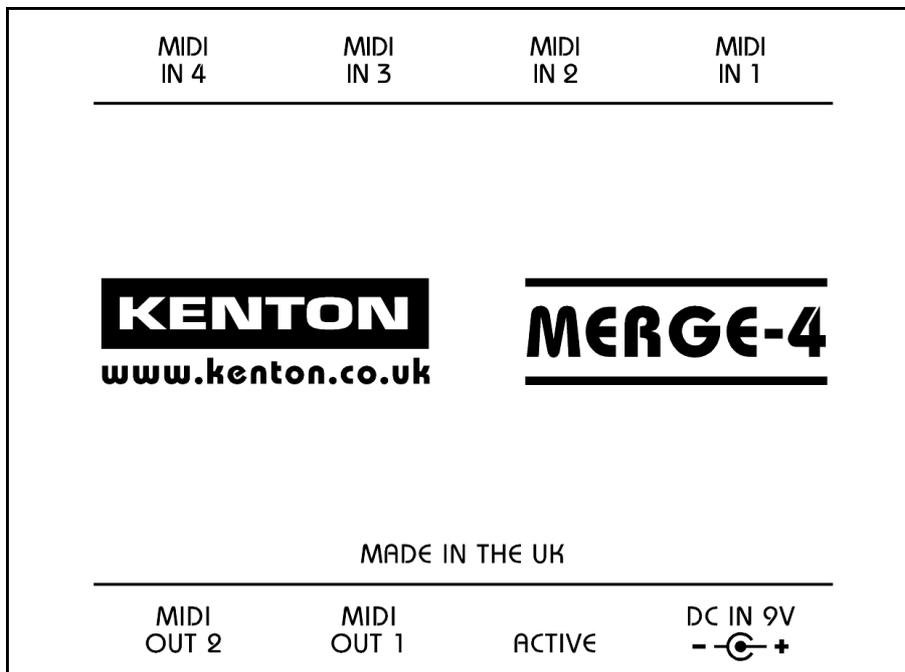


KENTON

MERGE-4

4 into 2 MIDI Merge Box



Operating manual

Description

The MERGE-4 has four MIDI Inputs and two MIDI Out ports to enable you to connect several MIDI devices to one or two MIDI inputs.

The MERGE-4 has opto-coupled MIDI Inputs and separate drive circuits for each MIDI Out socket for optimum performance. The MERGE-4 also contains active circuitry that can restore the quality of signals received at the MIDI Input that may have become degraded by losses in the MIDI cable.

The MERGE-4 is powered by a mains adaptor (supplied), so it doesn't need periodic battery changes to keep it working, enabling you to "fit and forget".

Connecting

Ensure that the power adaptor is plugged in, and the ACTIVE LED on the MERGE-4 is on. Connect the MIDI output of your keyboard(s) and/or computer to the MIDI Inputs of the MERGE-4 and connect one of the MIDI Out ports of the MERGE-4 to the MIDI input of the device you want to control.

Do not connect any of the MIDI Out ports of the MERGE-4 back to the MIDI Input of the device which is supplying data to the MIDI In port of the MERGE-4, as this may cause a MIDI loop to occur. This may cause note hangs or other undesirable effects.

Merging Rules

You may find it useful to have an understanding of the following rules which the Merge-4 uses when handling certain types of MIDI data. The Merge-4 defines one of the four inputs as the *master* input for each of the following data types. One input may be the *master* for one or more data types whilst a different input may be the *master* for another data type.

MIDI Clock

When power is first applied, no input is defined as a *master* and all clock messages from all inputs will be passed until one input is defined as a *master*.

The most recent input to receive a START command (or Song Position Pointer=0 followed by CONTINUE) will become the clock *master*.

That input continues to be the clock *master* until another input satisfies the above condition.

Active Sensing

The first input to receive an Active Sensing message will become the Active Sensing *master*. Active sensing messages from that input will be passed to the output, any active sensing messages received at other inputs will be ignored. An input will stay as Active Sensing *master* until no more Active Sensing messages are received at

that input for a period of around 5 seconds. Then another input has the opportunity to become the Active Sensing *master*.

Sysex Messages

While any input is handling a SysEx message it becomes the SysEx *master*, and SysEx messages from all other inputs will be locked out until the message at the *master* input has finished.

SysEX messages may be terminated either with an End Of Sysex command (F7) or with any other status command .

Firmware version Request:

A firmware version request must be issued within 10 seconds of power being applied to the unit, otherwise it will be ignored.

The firmware version request message is - F0 00 20 13 0E 60 F7 (hex)

The unit replies with the version number as F0 00 20 13 0E 6F xx xx xx xx F7 (hex).

Where xx is a number in ASCII and the leftmost digit is the most significant.

For example - F0 00 20 13 0E 6F 31 32 33 34 F7 (hex) = version number 1234

Specification

Power Input:	9V DC (regulated or unregulated) – never apply more than 12V (never use an unregulated supply greater than 9V as unregulated supplies typically give a higher output than shown)
Power :	60mA, 2.1mm plug (centre positive)
MIDI ports:	4 x In, 2 x Out (both deliver the same data)
Weight:	150g (excluding power supply)
Dimensions:	110 x 80 x 32 mm
Power supply:	Supplied with unit. Specify UK, EU or US type when ordering.

Warranty

The MERGE-4 comes with a 12 month (from purchase date) back to base warranty, (i.e. customer must arrange and pay for carriage to and from Kenton Electronics Ltd).

KENTON

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