CR-8000 Installation

The CR-8000 will require some modifications to allow it to be MIDIfied. The modification involves adding a multipin connector in series with the CR-8000 Trigger signals. This connector is mounted on the back panel of the CR-8000. A mating connector is then wired to an external MIDI-TRIGGER unit. To restore the CR-8000 back to normal operation simply requires a 2nd mating connector to be plugged in. This connector is internally wired with loopback wires that connect the Expansion connector output pins to the Expansion connector input pins thus effectively restoring the original wiring.

It is not possible with this modification to have both the internal trigger generator AND the external MIDI-Trigger generator running at the same time.

The MIDI2SDS-16 unit has 16 trigger outputs. In addition it offers the facility for installing an LED indicator for each trigger. These LED outputs are not used in this modification. If required, you will either need to use a larger connector (at least 53 pins), add a 2nd connector (at least 17 pins) or install the LEDs in to the MIDI2SDS-16 unit.

Connections on the Expansion port are also included for a MIDI-IN socket and a LEARN switch. The LEARN switch is required for (re)defining the MIDI notes associated with each TRIGGER. If you intend to this only once then you can leave the LEARN switch unterminated, and simply jumper the pins in the MIDI2SDS-16 unit when required. It should be noted that having the LEDs installed is a major benefit while in the LEARN mode. The MIDI-IN socket can be mounted in the MIDI2SDS-16 unit itself or can be wired to a MIDI socket in the CR-8000. This may either be a totally dedicated MIDI IN socket or you can use the unsued pins on the SYNC IN/OUT connector. Please note that this latter option will require the use of a splitter cable to separate the SYNC signals from the MIDI IN signals. For this modification we suggest using the SYNC IN/OUT option although there is plenty of room for a new socket to be added on the back panel.

The first modification to the CR-8000 is the addition of the Expansion connector. Carefully cut a hole in to the back panel of the CR-8000 sized to take the supplied 37-pin connector.

Once the connector has been installed it is time to make the next modification to the CR-8000.

This modification will allow the sound generating circuitry to be either triggered by the internal CR-8000 controller or the external MIDI-TRIGGER unit.

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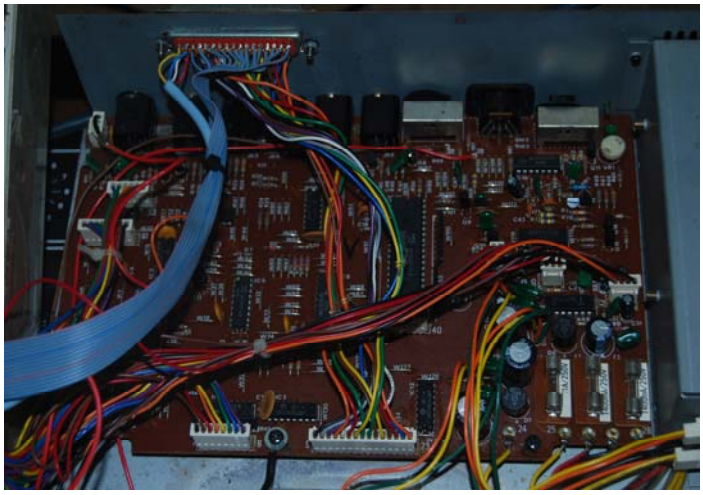


This is achieved by interception the internally generated trigger signals. You will see a 15-pin connector on the logic board (bottom-centre in picture at left) . Each of these wires needs to be unsoldered from its termination on the sound generator board and taken to its respective pin on the Expansion connector. At the same time, you should add a new wire from the previous termination point on the sound generator and run this to the relevant point on the Expansion connector. Repeat for all 15 wires.

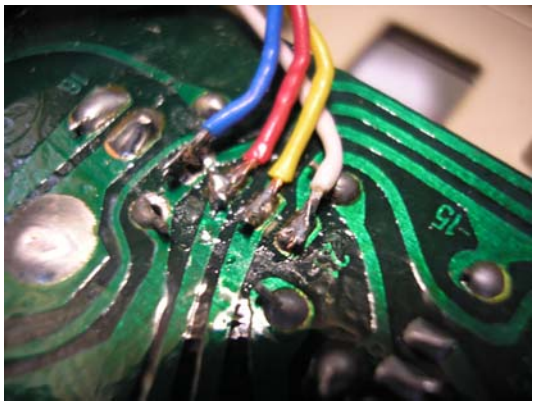
Power Connection

The MIDI2SDS-16 unit requires a 12V to 15VDC supply which can be safely taken from the CR-8000

Access to the power port is made through a set of pads visible in the lower left corner of the picture top the left.

The port has 4 power pins although we only require 2 for this application.

Carefully solder 2 wires on to the indicated pins and run them to the relevant pins on the Expansion Connector.



- Yellow –15V (Not Used
- Red +15V (To Power connector)
- Blue 0V (To Power connector)
- White +5V (Not Used)

CR-8000 Expansion Connector

Expansion Connector	Location	Signal
1	CPU Board 9	HC – Hi Conga
2	CPU Board 10	LC – Low Conga
3	CPU Board 11	MC – Middle Conga
4	CPU Board 12	CB – Cow Bell
5	CPU Board 13	CY – Cymbal
6	CPU Board 14	HT – Hi Tom
7	CPU Board 15	OHH – Open Hi-Hat
8	CPU Board 16	LT – Low Tom
9	CPU Board 17	HH – Hi-Hat
10	CPU Board 18	SD – Snare Drum
11	CPU Board 19	BD – Bass Drum
12	CPU Board 20	ACC – Accent
13	CPU Board 21	HCP – Hand Clap
14	CPU Board 22	C – Claves
15	CPU Board 23	RS – Rim Shot
16		
17	SYNC IN/OUT 4	MIDI-IN
18	SYNC IN/OUT 5	MIDI-IN
19		
20	VG Board 31	HC – Hi Conga
21	VG Board 29	LC – Low Conga
22	VG Board 28	MC – Middle Conga
23	VG Board 3	CB – Cow Bell
24	VG Board 30	CY – Cymbal
25	VG Board 2	HT – Hi Tom
26	VG Board 25	OHH – Open Hi-Hat
27	VG Board 5	LT – Low Tom
28	VG Board 26	HH – Hi-Hat
29	VG Board 1	SD – Snare Drum
30	VG Board 4	BD – Bass Drum
31	VG Board 22	ACC – Accent
32	VG Board 23	HCP – Hand Clap
33	VG Board 27	C – Claves
34	VG Board 24	RS – Rim Shot
35		
36		0V
37		12V

MIDI2SDS-16 Expansion Connector

Expansion Connector	Location	Signal
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20	VG Board 31	HC – Hi Conga
21	VG Board 29	LC – Low Conga
22	VG Board 28	MC – Middle Conga
23	VG Board 3	CB – Cow Bell
24	VG Board 30	CY – Cymbal
25	VG Board 2	HT – Hi Tom
26	VG Board 25	OHH – Open Hi-Hat
27	VG Board 5	LT – Low Tom
28	VG Board 26	HH – Hi-Hat
29	VG Board 1	SD – Snare Drum
30	VG Board 4	BD – Bass Drum
31	VG Board 22	ACC – Accent
32	VG Board 23	HCP – Hand Clap
33	VG Board 27	C – Claves
34	VG Board 24	RS – Rim Shot
35		
36		
37		

This plug connects the MIDI2SDS-16 outputs to the CR-8000 inputs. It also connects the CR-8000 power pins to the MIDI2SDS-16 and also provides connections for MIDI IN.

CR-8000 Loopback Connector

Expansion Connector	Expansion Connector
1	20
2	21
3	22
4	23
5	24
6	25
7	26
8	27
9	28
10	29
11	30
12	31
13	32
14	33
15	34
16	
17	
18	
19	

This plug simply connects the CR-8000 outputs to the CR-8000 inputs.

In this picture you can see the rerouted CPU Board connections, coloured cables running from bottom centre of right-hand board to the Expansion connector and the new trigger cable, blue ribbon cable running from the left-hand board to the Expansion connector.

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