

Korg KPR-77 MIDI Interface

Installation Instructions

The kit includes the following:

- 1x Pre-assembled MIDI interface board
- 1x 14-way ribbon cable with IDC plug
- 1x Push button switch

You will need:

- Fine-tipped soldering iron & solder (tin / lead alloy recommended)
- Phillips head screwdriver
- Wire strippers
- Small-gauge stranded core wire

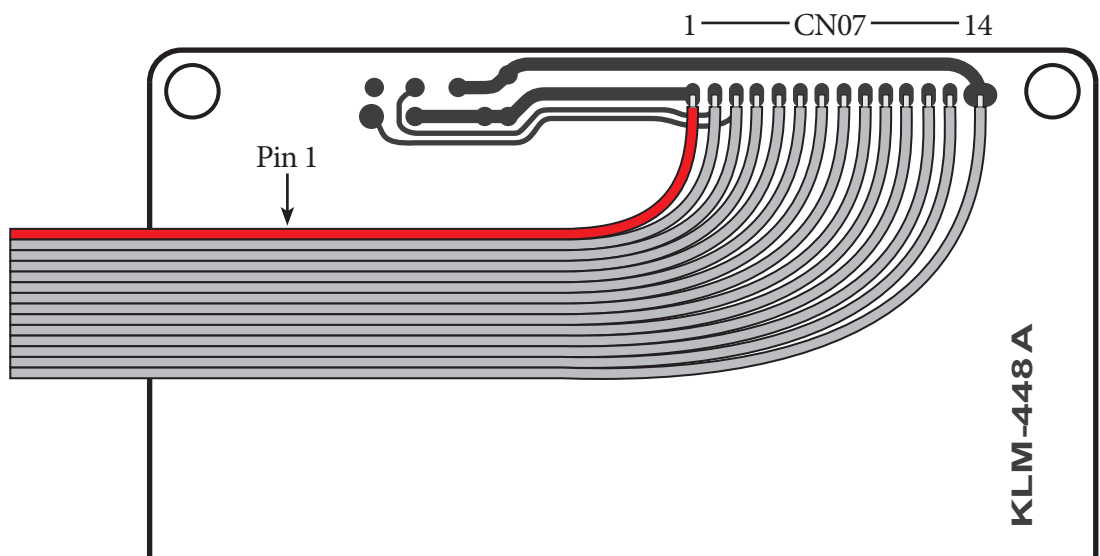
Installation

1. Remove any batteries if they are installed, and remove the 7x screws on the bottom of the KPR-77. Carefully separate the two halves of the case by disconnecting the 2x flat flex cables and 3x Molex connectors.

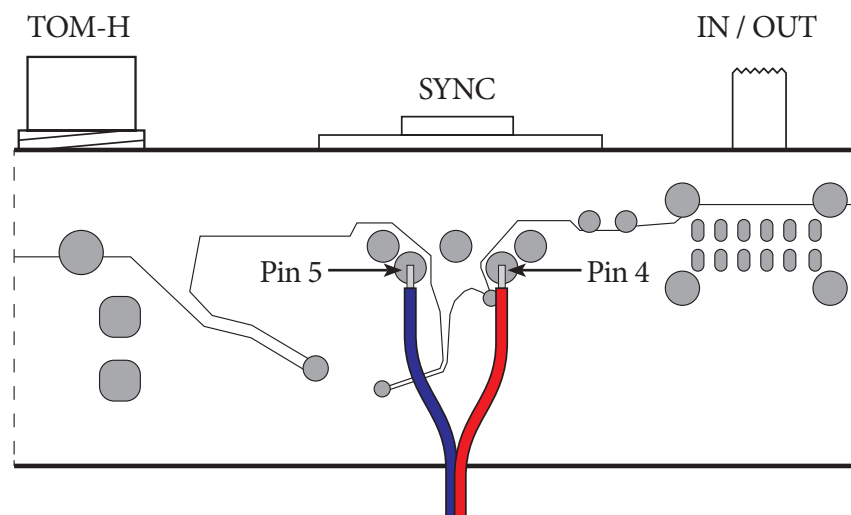
Note: the two halves will still be joined by the wires going to the volume knob / power switch.

2. Unscrew and remove the square board labelled 'KLM-448A', found in the bottom half of the case. Disconnect the flat flex cable that joins it to the large voice board.
3. Separate and fan out the wires of the included ribbon cable. It is recommended that you cut the wires progressively shorter towards the striped end (Pin 1), as it will be connected at right angles to the KLM-448A board. Strip a small amount of insulation on each, and tin the wire with solder.

Solder the 14 wires to the underside of CN07 on the KLM-448A board as shown:

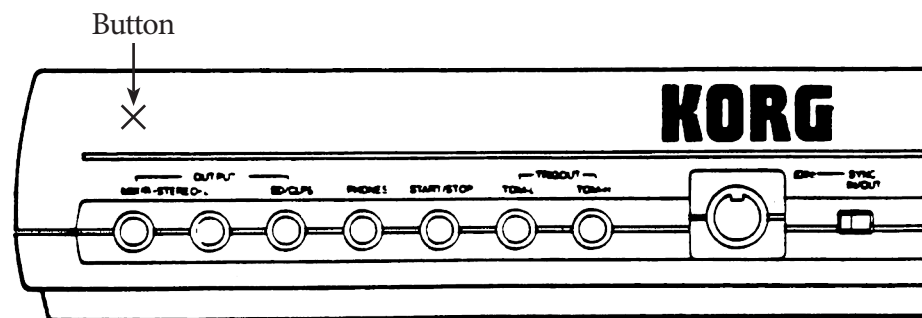


4. Unscrew and remove the voice and connector boards which occupy the bottom case (they are attached together). Solder 2x 40cm lengths of wire to pins 4 & 5 of the SYNC connector as shown. Either use different coloured wires, or mark the wires to tell them apart.

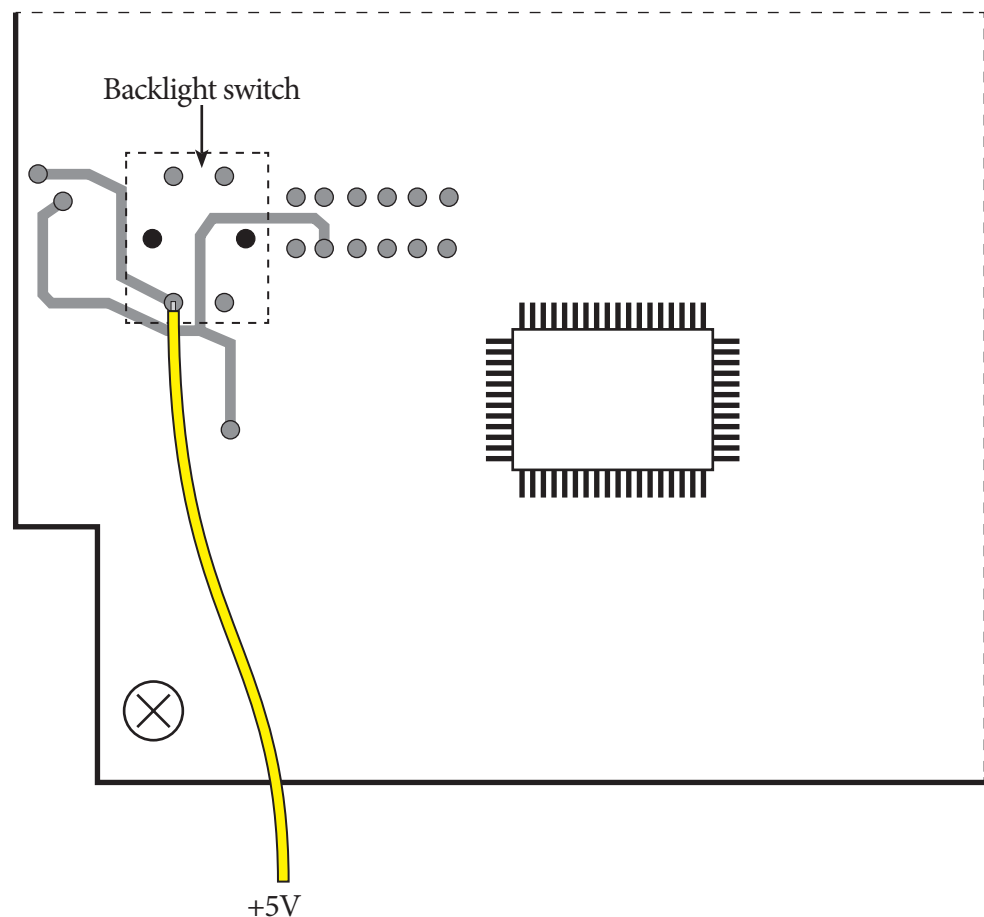


5. Replace the voice and connector boards, running the wires from the SYNC socket underneath the voice board to the battery compartment. Be careful not to pinch any wires when replacing the screws. Also replace the KLM-448A board, and reconnect its flat flex cable.
6. Carefully drill a hole for the MIDI Learn button in the top left corner of the back panel, above the MIX / R output jack. Make sure the drill bit doesn't hit anything when it emerges. Solder 2x 60cm lengths of wire to the terminals of the button and fit it. Run the wires to the battery compartment - you can bundle them with the wires from the power switch.

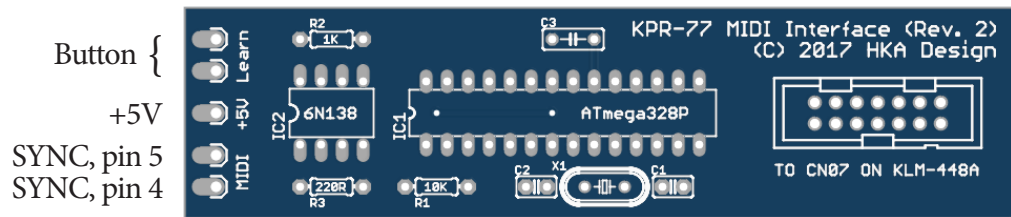
Note: if you don't want to drill a hole in the case for the button, you could instead hot glue it to inside of the battery door (in which case the wires need only be a few cm long).



7. Solder a 40cm length of wire to the backlight switch (+5V), located on the sequencer board in the top case as shown, and run it to the battery compartment.



- Solder the 5x newly installed wires to the pads on the MIDI board as shown:



- Position the MIDI board in the battery compartment so that the ribbon cable from the KLM-448A board, when folded, will reach the IDC socket. Plug the cable into the socket.
- Reconnect the 2x flat flex cables and 3x Molex connectors from the top case to the bottom case. Close the KPR-77, ensuring that no wires are getting pinched or stretched. Replace the 7x case screws.

MIDI Setup

The first time you power on the KPR-77 after installing the kit, it will not respond to notes as the MIDI channel has not yet been initialised. To do so (and to change it at any point in the future), press and hold the MIDI Learn button. While holding the button down, trigger a note on the channel you want the KPR-77 to receive on.

The metronome bell will sound 3 times, indicating that the channel has been set. You can now release the button. The channel will be stored in EEPROM and recalled on start-up. The velocity of the note is taken as the accent threshold velocity.

MIDI Implementation

The KPR-77 will respond to MIDI Note On messages on a specific channel (see above). Drum voices will play accented if the velocity is greater than the accent threshold velocity, depending on the position of the ACCENT slider. Using MIDI will not affect the operation of the internal sequencer - both can trigger voices simultaneously. The KPR-77's original SYNC functionality is unchanged, although it is not possible to use it at the same time as MIDI.

The drum voices are assigned to the following MIDI notes:

Bass Drum	36	(C3)
Snare Drum	38	(D3)
Closed Hi-Hat	42	(F#3)
Open Hi-Hat	46	(A#3)
High Tom	48	(C4)
Low Tom	45	(A3)
Hand Claps	39	(D#3)
Cymbal	49	(C#4)
Metronome (Click)	37	(C#3)
Metronome (Bell)	56	(G#4)