Installation

Installation requires: 4hp available Eurorack spaces, and an ES-3 mk3/mk4, ES-8, or ES-9.

Installation instructions differ depending on your base unit.

- House the ES-5 in a Eurorack case of your choosing. The power connector is Doepfer standard.
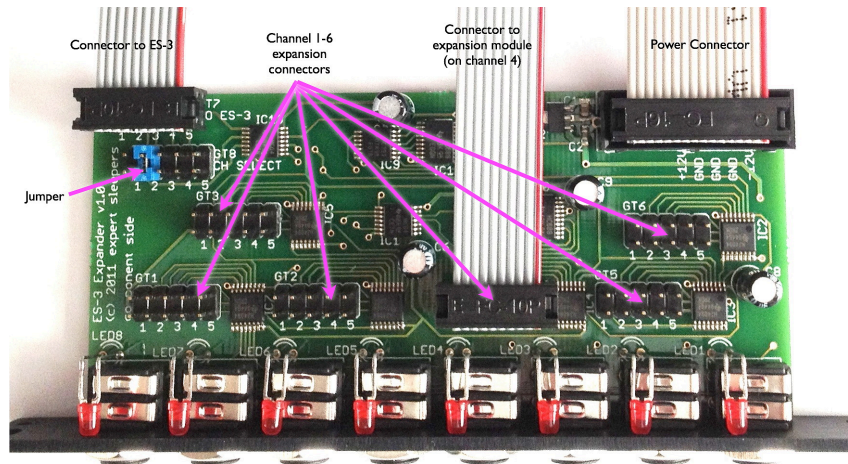- Connect the power cable so "-12V" (printed on the PCB) corresponds to the red stripe on the cable (see Fig.1).

Figure 1: ES-5 PCB

All Units

1. Disconnect power to your Eurorack case.
2. Attach the power connector so "-12V" (printed on the PCB) corresponds to the red stripe on the power connector (see Fig.1).
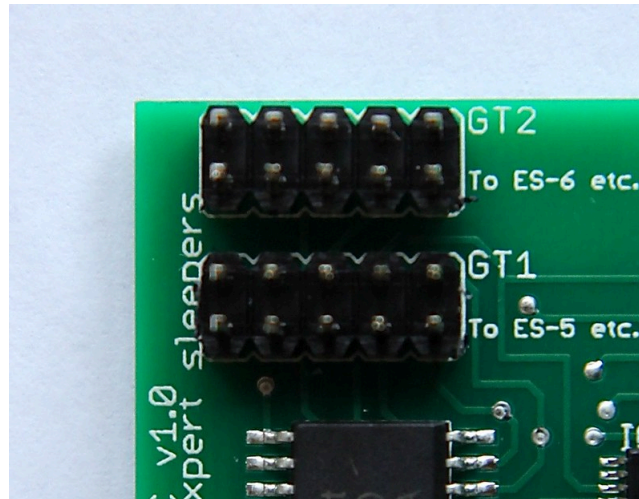
   📝   **Note:** The red stripe must be alinged with "-12V" marked on the PCB. The power connector supplied with the ES-5 is keyed to in ensure a correct fit.

3. Connect the other end of the power cable to an available power port in your Eurorack case so "-12V" on your power supply PCB corresponds to the red stripe on the cable.

ES-3 mk3, ES-3 mk4, ES-8, ES-9

1. Disconnect power to your Eurorack case.
2. Connect power as instructed under "All Units."

3. Connect the ES-5, with the supplied 10-way cable, to the header on your units PCB (see Fig. 1 and Fig. 2).

4. Ensure all connectors are seated fully and correctly.
5. Secure the ES-5 in your Eurorack case with the four provided screws.
6. Reconnect power to your Eurorack case.
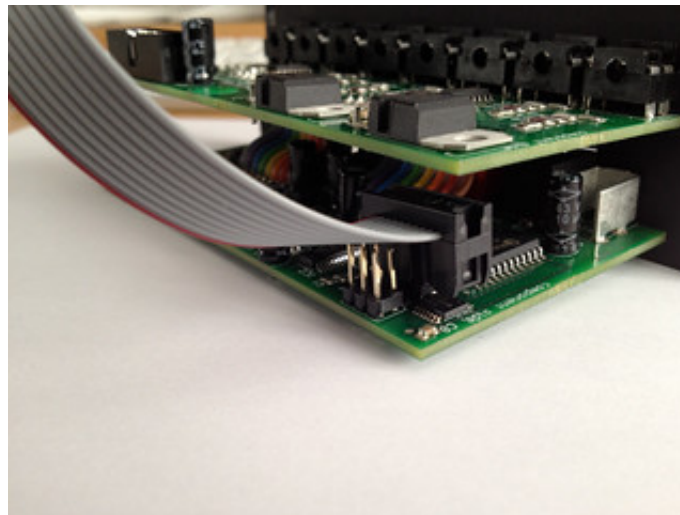**7.** Have fun!

ES3 mk2

1. Disconnect power to your Eurorack case.
2. Connect power as instructed under "All Units."
3. Connect the ES-5, with the supplied 10-way cable, to the header on your ES-3 mk2 PCB (see Fig. 3).

> 📝 **Note:** You may find it helpful to loosen the screws that attach the PCB to the module's panel while fitting the cable.

> 📝 **Note:** The six conductors on the side of the cable with the red stripe must engage with the 6-way header on the ES-3; the four unused conductors hang over the small IC at the edge of the board (see Fig. 3).
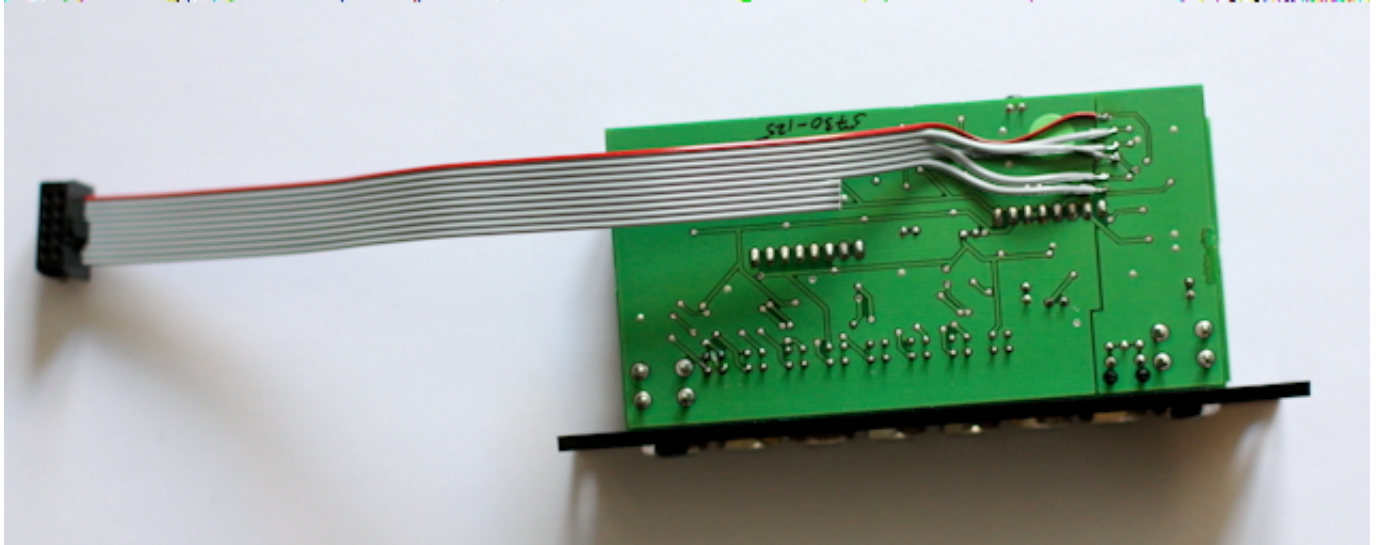

4. Ensure all connectors are seated fully and correctly.
5. Secure the ES-5 in your Eurorack case with the four provided screws.
6. Reconnect power to your Eurorack case.
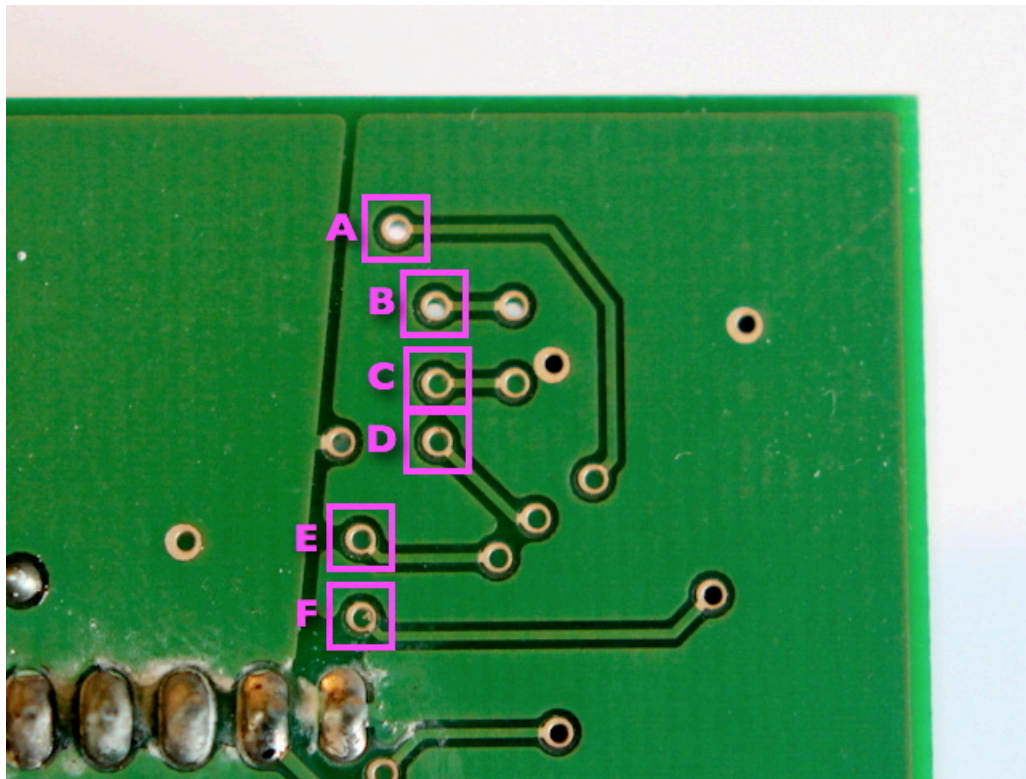**7.** Have fun!

ES-3 mk1

📝 **Note:** The ES-3 mk1 lacks the expansion headers of mk2 and later. However, it is fairly simple to solder the equivalent connections. The suggested solution is to use the 10-way ribbon cable provided with the ES-5 to solder one end to the ES-3 PCB, leaving the other end with the usual connector for the ES-5 as shown in Fig. 4.

1. Disconnect power to your Eurorack case.
2. Remove your ES-3 mk1 from your Eurorack case.
3. Modify the suppled 10-way ribbon cable to match Fig. 4

4. An unmodified ES-3 mk1 PCB is shown below. The highlighted areas are vias (connections from one side of the PCB to the other) and are the easiest points to make the connections.
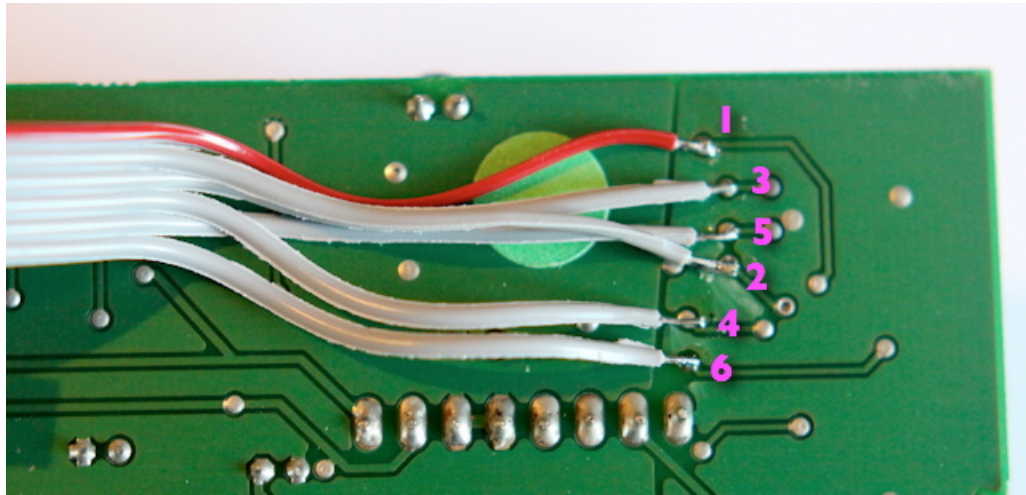
5. Solder the connections as shown in Fig. 6. In this scheme, the conductors match up to the pads above as follows:

- 1-A
- 2-D
- 3-B
- 4-E
- 5-C
- 6-F

    📝 **Note:** The numbers 1-6 correspond to the conductors of the ribbon cable, starting from the red edge as number "1" and the letters A-F correspond to the vias as shown in Fig. 5.

6. Install your ES-3 mk1 to your Eurorack case.
7. Attach the ES-5 power connector so "-12V" (printed on the PCB) corresponds to the red stripe on the power connector (see Fig.1).

    📝 **Note:** The red stripe must be alinged with "-12V" marked on the PCB. The power connector supplied with the ES-5 is keyed to in ensure a correct fit.

8. Connect the other end of the power cable to an available power port in your Eurorack case so "-12V" on your power supply PCB corresponds to the red stripe on the cable.
9. Connect the ES-5, with the modded 10-way cable, to the "Connector to ES-3" header on your units PCB (see Fig. 1).
10. Ensure all connectors are seated fully and correctly.
11. Secure the ES-5 in your Eurorack case with the four provided screws.
12. Reconnect power to your Eurorack case.
13. Have fun!