of the next pattern.

Example 4



- **The Fill-in pattern insertion is impossible while the Break pattern is played.**
- **While a Fill-in pattern is being played, inserting another Fill-in or Break pattern is impossible.**

3) Specify the Measure of the Variation Pattern

The Variation pattern consists of a 2 measure phrase. You can specify to play either the first or the second measure only.

a. Press TIMING CORRECT and hold it down, press VARIATION A, VARIATION B or VARIATION C, or Fill-In A, Fill-In B or Fill-In C.

VARIATION A/B/C: Specifies the first measure of each Variation pattern.

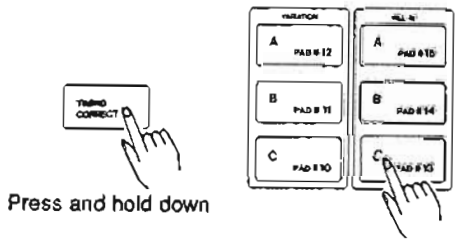
FILL IN A/B/C: Specifies the second measure of each Variation pattern.

b. Either of the following charts is shown in the Type field.

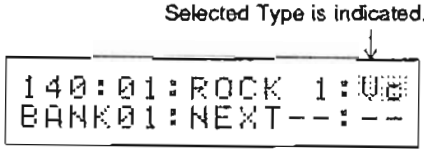
fig 29-6

	1st. measure	2nd. measure
Variation A	vA	Va
Variation B	vB	Vb
Variation C	vC	Vc

Example: When playing only the second measure of the Variation Type C of a certain pattern.



Selected Type is indicated.



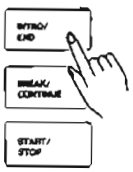
*** When playing the Variation pattern in full length (not specifying the measure), VA, VB or VC will be shown in the display.**

4) Start from the Intro Pattern

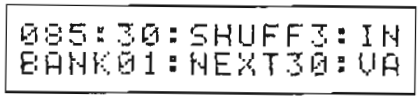
The rhythm can be started from the Intro pattern corresponding to the selected pattern shown in the display.

a. Press INTRO/END when the rhythm is stopped.

Example: When selecting 30 SHUFF3: VA



(During the Intro pattern play)



*** In this case, the last selected Variation Type will be automatically shown in the next pattern field. When the XR10 is turned on, VA (Variation Type A) is automatically selected for the next pattern.**

b. The selected pattern (30 SHUFF3: VA) starts after the Intro pattern is played for one measure.

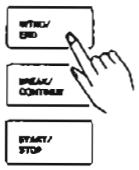
```
085:30:SHUFF3:VA
BANK01:NEXT--:--
```

5) Stop in the Ending Pattern

The rhythm can be stopped with the Ending pattern corresponding to the selected pattern shown in the display.

a. Press INTRO/END during pattern play.

Example: When playing 30 SHUFF: VA



```
085:30:SHUFF3:VA
BANK01:NEXT30:EN
```

Indicates the Ending pattern in the next pattern field.

b. After completion of the current pattern (30 SHUFF3: VA), the Ending pattern is played and the rhythm is automatically stopped.

```
085:30:SHUFF3:EN
BANK01:NEXT--:--
```

↓

```
085:30:SHUFF3:IN
BANK01:NEXT--:--
```

6) Foot Switch Function

The following functions can be remote controlled with an optional foot switch (normal short type, such as AKAI PS-X80, etc.).

#1 Insert a Fill-In Pattern
#2 Start from the Intro Pattern
#3 Stop in an Ending Pattern
#4 Start from the beginning of the specified pattern
#5 Stop the rhythm the minute you step on the foot switch

a. **First connect a foot switch to the foot switch jack, FILL IN or START/STOP, of XR10 (For more information refer to p.10).**

- **To perform function #1, use the foot switch connected to the FILL IN jack. To perform function #2 and #3, use the foot switch connected to the START/STOP jack. ..... Moreover, to perform the functions #4 and #5, use a couple of foot switches (for Fill-In and Start/Stop) in combination.**

b. **The last selected Fill-In pattern will be inserted by stepping on the foot switch for Fill-In insertion during Preset pattern play (not available during User pattern play).**

c. **The rhythm will start with an Intro pattern by stepping once on the foot switch for Start/Stop control at stop with a Preset pattern selected. Moreover, by stepping on it once again during Preset pattern play, the Ending pattern will be played at the first beat of the next measure and the rhythm will automatically stop after the Ending's completion.**

d. **When the rhythm is stopped, stepping on the foot switch for FILL-IN control and hold it down, then step on the foot switch for START/STOP insertion enables you to start the rhythm from the beginning of the specified pattern. Moreover, while the rhythm is being played, stepping on the foot switch for START/STOP control and hold it down, then step on the foot switch for Fill-In insertion enables you to stop the rhythm immediately.**

7) Sound Replace Function

A given pattern has several sounds. This function allows you to replace the pattern's KICK, SNARE and TOM sounds with the KICK, SNARE, TOM sounds in the Bank specified by a Replace number.
In case those sounds are not set in the Bank (User Bank 06-10), the sounds are as they were (this function is not performed).
Furthermore, in case more than 2 similar sounds (ex. KICK1, KICK2) are set in the same Bank, replacing will be performed to the sound assigned to the smaller-numbered Key pad.

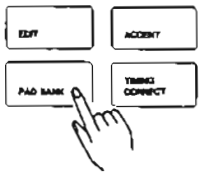
a. Press [ENTER] at stop or during play to get the Sound Replace display as follows:

* To get the previous display back, press [ENTER] again.

Example: Current pattern 25 DISCO5: VA

Replace number field

b. Every time [PAD BANK] is pressed, the Replace number will change in order as shown in the display. (The number increases.)

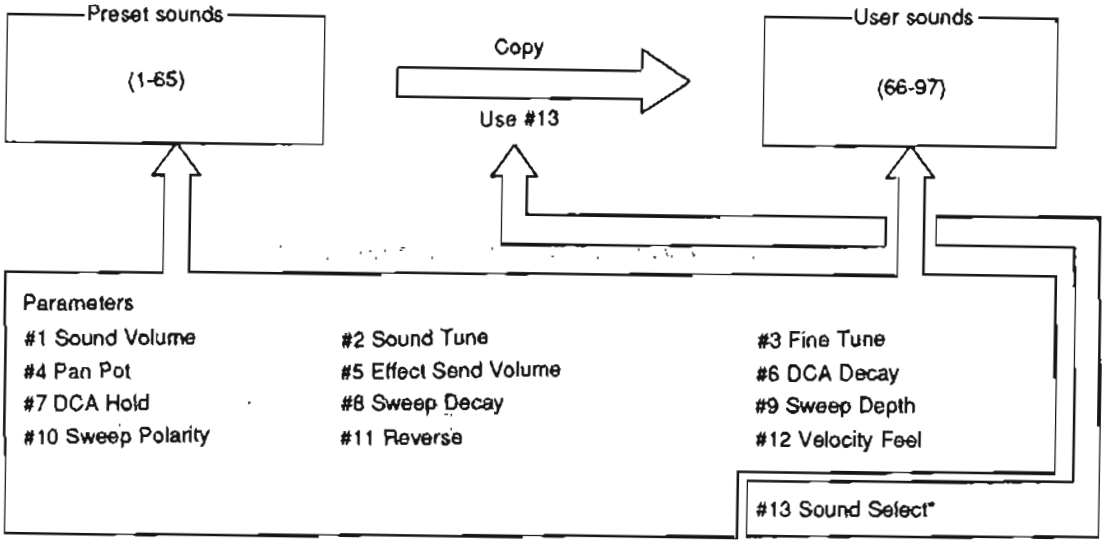


Pressed 3 times

* This Replace number is not memorized put in memory. It must be specified again when another mode (Pattern, Song, Sound or Utility) is selected. Furthermore, to get the previous sounds back that were replaced, press [PAD BANK] to specify the Replace number "- -".

[2] Editing Sounds

The volume, pitch, tone, etc. of each sound can be edited by the parameters in the Sound mode. In addition to 65 Preset sounds, up to 32 edited sounds can be stored as your original User sounds.



* **The parameter #13 Sound Select is available only for the User sounds.**

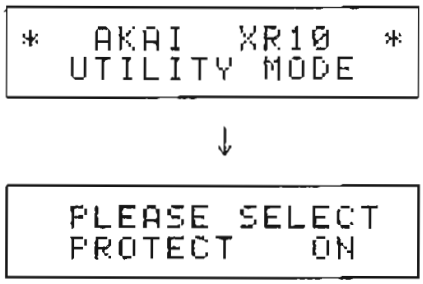
Parameters Sorts

Sound Editing	① Sound Volume	Adjusts the volume of each sound.
	② Sound Tune	Adjusts the pitch of each sound.
	③ Fine Tune	Adjusts the pitch slightly.
	⑥ DCA Decay	Adjusts the time variance for the volume of each sound.
	⑦ DCA hold	
	⑧ Sweep Decay	Adjusts the time variance for the pitch of each sound.
	⑨ Sweep Depth	
	⑩ Sweep Polarity	
	⑪ Reverse	Time Reverse Effect
	⑫ Velocity Feel	Velocity Feel effect
Output Control	④ Pan Pot	Positions each sound between right and left for the Stereo outputs.
	⑤ Effect Send Volume	Adjusts the level of each sound to send to the Effect send output.
Copy	⑬ Sound Select	Copies a Preset sound to a User sound.

1. Editing Procedures

a. First press [MODE] several times and select the Utility mode.

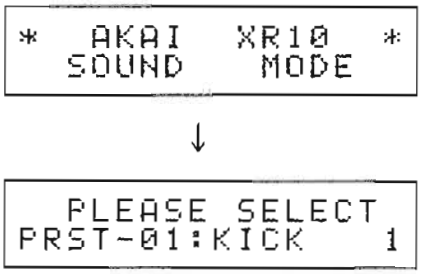
After shown for a



b. Turn [TEMPO/DATA] knob and set to "PROTECT OFF".

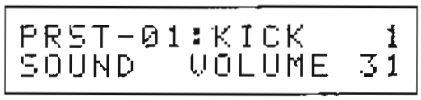
* Any kind of editing or writing (storing) data is not available with "PROTECT ON". Therefore the protect should be set to OFF before editing or writing. Note that powering up the XR10 always sets it to "PROTECT ON".

c. Next press [MODE] several times and select the Sound mode. At this time the Sound mode LED will light to indicate the mode selected.



d. Using [-/N] or [+/Y] key or [TEMPO/DATA] knob, select the sound to be edited from among the Preset sounds 1-65 and the User sounds 66-97. Then press [ENTER] for the parameter display.

When pressing [ENTER],



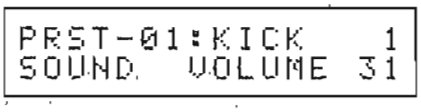
e. Select the parameter you wish to edit by pressing [<] or [>] key and changing the value with [TEMPO/DATA] knob or [-/N], [+/Y] keys.

f. Pressing the Key pads #1-#15, the edited sound is played back with loudness of 15 degrees. This allows you to monitor the sound when editing. Furthermore, Pressing [ENTER] again will lead you to the display for selection of the sound to be edited.

g. When finished editing the sound, press [MODE] several times to enter the Utility mode and set the protect to ON ("PROTECT ON") following the operations a to b.

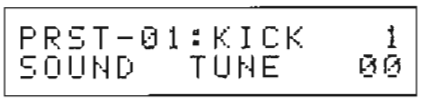
2. Functions of Various Parameters

1) Sound Volume

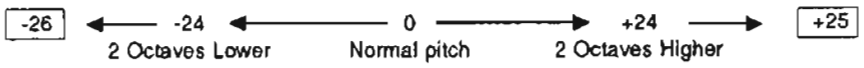


Adjusts the volume of each sound within a range of 0 to 31 (No sound is heard at 0). This parameter can adjust the volume balance among various sounds in the same rhythm pattern.

2) Sound Tune



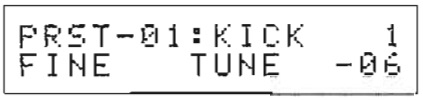
The pitch of each sound can be set by the half tone (100 cent). The adjustments can be made within a range of -26 to +25 (100 CENT/STEP).



* **This wide tuning range allows you not only to tune the drum sounds but also to create the special effect sounds.**

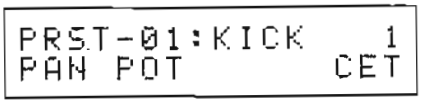
Example: Create special effects by tuning extremely low or high, or by tuning several sounds individually to play melodies with them, etc.

3) Fine Tune

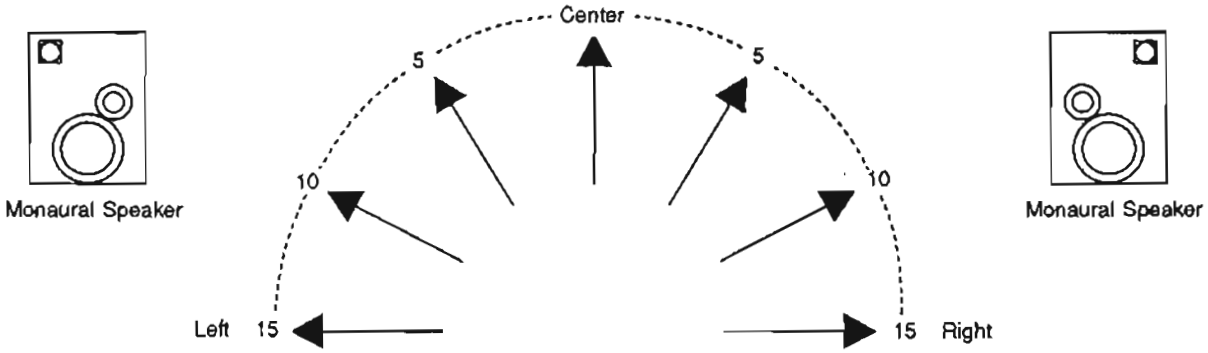


Allows to finely adjust the sound by 1/16 of the half tone. The adjustable range is between -8 and +7 (6.25 CENT/STEP).

4) Pan Pot



In case each sound is output from the Stereo output jacks, set it in the position between right and left (this is called "panning"). Adjustments can be made within the range of L15 - CET - R15.

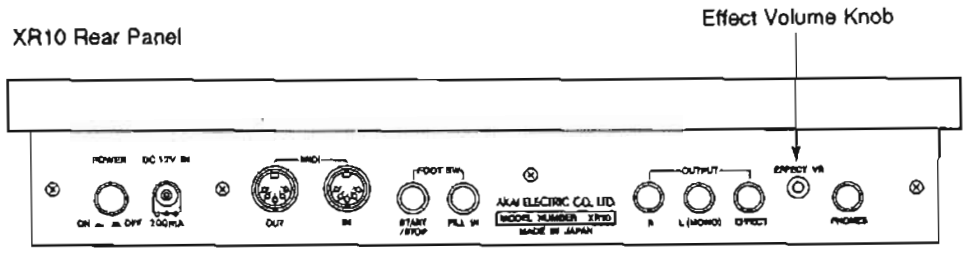


* **When using only the L(MONO) jack, the panning position will be at the center for all sounds.**

5) Effect Send Volume

Adjusts the level of each sound output from the Effect send out jack. Adjustments can be made within a range of 0 to 31.

* **Furthermore, the total level output from the Effect send out jack can be adjusted with the Effect volume knob located on the right side of the jack.**

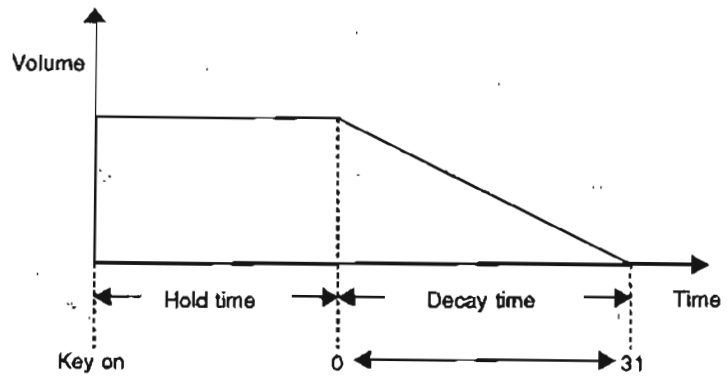


>>The following parameters, "6) DCA Decay" and "7) DCA Hold", adjust the time variance of the Sound volume in combination to maintain the volume of a cymbal sound for realistic imaging or to create an effect sound without reverberation.

6) DCA Decay

```
PRST-01:KICK    1
DCA DECAY      31
```

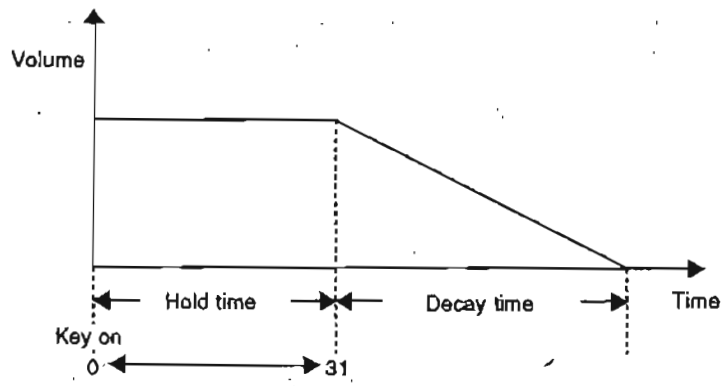
Adjusts the time for the Sound volume fading out within a range of 0 to 31. As the value gets larger, the slower the sound will fade out. Set the parameter within the designated decay time range shown in the following graph.



7) DCA Hold

```
PRST-01:KICK    1
DCA HOLD       31
```

Adjusts the sustain time of the sound before it begins to fade out. The adjustments can be made within a range of 0 to 31. The larger the value set, the longer the sound will be sustained. Set the parameter within the designated Hold time range shown in the following graph.

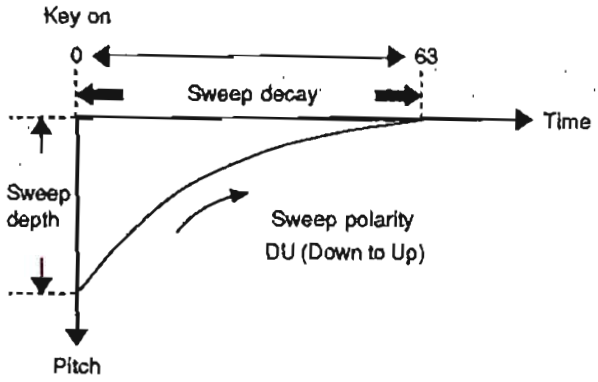


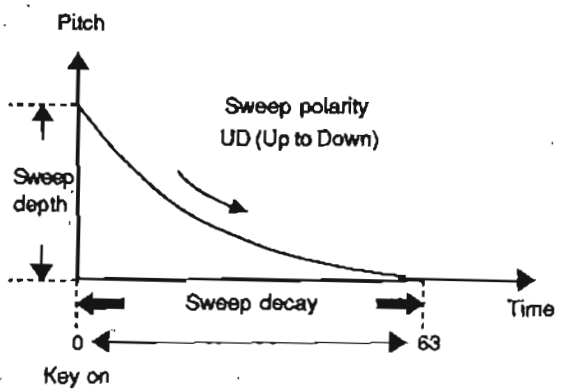
>>The following parameters, "8) Sweep Decay", "9) Sweep Depth", and "10) Sweep Polarity" adjust the time variance of the pitch of each sound in combination making pitch-bent effects or drum synthesizer sounds or to give vividness to the attack of each sound such as a slapped bass sound or an orchestral tutti sound, etc.

8) Sweep Decay

```
PRST-01:KICK    1
SWEEP DECAY    00
```

Adjusts the time variance of the pitch specified by the following parameters "9) Sweep Depth" and "10) Sweep Polarity". The adjustments can be made with a range of 0 to 63, and the larger the value set, the slower the time variance of the pitch will be. Set the parameter within the designated Sweep decay range shown in the following graph.

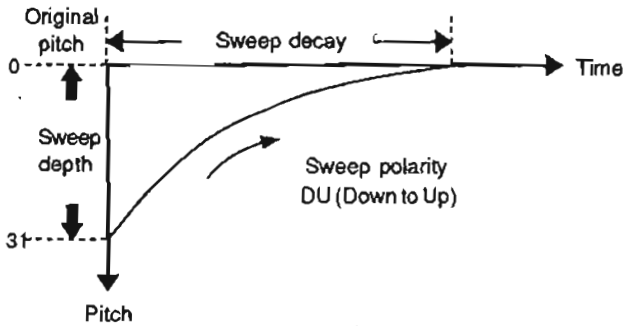


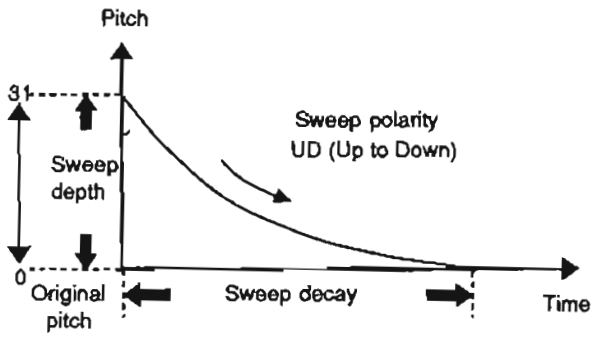


9) Sweep Depth

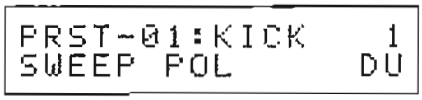
```
PRST-01:KICK    1
SWEEP DEPTH    00
```

Adjusts the variant width of the pitch. The adjustments can be made within range of 0 to 31, The larger the value set, the wider the pitch variance will be ("0" indicates the original pitch). Set the parameter within the designated Sweep depth range shown in the following graph.



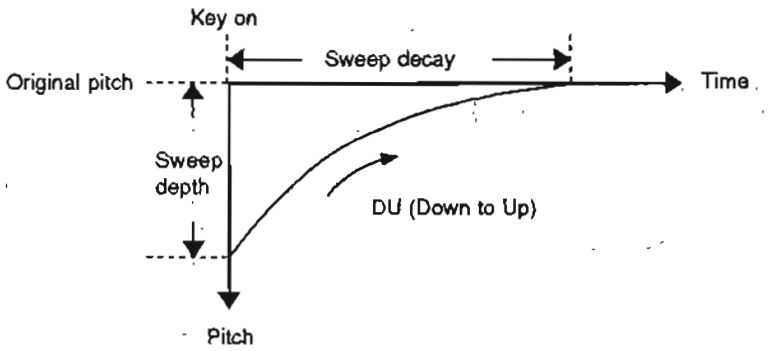


10) Sweep Polarity

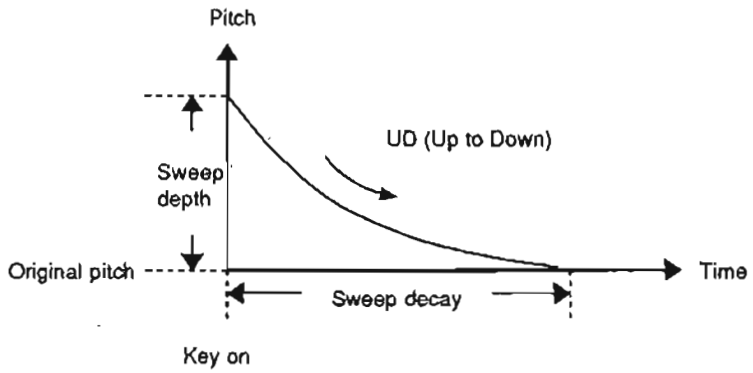


Selects either "DU" or "UD" on how the pitch is varied.

DU (Down to Up): Changes the pitch continuously from the lower pitch to the original pitch at the variance set by parameters "8)" and "9)".



UD (Up to Down): Changes the pitch continuously from the higher pitch to the original pitch at the variance set by parameters "8)" and "9)".



11) Reverse

Allows selection of reversing the sound or not. Select "RV", to reverse the sound and "FW" for a normal sound.

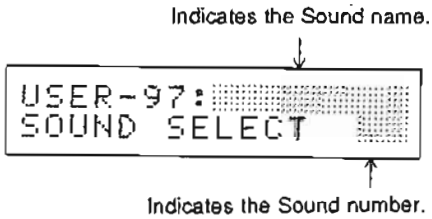
* **This term "Reverse" refers to a reversed sound that can be heard by playing a tape-recorded sound backward. This effect is in high demand in modern music production.**

12) Velocity Feel

Allows selection of giving the sound the Velocity Feel effect or not. Select "ON" to add the effect. Selectig "OFF" for a normal sound.

- **The Velocity Feel effect refers to reproducing the sound from a different Start point from that where it was sampled (digitally recorded). It makes a fast attack sound slower when reproduc. So it is more effective with fast attack sounds. It makes.**
- **As for a couple of sounds #3 "KICK3" and #5 "KICK5", their value for this parameter are fixed to "OFF".**
  Note that you cannot give the effect to these two sounds.

13) Sound Select



This parameter copies Preset sounds, that is only for User sounds 66 to 97 (It is not displayed when selecting the Preset sounds 1 to 65). Select the Preset sound number (1 to 65) you wish to copy using [-/N], [+/Y] keys or [TEMPO/DATA] knob.

- **When copying a Preset sound, only the sound (instrument) is copied, not the parameters.**

Chart B: **Parameter Settings of Various Sounds (Factory Prepared)**

No.	NAME	SOUND VOLUME	SOUND TUNE	FINE TUNE	PAN POT	EFFECT SEND	DCA DECAY	DCA HOLD	SWEEP DECAY	SWEEP DEPTH	SWEEP POLARITY	REVERSE	VELOCITY FEEL	COPY SOUND
1	KICK 1	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
2	KICK 2	27	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
3	KICK 3	27	0	0	CET	0	31	31	0	0	DU	FW	OFF	
4	KICK 4	24	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
5	KICK 5	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
6	KICK 6	28	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
7	KICK 7	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
8	KICK 8	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
9	KICK 9	26	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
10	KICK 10	27	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
11	SNARE 1	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
12	SNARE 2	24	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
13	SNARE 3	25	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
14	SNARE 4	18	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
15	SNARE 5	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
16	SNARE 6	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
17	SNARE 7	31	0	–6	CET	0	5	0	0	0	DU	FW	OFF	
18	SNARE 8	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
19	SNARE 9	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
20	SNARE 10	31	0	0	CET	0	31	31	0	0	DU	FW	OFF	
21	RIMSHOT 1	31	–2	0	CET	0	31	31	0	0	DU	FW	OFF	
22	RIMSHOT 2	15	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
23	HAT CL	27	+2	–6	R10	0	0	0	0	0	DU	FW	OFF	
24	HAT MD	15	0	+5	R10	0	31	31	0	0	DU	FW	OFF	
25	HAT OP.	16	0	+5	R10	0	31	31	0	0	DU	FW	OFF	
26	TOM1 L	25	–1	–4	L15	0	24	31	0	0	DU	FW	OFF	
27	TOM1 M	20	–1	–3	CET	0	25	31	0	0	DU	FW	OFF	
28	TOM1 H	31	+6	–1	R15	0	24	31	0	0	DU	FW	OFF	
29	TOM2 L	25	0	–6	L15	0	31	31	0	0	DU	FW	OFF	
30	TOM2 M	16	+2	–6	CET	0	15	15	0	0	DU	FW	OFF	
31	TOM2 H	22	+6	–6	R15	0	15	10	0	0	DU	FW	OFF	
32	TOM3 L	31	+1	–6	L15	0	15	15	0	0	DU	FW	OFF	
33	TOM3 M	22	+5	–6	CET	0	25	20	0	0	DU	FW	OFF	

Chart C: Parameter Settings of Various Sounds (Factory Prepared)

No.	NAME	SOUND VOLUME	SOUND TUNE	FINE TUNE	PAN POT	EFFECT SEND	DCA DECAY	DCA HOLD	SWEEP DECAY	SWEEP DEPTH	SWEEP POLARITY	REVERSE	VELOCITY FEEL	COPY SOUND
34	TOM3 H	31	0	–6	R15	0	31	31	0	0	DU	FW	OFF	
35	TOM4 L	31	–2	–6	L15	0	20	20	0	0	DU	FW	OFF	
36	TOM4 M	22	0	–6	CET	0	20	10	0	0	DU	FW	OFF	
37	TOM4 H	31	+6	–6	R15	0	15	10	0	0	DU	FW	OFF	
38	CRASH 1	20	0	–6	R10	0	31	31	0	0	DU	FW	OFF	
39	CRASH 2	15	0	–6	L05	0	31	31	0	0	DU	FW	OFF	
40	RIDE	15	0	–6	L10	0	25	31	0	0	DU	FW	OFF	
41	CHOKE	12	0	–6	R06	0	10	10	0	0	DU	FW	OFF	
42	CLAPS	20	0	–6	CET	0	20	15	0	0	DU	FW	OFF	
43	FINGER	22	0	–6	CET	0	15	20	0	0	DU	FW	OFF	
44	CONGA 1	23	0	–6	CET	0	5	0	0	0	DU	FW	OFF	
45	CONGA 2	18	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
46	CONGA 3	18	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
47	CONGA 4	18	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
48	VIBRASLAP	10	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
49	GUIRO 1	15	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
50	GUIRO 2	15	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
51	CABASA	12	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
52	TAMBOURINE	12	+5	–6	CET	0	31	31	0	0	DU	FW	OFF	
53	HITS	25	0	–6	CET	0	22	20	0	0	DU	FW	OFF	
54	TRIANGLE L	15	+6	–6	CET	0	2	2	0	0	DU	FW	OFF	
55	TRIANGLE H	15	+8	–6	CET	0	31	15	0	0	DU	FW	OFF	
56	COWBELL	12	0	–6	CET	0	3	0	0	0	DU	FW	OFF	
57	CLAVES	31	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
58	WHISTLE	15	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
59	SQUEAK L	15	0	–6	CET	0	15	5	0	0	DU	FW	OFF	
60	SQUEAK H	20	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
61	TIMBALES L	15	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
62	TIMBALES H	13	0	–6	CET	0	31	31	0	0	DU	FW	OFF	
63	AGOGO L	10	0	–6	CET	0	16	5	0	0	DU	FW	OFF	
64	AGOGO H	12	+6	–6	CET	0	20	10	0	0	DU	FW	OFF	
65	CHOP	20	0	–6	CET	0	10	20	0	0	DU	FW	OFF	

Chart D: Parameter Settings of Various Sounds (Factory Prepared)

No.	NAME	SOUND VOLUME	SOUND TUNE	FINE TUNE	PAN POT	EFFECT SEND	DCA DECAY	DCA HOLD	SWEEP DECAY	SWEEP DEPTH	SWEEP POLARITY	REVERSE	VELOCITY FEEL	COPY SOUND
66	USER-66	31	-10	0	CET	0	31	31	50	31	UD	FW	ON	43-FINGER
67	USER-67	31	0	0	CET	0	31	31	50	31	UD	FW	ON	43-FINGER
68	USER-68	31	-10	0	CET	0	20	31	0	0	DU	RV	OFF	9-KICK 9
69	USER-69	31	0	0	CET	0	31	31	0	0	DU	RV	ON	22-RIM 2
70	USER-70	31	0	0	CET	0	31	31	0	0	DU	RV	ON	59-SQK L
71	USER-71	31	0	0	CET	0	31	31	0	0	DU	FW	ON	16-SNR 6
72	USER-72	31	0	0	CET	0	31	31	0	0	DU	FW	ON	61-TIMBA L
73	USER-73	31	0	0	CET	0	31	31	0	0	DU	FW	ON	62-TIMBA H
74	USER-74	31	0	0	CET	0	31	31	0	0	DU	FW	ON	12-SNR 2
75	USER-75	31	0	0	CET	0	31	31	0	0	DU	FW	ON	15-SNR 5
76	USER-76	31	0	-04	CET	0	31	19	55	22	DU	FW	OFF	26-TOM 1 L
77	USER-77	31	-1	0	R15	0	31	31	0	0	DU	FW	OFF	63-AGOGO L
78	USER-78	31	+4	0	L15	0	31	31	0	0	DU	FW	OFF	64-AGOGO H
79	USER-79	31	0	0	CET	0	31	31	0	0	DU	RV	OFF	38-CRASH 1
80	USER-80	31	+1	0	L15	0	31	31	0	0	DU	FW	OFF	53-HITS
81	USER-81	31	+4	0	R15	0	31	31	0	0	DU	FW	OFF	53-HITS
82	USER-82	31	+6	0	CET	0	31	31	0	0	DU	FW	OFF	53-HITS
83	USER-83	31	-1	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
84	USER-84	31	0	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
85	USER-85	31	+1	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
86	USER-86	31	+2	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
87	USER-87	31	+3	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
88	USER-88	31	+4	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
89	USER-89	31	+5	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
90	USER-90	31	+6	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
91	USER-91	31	+7	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
92	USER-92	31	+8	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
93	USER-93	31	+9	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
94	USER-94	31	+10	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
95	USER-95	31	+11	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
96	USER-96	31	+12	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP
97	USER-97	31	+13	0	CET	0	31	31	0	0	DU	FW	OFF	65-CHOP

* User sounds 71 to 97 are used for the Demonstration songs. Therefore, note that if you carelessly edit the parameter value of them, you can't have the demonstration performed correctly.

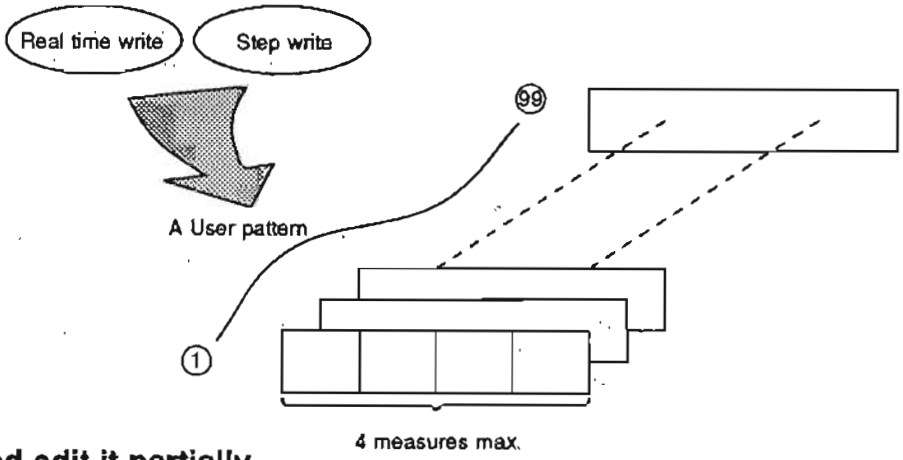
[3] Programming User Pattern

1. Before Programming Patterns

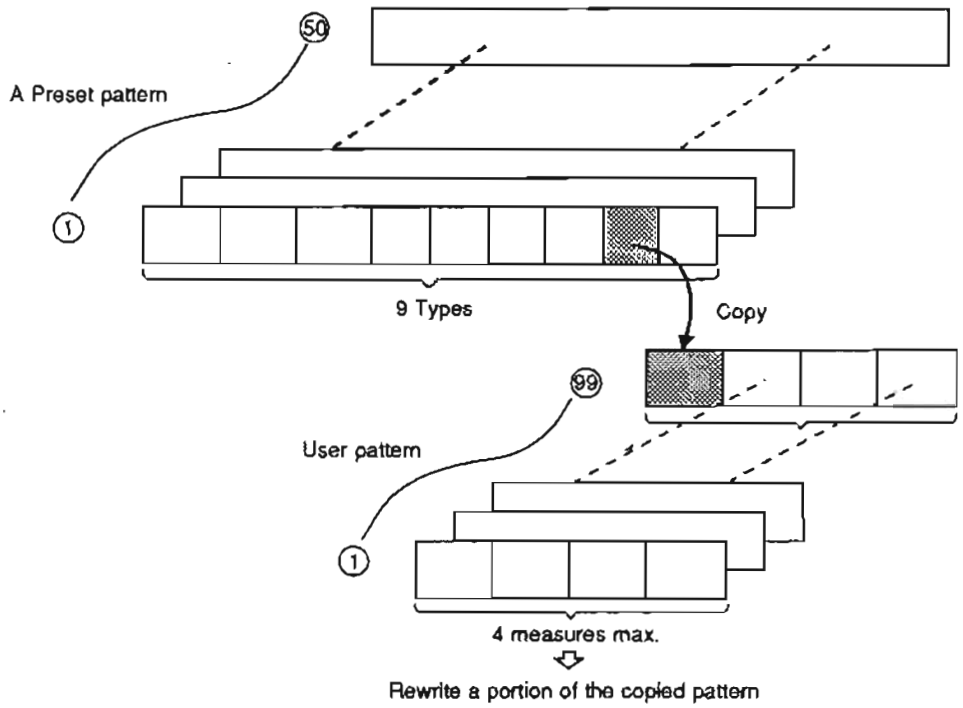
The XR10 supplies 450 preset rhythm patterns (50 patterns x 9 Types). This in itself is sufficient for song production, but the XR10 is capable of handling up to 99 additional rhythm patterns (A pattern with a maximum of 4 measures) as User patterns. Programming can be performed in either Real time write or Step write, or by copying a Preset pattern to a User pattern and editing it.

"Real time write" refers to actually hitting the Key pads according to the metronome to make a rhythm pattern manually. "Step write" refers to setting the sound timing for each sound. It is useful when writing a rhythm pattern from a score or when preparing a complex pattern. Rhythm programming is done by using these 2 methods in combination with editing functions. Actual procedures for rhythm programming are as follows:

>> To make a new pattern

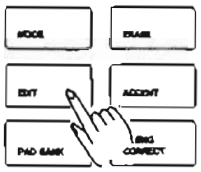


>> To copy a pattern and edit it partially



1) Pattern Write Mode

a. Press [EDIT] in Pattern play mode.



```
PLEASE SELECT
USER No 01 --
```

When selecting a pattern with no data, "- -" will be shown to indicate that.

* Remember to set the Protect to OFF ("PROTECT OFF") in the Utility mode before Pattern write. (Refer to p.** for more information).

b. Select the User pattern number (1-99) you wish to write with the Ten key and press [ENTER].

c. 4 menus will be shown in the display.

```
1:REAL   2:STEP
3:COPY   4:DELETE
```

d. Select a menu (1-4) with the Ten key and press [ENTER] to show the menu in the display.

* Note that the pattern number cannot be altered during pattern write. In case you wish to select another pattern, press [EDIT] again to reselect it by following procedures a and b. in the pattern play display.

2) 4 Menus

The functions of the 4 menus in the Pattern write mode are as follows:

Contents in the Pattern mode

Pattern play mode				For pattern playing	
⇩					
Pattern write mode (Pattern edit mode)					
4 Menus	1	REAL For Real time write	4 Parameters	1)	Setting of the Bar (measure)
				2)	Setting of the Time Signature (Time)
				3)	Setting of the Metronome
				4)	Setting of the Quantize
	2	STEP For Step write	4 Parameters	1)	Setting of the Bar (measure)
				2)	Setting of the Time Signature (Time)
				3)	Setting of the Timing Correct
				4)	Setting of the Auto Scan function
	3	COPY	For copying a pattern.		
	4	DELETE	For deleting a pattern.		
⇩					
Pattern saving (storing)					

*** When selecting 1, 2, or 3 from 4 menus mentioned above, if the XR10 runs short of memory for pattern write, the following error message will be shown in the display for a second. Then the display will show the 4 menus again. In this case, Pattern write is not available unless you select "4. DELETE" from the menus to delete the unnecessary data. (Refer to p.52 for more details.)**

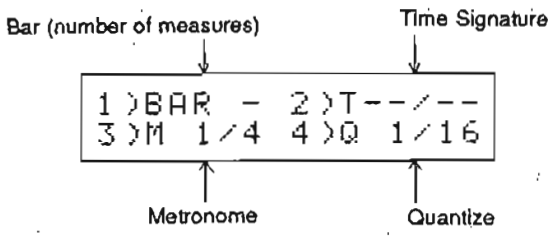
The error message shown.

2. Real Time Write

a. First select "1: REAL" from the 4 menus.

b. The display will show the following 4 parameters:

* If the rhythm data has been already entered for the pattern currently selected, neither the value of "1) BAR (measure)" nor "2) T (Time signature)" can be altered. Both the value of "3) M (Meteronome)" or "4) Q (Quantize)" can be altered at any time.



c. Using the Ten key, select each of 4 parameters shown in the display and set the value with TEMPO/DATA knob.

1) BAR: Set the number of measure within the range of 1 to 4.

2) T (Time signature): Set the time signature to set to the following value.

Numerator	1-4	1-6	1-8	1-12	1-16
Denominator	4	6	8	12	16

3) M (Metronome): Set the guiding beat's interval of the metronome within one measure to the following value:

Numerator	1	1	1	1	1	OFF
Denominator	4	6	8	12	16	

4) Q (Quantize): Set the interval of data to be entered within one measure to the following value:

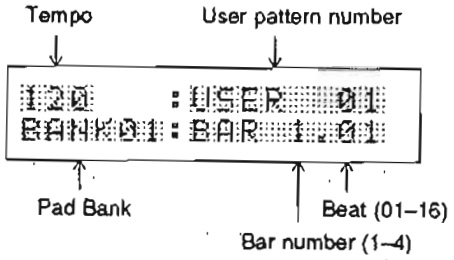
Numerator	1	1	1	1	1	1	1	1	OFF (1/384)
Denominator	4	6	8	12	16	24	32	48	

* Unless the value of "1) BAR" and "2) T" are set, you cannot perform the following procedure (Once the value has been set, they cannot be altered).

* If needed, set the value of "3) M" "4) Q" (They can also be altered later.).

d. Press [ENTER] when finished setting the 4 parameters.

e. When the following is shown in the display, Real time write is available:



* The previous display is shown by pressing [ENTER] once again.

Tempo: Set with [TEMPO/DATA] knob.
User pattern number
Pad Bank: Selected by pressing [PAD BANK] (Refer to p.15 in details).
Bar, Beat: Shows the Bar number and the Beat during pattern play. These are variable with the Bar and Time signature specified.

1) Real Time Write

a. Press [START/STOP] to start the Real time write. Alternatively, press [INTRO/END] to start it after counting beats for one measure.

* The Utility mode LED will flicker at every beat during play. At this time The Sound mode LED will flicker at the first beat of a measure.

b. By actually hitting the Key pads #1#-15 when playing manually, enter the pattern data changing the tempo or alternating the Pad Bank as you wish. The pattern will be played repeatedly until [START/STOP] is pressed once again.

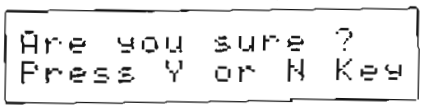
* Hitting a Key pad while holding [ACCENT] down, enables you to enter the accentuated data of the corresponding sound.

* Pressing [ENTER] at stop gives you the 4 paramters in the display. This allows you to reset the value of the Metronome and the Quantize. If no data has been entered yet, value of the Bar and the Time signature will be reset.

2) Erase

a. Pressing a Key pad while holding [ERASE] down enables you to clear the data of the corresponding sound.

b. Pressing [ERASE] at STOP enables you to clear all the sound data in the pattern:



When this query is being shown, press [+/Y] key to erase all the data. Then erasing will be executed with the message "COMPLETE" shown and the Real time write display will be back.

3) Note Repeat Function

When [TIMING CORRECT] and a Key pad are pressed and hold down during Real time write, the pattern data for the corresponding sound is entered by the interval set to the Timing Correct function (Refer to the following explanation for details). It is convenient for example, when entering high hats, etc. with many pitches.

4) Setting the Timing Correct

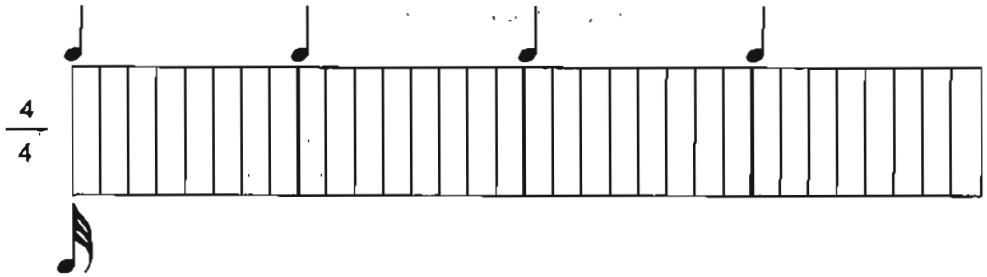
Specifies the interval within one measure, that functions when using the Note Repeat function. The pattern data is entered by this interval.

a. Press [TIMING CORRECT] at STOP, the display will show the following:

b. Select the value from within the following using TEMPO/DATA knob.

08(=1/48), 12(=1/32), 16(=1/24), 24(=1/16),
32(=1/12), 48(=1/8), 64(=1/6), 96(=1/4)

Example: When setting "12" in 4/4 time.



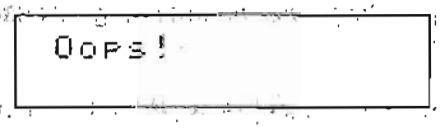
The Note Repeat function enables you to automatically enter the pattern data within one measure by the 32th note.

* By successfully setting the interval in relation to the time it will be useful when producing rhythms in 3 beats or odd beats, or when entering a lot of short notes within one measure.

c. Press TIMING CORRECT again to return to the previous display.

5) Notes on Real Time Write

>>The maximum data entry for each User pattern is 300 notes. If more than 300 notes are entered during Real time write, the display will show the following and the rhythm will stop.



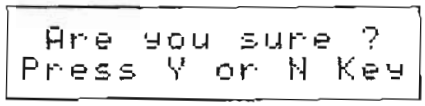
>>The XR10 will simultaneously sound the notes at the maximum of 8, so that in case 9 sound data have been entered at the same time, one odd sound will not be reproduced.

6) Saving the Pattern Data

The pattern data written in the Real time or Step write will be lost if another mode is selected or the XR10 is turned off before saving (storing) it in the memory. The following explains how to save the pattern data as a User pattern.

a. Press [EDIT] with Real time write stopped (or in Step write). The display will show the following:

b. Set the tempo using [TEMPO/DATA] knob or [+/Y], [-/N] keys and press [ENTER]. The display will show as follows:



- **The tempo specified in this operation will be the Preset tempo for the pattern to be played.**
- **At this time, pressing [-/N] key leads you to the previous display without saving. (Continue writing the pattern in Real time or by Step.)**
- **At this time, pressing [EDIT] leads you to the 4 menus display without saving the pattern data.**

c. Press [+/Y] key. And the following message will be shown in the display for a while.

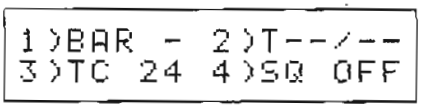
e. When saving is completed, the pattern play mode will return.

- **If the XR10 is turned off with the message "COMPLETE" being displayed, it may be damaged or malfunction. Remember to handle it with care.**

3. Step Write

a. Select "2: STEP" from the 4 menus of the Pattern write mode (Refer to p.40 for details).

b. The 4 parameters are shown in the display.



* As with in the Real time write, if the rhythm data has been already entered for the pattern currently selected, neither the value of "1) BAR" nor "2) T" can be altered.

c. Select each of 4 parameters using the Ten key and set the value with [TEMPO/DATA] knob.

The values of "1) BAR" and "2) T (Time signature)" are set with the same procedure as in the Real time write. (Refer to p.42 for details).

3) TC (Timing Correct): When you move from the point to another within a measure by the interval, select from the following:

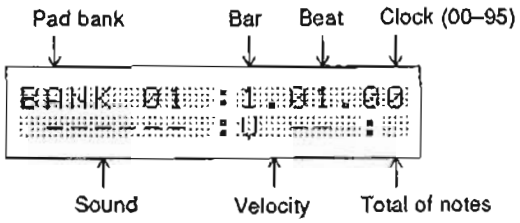
08(=1/48), 12(=1/32), 16(=1/24), 24(=1/16),
32(=1/12), 48(=1/8), 64(=1/6), 96(=1/4)

4) SQ (Auto Scan): Select either to use the Auto Scan function (ON) or not (OFF).

* Unless the value of "1) BAR" and "2) T" are set, you cannot perform the following procedure, (Once the value has been set, they cannot be altered).

* If needed, set the value of "3) TC" "4) SQ" (They can also be altered later.).

d. Press [ENTER] when finished setting the 4 parameters. When the display shows the following, the Step write is available:



* Press [ENTER] again to return to the previous display.

Pad Bank: Select the one you wish pressing [PAD BANK] (Refer to p.15 for details).

Bar, Beat, Clock: Shows the Bar number and the point (by 1/96 clock) within the Bar by the Beat and Clock numbers.

Sound: Shows the name of a sound entered on the point.

Velocity: Shows the velocity (intensity) with which a sound has been entered within the range of 01 to 15.

Total of notes: Shows the total of sounds entered on the same point.

1) Step Write

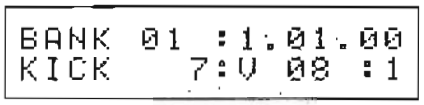
a. Move to the position you wish the sound to be reproduced using [+/Y] , [-/N] keys or [<] , [>] keys and enter the pattern data by actually hitting the corresponding Key pad #1-#15.

* [+/Y] key allows you to move forward and [-/N] key to move backward.

* [>] key allows you to move forward by a 1/384 step within a measure and [<] key to move backward by that amount.

b. The display shows the name of the sound, the velocity (intensity) and the total of notes (sounds) at the point when the pattern data is entered.

Example: Selecting the Pad Bank 01 and hit the Key pad #1



* Even if you hit any Key pad, a value of "08" will be entered as the velocity data. (This can be altered later.)

* When several sounds are entered at the same point, a total of up to 8 is shown by a Corresponding more than number but the total over 8 is shown by "*".

* [^], [v] keys will alternately show the name of the sound entered on the same point.

c. Continue making the pattern entering the various data and alternate the Pad Bank if required.

* The entered sound is reproduced when moving to another point. Therefore holding [+/Y] key down, will enable you to monitor the pattern in some tempo. (When "4) SQ" is set to "OFF").

* Pressing [ENTER] in this Step write display leads you to the 4 parameters display so that you can reset the Timing Correct and the Auto Scan functions. If no pattern data has been entered, you can also reset the Bar and the Time Signature.

2) Useful Functions in Step Write

>> With START/STOP
Pressing START/STOP leads you from the current point onto the first point within the Bar.

>> With TIMING CORRECT
Press TIMING CORRECT and the interval value set for the parameter "3) TC" will be added to the current point value, and you can move forward to another point.

Example: In case of the current point value "1.01.04" and "TC = 96"
Pressing TIMING CORRECT leads you onto the point valued "1.02.04".

Moving forward by pressing TIMING CORRECT enables you to enter the data by the Timing Correct value (interval).

>> With BREAK/CONTINUE
Pressing TIMING CORRECT will simply make an additon of the time interval to the current point value, so that you may not always move to a suitable point. In this case, by pressing BREAK/CONTINUE , the odd value will be corrected automatically to the Timing Correct value (interval set for "3) TC").

Example: In case of the current point value "1.01.11" and "TC = 96"
Pressing TIMING CORRECT leads you to the point valued "1.02.11" then pressing BREAK/CONTINUE takes you to "1.02.00".

>> With Auto Scan function
To use this function, select "4) SQ" and set it to "ON" in the 4 parameters display.

During Step write, if moving within the Bar with +/Y, -/N keys, it will automatically stop at the point where the data wasentered. This function is very useful for making sure of the points of data entry so that every point is scanned one after another.

3) Erase

The data entered Step write can be erased individually.

a. Move to the point and have the data shown in the display.

* **If several data exist on the same point, use , ^, v keys to select the name of the sound to be erased.**

b. Press ERASE . The display will show the following and the data will be erased. Erasing completed, the previous display will be shown.

4) Editing the Velocity

In Step write, all velocity data of the sounds are entered with the value "08". But once entered, the value can be edited (modified) individually within a range of 02 to 16.

a. Press ACCENT and hold it down and hit the Key pad #1-#15 corresponding to the sound.

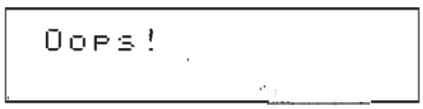
b. The value of the sound shown in the display will be re-entered to the intensity with which you hit the Key pad within the range of 01 to 15.

* **If case no sound data has been entered, this operation is not available.**

* **If case several data exist on the same point, use ∧, ∨ keys to select the name of the sound to be edited.**

5) Notes on Step Write

>>The maximum data entry for each User pattern is 300 notes. If more than 300 note are entered during Step write, the display will show the following and Step write won't be available at that time.



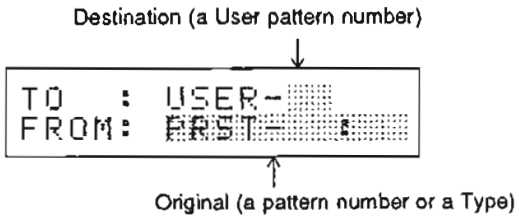
6) Saving the Pattern Data

As in Real time write, the pattern data written in Step write will be lost if another mode is selected or the XR10 is turned off before saving (storing) it in the memory. save it as explained on p.46.

4. Copy

This function allows you to copy one of Preset patterns or previously produced User patterns to another User pattern. If you make a new rhythm pattern similar to the one already written, just copy it then rewrite a portion of it. This will save you a lot of time and effort.

a. First select "3) COPY" from the 4 menus shown in the display. (Refer to p.40 for details.) The display will show as follows:



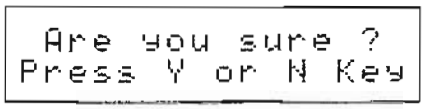
* If a pattern data has been already written for Destination User pattern, the message "OOPS!" is shown in the display to indicate that this operation is not available.

b. Select a pattern number or a Type as Original and have them shown in the display.

* Actually, first select either a Preset pattern or a User pattern using [<], [>] keys as the original. Then enter the pattern number using the Ten key. In the selection of a Preset pattern, select the Type and the first or second measure of the Variation to be copied as in the Pattern mode (Refer to p.23 for details).
Furthermore, in case selecting the Intro, press [INTRO/END] and [START/STOP] for the Ending.

c. Make sure of the selection of both the Original and the Destination, and then press [ENTER]. The display will show as follows:

d. Set the tempo with [TEMPO/DATA] knob or [+/Y], [-/N] keys and press [ENTER]. The display will show as follows:



e. Press [+/Y] key to perform the copy and the following will be shown for a while. When the copy is completed, the pattern play mode display will be back.

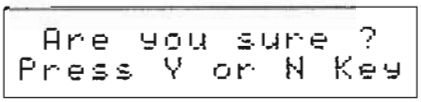
* Pressing [-/N] key will lead you to the copy display. (same as in the operation a.)

* Pressing [EDIT] will lead you to the 4 menus display without copying.

5. Delete

This function allows you to delete the User pattern data currently selected. It is useful when eraing several unnecessary User patterns and when making a new User pattern.

a. Select "4) DELETE" in the 4 menus display. The following will be shown in the display:



b. Press [+/Y] key to perform the delete and the following display will be shown for a while. When the delete is completed, the 4 menus will be back in the display.

* **Pressing [-/N] key lead you to the 4 menus display without deleting.**

[4] Song Write and Play

A Song refers to a combination of various rhythm patterns that make up a song. The XR10 can be programmed for 20 songs worth of performances. These operations are all performed in the Song mode. The following indicates the structure of the Song mode.

Contents in the Song mode

Song play mode	○ **Song play** ○ **Song erase**
⇩	
Song write mode **(Song edit mode)**	○ **Song write** ○ **Song edit** • **Time** • **Repeat** • **Pattern delete** • **Pattern insert**
⇩	
Song save (store)	

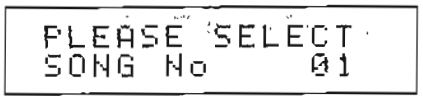
1. Song Write

1) Song Write Mode (Song Edit Mode)

a. In the Utility mode, set the Protect to OFF ("PROTECT OFF").

b. Press [MODE] several times to select the Song mode. The display will show as the following:

(Song number selection display)



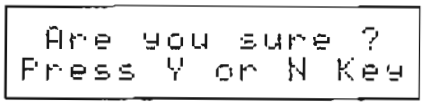
c. Using the Ten key, select the number of the song you wish to write and press [ENTER]. The song play mode display will be shown as follows:

* If any song data have been written for the selected song, the diplay will show the first measure of the song. If no data exist for the song, the diplay will also show the first measure of the song with its fields for the data blank.

(Song play mode display)

* Pressing [<], [>] keys leads you back to the previous display (the song number selection display).

d. In case the song data exist and you wish to erase them all, press [ERASE].

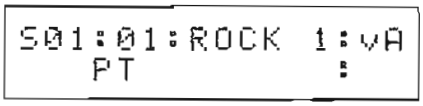


Following the message shown in the display, then pressing [+/Y] key, the data erasing will be performed with the "COMPLETE" message shown for a while. When the erasing is completed, a cleared song play mode display will be back.

* Pressing [-/N] key will lead you back to the previous song play mode display without erasing the existing song data.

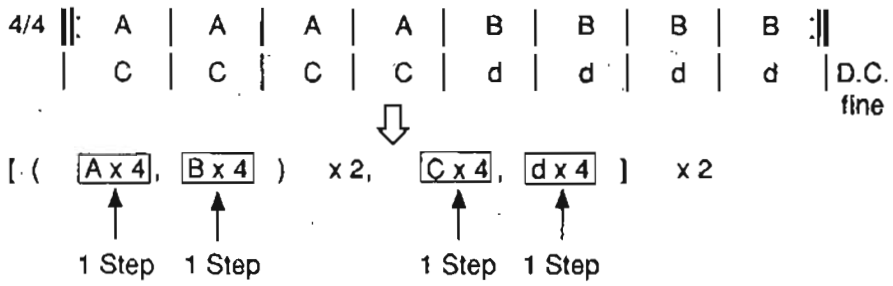
* If not required, skip the operation d.

e. Press [EDIT] to have the following display shown. Now Song write (Song edit) is available.

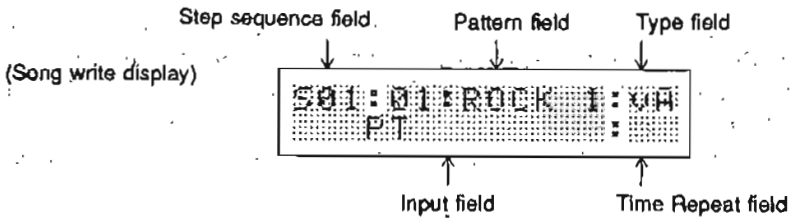


2) Song Write by Step Sequence

A Step sequence refers to a repetition of a pattern play In several times. A song Is written made arranging up to 99 Steps in the order you wish. Furthermore, the Repeat function allows you to set some Step sequences to be played in repetition so that you can write a song so easily.
Before learning how to actually write a song look at this schematic illus tration:



3) Song Write



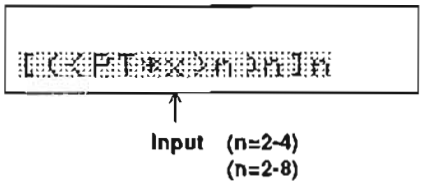
>> Step sequence field (01-99)
The Step sequence currently selected will be shown.
The Step sequence refers to repeating a pattern play several times.
Pressing [+/Y] key enables you to move forward and [-/N] key to move backward.

>> Pattern field
The pattern number entered in the Step sequence will be shown.

>> Type field
The Type (Fill-in, Break, etc.) of the Preset pattern entered in the Step sequence will be shown. In selecting a User pattern, no data will be shown.

>> Input field
The entered mark for the Time or Repeat will be shown.

*** Each position where the entered mark shown is as follows:**



>> Time / Repeat field
The mark for the Time or Repeat selected for entry will be shown.
Use [TEMPO/DATA] knob to select it and press [ENTER] to specify and show it in the Input field.

Time mark: This mark shows how many times the rhythm pattern will be played repeatedly. Set it within the range of "*2 (twice)" to "*8 (8 times)".

Repeat mark: This mark is used to repeat from one Step sequence to another. Set the Repeat Start mark to the former Step sequence to start the repetition and the Repeat End mark to the latter to end it. Repeat marks are as follows:

	Repeat Start mark	Repeat End mark		
Large Repeat	[	]2	]3	]4
Middle Repeat	(	)2	)3	)4
Small Repeat	<	>2	>3	>4

The procedure for Song write is as follows:

a. **a. First select a pattern number and its Type you wish to enter. Use the Ten key to enter the pattern number. Then select either the Preset pattern or the User pattern with [<] or [>] key. The Type of the Preset pattern will be selected by [FILL IN A], [FILL IN B], [FILL IN C] (for Fill-ins), [INTRO/END] (for Intros), [BREAK/CONTINUE] (for Breaks) and [START/STOP] (for Endings).**

* **When selecting a Variation, you have to specify the first measure or second measure to be entered. As with in the Pattern mode, press [TIMING/CORRECT] and hold it down then select it using [VARIATION A], [VARIATION B], [VARIATION C] or [FILL IN A], [FILL IN B], [FILL IN C] (Refer to p.23 for details).**

b. **Next enter the Time mark (to repeat on of the pattern) or the Repeat mark. Use [TEMPO/DATA] knob to select it and press [ENTER] to specify.**

* **If not required, skip this operation b.**

c. **Press [+/Y] key to move forward to the next Step sequence. Another Step sequence field will be shown.**

d. **Repeat the oprations a to c as required to write the song (using up to the maximum of 99 Step sequences).**

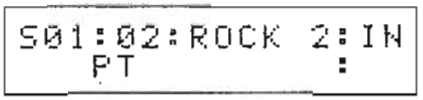
Let's try a easy song writing with the following example.

Example: In case writing a song only using the Preset pattern 02: ROCK 2

4/4	IN	vC	vC	vC	BR	Vb	Vb	Vb	FB	EN

1st Step sequence:

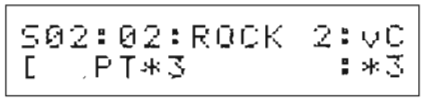
a) Enter the Intro pattern by [INTRO/END].
b) Move forward to the next Step sequence by pressing [+/Y] key.



↓

2nd Step sequence:

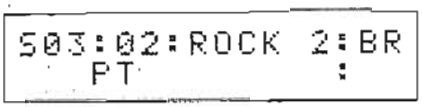
a) Holding [TIMING CORRECT] down, enter the first measure of the Variation pattern C by pressing [VARIATION C].
b) Using [TEMPO/DATA] knob, select the Repeat Start mark "[" and press [ENTER] to specify it.
c) Then enter the Time mark "*3" by following the operation b.



↓

3rd Step sequence:

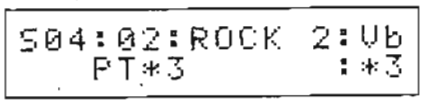
a) Enter the Break pattern using [BREAK/CONTINUE].



↓

4th Step sequence:

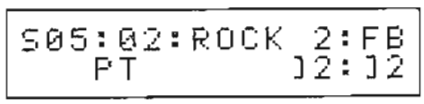
a) Holding [TIMING CORRECT] down, enter the second measure of the Variation pattern B by pressing [FILL IN B].
B) Enter the Time mark "*3".



↓

5th Step sequence:

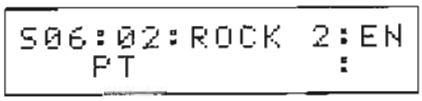
a) Enter the Fill-in pattern B by pressing [FILL IN B].
b) Enter the Repeat End mark "]2".



↓

6th Step sequence:

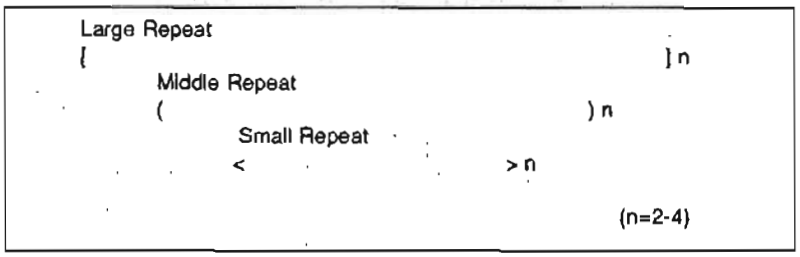
a) Enter the Ending pattern by pressing [START/STOP].



4) Repeat Function

This allows for the repetition from one Step sequence to another.
The repitition times can be set at 2 (twice) to 4 (4 times). 3 types of Repeat marks, Large, Middle and Small allow you to write a song of complex construction such as Small or Middle bracheted by Large; or Small by Middle in combination with one another.

*** A repetition bracketed by any type of 3 Repeat marks be set in the the same marks:**



Example: Setting the Repeat marks for Step sequences 01 to 06

[01 , (02 , < 03 , 04 > 2 , 05) 2 , 06] 2

This will actually be played as follows:

01	02	03	04	03	04	05	02	03	04	03	04	05	06
01	02	03	04	03	04	05	02	03	04	03	04	05	06

5) Correcting a Wrong Entry (Editing Function)

Wrong entries during song write can be easily corrected by the following procedure.

First select the Step sequence to correct with +/Y or -/N key.

>> Replacing the Pattern number or the Type
As in writing the data, select the Preset pattern or User pattern with < and > keys and replace the number with another you wish.
Type can replaced in the same way.

>> Replacing and Erasing the Time mark
As in writing the data, select a new Time mark you wish by TEMPO/DATA knob. Then press ENTER to replace it. To erase the Time mark, and press ERASE .

>> Replacing and Erasing the Repeat mark
As in writing the data, select a new Repeat mark you wish with TEMPO/DATA knob. Then press ENTER to replace it. To erase the Repeat mark, and press ERASE .

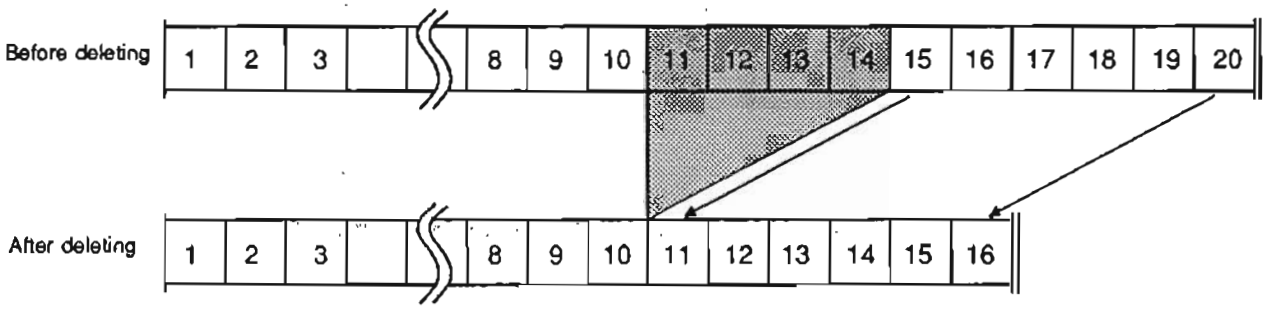
6) Deleting a Step Sequence (Editing Function)

This allows you to delete any unnecessary Step sequence(s) from the song.

a. **Using [+/Y] or [-/N] key, select the Step sequence to be deleted and have it shown in the display.**

b. **Then press [▽] key, and the message "COMPLETE" will be shown for a while. When the deleting completed, the next Step sequence display will be shown.**

Example: To delete the Step sequences 11 to 14, repeat the operation b. 4 times.



7) Inserting a Step Sequence (Editing Function)

This allows you to insert a Step sequence in the song.

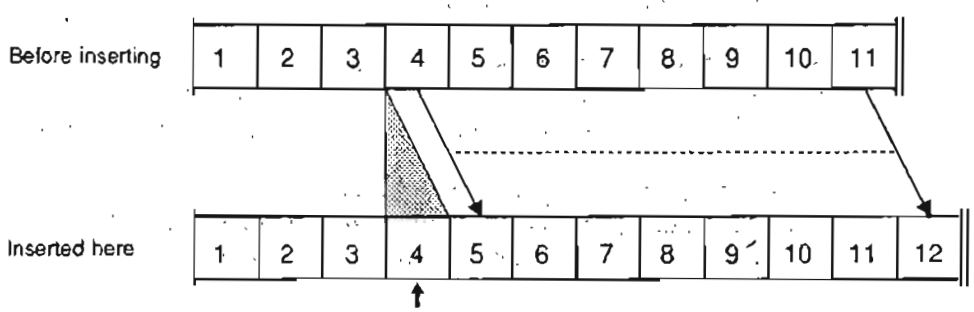
a. **Using [+/Y] or [-/N] key, look up the position where you wish to insert a Step sequence and have the sequence number (the position) shown in the display.**

b. **As in writing the data, enter the pattern number or the Type by pressing [△] key.**

c. **When the inserton is done, each following sequence will be one step later than it was previously positioned.**

d. **If required, set the Time or Repeat mark.**

Example: To insert a new Step sequence in the position of the 4th. Step sequence, press [▽] key with the Step sequence number "04" shown in the display.



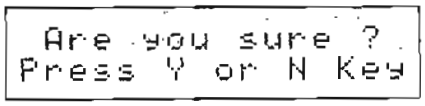
* **The maximum Step sequence entry for one song is 99 steps. Attempting to insert more than 99 steps will not be accepted. The insertion will not be done. The message "OOPS!" shown in the display.**

8) Saving the Song Data

The song data written in song writing (or song editing) procedures will be lost if another mode is selected or turning the XR10 is turned off before saving (storing) it in the memory. The following explains how to save the song data.

a. Press [EDIT] in the song write mode (song edit mode). The display will show as follows:

b. Set the tempo with [TEMPO/DATA] knob or [+/Y], [-/N] keys and press [ENTER]. And t he following will be show in the display:



- **The tempo you set here will be the initial tempo at which the song is played.**
- **At this time, pressing [-/N] key will lead you to the song write display without saving. (Continue writing or editing the song data.)**
- **At this time, pressing [EDIT] will lead you to the song select display (This display will be show first when you select the Song mode.) without saving.**

c. To press [+/Y] key, the message "COMPLETE" will be show for a while. When saving is completed, the song select display will return.

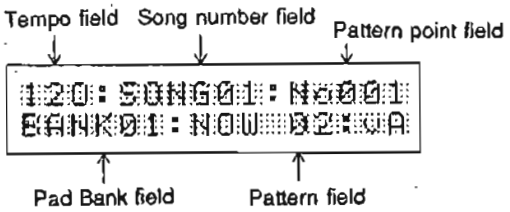
- **If the message "OOPS!" is show and then replaced by the song write display, it means that incorrect setting (ex. a couple of Repeat marks bracketed by the same marks, etc.) have been made in the data. In this case, chek the data setting again.**

2. Song Play

Now let's try playing a song you made in song write.

a. Press [MODE] some times for the Song mode.

b. Using the Ten key, select the number of the song you wish to play then press [ENTER].



>> Tempo field
First shows the Initial tempo you set when saving the song (this can be changed by [TEMPO/DATA] knob during song play).

>> Song number field
Shows the song number currently selected.

>> Pattern point field
Every pattern change occurs, the XR10 will count up the time by one point and show it in this field (if you have written the song in patterns of one measure, you can take it for the number of measures).

Example: In case you have written "vA*3"

vA*3 means vA+vA+vA so that each will be counted No.001, 002, 003.

>> Pad Bank field
Shows the Pad Bank currently selected (this can be changed by [PAD BANK]).

>> Pattern field
Shows the pattern number and Type currently played.
When a User pattern is played, "US" is shown for the Type field.

c. Press [START/STOP] to play the song from the beginning in the initial tempo.

d. To stop the song play, press [START/STOP] again.

- **When you wish to play the song again from the point you stopped, select the pattern point by [^] or [v] key while stopped. Then press [BREAK/CONTINUE] to start it.**
- **When the last pattern point is played and the song play finished, the rhythm will automatically stop.**
- **During song play, you can manually play the sounds by selecting the Pad Bank you like and hitting Key pads #1-#15.**
- **As in the pattern play mode, the Sound Replace function is available. (Refer to p.26. for details.)**

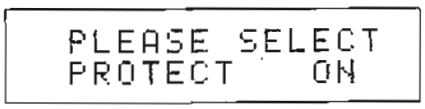
[5] Other Functions (The Utility Mode)

In the Utility mode, you can set the MIDI functions and other useful functions. The following functions can be set in the Utility mode:

1. **Setting the Memory Protect function to On/Off**
2. **Setting the MIDI receiving channel**
3. **Setting the MIDI transmitting channel**
4. **Setting the MIDI receiving note numbers**
5. **Setting the MIDI transmitting note numbers**
6. **Muting the MIDI transmitting sounds**
7. **Setting the MIDI clock**
8. **Bulk dump/Bulk load**
9. **Assigning sounds to Pad Banks**

General operation before each setting is as follows:

a. **Press [MODE] some times until Utility mode appears in the display:**



b. **Select the function you wish to set with [<] and [>] keys.**
Pressing [>] key will show each function in turn.
Pressing [<] key will show the previous function again.

c. **Set the value for the parameter (of the function you selected).**

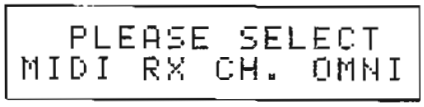
1. Memory Protect Function

This is for protecting all the data in the XR10. The data will be protected with "PROTECT ON" but not with "PROTECT OFF". Use TEMPO/DATA knob for setting.
PROTECT ON : You can neither edit nor write the data.
PROTECT OFF: You can edit or write the data as you wish.

* **The XR10 will be set to "PROTECT ON" automatically when it is turned on.**

>> The XR10 is equipped with MIDI jacks so that if it is connected with other external MIDI equipped devices, it will be possible to control them by XR10 or vice versa. The functions 2 to 7 below concern MIDI.

2. Setting the MIDI Receiving Channel



Using TEMPO/DATA knob, select the channel from among CH01-CH16 and OMNI. In selecting OMNI, the XR10 can receive messages on any channel.

3. Setting the MIDI Transmitting Channel

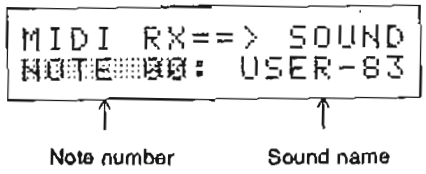
Using TEMPO/DATA knob, select the channel from among CH01-CH16.

Chart E:

Sound Assignment to MIDI Note number (Factory Settings)

NOTE	SOUND	NOTE	SOUND	NOTE	SOUND	NOTE	SOUND
0	83-USER	35	01-KICK 1	70	31-TOM2 H	105	70-USER
1	84-USER	36	01-KICK 1	71	21-RIMSHOT 1	106	71-USER
2	85-USER	37	41-CHOKE	72	22-RIMSHOT 2	107	72-USER
3	86-USER	38	02-KICK 2	73	61-TIMBALES L	108	73-USER
4	87-USER	39	40-RIDE 0	74	42-CLAPS	109	74-USER
5	88-USER	40	03-KICK 3	75	62-TIMBALES H	110	75-USER
6	89-USER	41	04-KICK 4	76	43-FINGER	111	76-USER
7	90-USER	42	23-HAT CL	77	44-CONGA 1	112	77-USER
8	91-USER	43	05-KICK 5	78	32-TOM3 L	113	78-USER
9	92-USER	44	24-HAT MD	79	45-CONGA 2	114	79-USER
10	93-USER	45	06-KICK 6	80	33-TOM3 M	115	80-USER
11	94-USER	46	25-HAT OP	81	46-CONGA 3	116	81-USER
12	95-USER	47	07-KICK 7	82	34-TOM3 H	117	82-USER
13	96-USER	48	08-KICK 8	83	47-CONGA 4	118	———
14	97-USER	49	38-CRASH 1	84	48-VIBRASLAP	119	———
15	———	50	09-KICK 9	85	63-AGOGO L	120	———
16	———	51	39-CRASH 2	86	49-GUIRO 1	121	———
17	———	52	10-KICK 10	87	64-AGOGO H	122	———
18	———	53	11-SNARE 1	88	50-GUIRO 2	123	———
19	———	54	26-TOM1 L	89	51-CABASA	124	———
20	———	55	12-SNARE 2	90	53-HITS	125	———
21	———	56	27-TOM1 M	91	52-TAMBOURINE	126	———
22	———	57	13-SNARE 3	92	54-TRIANGLE L	127	———
23	———	58	28-TOM1 H	93	55-TRIANGLE H		
24	———	59	14-SNARE 4	94	56-COWBELL		
25	———	60	15-SNARE 5	95	57-CLAVES		
26	———	61	59-SQUEAK L	96	58-WHISTLE		
27	———	62	16-SNARE 6	97	35-TOM4 L		
28	———	63	60-SQUEAK H	98	36-TOM4 M		
29	———	64	17-SNARE 7	99	37-TOM4 H		
30	———	65	18-SNARE 8	100	65-CHOP		
31	———	66	29-TOM2 L	101	66-USER		
32	———	67	19-SNARE 9	102	67-USER		
33	———	68	30-TOM2 M	103	68-USER		
34	———	69	20-SNARE 10	104	69-USER		

4. Setting the MIDI Receiving Note Numbers



This is for setting the MIDI receiving note number used to control sound reproduction of the XR10 from other external MIDI devices.

a. Using TEMPO/DATA knob or ∧, ∨ keys, select the receiving note number within the range of 00 to 127.

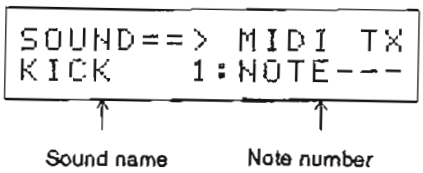
* **At this time, the diplay will also show a sound name currently assigned to the selected note number. However, when "————" has been shown for the sound name, it means that no sound is assigned to the note number.**

b. Next select a sound from among the Preset sounds (01 to 65) and User sounds (66 to 97) using TEMPO/DATA knob or +/Y, -/N keys. In case setting the sound number higher than 97, "————" will be shown meaning that no sound is assigned to the note number.

* **At this time, if you hit the Key pads #1-#15, the currently selected sound will be reproduced and transmitted with the MIDI transmitting note number which is given the explanation in the following chapter "5. Setting the MIDI transmitting note numbers".**

* **A factory prepared sound assignment to MIDI note number is shown on Chart E.**

5. Setting the MIDI Transmitting Note Numbers



This is for setting the MIDI transmitting note number with which the XR10 can control the sound reproduction of other external MIDI devices.

a. First select the sound using TEMPO/DATA knob or ∧, ∨ keys.

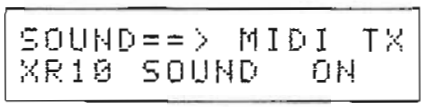
* **At this time, the diplay will also show the transmitting note number currently assigned to the sound. In case "—" is shown for the note number, the selected sound is not assigned to any note number.**

b. Next select a note number to be assigned to the sound from 00 to 128 with the Ten key or [+/Y], [-/N] keys. In case selecting '128', however, "—" is shown for the note number.

* At this time, if you hit the Key pads #1-#15, the currently selected sound will be reproduced and this note number will be transmitted simultaneously.

* Note that the MIDI transmitting note numbers are not set when the XR10 is shipped.

6. Muting the MIDI Transmitting Sounds



This enables you to select whether to reproduce or mute the XR10's sounds assigned to the MIDI transmitting note numbers (in "5. Setting the MIDI transmitting note numbers") during a pattern or a song play and during Real time write of User patterns. So it will be helpful when you wish to make rhythm ensemble with the XR10 and other external MIDI instruments.

a. Set this function using [TEMPO/DATA] knob.

>> XR10 SOUND "ON" : Reproduces the sound.
>> XR10 SOUND "OFF" : Mutes the sound.

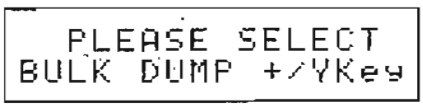
* In case this function has been set to "OFF", you cannot reproduce the sound whereas you hit the corresponding Key pad during a pattern or a song play and during Real time write of User patterns. However, when the rhyhtm is stopped, the sound will be reproduced without concerning its setting (ON/OFF).
When hitting the corresponding Key pad, the assigned MIDI transmitting note number will be always transmitted.

7. Setting the MIDI Clock

Use this function when playing the XR10 and other MIDI devices (a sequencer or another rhythm machine, etc.) at the same tempo (sync play).
The XR10 can receive the MIDI clock with "ON" set by TEMPO/DATA knob.

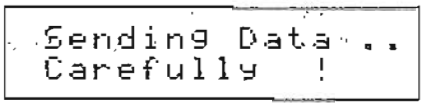
MIDI CLOCK ON : The XR10 will start or stop the performance synchronizing with other MIDI devices (in the pattern write or Song mode).
MIDI CLOCK OFF: The XR10 will synchronize with other MIDI devices. (Only in the Song mode)

8. Bulk Dump/Bulk Load



This is for sending/receiving all the data for the XR10 using MIDI exclusive messages to/from the external MIDI device (sequencers or MIDI equipped computers, etc.) that is capable of dealing with exclusive messages.

a. First set the receiver to receive the bulk data from the XR10 then press +/Y key. The following will be shown in the display:



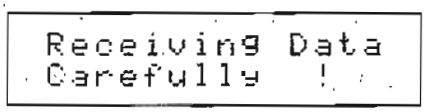
b. When the Bulk dump is completed, the previous display will return.

*** When transmitting the bulk data, ensure to connect the XR10's MIDI out jack to MIDI in jack of the external device with a standard MIDI cable. (This is called "One way" connection. In this case, bi-directional "Hand shake" connection is not necessary.)**

>> Receiving the Bulk Data

When The XR10 receive the bulk data from the external device (sequencers or MIDI equip ped computers or another XR10, etc.), first connect the XR10's MIDI in jack to MIDI out jack of the external device. Then have the receiver XR10 in the Bulk dump display. (The bulk data cannot be received in any other displays.)

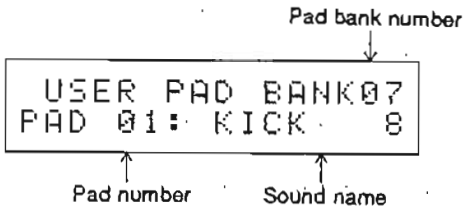
a. When the XR10 is receives the bulk data, the display will show as follows:



b. When receiving is completed, the message "COMPLETE" is shown and replaced by the initial display when you turn the XR10 on.

*** If the XR10 fails to receive the data, an error message will be shown. In this case, first ensure again to connect the XR10's MIDI in jack to MIDI out jack of the external device. Then turn the XR10 off and repeat the procedure again.**

9. Assigning Sounds to Pad Banks



This is for free assigning the sounds freely to Key pads #1-#15 of Pad Banks 6 to 10. The Preset sounds 01 to 65 and the User sounds 66 to 97 can be assigned. (Sound to Pad Banks 1 to 5 are fixed and can't be altered).

a. **First press [PAD BANK] to select the Bank (06 to 10) where you wish to assign the sounds.**

b. **Next hit the Key pad (#1-#15) to assign a new sound, then the sound number currently assigned to the pad will be shown in the display.**

c. **Select the sound number you wish using [TEMPO/DATA] knob or [-/N], [+/Y] keys.**

d. **If required, repeat the operations b to cto assign the sounds to the pads in the same Bank. (Refer to the Chart A on p.16.)**

(16 BIT PCM DRUM MACHINE)

Date: 1990.1.10

Model XR10

MIDI Implementation Chart

Version: 2.0

Function . . .		Transmitted	Recognized	Remarks
Basic	Default	1	1 - 16	
Channel	Changed	1 - 16	1 - 16	
Mode	Default	Mode 3	Mode 1	
	Messages	X	X	
	altered	********		
Note		0 - 127	0 - 127	
Number:	Sound Module	********	X	
Velocity	Note ON	○ 9n V = 1 - 127	○ 9n V = 1 - 127	
	Note OFF	X	X	
After	Key's	X	X	
Touch	Channel's	X	X	
Pitch Bender		X	X	
Control Change		X	X	
Program		X	X	
Change:	True number	********	X	
SYSTEM EXCLUSIVE		○	○	AKAI ID: 47H XR10 ID: 4DH
System Common	: Song Position	X	X	
	: Song Select	X	X	
	: Tune Request	X	X	
Real	: Clock	○ (* Note 1)	○ (* Note 2)	
Time	: Command	○	○	
	: Local ON/OFF	X	X	
Aux	: All Notes OFF	X	X	
Messages	: Active Sensing	X	X	
	: Reset	X	X	
Notes		Note 1: Only in the song play mode.	Note 2: Not available in the Pattern play mode.	

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○ : Yes

Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO