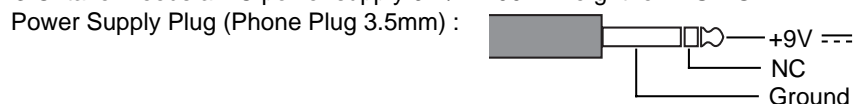# Operating Instructions: EES M3 Oktaver.

The purpose of the EES M3 Oktaver is to shift MIDI Notes from -6 to +5 octaves on one selectable MIDI Channel.
A second task is to split one out of sixteen MIDI Channels.

For operating the M3 Oktaver needs a DC power supply 9V / > 100mA e.g. the EES NG4.

Power Supply Plug (Phone Plug 3.5mm) :

+9V
NC
Ground

The EES M3 Oktaver is equipped with one MIDI In jack, two equivalent MIDI Out jacks and one MIDI Thru jack. The processed MIDI data is routed from MIDI In to the two MIDI Out jacks, the original MIDI In data is routed to the MIDI Thru jack.
For operating connect MIDI Out of the controlling keyboard with MIDI In of the M3 Oktaver. MIDI Out of the M3 Oktaver has to be connected with MIDI In of the sound modules.
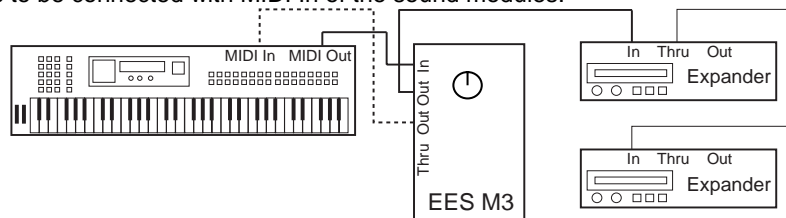
MIDI octave shift.
The rotary switch enables to select the interval to shift. In position 0 there is no shifting, e.g. in position 1 the sound modules will sound one octave higher. It is possible to shift down up to 6 octaves and up to 5 octaves higher.
Only one MIDI channel will be shifted. The channel to be shifted is chosen by the "**Kanal**" rotary switch.
If it is possible to switch the controlling Keyboard to MIDI Local Off, you can connect the MIDI In from the Keyboard with a MIDI Out of the M3 Oktaver (dashed line). In this way all connected instruments will be shifted by the rotary switch of the M3 Oktaver.

MIDI Split.
The Smart Split allows to split one keyboard into two MIDI channels. The Smart Split recognizes the MIDI channel you want to split. To set a new split point, you have to hold down the Split push-button. The next keypress will set the split at the position of the pressed key - with the MIDI channel of the respective key. Right from the split the "old" MIDI channel still remains. On the left side the next higher channel number is used: right 1 with left 2, 5 with 6 but 16 with 1!
Always the last pressed key before releasing the Split push-button will be accepted.
The split point will be stored into the EEPROM of the M3 Oktaver. It can be replaced anytime by a new split. If you choose the lowest note, you will not recognize any split.
Please remember: Only MIDI Out will be splitted, not the keyboard at MIDI In (except you are using the MIDI Local Off mode).
Attention: Octave shifting is used for the **MIDI Out Channel!** That means, if channel 2 is splitted and the "Kanal" rotary switch is set to Channel 3, the left (low) area will be shifted!

Hidden function: **Octave Shift for each channel.**
As an extra function you can choose a different octave shift for each MIDI channel. This octave shifting will be stored in the internal M3 Oktaver EEPROM. On the selected MIDI channel the stored value will be overwritten by the position of the rotary switch.
To do the octave shift you have to execute the following procedure:
First you have to choose the MIDI Channel to be shifted with the "**Kanal**" rotary switch. Then you have to press the **Split** push-botton until you have chosen the octave shift with the rotary switch. To choose the actual position of the switch you must toggle it. In position 0 there is no shifting. You can select a different octave shift for any of the 16 MIDI channels.
Attention: During programming octave shifts, the M3 Oktaver should not receive MIDI notes, otherwise you will get a strange split point. Like for the split point, the MIDI Out channel is valid for the octave shift. So you can choose different shifts for both split areas.

All Notes Off.
By moving the rotary switch, Kanal switch and Split push-botton the EES M3 will send All Notes Off and All Sounds Off messages.

Resetting M3 Oktaver.

To set back the M3 Oktaver to an initial state (erasing all octave shifts and the split point) press the Split push-button before power up and hold the Split push-button for a minimum of 1 second.