

Technical Notes

POWER REQUIREMENTS

To operate the units with no external power it is important that an equal number of MIDI INs and MIDI OUTs are connected. The MIDI OUTs from devices provide the patchbay with the necessary power to operate. Where a device has no MIDI OUT, use its MIDI THRU. The unit will work with fewer MIDI OUTs from devices connected than the number of MIDI Ins connected, but this is not recommended.

An external power supply can be used. This should provide +5V - + 6.5V regulated DC @ not less than 100mA. An appropriate unit is available from DACS Ltd.

EARTHING

It is possible that poor earthing may cause hum or MIDI data to appear on signal lines. Should occur, pluggable links are provided to disconnect earths from instruments. See figure 3.

NB. 1 Earth link must be connected at all times

SHORT CIRCUITS

While no damage can occur if components are short-circuited, this should be avoided, particularly if an external power supply, which is, not short-circuit protected is used.

DATA TRANSMISSION

It should be noted that the data being transmitted by the front panel jack sockets and the normalising pads is not standard MIDI data.

SPECIFICATIONS

Connectors	5 pin 45 degree DIN sockets, 2 pole .25" jack sockets
Power	No external requirements, uses +5V from MIDI
Protection	Short circuit protected Safe with audio inputs >+18dBm
Size and Weight	19" rack mount, 1U, 63mm deep, weighs 850g



Instructions for Installation and Use of

MIDI PATCH BAY

DIGITAL AUDIO AND COMPUTER SYSTEMS (M&M) Ltd

For further information on this and our full product range:

**DACS Ltd, Stonehills, Shields Road, Pelaw,
Gateshead, Tyne & Wear, NE10 0HW
Tel: (44 191) 438 2500 Fax: (44 191) 438 2511
Email: sales@dacs-audio.com
Web: www.dacs-audio.com**

Installation

The Patch Bay's MIDI connectors on the rear are via standard MIDI connectors.

The Patch Bay's connectors labelled MIDI IN should be connected to the MIDI OUT connectors on devices.

The Patch Bay's connectors labelled MIDI OUT should be connected to the MIDI IN connectors on devices. See figure 2.

No connections need to be made to the device MIDI THRU connectors except where it has no MIDI OUT connector. See Technical Notes for more information.

Use

INTERCONNECTION

Each section of the front panel contains 4 jack sockets (see Figure 1):

The sockets labelled OUT are linked to the MIDI IN connector of the same number on the rear panel.

The socket labelled IN is linked to the MIDI OUT connector of the same number on the rear panel.

The socket labelled THRU gives a copy of the data going into the adjacent IN socket for connection to another IN on the front panel. Daisy chaining using these THRU sockets produces negligible delays.

To interconnect MIDI devices, use a 2 pole $\frac{1}{4}$ " jack patch cord, and link the appropriate OUT or THRU to the appropriate IN. Suitable high quality jack to jack patch cords are available from DACS Ltd.

NORMALISATION

Frequently used configurations can be pre-set, or "normalised", so that no jack sockets need to be used to interconnect those devices normalised.

On the top PCB you will see pads numbered and labelled NORMALISE, and on the bottom board labelled IN and THRU.

To normalise a connection solder one end of a wire to the appropriate NORMALISE pad on the upper board, and solder the other end to the appropriate IN pad on the lower board. To extend your normalisation, use further THRU and IN connections.

Illustrations

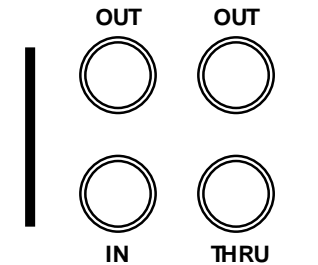


Fig. 1 A section from the front panel

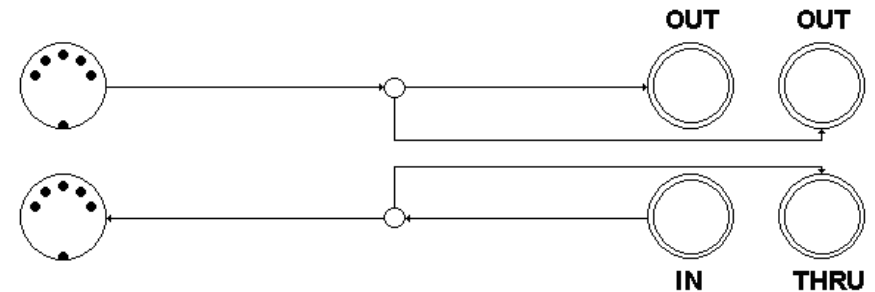


Fig. 2 Schematic diagram of a section of the MIDI Patch Bay

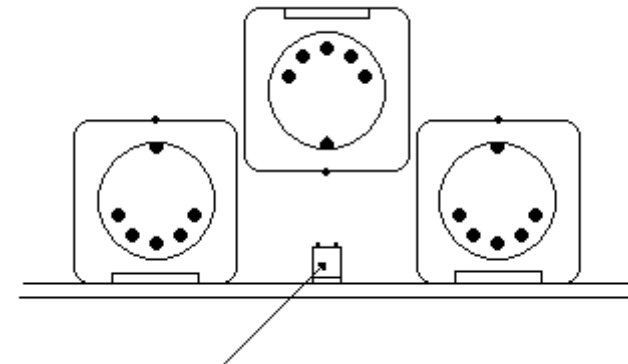


Fig. 3 Removable re-pluggable earth links