

# **Operating Instructions**

## **EES M3 Multi Kanal**

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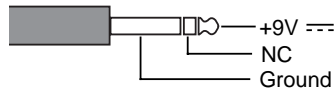
The M3 Multi Kanal performs three different functions:

1. Renumbering of one MIDI channel.
2. Multiplying of one MIDI channel.
3. Filtering of MIDI channels.

## Power.

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

Power Supply Plug (Phone Plug 3.5mm) :

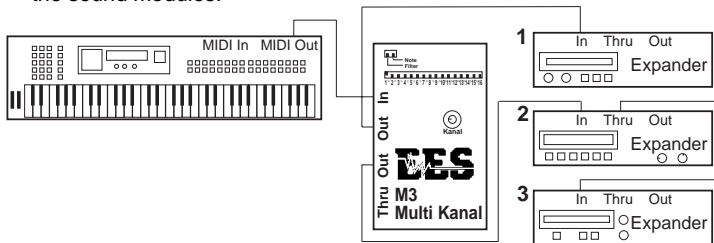


## MIDI Connections.

The EES M3 Multi Kanal is equipped with one MIDI In jack, two equivalent MIDI Out jacks and one MIDI Thru jack.

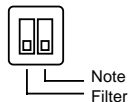
The processed MIDI data is routed from MIDI In to the two MIDI Out jacks, the original MIDI In data is routed to the MIDI Thru jack.

For operating connect MIDI Out of the controlling keyboard with MIDI In of the M3 Multi Kanal. MIDI Out of the M3 Multi Kanal has to be connected with MIDI In of the sound modules.



## 1. Renumbering of one MIDI channel.

DIP-Switch :



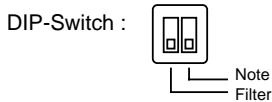
The MIDI channel to renumber has to be selected by the rotary switch "**Kanal**". All DIP-switches 1 to 16 have to be off ( down ) except the switch for the channel you want to renumber, this switch must be set up .

All MIDI data of the selected MIDI In channel will be sent with the new channel number.

## 2. Multiplying of one MIDI channel.

There are two versions of multiplying MIDI channels.

### 2.a. All MIDI Data.



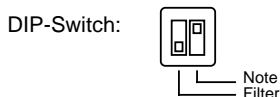
The MIDI channel to renumber has to be selected by the rotary switch "**Kanal**".

Any of the 16 DIP switches 1 to 16 switch on one MIDI channel to be sent. So it is possible to multiply the In channel up to all 16 MIDI channels.

Remember: With each channel switched on, the amount of data to be sent will be increased. This could lead to a bad MIDI timing.

Caution: The incoming MIDI channel will be sent only if the DIP-switch with the corresponding MIDI channel is switched on.

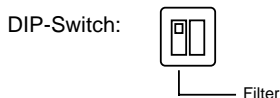
### 2. b. Note data only



Use the same channel selecting like "2.a. All MIDI Data".

The channel multiplying function is the same like 2.a. but only Note On / Note Off messages will be multiplied. The rest of the MIDI data ( e.g. Pitch or Modulation ) will be filtered. Only data from the MIDI channel with the MIDI In channel number will be sent if this channel is switched on. This will help to reduce the amount of multiplied MIDI data.

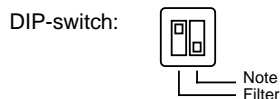
## 3. Filtering of MIDI channels.



If the "Filter" DIP-switch is on ( upper position ), the "Kanal" rotary switch is out of function. The MIDI channels will be switched by DIP-switches 1 to 16.

There are two versions how to filter MIDI Data.

### a. All MIDI Data.



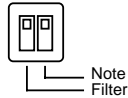
Any MIDI channel with DIP-switch in **upper** position will be filtered.

Any MIDI channel with corresponding DIP switch in lower position will be passed thru.

### ...3. Filtering of MIDI channels.

#### b. Filtering of all "none note"-data.

DIP-switch:



All MIDI channels with DIP-switch setting in upper position will be processed. For this channels **only** note-data will pass the M3 Multi Kanal! All channel related messages like Modulation or Programchange will be filtered.

Functions 2.b. and 3.b. are right for reducing MIDI data. This will help to improve the MIDI timing. Mainly MIDI data like Aftertouch or Pitch will lead to big quantities of data if they are multiplied. So it could be usefull not to multiply or to filter "none-note"-data.

#### All Notes Off.

By moving the "Kanal" rotary switch or the Filter switche the EES M3 Multi Kanal will send All Notes Off and All Sounds Off messages on all 16 MIDI channels. By moving one of the Channel switches 1 to 16 on the corresponding channel All Notes Off and All Sounds Off messages will be sent. So only very early MIDI devices should produce "drones" when switching any M3 Multi Kanal switch.