

# KENTON

## **User instructions for MIDI retrofit for *Oxford Synthesiser Company - OSCAR***

Note that this retrofit is only supplied and/or fitted by Kenton, it is not a Kenton design. The MIDI manual reproduced here is an updated and enhanced version of the original manual that was supplied with the factory MIDI for the Oscar, for the convenience of our customers only.

Fitting the MIDI retrofit means that the OSCAR now has 36 voices which are user-programmable and the sequencer space is 1500 events.

### **MIDI SOCKETS**

#### **MIDI IN**

Receives MIDI control signals from another MIDI instrument.

#### **MIDI OUT**

Transmits MIDI control signals to another MIDI instrument. Note: Signals received at MIDI IN socket will not be retransmitted from MIDI OUT socket on the OSCAR.

#### **MIDI THRU**

Transmits a direct copy of the signals received at the MIDI IN socket, allows more than one MIDI instrument to be driven from one source of MIDI signals.

Standard MIDI cables should be used for interconnections between instruments. Basic connection set up is MIDI OUT of one instrument (Master unit) to MIDI IN of another instrument (Slave unit). More instruments can be chained together by connecting MIDI THROUGH of the slave unit to MIDI IN of a second slave unit, etc. The maximum number of units that can be chained in this way are 3 to 4. Special MIDI THRU boxes can be used to connect instruments in parallel. It is also possible to connect MIDI IN and OUT both ways between two instruments so that playing either instrument will operate both.

### **CONTROL OPTIONS**

Several control options are available on the MIDI OSCAR.

At Mains Power on, some options are enabled and some are disabled. Hold down the [SPACE] button on the wheel panel, Octave display shows which options are enabled and allows the options to be changed using the keyboard.

#### **1. PERFORMANCE WHEEL**

Enabled at power on. Transmit and receive wheel positions. To access, press and hold down the [SPACE] button and press key -11 of the keyboard. While the [SPACE] button is held down, the extreme left hand side LED of the Octave Display will light up if wheel signals are enabled.

By repeating the procedure the option status can be altered to off (if it was previously on) or to on (if it was previously off).

Bend Wheel signals should be compatible with other instruments. Mod Wheel signals do not normally allow for the OSCAR's negative modulation; the OSCAR therefore transmits a normal positive Mod Wheel signal, whether it is turned up or down.

## 2. PROGRAMME CHANGE

Disabled at power on. Transmit and receive programme (VOICE) changes.

Accessed in the same way as the Wheel option. Press and hold down [SPACE] and press key -9 on the keyboard. The second LED from the left hand side will light up (while the [SPACE] button is depressed) if programme changes are enabled.

The OSCAR has 36 voice programmes and therefore only transmits or receives the first 36 out of the full 128 MIDI programmes. The order of programme numbers on the OSCAR is -1 to -12 followed by 1 to 24.

## 3. KEY ON/OFF

Enabled at power on. Transmit and receive key-on and key-off signals.

Press and hold down [SPACE] button and press key -6 on the keyboard. The third LED from the left will light up if keyboard signals are enabled. Notes received by the OSCAR outside the range of its keyboard will be transposed by whole octaves so that they fall within the normal range.

## 4. SEQUENCER AND ARPEGGIATOR

Disabled at power on. Transmit sequencer output or arpeggiator output.

Press and hold down [SPACE] button and press key -4 on the keyboard. The fourth LED from the left hand side will light up if sequencer/arpeggiator signals are enabled. Only applicable when the OSCAR is the Master instrument. The transmitted signals are normal MIDI key on/off signals and can be received by any MIDI Slave instrument. They are transmitted as well as keyboard signals if key on/off is enabled.

This provides a monophonic MIDI sequencer or arpeggiator for any MIDI Slave instrument. With the keyboard signals enabled, the keyboard can be used to play live over the sequence when controlling a polyphonic slave instrument.

The GATE TIME control can be used to alter the duration of the transmitted MIDI notes in the normal way.

\* N.B. If the sequencer is running, the arpeggiator is disabled.

## 5. OMNI MODE

Enabled at power on.

Press and hold down [SPACE] button and press key -2 on the keyboard. The fifth LED from left side will light up in omni mode is selected.

In the omni mode the OSCAR will receive signals on any of the 16 MIDI channels. If omni mode is switched off, signals will only be received through the MIDI channel selected in the OSCAR (see next section). This option is only applicable when the OSCAR is the slave instrument as transmit signals are not affected by it. Transmission is always on the internally selected MIDI channel.

It is unusual to be able to turn the omni mode on or off locally; it is usually only selectable remotely via a special signal received through MIDI IN. (If this happens, the omni mode LED will show the remotely selected state.) In certain circumstances it is useful if the omni mode option can be overridden manually.

## 6. CHANNEL ASSIGNMENT

At power on, set to Channel 1.

To change channel, press and hold down [SPACE] button and press keyboard key in the range 1 to 16 to select the channel number required. MIDI signals are always transmitted on the channel selected. If the omni mode is OFF, received MIDI signals will only be accepted if they are on the selected channel. If the omni mode is ON, signals received on any of the 16 channels will be accepted. Note many MIDI instruments can send a special signal to turn the omni mode OFF and if the transmit and receive

channels are not the same, the slave instrument will not respond. Press the [SPACE] button to check the status of omni mode.

## 7. PULL-OFF

At power on, the PULL-OFF response is enabled.

To disable, press and hold down [SPACE] button and press key 22. To re-enable repeat the procedure. OSCAR responds when the sounding key is released but another key is still held down. Using the PULL-OFF style of playing is immensely desirable with monophonic instruments.

## ALL NOTES OFF

When using MIDI instruments notes can occasionally be left on when they should be off. If a MIDI lead is disconnected before an appropriate note off signal is given, the note will stay on.

Press and release [SPACE] button, this will turn off all the keys of the OSCAR keyboard, regardless of how they came on. If keyboard signals are enabled, it also transmits a special all notes off signal which has the same effect on a slave OSCAR with the keyboard signal enabled. Most other MIDI instruments respond to the all notes off signal.

## PROGRAM DATA TRANSFER

With the use of the MIDI System Exclusive format, programmable waveform, voice and sequence data can be transferred to another OSCAR. (See Cassette, Saving and Loading Section) Press and hold down [INSERT] button (cassette ready) and press [VOICE], [SEQ] or one of the [WAVEFORM] push buttons (or [STORE] for all three types); the OCTAVE display will show the ready condition in the normal way. Then, instead of pressing [LOAD] or [SAVE], press [SPACE] and the data will be transmitted. It is not necessary to set up the slave Oscar, the data received at the MIDI IN will be stored in its memory

## MIDI OPTIONS MENU

**PRESS AND HOLD DOWN [SPACE] BUTTON, FOR ALL FUNCTIONS. FOLLOWED BY A KEY PRESS (except All Notes Off).**

<i>FUNCTION</i>	<i>PRESS KEYBOARD KEY</i>	<i>LED DISPLAY</i>
WHEELS ON	-11	● ○ ○ ○ ○
PROGRAMMES ON	-9	○ ● ○ ○ ○
KEYBOARD ON	-6	○ ○ ● ○ ○
SEQ/ARP ON	-4	○ ○ ○ ● ○
OMNI MODE ON	-2	○ ○ ○ ○ ●
CHANNEL SELECT	1 to 16	
PULL-OFF DISABLE	22	

ALL NOTES OFF	PRESS AND RELEASE [SPACE] BUTTON
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## **GENERAL INFORMATION ABOUT MIDI CONNECTIONS**

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

MIDI OUT (if fitted) 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.

## **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). Note that kits should be fitted as soon as possible after purchase, as the retrofit kits are in a continuous state of development.

The logo for Kenton, featuring the word "KENTON" in a bold, white, sans-serif font, centered within a solid orange rectangular background.

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