

## KORG Delta MIDI installation manual v 1.0

### Introduction

Great care has been taken to make sure this installation is as simple as possible.

The LaLaLand Delta MIDI Board plugs in between the existing Delta main board PCB, and existing Delta connectors.

#### Delta MIDI Kit:

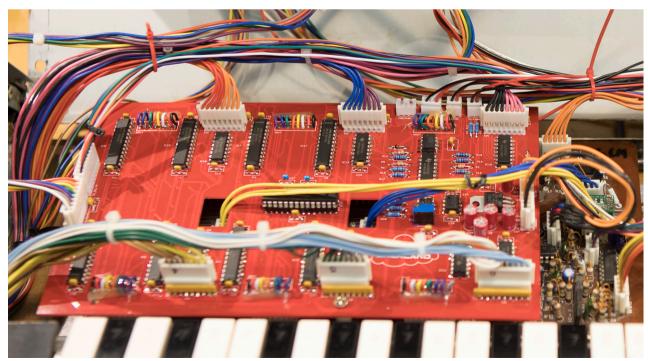
Optional Filter and Gate control via two solder points. \*see diagram

No drilling needed for switches or knobs, all settings made on keybed (see User's Manual)

Only two extra cables needed (provided in kit) (no soldering needed for basic kit\*)

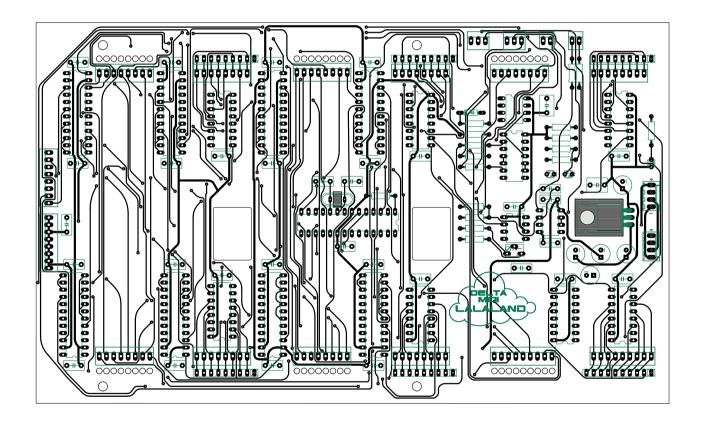
Only drilling is for MIDI Jacks (see provided template in kit)

Tools needed
Philips Screwdriver
3.5mm and 14mm Drill Bits for MIDI Socket template
2mm Drill Bit (for Guide Holes)



#### Content

Delta MIDI Board 3x Cables 3x prewired MIDI sockets plus 6x screws & 6x nuts MIDI Jack drilling template 4x Spacers and 4x screws

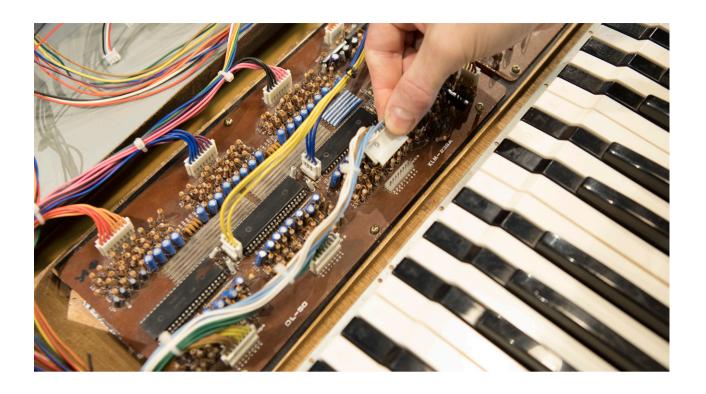


## Installation

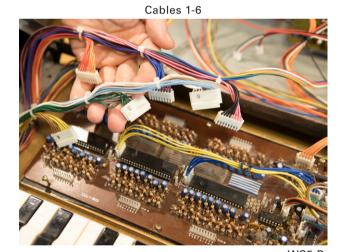
Unplug from power remove four screws on front panel remove four screws on back panel and three screws underneath, backside.

Open synth
On the Delta board, locate the six connectors marked 1-6 (upper left= 1, lower right= 6) and the Yellow (11) & Blue (10) cables as well as the Power Cable (WS5)





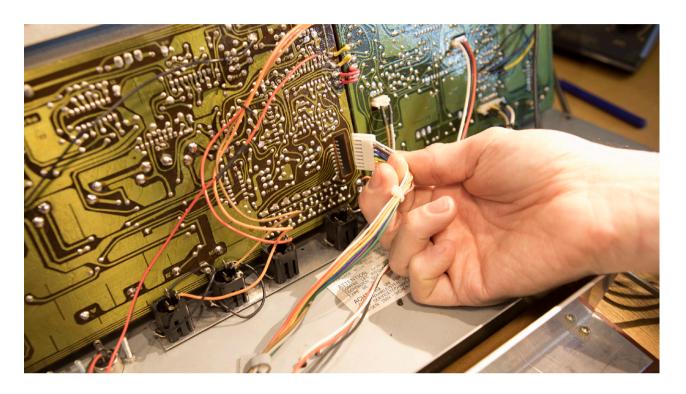
Unplug cables 1-6 Unplug <u>Yellow (11)</u>/ <u>Blue (10)</u> cables from centre of board Also unplug Power Cable <u>WS5</u> (marking on board)







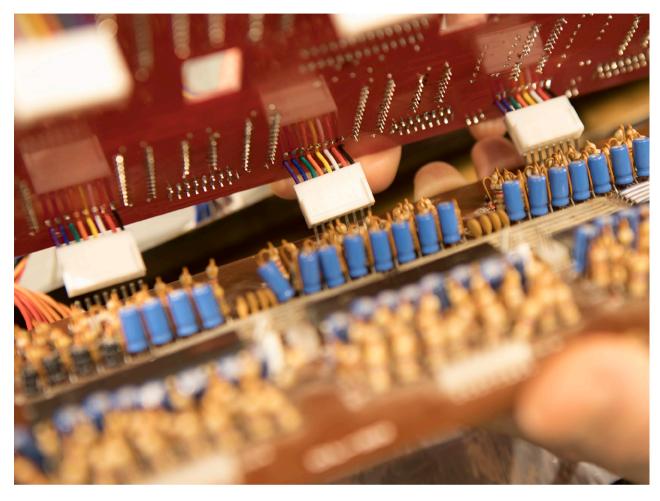
## Also unplug the bottom Right cable from the front PCB on the Delta (Connector 7)



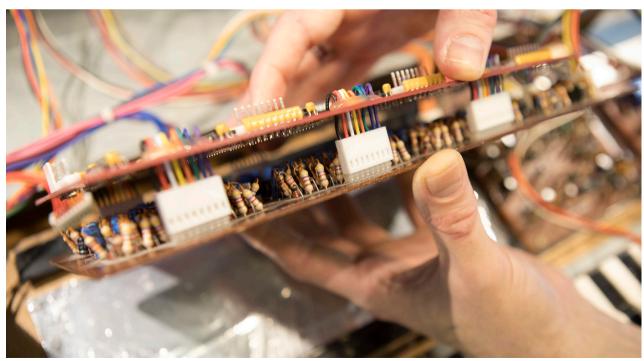
Remove the six screws holding the main Delta board in place. Now the Delta board should move freely (four of the screws will be replaced with new screws holding the MIDI Board, two will be reused)



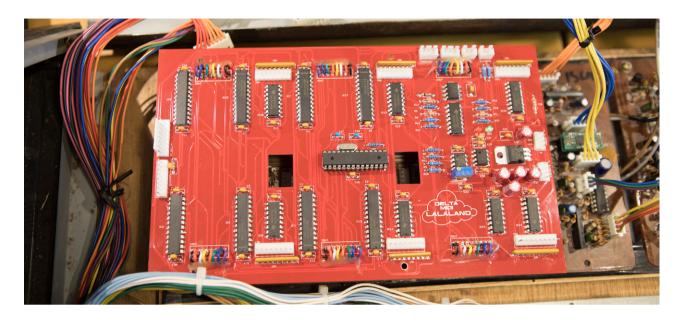
# Holding the Delta Board plug in JST connectors 1-3 of MIDI Board into Delta Main Board



Now connect JST connectors 4-6

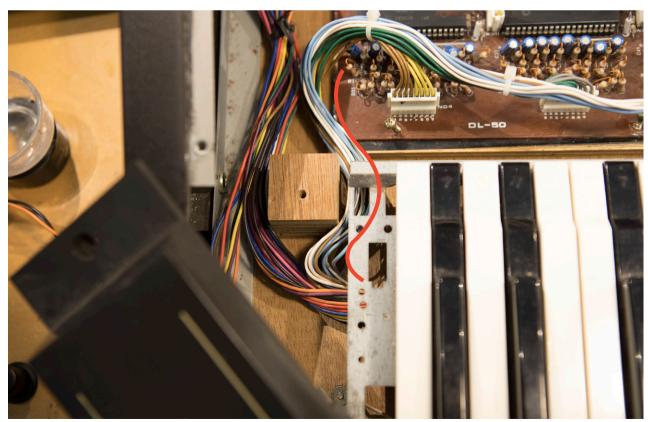


#### Put both boards into place



The following step is usually not needed! In rare cases the cable which connects the keybed to the Delta Board is a tad bit short after installing the MIDI Board and requires to be relocated as follows:

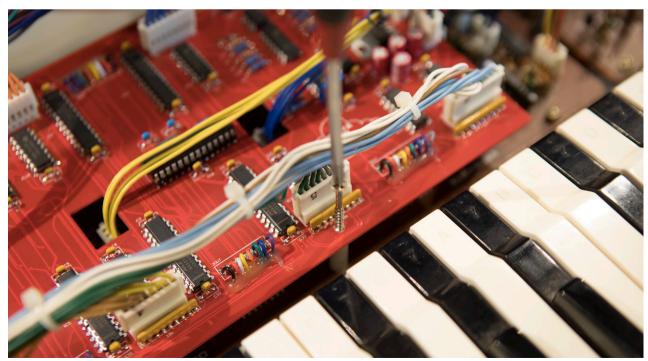
Start by unscrewing and moving the Joystick assembly, exposing the cable. Gently tuck the cable between the wooden block and underneath the metal frame which fastens the keybed to the bottom.



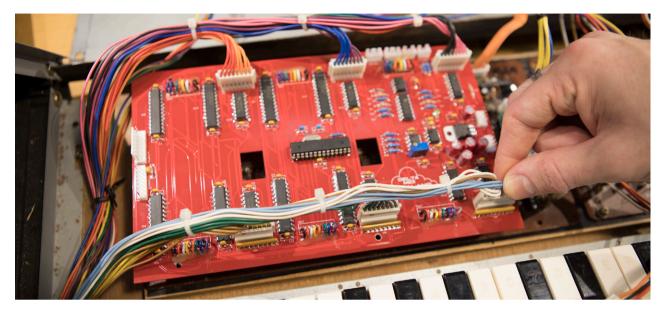
#### Place spacers between boards



Insert provided screws but perhaps it is best not to fasten the boards until tests have been fully completed



#### Connect JST connectors 1-6 to MIDI Board

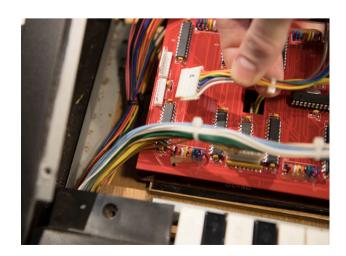


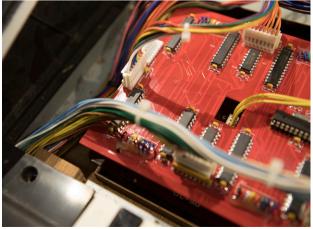
Connect Yellow (11) and Blue (10) cables back into the centre of Delta Main Board



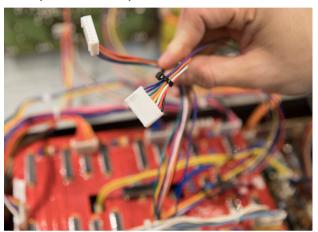


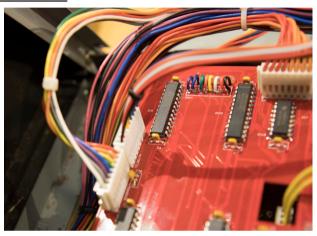
Connect Cable 7 from Delta Front Panel to <u>BUSBARS</u> connector on MIDI Board (cutting cable-ties is needed for the cable to reach the MIDI Board)





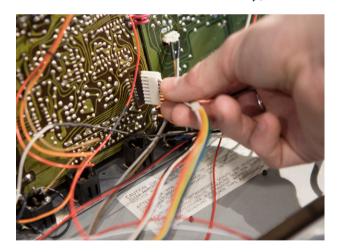
Use provided 8 pin cable and connect to **TODELTA** connector on MIDI Board

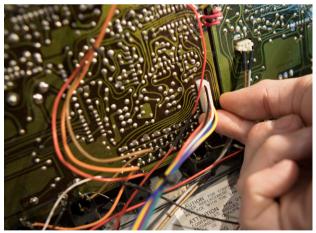




Now connect the <u>TODELTA</u> cable to Front Panel Connection (orientation: <u>Black Wire</u> facing up)

Make sure it is seated correctly; not off by one pin or so.





#### Plug WS5 Power Connector onto MIDI Board PWRIN

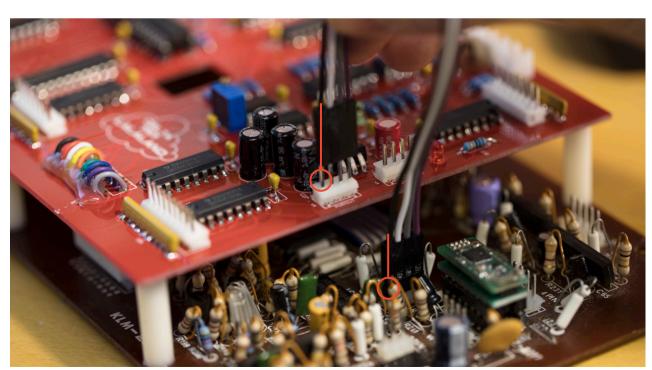


Connect <u>PWROUT</u> from MIDI Board to Delta Main Board WS5 Connector using provided cable.

Make sure that Pin 1 (-15) on MIDI Board is connected to -15 on the Main Board(same position as white wire on original cable)

Orient Power Cable correctly!

#### (COLORS OF PROVIDED POWER CABLE MAY DIFFER!)



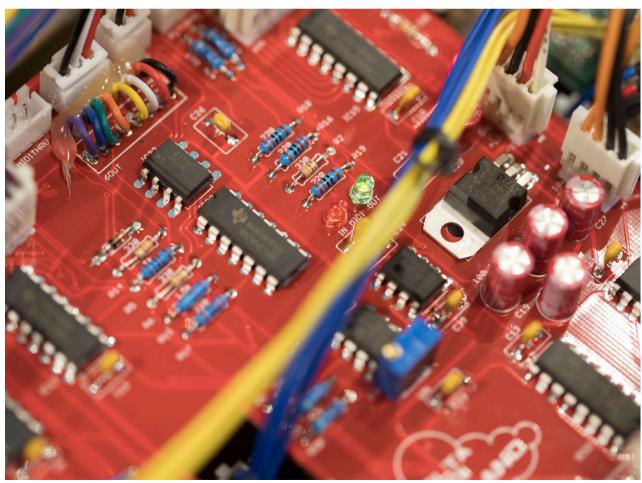
# Testing (MIDI OUT and general operation)

Power on synth (be careful, HIGH Voltage inside Synth!)

Play keyboard, you should hear the synth and see the Green MIDIOUT LED on the MIDI Board light up.

If not, verify all connections and front panel settings.

If ok, turn off synth and <u>unplug from power</u> before proceeding to next steps.



# Optional: Gate and Filter Control Installation

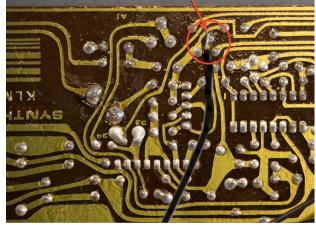
Only two solder points are needed.

Using the provided two pin cable you can easily install the optional Filter and Gate control.

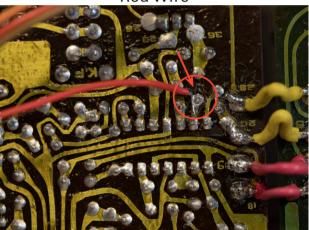
Solder Black Wire to Center front panel as pictured Solder Red Wire to Center front panel, right-most side, as pictured.

Black Wire = Filter Red Wire = Gate

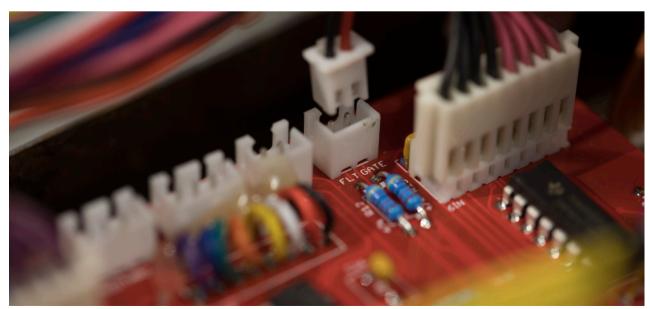




Red Wire



Plug the two pin connector to FLTGATE on MIDI Board (top-right connector)



### **MIDI Connectors Installation**

For drilling on back panel use provided drilling template.



(Precaution: Place a towel or equivalent over the internal boards, metal fragments are not wanted on the PCBs;)

Place Drilling Template and align Start by drilling 2mm Guide Holes. Drill from the back (outside->) Proceed to drilling 14mm holes; step-drill bit recommended.

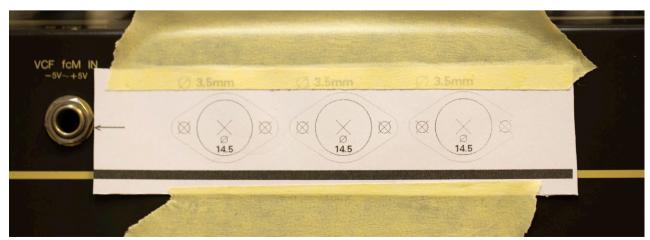
Insert three-wire MIDI Socket into left-most hole and plug into MIDITHRU on MIDI Board

Insert three-wire MIDI Socket into middle hole and plug into MIDIOUT on MIDI Board

Insert two-wire MIDI Socket into right-most hole and plug into MIDIIN on MIDI Board

Once in place, use 2mm drill bit for drilling guide holes for mounting screws/MIDI sockets.

Fasten sockets using provided nuts and bolts.



## **Testing MIDI IN**

Keep synth open for observation.

Plug in synth and power on (be careful, HIGH Voltage inside Synth!).

Connect MIDI from Controller/DAW MIDI OUT to Delta MIDI IN

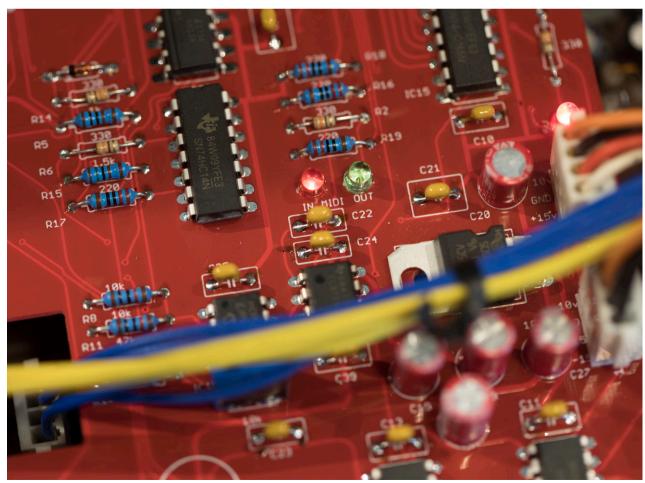
(Default Setting: MIDI Channel 1)

Play MIDI Controller/DAW

Verify Red MIDIIN LED on MIDI Board

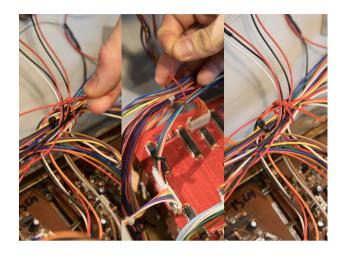
If ok, you should hear sound.

If not, verify all connections and front panel settings.



## **Finalizing**

Use cable-ties and fasten cables for a clean, neat & fashionable look.



Your board installation should look somewhat like this:



Close synth and fasten screws.

Congratulations,
you now have one of the few
MIDI Capable Deltas on the Planet!