STEREOPING

▼ MIDI IN ▲ MIDI OUT ▲ MODE

1 | 2

STEREOPING

LAYER

CHAIN

LEARN MIDICHANNEL

1

2

SYSEX

POLYCHAINER
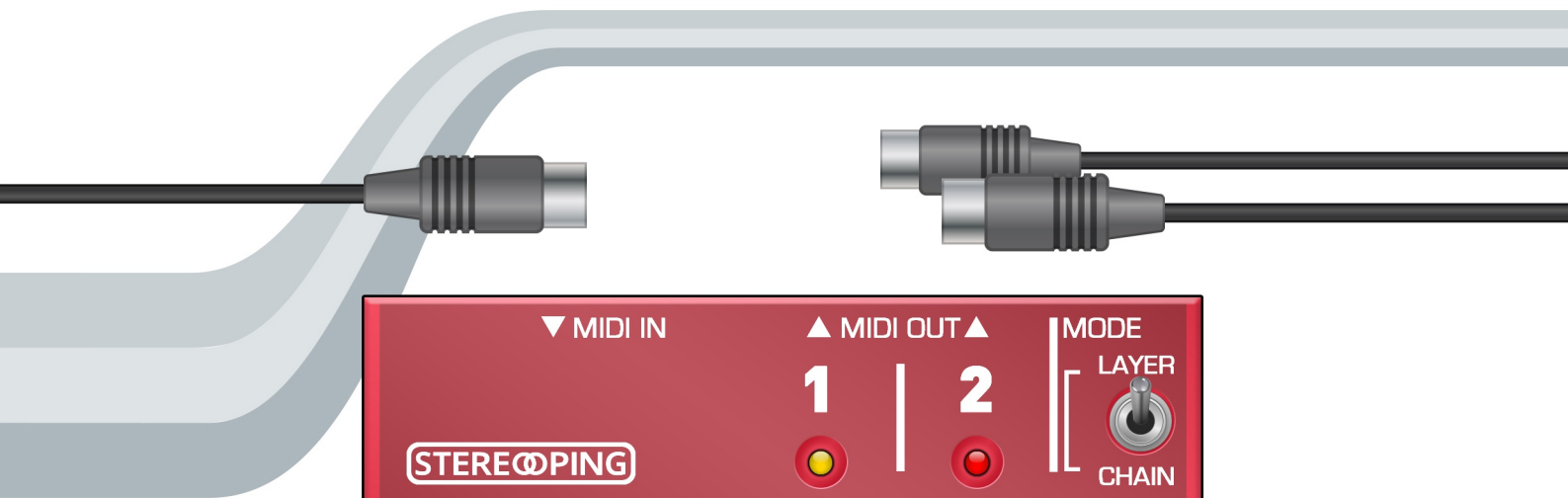
Owner´s Handbook

Terms

„GROUP-Mode" is a term you will find in the Oberheim manual for the Matrix1000 – it describes a constellation making a 12-voice (or more) Matrix out of two (or more) 6-voiced Matrix 1000. We are using the term 'POLY Mode' which perfectly means the same thing.

What's the function of the PolyChainer?

The PolyChainer distributes incoming midi notes on it's MIDI IN jack one after the other on it's two MIDI OUT jacks. In relation to the position of the switch labeled POLY / LAYER you can choose whether it should double the **POLY**phonie (max. 6 notes per MIDI OUT) or if you prefer **LAYER**ing the sounds of 2 connected synthesizers.

Originally it was designed for enabling the Synth Programmer to use the GROUP mode with two Matrix (1000 or 6/6R or even mixed) for doubling polyphony. Without the PolyChainer this is not possible for two reasons:
  • the Matrix 6 does not offer the GROUP mode at all
  • the Matrix 1000 seems to have a little bug: Midi Parameter Change SysEx-data being forwarded on it's MIDI THRU jack is destroyed, parameter changes therefore can not be forwarded to the 2nd Matrix.

The PolyChainer solved this by not using the M1000's own Group mode. Instead it distributes the notes alternately to the connected synthesizers. Further it allows to select which one of the synths will be provided with parameter-change data. This even works with two Matrix 6 or 1000 mixed in all combinations.

Power supply

The PolyChainer does not have a jack for power supply. It will be supplied with energy by the midi device connected to it's MIDI IN jack. This perfectly works with the vast majority of midi equipment.

When being switched on - by connecting it's MIDI IN with a MIDI OUT jack or powering up the device connected to MIDI IN – the PolyChainer should blink a few times quickly with it's LEDs. If it should not give light signs on powerup the supplying midi device is not capable of supplying the PolyChainer with sufficient energy.

Connections

The following does not make a difference whether you are using a Matrix 1000 or 6/6R. The PolyChainer will be plugged between the Synth Programmer's MIDI OUT 1 and the first Matrix's MIDI IN. The midichannels of the Programmer and both connected Matrixes should be identical.

Program Management for Programmer + 2 x Matrix

The teamwork of the first Matrix (plugged between Polychainer's MIDI OUT 1 and the Programmer's MIDI IN 1) and the Programmer itself behaves exactly as if the PolyChainer would not be there at all. Selecting Programs on the Matrix or the Programmer's PATCH mode trigger a request updating the Programmer with the parameter data.
Take care for the flip switch labeled 'SysEx' to be in position 1 or 1&2 – otherwize the Polychainer blocks SysEx data for the request between Programmer and Matrix.

For doubling polyphony both Matrix should hold the same patch, otherwize every 2nd note would sound different than the first. It would be easiest if the 2nd Matrix holds the same programs in identical program numbers. If this is not the case: since firmware version 1.07 for the Matrix Programmer there is a new menu selection in PATCH mode called „DMP?". When selecting it, the Programmer dumps out the patch currently held in memory. By flipping the
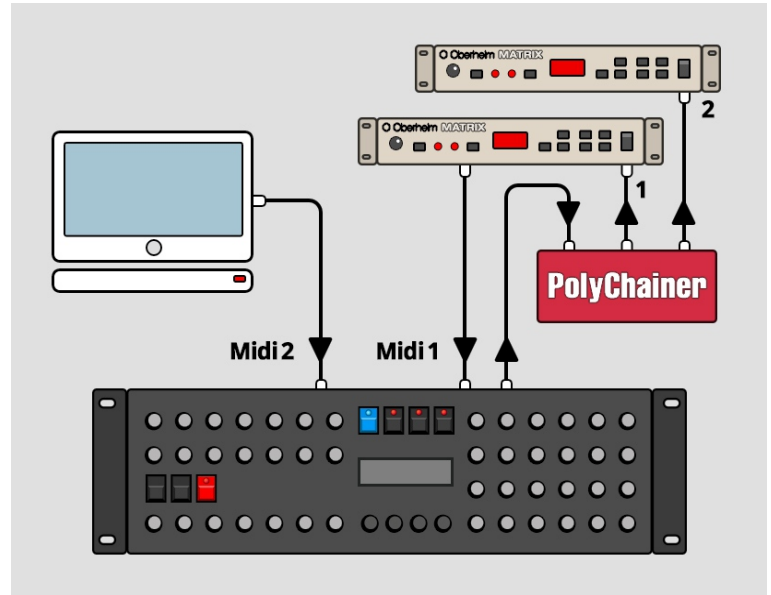
SysEx-target switch in position 2 and dumping the program to the 2nd Matrix, both Synths will hold the same patch and you can start using them in POLY mode.

If your 2nd Matrix is a 6/6R: Caution! As you might know the Matrix 6/6R writes incoming patch dumps directly into memory, the formerly saved patch in this slot is lost. Therefore the Programmer allows to select a target program number where the dumped program should be saved to.

Patching other synths without Synth Programmer

You can use the PolyChainer together with any two synthesizers to doubly polyphony or layer sounds. For proper POLY mode it is of course advisable, the used synthesizers are of the same model and holding the same programs.
All of the PolyChainer's functions make perfect sense with synths of other manufacturers.
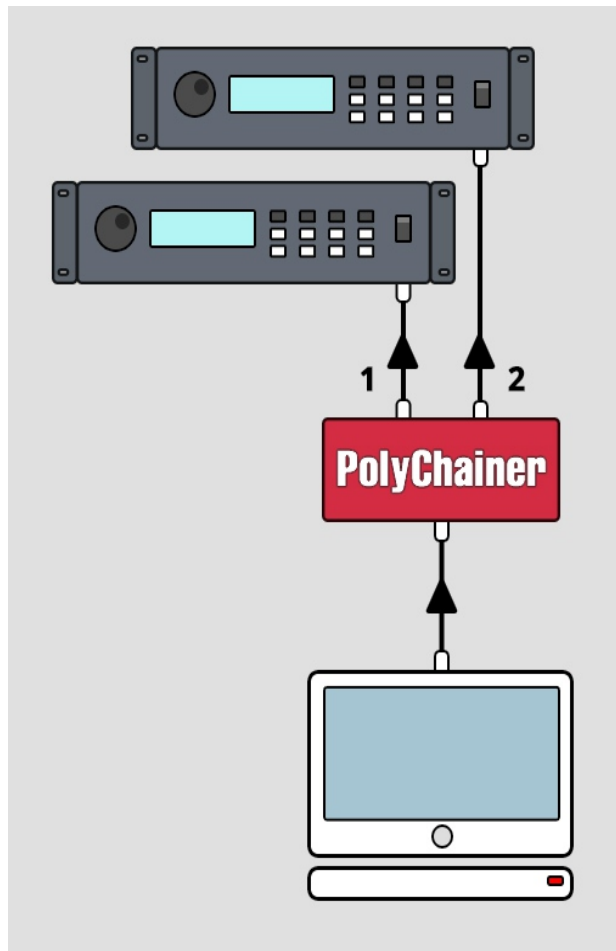
LEDs and switch functionality

The upper flip switch offers two positions: LAYER or CHAIN. Incoming midi notes on MIDI IN are distributed to both MIDI OUT jacks in relation to it's position. If it's set to CHAIN, the incoming note is sent to both MIDI OUTs alternately. In position LAYER the incoming notes are sent to both OUTs at the same time.

Each time you flip the MODE switch the LEDs are flashing accordingly to indicate the current note distribution mode: when set to LAYER they flash together a few times. If you flip to CHAIN they are flashing a few times alternatively.

In normal operation, both LEDs are indicating where the current notes are being sent to.

The lower flip switch („SYSEX") offers three positions. It determines where the SysEx data (=parameter change data or program dumps) detected on MIDI IN is sent to: synthesizer on MIDI OUT 1, on 2 or both at the same time. This allows to edit only one of the connected synths while both still get the same channel data like midinotes, pitchbend etc. In middle position, both connected synths get the SysEx data at the same time – this makes most sense while being in CHAIN mode.

Pushbutton „LEARN MIDICHANNEL"

Although the pushbutton has the label LEARN MIDICHANNEL, the midichannel does not make any difference on the PolyChainer. Each incoming note on MIDI IN it forwarded with it's midichannel to the MIDI OUTs.

Firmware Update

There might be an update for your PolyChainer firmware one day. For this situation there is a Bootloader mode.
Keep the LEARN MIDICHANNEL pushbutton down when plugging the MIDI IN cable to powerup the PolyChainer.
Alternatively you can as well powerup the connected device on MIDI IN.
The LED above the button should go on. You can now release the button.

Open your favourite freeware SysEx-Dump-Tools to transmit the new firmware file int the PolyChainer. For PC there
is e.g. 'MidiOX', for the Mac you could use 'SysEx Librarian'. In the prefs of the sysex-dump-tool you will find a
setting like 'Delay between Buffers' or 'Delay after F7'. Set it to about 70mS (Milliseconds).

After you've started the transmission the CHANNEL LED starts to flash slowly. The whole process should not take
much longer than a minute and your PolyChainer restarts automatically by indicating it's typical startup LED show. If
for some reason it does not restart or something else was going wrong you can try it again. There is nothing you
can break on the PolyChainer.

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)

This symbol on the product(s) and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge.

Alternatively, in some countries you may be able to return your products to your local retailer upon purchase of an equivalent new product. Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.Please contact your local authority for further details of your nearest designated collection point.Penalties may be applicable for incorrect disposal of this waste, in accordance with you national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.
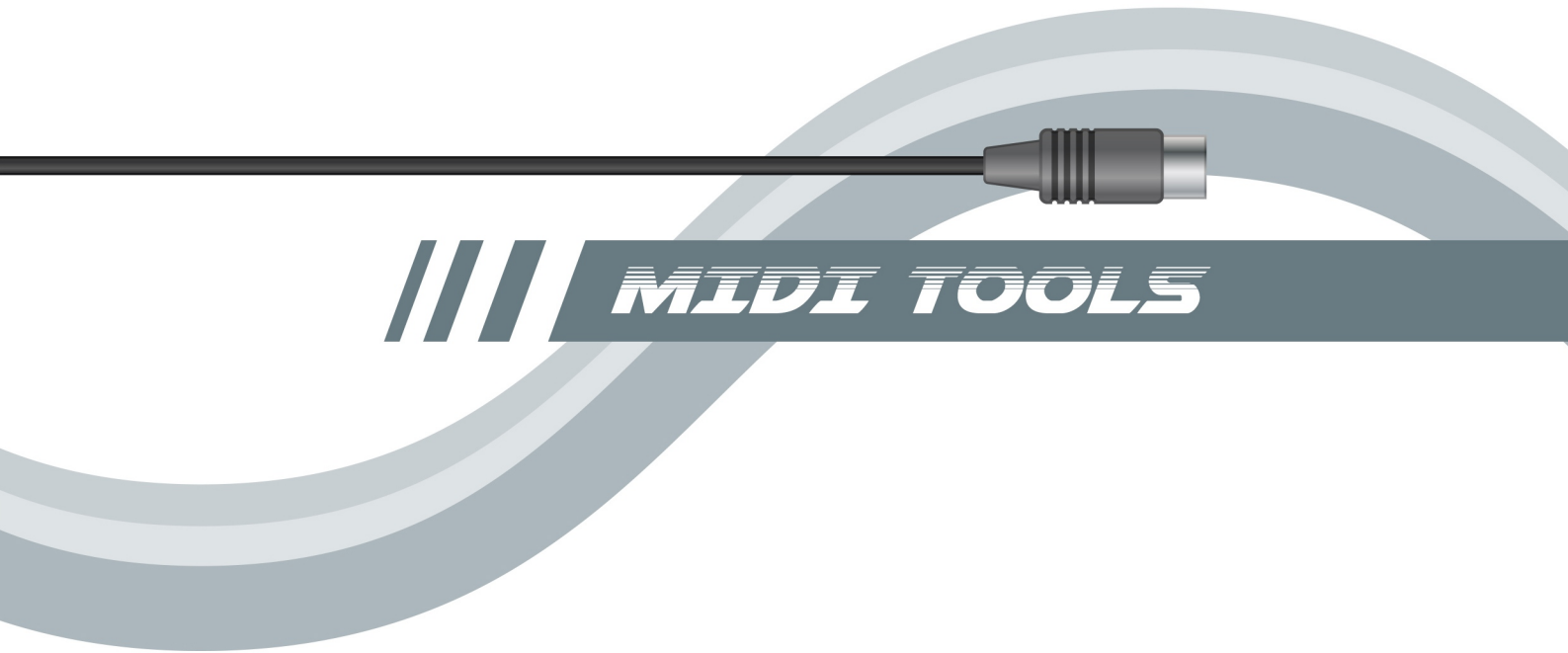
Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union. If you wish to discard this product please contact your local authorities or dealer and ask for the correct method of disposal.

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