**V3 MIDI THRU UNIT**

Classic MIDI 'splitter'

The highly successful V3 is a handy one-into-four MIDI Thru unit, which you can use to convert one MIDI output into three buffered parallel outs. The V3 is very compact - just 58mm x 69mm x 23mm.

**Power options**

You can use a PP3 (6F22) battery to power your V3 - the battery will give a very long life (usually a year or more in normal use). When you leave the IN socket unconnected, or your MIDI master device is quiescent or switched off, no battery power is consumed.

You can use and external 6Vdc to 9Vdc supply to power your V3 - you'll have to make connection via a PP3 type snap (press stud) connector with the negative voltage on the male stud. The current requirement is just 10mA maximum.

**V4 MIDI THRU UNIT**

The V4 is a handy one-into-four Thru unit and it has the same compact dimensions as the V3.

**Powered from the line**

The power for the V4 buffer circuit is derived from the MIDI connections at its MIDI In socket. This configuration makes assumptions about the master MIDI device, so compatibility problems can occur; problems are however rare.

The MIDI In and power control circuit of the V4 is designed for best possible compatibility and resistance to damage. It will work perfectly when driven by the vast majority of MIDI master devices.

When an incompatible driver is found, it is nearly always easy to rearrange the system to avoid the problem, as in the example which follows. In the example below the MIDI Thru of the Synth Expander is chosen to drive the V4 instead of the incompatible MIDI output of Synth 1.

**V8 MIDI THRU UNIT**

Two output banks

This Thru box has eight Thru outputs. They are arranged as two banks of four. It has two MIDI input ports, marked 'A' and 'B'.

There is an INPUT SELECT slide switch for each output bank. Each switch has three positions: position 'A' selects MIDI IN A, position 'B' selects MIDI IN B, while position '0' means no MIDI signal for that bank.

There are lamps that indicate when MIDI data is being received at each of the MIDI inputs. A POWER lamp is also fitted, to show when proper dc power is being supplied.

**External power required**

The V8 does not incorporate its own power supply, so it requires to be connected to an external DC power source. An ordinary mains adaptor (regulated or unregulated) of between nine and twelve volts will do fine. The current requirement is just 30mA.

Power connection is made via a 3.5mm jack socket, with the tip positive.

The dimensions of the V8 MIDI Thru Unit are 109mm x 109mm x 40mm.

**V10 MIDI THRU UNIT**

**The big bright MIDI star**

The V10 is a one-into-ten MIDI Thru box, which will convert one MIDI out into ten buffered parallel outs. It will provide your MIDI master device with Thru outputs to drive up to ten slave devices in a 'star' network.

On one side of the W5 are the two input sockets, and on the other side are the five Thru outputs. On the front panel are the five three-position slider selectors, one for each output. Each switch can independently link the corresponding output to either of the inputs or a centre 'off' position.

The case of the W5 is 109mm x 109mm x 40mm. Even though it is so compact, the mains supply of the W5 is built-in, so you wont need an external adaptor. The integral mains lead comes with a plug. An LED POWER indicator is provided.

**Why you need a MIDI thru unit**

Interconnecting several items of MIDI gear can be a frustrating business.

Some of your MIDI gadgets may lack the MIDI Thru sockets which are required for connecting several devices together in a 'chain'. Where MIDI thru ports are provided, the signal throughput may introduce 'duty cycle' distortion or time delays - so 'chain' performance may be unacceptable, particularly on 'chains' of three or more.

The preferred alternative to the troublesome 'chain' is the 'star' network. The only snag is that for a 'star' network you will need more than the single MIDI Out, which is all that may be available on your master controller. You'll need a MIDI thru box to solve this problem by setting up a MIDI 'star' system.

A MIDI network may be expanded via a hybrid combination of 'star', and 'chain'.

**W5 DUAL INPUT MIDI THRU UNIT**

Two inputs and five outputs

The W5 has five MIDI Thru outputs, and two MIDI inputs - with independent source selection for each output. The W5 is versatile and excellent value-for-money.

The preferred alternative to the troublesome 'chain' is the 'star' network. The only snag is that for a 'star' network you will need more than the single MIDI Out, which is all that may be available on your master controller. You'll need a MIDI thru box to solve this problem by setting up a MIDI 'star' system.

A MIDI network may be expanded via a hybrid combination of 'star', and 'chain'.

The case of the W5 is 109mm x 109mm x 40mm. Even though it is so compact, the mains supply of the W5 is built-in, so you wont need an external adaptor. The integral mains lead comes with a plug. An LED POWER indicator is provided.