# One Control LWP Series 1Loop Box Kit

Thank you for purchasing the One Control LWP Series 1Loop Box build-it-yourself kit.
Before starting production, please be sure to check the parts list and make sure that there are no missing parts.
In the unlikely event that something is missing, please contact the musical instrument store where you purchased it.

1. Parts Checklist:
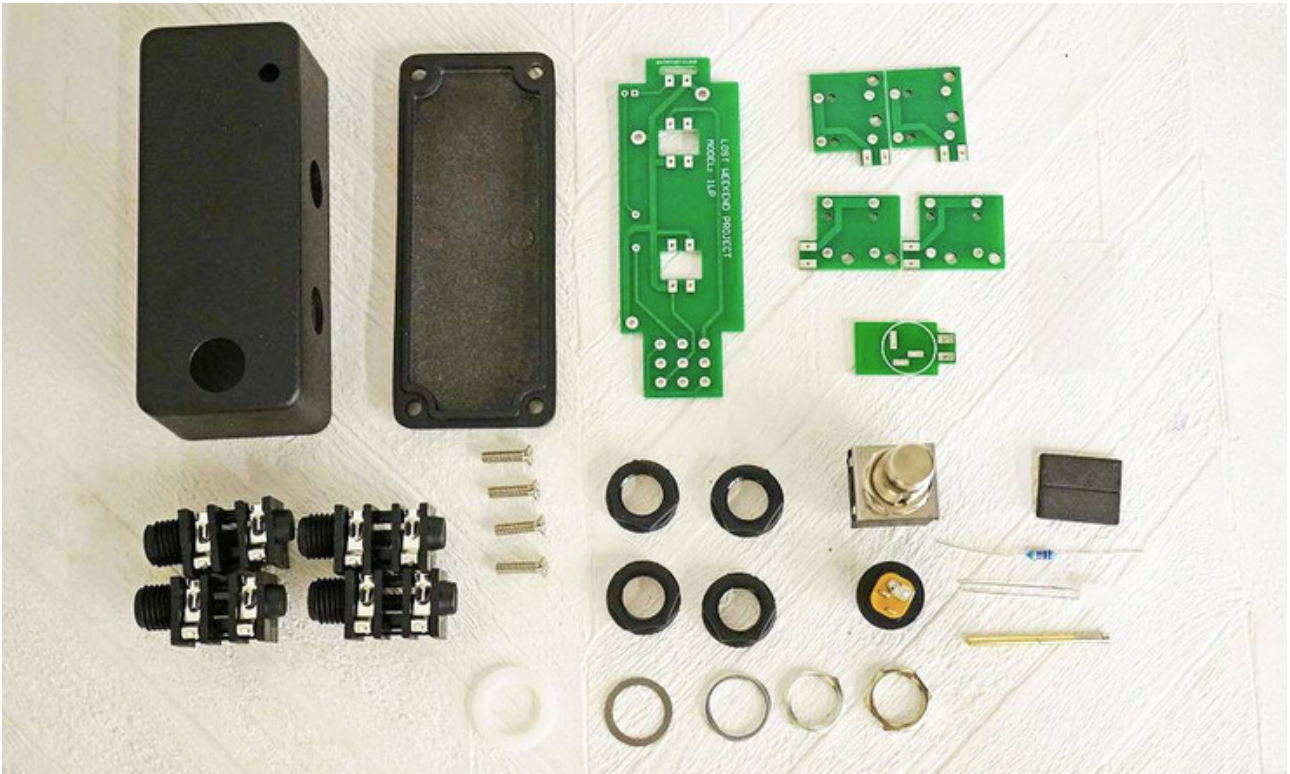
- 1 x case (pre-drilled)
- 1 x case back cover
- 4 x monaural jack
- 4 x nuts (black)
- 1 x DC input terminal
- 1 x DC input terminal nut
- 1 x Main PCB
- 4 x Jack PCB (marked as MONO)
- 1 x DC input PCB side
- 1 × 4.7K resistors
- 1 x Insulator (black)
- 1 x Insulation sheet (translucent)
- 1 x LED
- 1 x foot switch
- 1 x Foot switch nut
- 3 x washers
- 1 x Ground bar (gold and silver combined bar)
- 4 x back cover screws
- 1 x Rubber feet set

You can start to build the 1Loop Box Kit after confirming that there are no missing parts.
Once production has begun, we may not be able to provide exchanges or returns. Please make sure that no parts are missing.
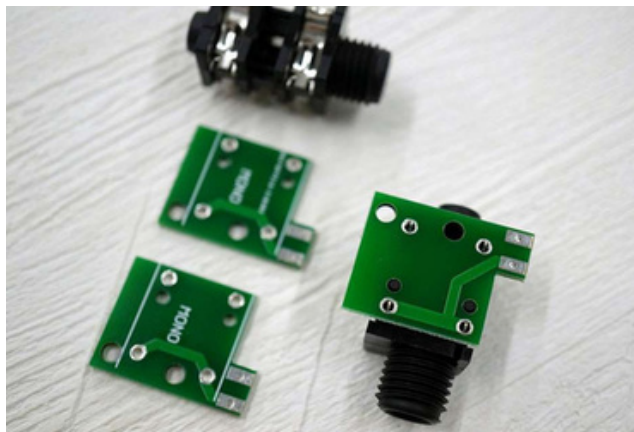
In addition, the following tools are required for production:

- Soldering iron, solder, screwdriver, hex wrench, nippers (pliers, etc.)
- Masking tape (if available)
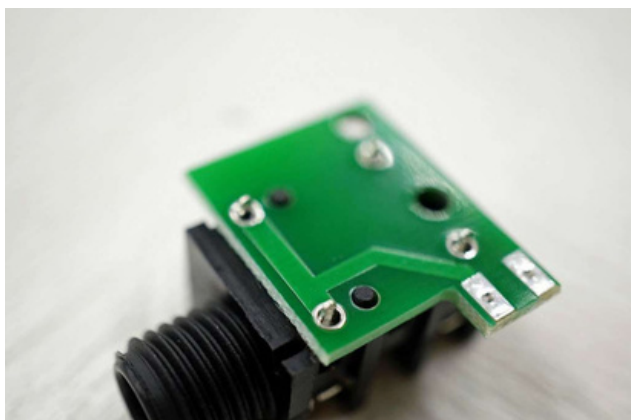- Solder sucker (for troubleshooting)

2. Assembling the jack and parts onto the PCB:
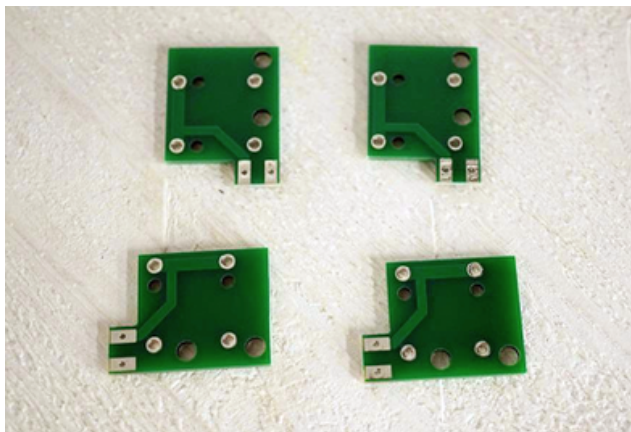
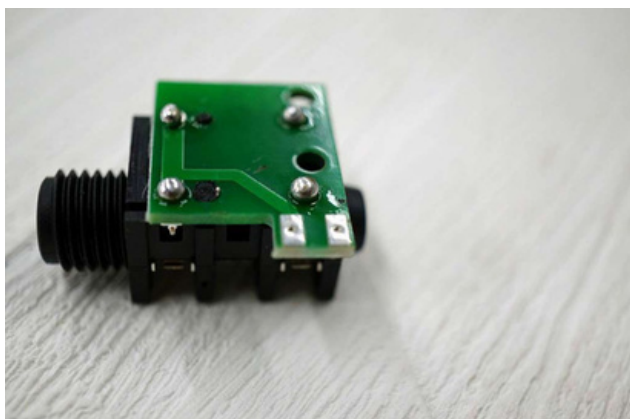Fold the PCB for the jack into four parts and attach each of them to the jack.

Attach the jack to the side with the letters on the board.

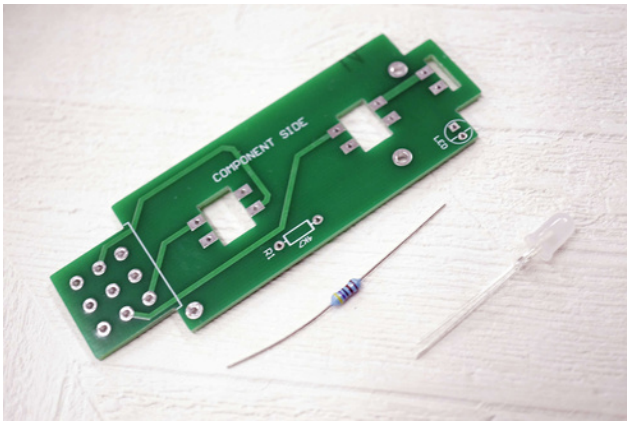In this way, align the protrusion of the jack with the hole on the board and install it.

Now, install the DC jack and DC jack PCB. Similarly, attach the side marked with ◯ to the board according to the correct shape of the terminal.
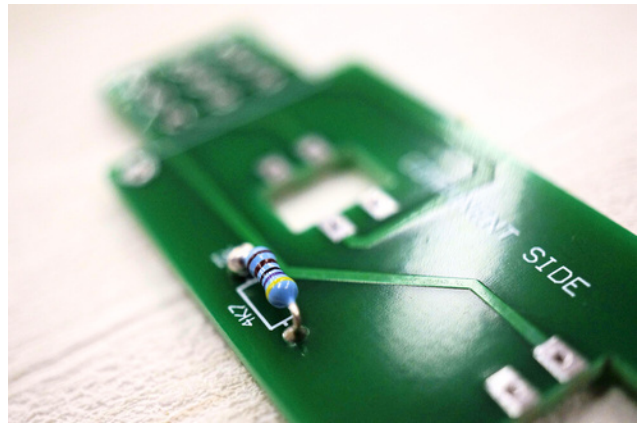

Solder each of the jack lugs.

Solder the three terminals of the DC jack in the same way.

Attach the parts to the main PCB. Insert all parts from COMPONENT SIDE.

First, place the resistor on the PCB where it says 4.7K. It doesn't matter which direction.
Insert the resistor into the PCB as shown in the photo, solder it from the back side, and cut off the excess lead wire with nippers or pliers.
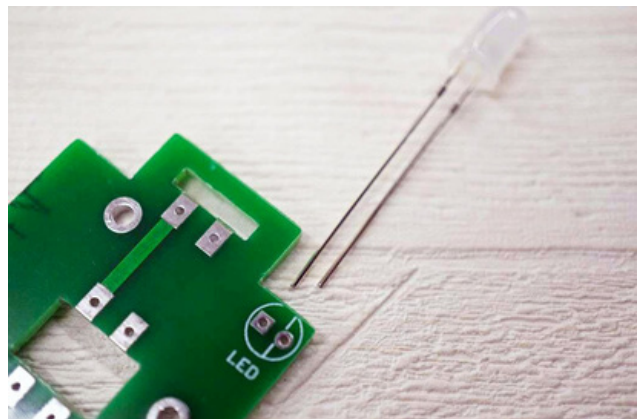

Insert the footswitch into the PCB hole. The foot switch has a certain orientation, but insert it in the direction that the foot switch lug fits into the hole in the PCB.
You can insert it even if the left and right sides are reversed, but there is no problem either way.
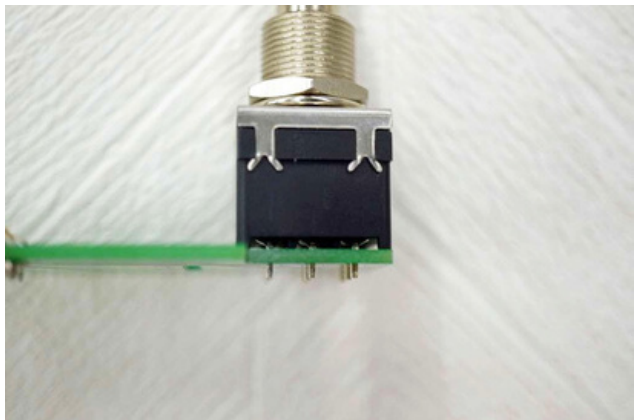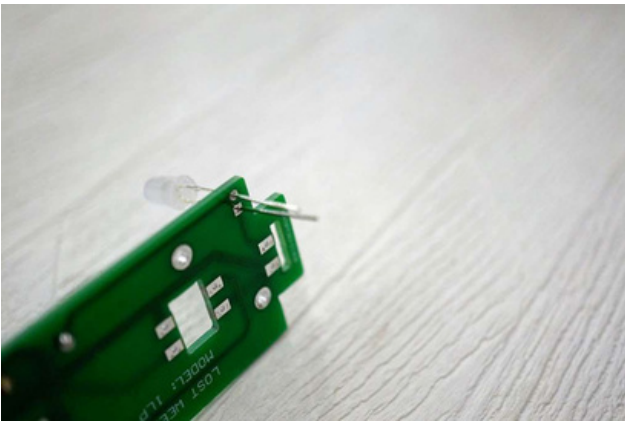

Insert the foot switch firmly as far as it will go.
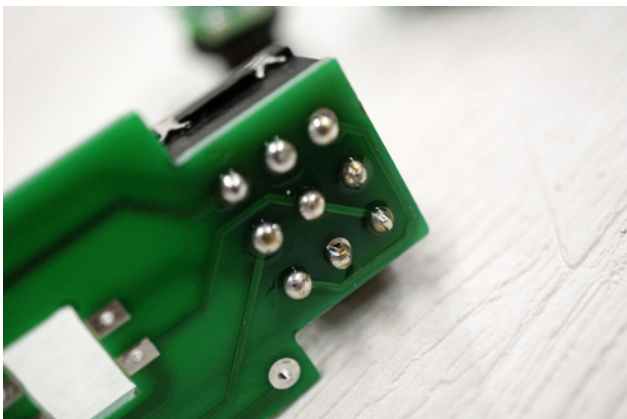
Solder the nine terminals on the footswitch.

Next, insert the LED. LEDs are polarized and have a fixed orientation.
The LED lead wire is longer on one side. Place the longer lead into the square eyelet of the PCB and the shorter lead into the round eyelet.

LED inserted.
Do not solder the LED until the end. **That means no soldering at this point.** However, the LED may come off and fall while you are working on it.

To prevent the LED from falling, use masking tape to secure the LED lead wires below the board to make the work easier. This step itself does not have to be performed. Be careful not to bend the lead wires by applying too much masking tape.
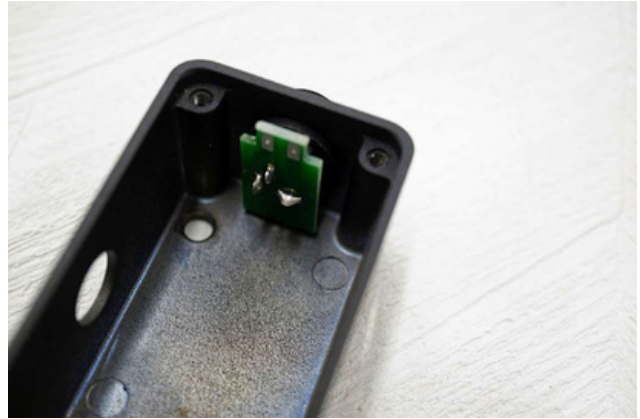

Use two washers for the footswitch.
Pass the thicker washer through the foot switch first.
* Do not install the thin washers and nuts at this time, as they will be installed later.

3. Beginning assembly to the case:

Temporarily assemble into the casing. Incorporate the jacks and the DC jack.

First, assemble the DC input terminal into the housing. Secure the DC input terminal by passing one washer under the nut. Next, install the three monaural jacks. At this time, install each PCB so that the protruding part faces upward.

Secure the DC input jack with the washer and nut.
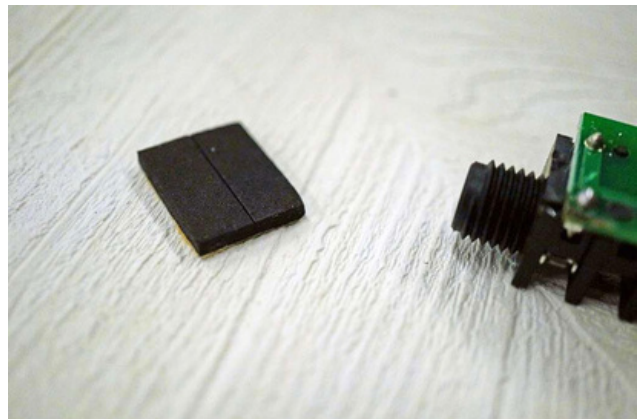
Next attach the insulators to the four phone jacks. The insulators come in two pieces, and you attach it to two of the four jacks.
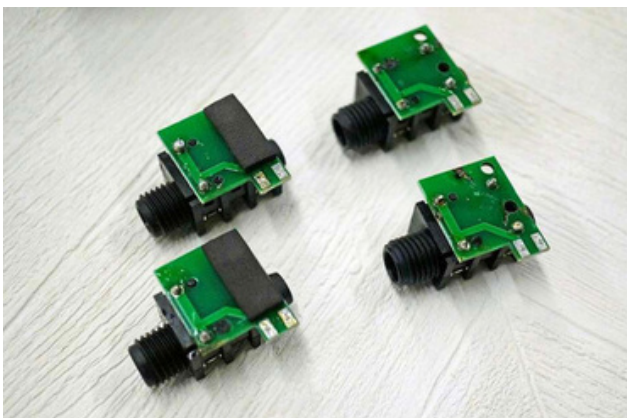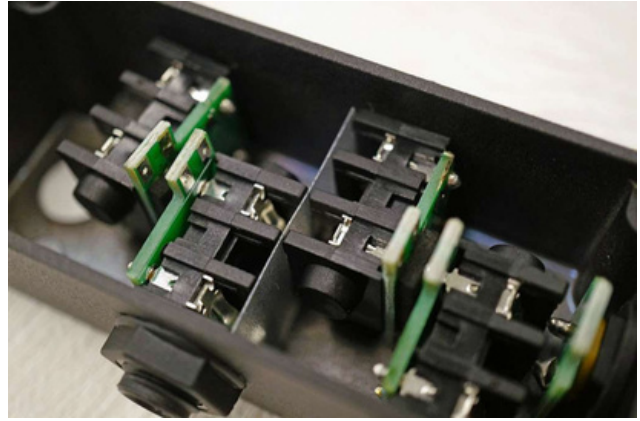

Paste it below the protrusion on the board like this. This is to prevent the jack boards from touching each other internally and causing electricity to not flow.

Next install the phone jack. Insert the jack to which the insulator was pasted earlier on one jack in each of the upper and lower tiers.
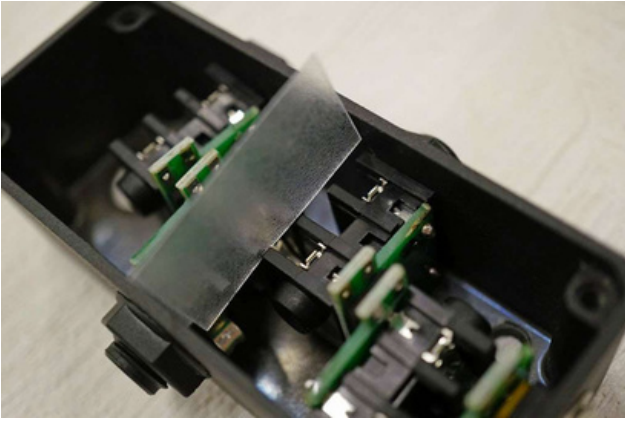
Insert the translucent insulation sheet.

Once you're sure all four jacks and the board are well isolated, it's time to mount the main PCB.

◄ Attach each jack by adjusting its position so that the protrusions fit securely into the holes on the main PCB.

Status check!
The PCB for each terminal is firmly sticking out of the hole in the main PCB.
The foot switch and each terminal are temporarily secured with nuts. LEDs are not soldered.

4. Assembling the main PCB:

Once the main PCB and jack board are firmly seated, solder the joints and the LED.
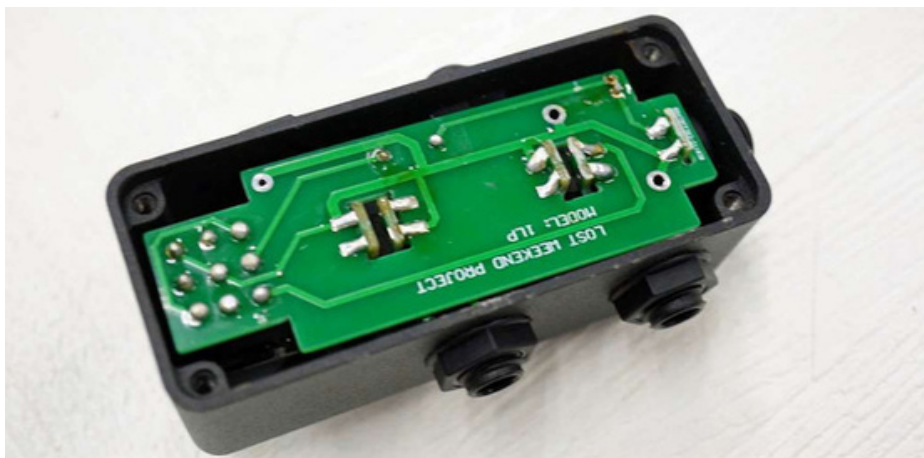
*If there is not enough solder on the parts that are fixed at right angles between the jack PCB and the main PCB, the power may not be applied properly.

Apply solder to the extent that the solder penetrates into the eyelet of the jack side board that protrudes. Also, be careful not to touch the solder of the adjacent terminal when soldering.
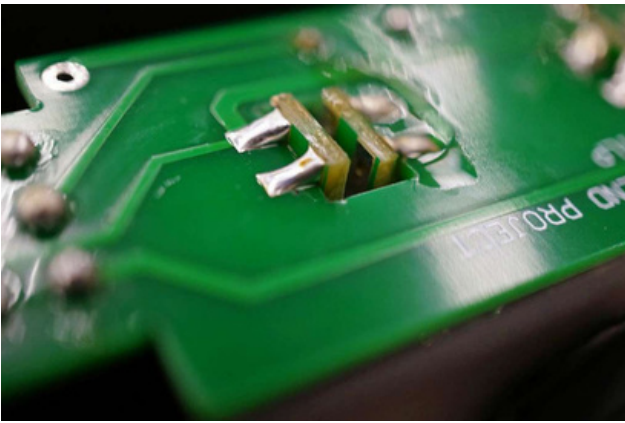
◄ Solder the intersections of the PCBs as shown in the photo on the left.

Soldering LEDs does not require a large amount of solder.

Solder it in the same way as the resistor and cut off the excess lead wire.

At this point, verify that each terminal is energized, the LED is lit, and the footswitch is working.
It's a bit noisy as the back is left open and there's no case shielding, but that's fine at this point.
If it does not work or is unstable, the solder may be touching a neighboring terminal, or the LED lead wire may be touching a neighboring lead wire. Visually check to see if there are any problems, and if there are still no problems, remove the solder and check if there are any problems on the COMPONENT SIDE side.

*When removing the LED, be sure to put it in the correct direction. It is difficult to tell the direction, especially after cutting the lead wires, so put masking tape on one side of the lead wires, etc.

5. Ground bar:

Install the ground bar. The ground bar connects the board and the case (back cover) and is used when shielding the case. There is no need to install it if you do not want to shield the case, such as when using it as an AB box for speaker cables.

We recommend installing the ground bar when using it between a regular guitar and a pedal board.

First, thread the ground bar through the hole in the main PCB. Pass the bar until it touches the top of the case, and at that point make sure that the gold part of the bar is sticking out from the PCB.

After checking, align the back cover and check where the ground bar is on the back cover.

◀ Slightly peel off the paint on the back cover where the ground bar touches.

You can easily peel it off by using the tip of the ground bar, but if you apply too much force, the bar will bend, so be careful. There is no problem if you use tools you already have, such as a flathead screwdriver.
By removing the paint, the ground bar and case will become properly connected.
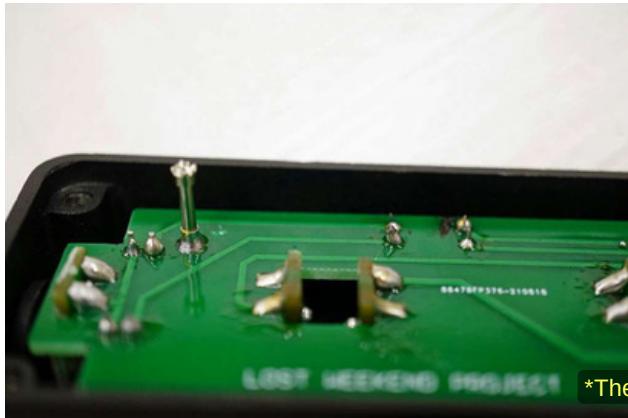
*These two photos show the Junction Box kit. for reference only.
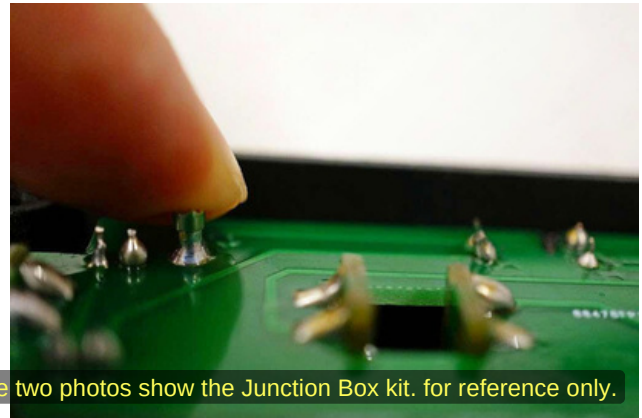
Solder the ground bar. **At this time, do not apply solder to the silver bar.**
If there is too much solder, the solder will flow into the gap between the silver and gold bars and stick, causing the bars to not move. Connect it with a small amount of solder.

After applying the solder, check that the bar moves. If the bar moves when you press it with your fingers from above, there is no problem.

All soldering processes are now complete.

Finally, firmly tighten the nuts on each jack and foot switch, attach the back cover so that the ground bar and the area where the paint was removed match up, and secure with the screws.

6. Completion:

1Loop Box is now complete.

Please attach the rubber feet to the back cover if you like. When fixing to a board with hook-and-loop fasteners, etc., it will be easier to install without using rubber feet.