

Shock Electronix

Modatron Modulator

Build Guide V02 (With Audio IN mod included (Refer to Stage 3))



Standard

W/Audio Input

Introduction:

Congratulations on your purchase and thank you for supporting Shock Electronix.

The **Shock Electronix Modatron Modulator** is our Eurorack conversion of the extremely popular Korg Monotron (Standard Model).

As standard, the Korg Monotron is a full-fledged, true analog synthesizer: VCO, VCF, LFO with the same classic analog filter found in the legendary Korg MS-10 & MS-20, and with newly added controls, there is much more flexibility and functionality than ever before.

Read more about the Korg Monotron [here](#).

The modification has purposely been designed for those with very basic assembly and soldering skills.

We are sure that you will reap the rewards of this simple modification.

****Note**** There are of course other modifications possible for the Monotron, however this means cutting tracks and/or adding additional circuits. As such we do not wish to engage with those modifications.

Disclaimer:

Whilst we have made every effort to ensure that the product is of high quality, and working perfectly we would appreciate you read our disclaimer below, as it is really important.

- Shock Electronix provides a 5-year warranty on the Modatron Front Panel and PCB
- If you do not feel comfortable with installing the Modatron, then please consult a qualified technician.
- ***It is essential that you test your Korg Monotron device before the modification of it with the Modatron to ensure your device is fault free, and that any warranty issues are resolved with the manufacturer prior to installation.***
- ***Any modifications to the original OEM design of your Korg Monotron device may void its warranty in full.***
- Shock Electronix accepts responsibility for the design of the Modatron
- Shock Electronix does NOT accept responsibility for any damage, loss or harm that may result during installation.
- "Monotron" is a trademark of KORG Inc. Japan, all other trademarks and copyrights are property of their respective owners.

We have designed the assembly guide to form our particular method of assembly/disassembly. It is designed so that you can have both an instructional guide view and visual guide view to complete the task.

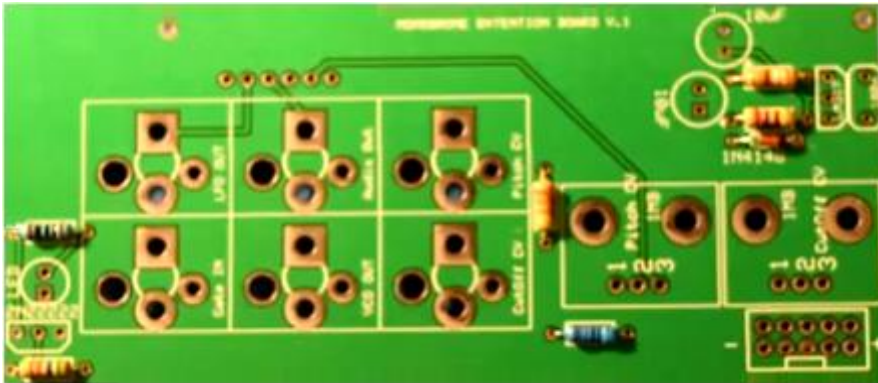
We encourage you to report any areas of concern or ways of doing things better and quicker, or any hacks and mods that may be useful.

Installation: (Let's do this!)

Stage 1: Assembly of the Modatron PCB Board.

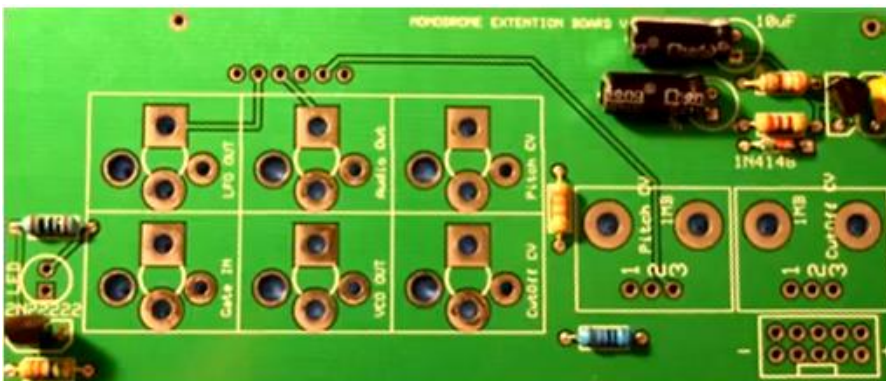
Step 1:

1. Fit 100R, 270R, 390R, 5K6, 10K, 33K
2. Fit 1N4148



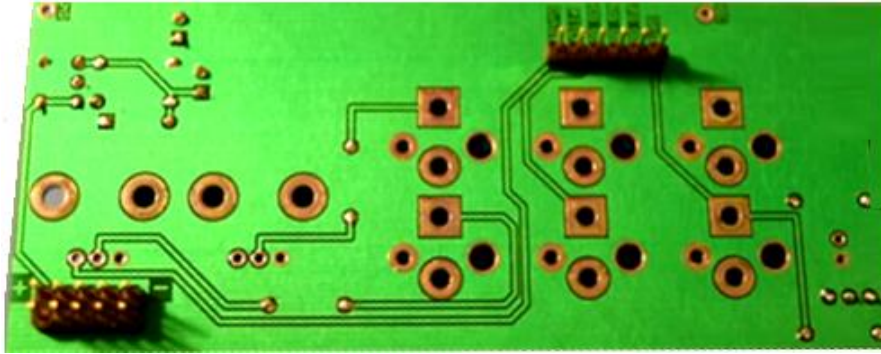
Step 2:

1. Fit 10uF, 100nF
2. Fit LM317, PN2222A



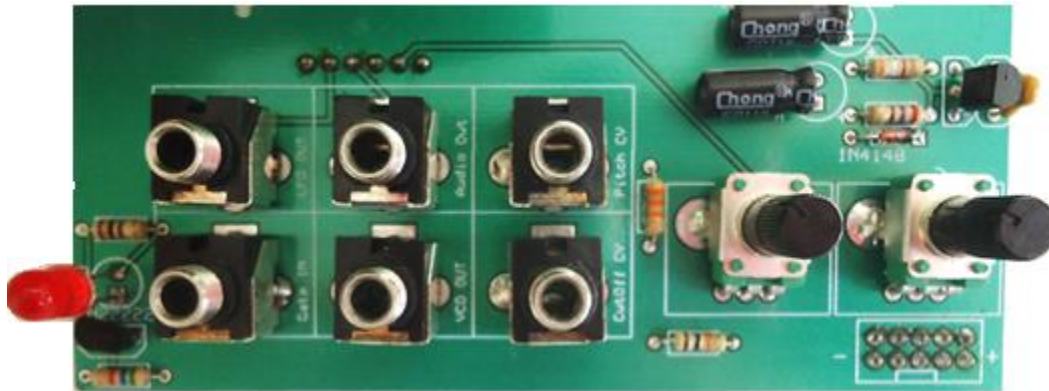
Step 3:

1. Fit 6 Pin RA Header
2. Fit IDC10 Boxed Header (or Unboxed)



Step 4:

1. Fit Red LED 3mm, 50k LIN (PTV09), all of the 3.5mm jacks (6) to the PCB, **"but do not solder"**.



Step 5:

1. Fit Red LED 3mm, 50k LIN (PTV09), all of the 3.5mm jacks (6) to the PCB, **"but do not solder"**.
2. Place the Modatron front panel over the PCB, so that Red LED 3mm, 50k LIN (PTV09), all of the 3.5mm jacks (6) locate freely into position.
3. Fit 6x nuts to the sockets.



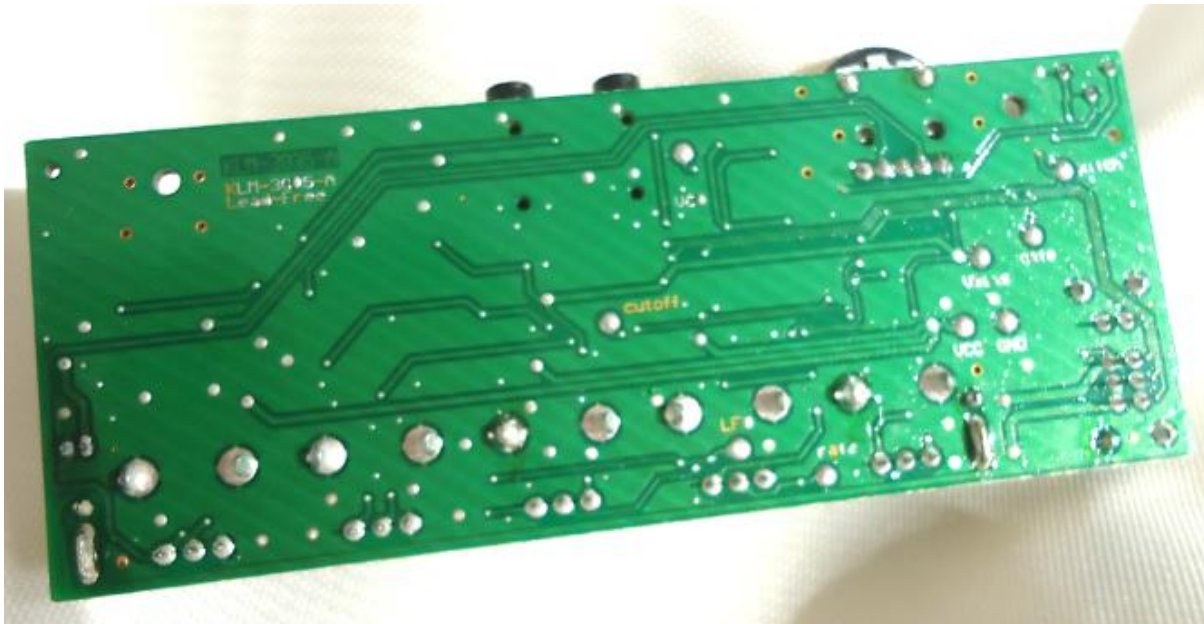
1. Whilst holding together the PCB to the Front Panel, turn over, lay on a flat surface and solder Red LED 3mm, 50k LIN (PTV09), all of the 3.5mm jacks (6)

Stage 2: Removal of Monotron from Chassis to Modatron Panel.

Step 1: Remove all external Philips head screws from the Monotron chassis and separate the KLM board carefully.

Step 2: Unplug the speaker wires, unplug the ribbon wire. (Take care with the Ribbon wire, as you may wish to consider using that for the ***Shock Electronix Modatouch***)

Step 3: Trim or de-solder the battery contacts.

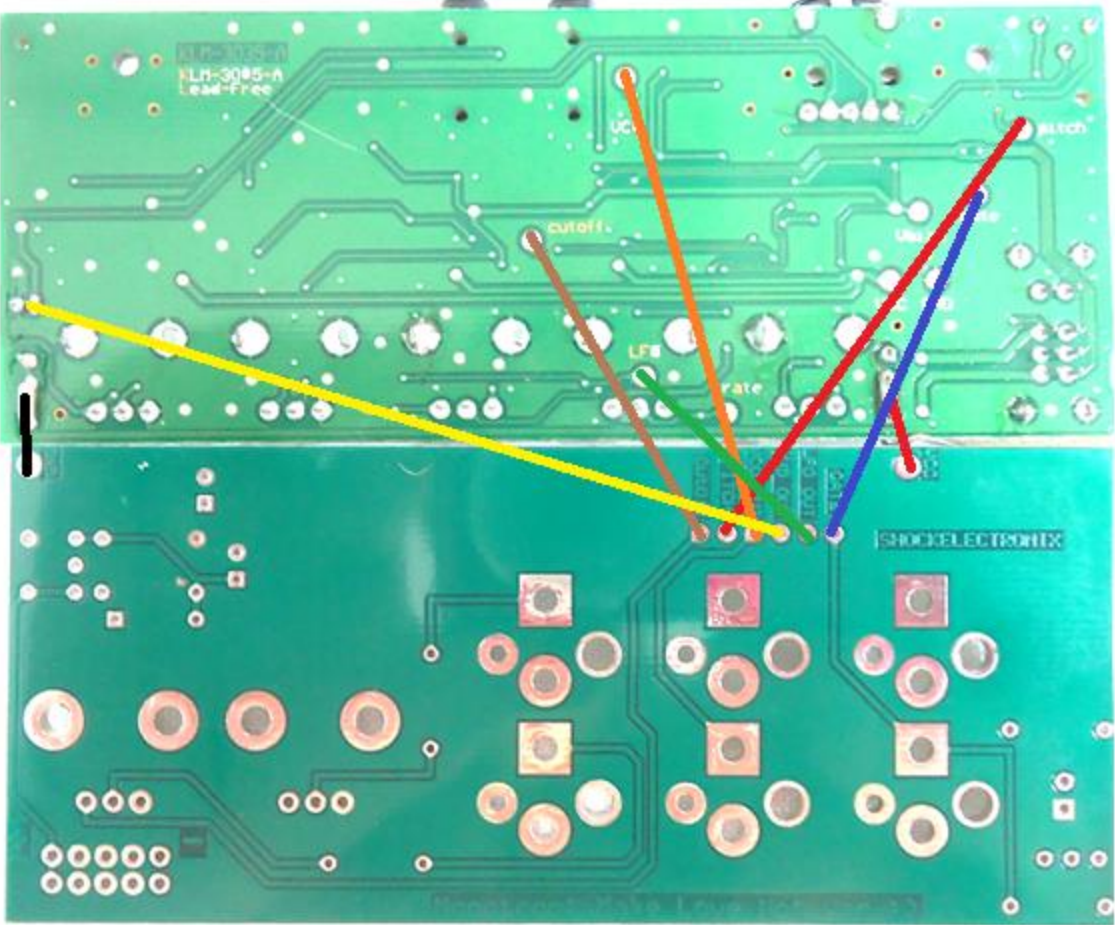


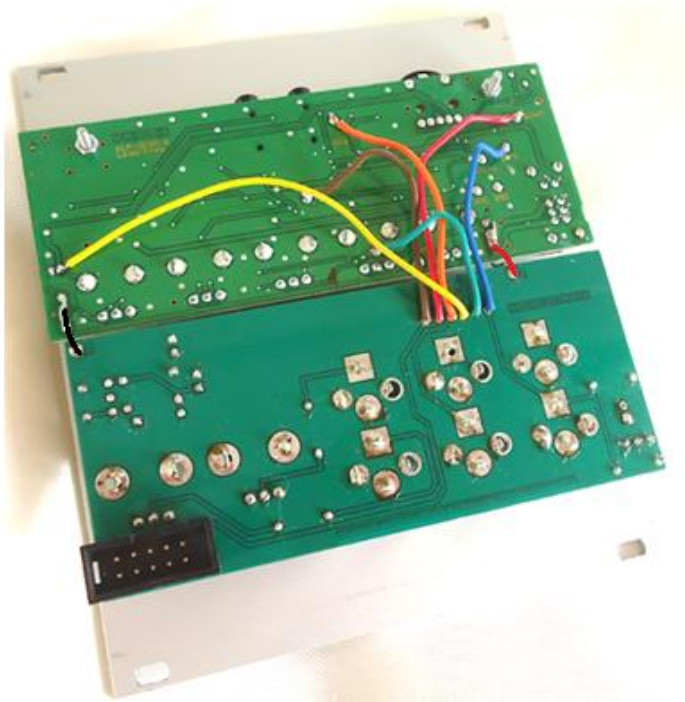
Step 5: Mount the KLM board to the Modatron panel. Fit M2 x 20mm Bolt, M3 x 10mm Spacer, M2 Nut.

However, if you are going to perform to the Audio Input Mod, refer to “Stage 3”. Otherwise follow only “Stage 2” and “Stage 3” only.

Step 6: Prepare the colored wires for the controls and solder each to the board as shown in the following image.

Step 7: Prepare the colored wires for the power and solder each to the board as shown in the following image.





If you have done everything according to the instructions, then **CONGRATULATIONS**, you are done!

BUTTTTTTTTTTTTTT WAIT there's more! We've now added the Audio Input Mod.

By popular demand, we've added the Audio Input jack.

Originally, we designed the Modatron board and panel for a nice clean transplant, and therefore the Audio Input was originally not included. Soooooo if you want Audio Input, follow these tips and reap the rewards.

Stage 3: Adding Audio Input socket to the Modatron Panel.

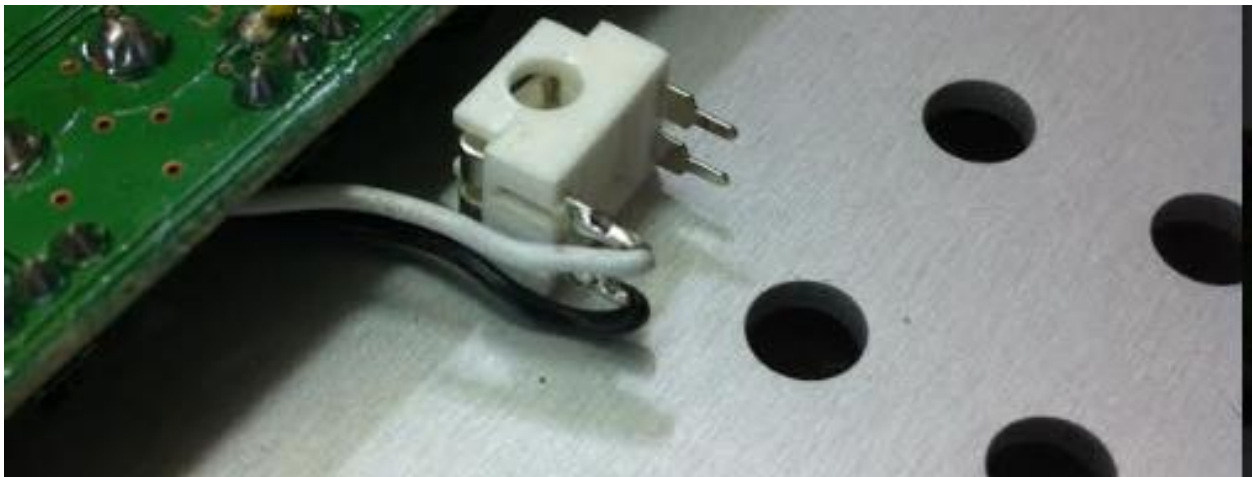
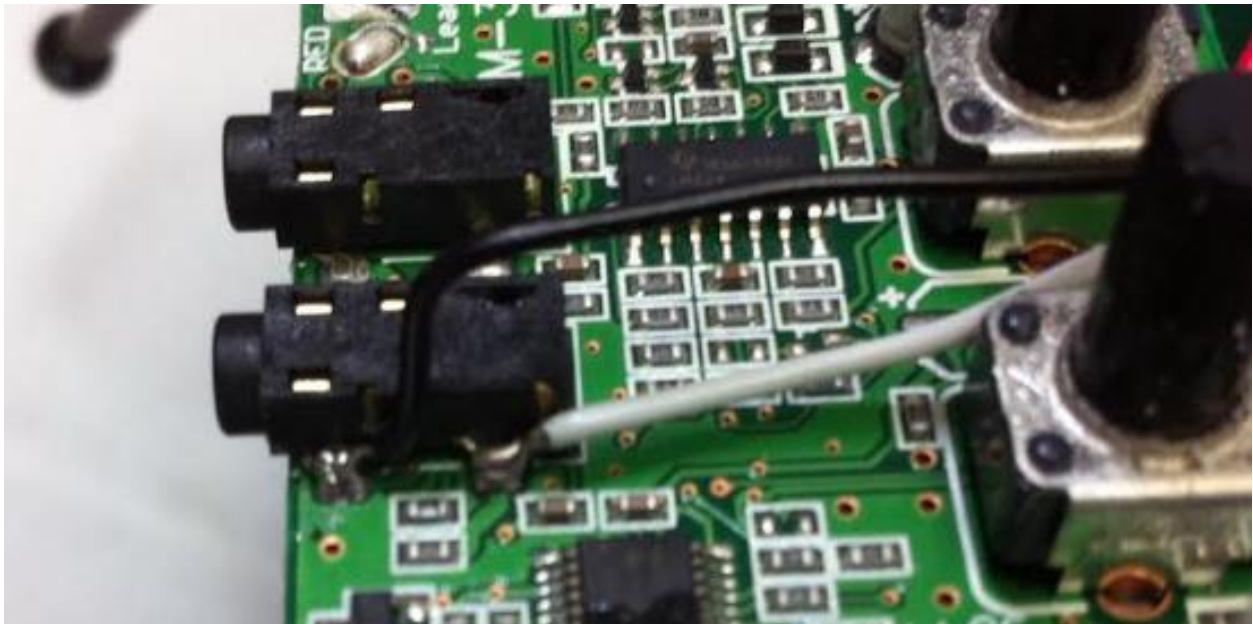


Step 1:

1. Refer to image above for our suggested location to add the Audio Input socket.
2. Drill hole 8mm

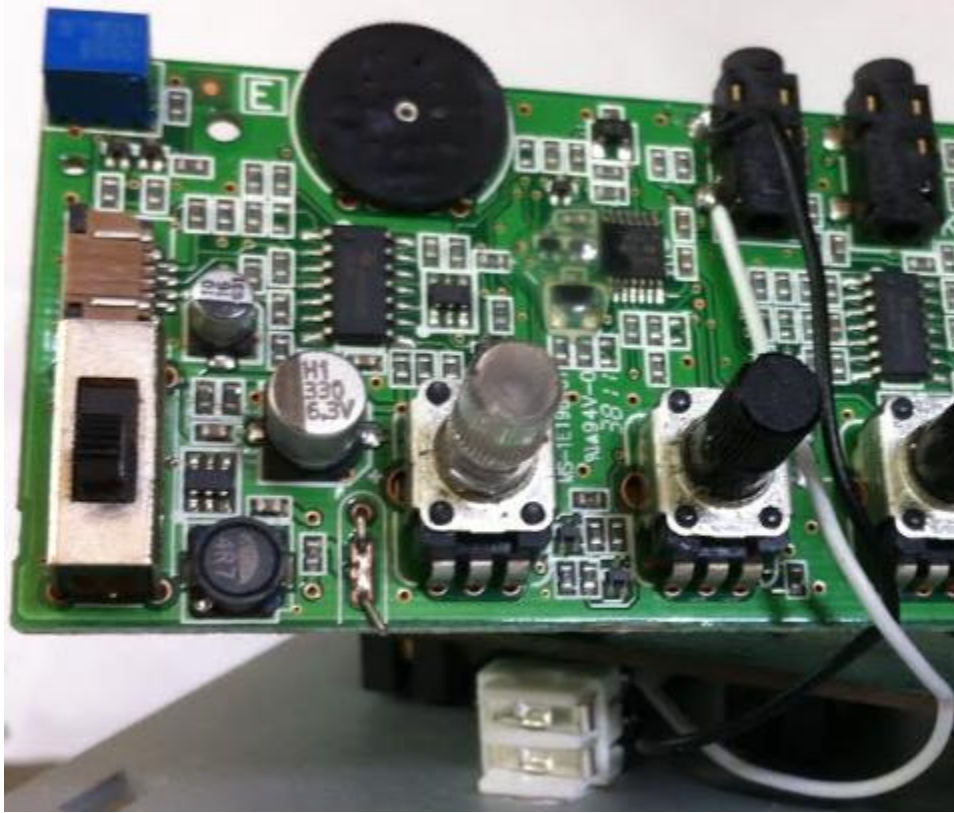
Step 2:

1. Solder wires to socket as shown on the KLM board
2. Solder Wires to socket (Cliff Panel Jack 2392728) terminals as shown



Step 3:

1. Secure the socket (Cliff Panel Jack 2392728) to the panel



Step 3:

1. Mount the KLM board to the Modatron panel. Fit M2 x 20mm Bolt, M3 x 10mm Spacer, M2 Nut.

If you have done everything according to the instructions, then **CONGRATULATIONS, NOW** you are done! **NOW**, you've got Audio Input 😊