

KENTON electronics

INSTRUCTIONS FOR MIDI INTERFACE KORG BX3 ORGAN

USING THE MIDI INTERFACE

When you turn on the synthesizer for the first time, you will be in omni-on mode for receive (all channels). When you select a receive channel or other set-up, this will be stored in memory and will be remembered for when you subsequently turn on the synth - all parameters listed on the next page are stored.

If you want to put the machine back to the factory default settings at any time, switch the synth on whilst holding the red push button pressed - hold for a couple of seconds then release.

RED PUSH BUTTON

Two modes are available by pushing the red push button. Before you press the red button however, make sure that no notes are pressed on the synth otherwise the results may be unpredictable.

The keyboard notes required for set-up & transpose modes should be sent via MIDI from an external keyboard. (DX7/D50 etc. etc.)

1) SET-UP MODE

Setting MIDI channels and assignments. Give the red push button one short press (half a second) - then release. Follow this with a note or sequence of notes as detailed on page 2. After selecting a channel you will be automatically returned to playing mode but after making assignments you will need to press the ENTER key (Top C) to return to playing mode. This is to enable you to make the multiple key presses required when re-assigning sources to destinations. (N.B. set-ups are stored in non volatile memory).

2) TRANSPOSE MODE

Press and hold the red push button for four seconds - then release. Middle C will sound on the synth and continue to sound until you press a key. The note that you press will be the new middle C for MIDI IN. You can set any value up to two octaves up or down. Settings outside this range will be ignored. Note that transpose mode cannot be entered from set-up mode.

C	Receive channel	1 [Bottom C on DX 7] MIDI note number 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
E	Omni-on mode	(puts both manuals in omni-on mode)
F	Receive Channel	1 Upper manual - [MIDI note 53]
Gb	" "	2
G	" "	3
Ab	" "	4
A	" "	5
Bb	" "	6
B	" "	7
C	" "	8
Db	" "	9
D	" "	10
Eb	" "	11
E	" "	12
F	" "	13
Gb	" "	14
G	" "	15
Ab	" "	16
A	Not Used - - -	
Bb	" "	
B	" "	
C	" "	
Db	" "	
D	" "	
Eb	Program change	OFF
E	" "	ON (default)
F	Mod wheel	OFF
Gb	Not Used - - -	
G	Mod wheel	ON (default)
Ab	Not Used - - -	
A	" "	
Bb	" "	
B	" "	
C	" "	
Db	" "	
D	" "	
Eb	" "	
E	" "	
F	" "	
G	" "	
A	" "	
B	" "	
B	" "	
C	ENTER key	Press and release. [Top C] MIDI note no. 96

NOTES

1) Program changes are treated as follows:-

- 1 = preset I
- 2 = preset II
- 3 = preset III
- 4 = drawbars
- 5 = percussion 4' on
- 6 = percussion 4' off
- 7 = percussion 2 2/3' on
- 8 = percussion 2 2/3' off
- 9 = rotor effect on
- 10 = rotor effect off
- 11 = rotor effect fast
- 12 = rotor effect slow
- 13 = chorus/vibrato on
- 14 = chorus/vibrato off

rotor effect can
be controlled by
either (both)
manuals

all other values are ignored

2) The modulation wheel of a synth can also be used to control the rotor effect as follows:-

- mod wheel value 0 - 63 = rotor effect on & slow
- mod wheel value 64-127 = rotor effect on & fast

3) Program changes etc. are treated separately for each manual (except for Rotor effect) - i.e. if the upper manual is assigned to MIDI channel 7, then incoming program changes etc. on channel 7 will be directed to the upper manual only - if omni-on is selected (factory default) then incoming MIDI data will affect both manuals the same.

4) Receive channel and omni-on setting will return you directly to playing mode, all other keys will let you stay in SET-UP mode until you press the ENTER key (Top C)

5) Control change commands recognised - (numbers in decimal)

- 123 all notes off
- 124 omni mode off (always poly)
- 125 omni mode on (always poly)
- 126 (mono mode) = all notes off
- 127 (poly mode) = all notes off
- 01 modulation wheel
- 94 select transpose mode
- 95 select set-up mode

6) Other commands recognised - (numbers in hexadecimal)

- 8nH notes off
- BnH control change (see above)
- FEH active sensing
- 9nH notes on
- CnH program change

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 synthesizer (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.

WARRANTY

All Kenton MIDI Kits come 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).

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