General Information

Thank you for purchasing the MFB-502, a compact drumcomputer with eight real analogue sound sources. Realtime control is provided for each sound in various ways. The MFB-502 also includes 72 programmable patterns (Rhythmen), each with individual fill-in, that can be combined to eight complete songs.

Setting Up

To power up the MFB-502, insert the supplied Power Supply. Connect MIDI IN to any keyboard´s or sequencer´s MIDI output. The Stereo Out has to be connected to an amplifier. It is also possible to use the individual outputs of the sound sources by connecting their outputs to a mixing console. Using an individual output automatically excludes that specific sound source from the Stereo Output. Now turn on the drumcomputer by pressing the ON/OFF button and then the amplification.

Instruments

The eight instruments (1/BD...8/HH) can be manually triggered when hitting their individual white instrument buttons on the machine. Of course all instruments can be played by MIDI, too.

B (35) = BD Hi, C1 (36) = BD Lo, C#1 (37) = SD Hi, D1 (38) = SD Lo, D#1 = Clap Short E1 (39) = Clap Long, F1 (40) = Lo Bongo, F#1 (41) HiHat, G1 (42) = HiBongo, G#1 (43) = HiHat, A1 (44) = LowTom, A#1 (45) Open HiHat, B1 (46) = MidTom. C2 (47) = MidTom, C#2 (48) = Cymbal, D2 (49) = HiTom.

Each sound source offers individual level control. Additonal controls are:

Bass Drum/Tom/Bongo
Attack controls the intensity of the first soundphase. Turn clockwise to enhance or even overdrive the attack level. Pitch adjusts the instrument´s tuning. Turn the knob clockwise for higher pitches. Decay adjusts the length of the instrument´s release phase. Turn clockwise to increase. This knob also influences the general pitch of the instrument.

Snare Drum
Attack controls the level of the initial sound phase. Turn the control clockwise for more bite or even overdrive the sound. Use Noise to add floor to the sound – the level of noise is incread by turning Noise clockwise. Decay controls the release time of the snare drum sound as well as the general pitch. Turn clockwise for longer release times and higher pitch.

Hand Clap
Attack controls the width/length of the clap sound. Turn clockwise for longer release time. Tone adjusts the brightness. Turn clockwise for a brighter sound. Decay adjusts the reverberation time. Turn clockwise for a longer reverb.

Cymbal
Attack controls the first sound period of the cymbal sound. It emulates the intensity of the drum stick´s hit. Turn up the knob if you want the sound to reach the sustain phase at medium volume quicker. Tone adjusts the character of the cymbal sound between noisy (left position) and metallic (right position). Finally Decay controls the overall length of the sound.

HiHat
Decay adjusts the length of the sound.

Sequencer

Hit **Play** to start (or stop) the sequencer. The Tempo control sets the speed of the playback. Each pattern contains a basic rhythm and a fill-in. Hit **Fill** to toggle between the playback modi. The left LED indicates that only the basic rhythm will play. The right LED indicates that the fill-in will always follow the basic rhythm.
Selecting the rhythm patterns is easy. Press and hold **Rhythm**. The white instruments buttons select the first eight patterns. To select higher memory locations, press a second white button (**Rhythm** is still hold). The LED's will display the corresponding location.
Selecting different rhythmic patterns can be done live on the fly without worry about getting out of timing. The MFB-502 will always play the previous pattern to the end before starting the next.

Programming sequences

Select a rhythmic pattern before recording. Press **Play** to verify if any rhythm is stored on that location. If so press and hold **Rec** and **Rhythm** for 1 second to erase.
Now select an instrument first: Press and hold **Rec**, while selecting the instrument (eg **1/BD**). The MFB-502 now displays the BD track lane. Use the eight instrument buttons to set and delete odd 1/16th notes. For even 1/16ths press **Shift** at the same time.
The second BD (BD Hi) is simply selected by pressing **1/BD** twice while holding **Rec**.

All instrument tracks are programmed the same way. Select **Rec** and
1/BD Bass Drum Lo (press twice to select BD Hi)
2/SD Snare Drum Lo (press twice to select SD Hi)
3/HC Hand Clap short (press twice to select long Hand Claps)
4/LT Lo Tom (press twice to select Mid Tom, press three times to select Hi Tom)*
5/HT Lo Bongo (press twice to select Hi Bongo)
6/CY Cymbal
7/OH Open Hi Hat
8/HH Closed Hi Hat
* The pitch range of the three tom sounds is adjusted with the Pitch control.

Setting the Accent is similar to an instrument´s programming. Press **Rec** and **Shift** to set full accent, press **Shift** twice to set medium accent.

Songs

The MFB-502 has eight song memory locations. Each can hold up to 64 patterns that can be freely arranged for playback.

Playback

Press **Song** and one of the white instrument buttons to activate Song Mode. **Play** starts the selected song.

Recording

Press **Song** and one of the white instrument buttons to enter Song mode. To start programming the song sequence press **Rec**. Now enter the pattern memory locations step by step. Specifiy between basic rhythm and fill-in first. Then press and hold **Shift**, select the rhythmic pattern with the white instrument buttons and then release **Shift**. Proceed in the same way to select the next pattern in your song. To define the end of the Song simply press **Rec**. Ready.

MIDI Channel

To change the MIDI channel, press and hold **Shift** and **Fill**. Use the tempo control to define the MIDI channel. The LED will indicate the corresponding value 1 – 16. Exit and store by releasing Shift and Fill.

MIDI Clock

The MFB-502 can run in internal or external mode. Change between these modi by switching the machine on while pressing **Play**. Only in external mode the MFB-502 will accept MIDI Start, Stop und Clock information.

Owners Manual

Drumcomputer MFB-502