

INSTRUCTIONS FOR MIDI INTERFACE

ROLAND TR808 DRUM MACHINE

MIDI - - -

First - a few words about Midi. Midi is an acronym of Musical Instrument Digital Interface. It is a system for transferring information between synths or other equipment. The information is sent in digital format using codes laid down by the international Midi committee.

Your TR808 drum is now equipped to send and receive Midi information. When turned on, it will be in it's default state - that is, the machine will function normally, sending out note information on channel 1 and receiving note information on the channel set on the internal D.I.L. switch (currently omni off channel 16). Midi timing and stop start information is not channel sensitive and is sent and received at all times (unless disabled).

With the rear panel switch set to normal (up) the TR808 drum will run from it's own internal clock and will send out Midi timing information at a rate determined by the tempo control. With the rear panel switch in the down position however, it will run from Midi sync at the rate set by the MIDI device connected. If no Midi timing information is present then the TR808 drum will not run.

Some drum machines/sequencers may not send start/stop codes, in this case pressing the start switch on the TR808, will make it wait until Midi clock/sync is present.

You can make the TR808 ignore start/stop codes by selecting it from the programming mode described in the next paragraph, when set to disable the TR808 will neither respond to, nor send start/stop codes - when enabled (the default condition) start/stop codes will be both sent and received.

CHANGING TRANSMIT/RECEIVE CHANNELS

As mentioned earlier, the Midi interface defaults to transmit channel one and as supplied receives on channel 16 - omni off mode - however the default receive channel can be changed internally as can the mode (omni on/off).

Changing channels in normal use is achieved by pressing the red push button on the back of the unit, and then pressing keys on an external keyboard. On the next page is a table of what each key will do on a standard 61 note keyboard (DX7 D50 etc.). Note that after selecting a channel or other function, top C will need to be pressed to return the unit to playing mode.

2) Pressing the red button once and holding for a couple of seconds enters transpose mode. Then the next key press on the remote keyboard will set the transpose amount, and return you to playing mode.

The interval between the note you press and middle C will be the amount by which the interface will transpose Midi signals in.

e.g. If you press the B immediately below middle C, then any note received from another unit will be transposed down a semitone.

Transpose mode cannot be entered from program mode.

N.B. The red button can be "pressed via Midi - see last page.

C	Receive channel	1	Bottom C - Midi note no. 36
Db	"	"	2
D	"	"	3
Eb	"	"	4
E	"	"	5
F	"	"	6
Gb	"	"	7
G	"	"	8
Ab	"	"	9
A	"	"	10
Bb	"	"	11
B	"	"	12
C	"	"	13
Db	"	"	14
D	"	"	15
Eb	"	"	16

Selecting a receive channel will automatically put the Midi into omni off mode. That is, it will receive on the selected channel only.

E not used
 F Omni on mode (default)
 Gb not used
 G not used
 Ab not used
 A Ignore received master reset
 Bb not used
 B not used

C	Transmit channel	1	Middle C - Midi note no. 60
Db	"	"	2
D	"	"	3
Eb	"	"	4
E	"	"	5
F	"	"	6
Gb	"	"	7
G	"	"	8
Ab	"	"	9
A	"	"	10
Bb	"	"	11
B	"	"	12
C	"	"	13
Db	"	"	14
D	"	"	15
Eb	"	"	16

The transmit channel can be changed independently of the of the receive channel, and can be set even during omni on mode.

E not used
 F not used
 Gb not used
 G not used
 Ab not used
 A not used
 Bb not used
 B not used
 C not used
 Db not used
 D not used
 Eb not used

E Disable start and stop through midi (both in & out)
 F Enable start and stop through midi (default)
 Gb not used
 G not used
 Ab not used
 A not used
 Bb not used
 B not used

C ENTER KEY - Press and release. Top C - Midi note no. 96

MIDI CONTROL OF RED PUSH BUTTON

The red push button can be "pressed" via midi as midi switch number 95 (5Fh) for regular program mode or 94 (5Eh) for transpose mode. The selection of the push button is enough, it doesn't matter if it is being turned on or off.

In hexadecimal BX - 5F - 00 = program mode

In hexadecimal BX - 5E - 00 = transpose mode

Where X is the current midi channel.

[n.b. whilst in program/transpose modes the midi is in omni on mode]

MIDI CONNECTORS - -

MIDI IN should be connected to a MIDI OUT or a MIDI THRU similarly MIDI OUT should be connected only to a MIDI IN and a MIDI THRU should also be connected only to a MIDI IN.

MIDI OUT is the signal from the synthesiser (or drum machine etc.) that is to be sent to another instrument. MIDI IN is a received signal that contains MIDI information from another synth, and MIDI THRU is an exact copy of information arriving at the MIDI IN socket. This allows several instruments to be connected together.

If you want to wire your own MIDI cables the following information may be useful.

- 1) Although a 5 pin connector is used, only two connections plus an earth connection are required.
- 2) If you look at the din plug from the wiring side you will see that the pins are numbered. From left to right (or clockwise) these are 1 - 4 - 2 - 5 - 3.
- 3) The pins numbered 1 & 3 are not used.
- 4) The screen (earth) is connected to pin 2 (centre pin)
- 5) Pin 4 of one plug should be connected to pin 4 of the other
- 6) Pin 5 of one plug should be connected to pin 5 of the other
- 7) You should now have a working Midi lead
- 8) It is preferable to label one end of the cable MIDI IN & the other end MIDI OUT, to avoid confusion.

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