

Getting started

Thank you for purchasing a **Logic Rail Technologies** product! This board adapts 8 Just Plug®-compatible outputs from our **Light EFX-16** board to either a 10-pin connector (#LEOAC) or screw terminals (#LEOAS). You can plug the output adapter board into either side of the **Light EFX-16** board.

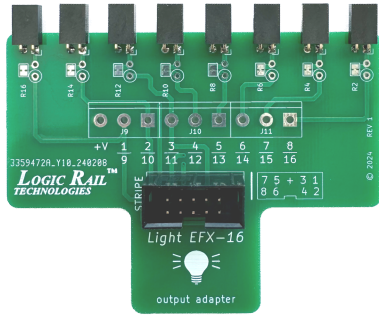


Figure 1 – Output Adapter with 10-pin connector

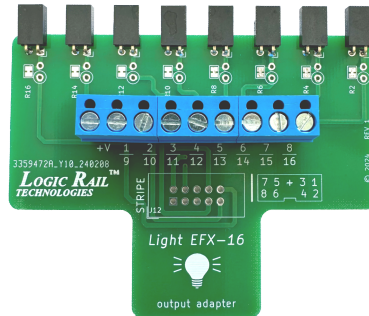


Figure 2 – Output Adapter with screw terminals

For the 10-pin connector version you may purchase a 10-conductor colored cable assembly from us. This is part #10CA. You could also choose the 10-conductor gray cable and mating connector from RR-Cirkits (<https://www.rr-cirkits.com/>) and build your own cable assembly. These are used with many of their LCC products.

10-pin connector

Please pay close attention to the pin definition shown below. Note that this connector is keyed so that you can only attach the mating cable assembly one way. The drawings below show the pin and wire definitions as viewed with the board rotated clockwise from Figure 1 above!

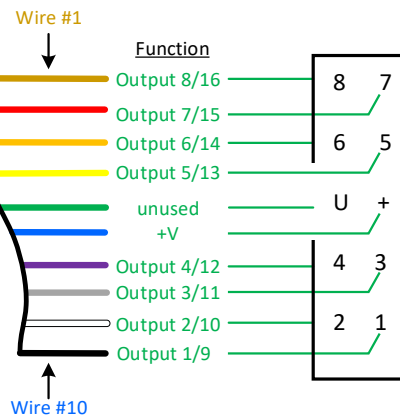
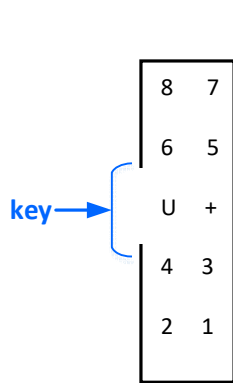


Figure 4 – Colored cable pinout

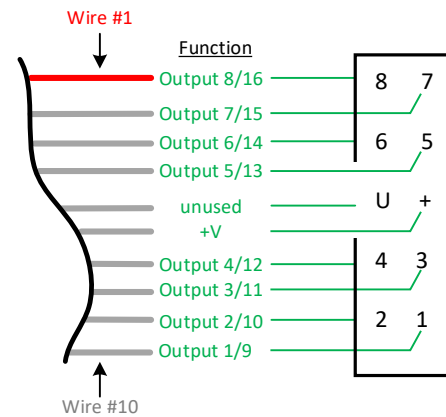
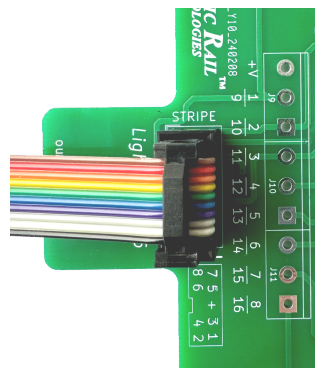


Figure 5 – Gray cable pinout

Figure 3 – 10-pin connector

The photo below shows the proper orientation of the 10-conductor colored cable assembly. Note: if you need to detach the cable assembly from the board make sure you grab the connector on the cable assembly from the short sides and gently rock it from short side to short side.



Screw Terminals

On this version of the Output Adapter board there are 9 screw terminals. Each terminal is labeled on the circuit board as shown in Figure 2. The first terminal on the left, labeled +V, is the positive voltage from the **Light EFX-16** board. The remaining terminals are either light outputs 1-8 or 9-16 depending on which side of the **Light EFX-16** board you've plugged this board into. Each screw terminal can accept wire sizes from 14-26 AWG. We recommend 22 AWG but this is not a hard requirement due to the low power nature of the connected lights.

Adding resistors to the board (optional!)

If you use the High Current version the **Light EFX-16 (i.e. Light EFX-16HC)** you have the option to install the necessary resistors on the output adapter board. **NOTE: good soldering skills are required!**

For each of the eight lines there is a resistor mounting site and an adjacent shorted trace. Refer to Figure 6 below. As shipped the board does not have resistors and those shorted traces are well, shorted! If you wish to install resistors you will need to carefully cut the center of the shorted traces. This is best done with a sharp hobby knife/blade. It is recommended that you use an ohmmeter to measure the resistance between the two resistor mounting holes. If you have successfully cut the shorted trace the meter will read infinite ohms (i.e. an open circuit). Wipe off any debris after you have cut the traces. The board will accept ¼ watt or ½ watt resistors. Insert the resistors from the topside of the board and bend the leads slightly on the underside of the board. Carefully solder the leads on the underside of the board and clip the excess leads. You may want to then use your ohmmeter to measure the resistance. You can touch one ohmmeter probe to the Just Plug socket pin to the right of the resistor and touch the other probe to either the appropriate screw terminal or pin on the 10-pin connector.

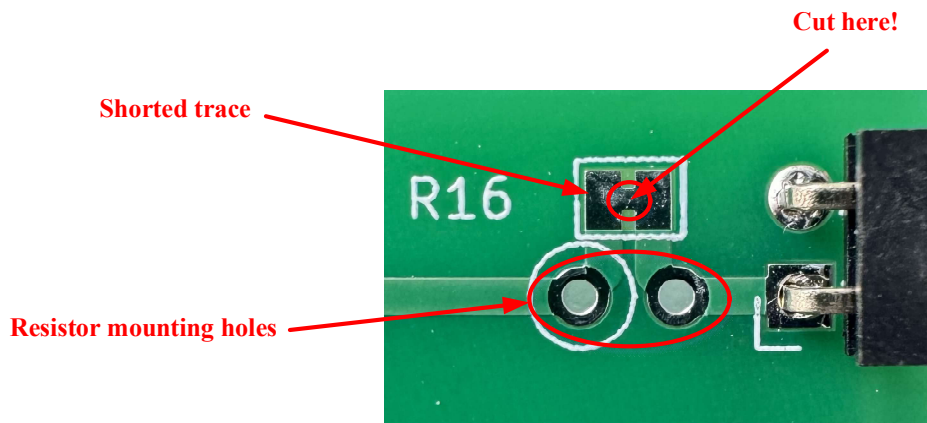


Figure 6 – Shorting pad and resistor mounting holes

Warranty

This product is warranted to be free from defects in materials or workmanship for a period of one year from the date of purchase. **Logic Rail Technologies** reserves the right to repair or replace a defective product. The product must be returned to **Logic Rail Technologies** in satisfactory condition. This warranty covers all defects incurred during normal use of this product. This warranty is void under the following conditions:

- 1) If damage to the product results from mishandling or abuse.
- 2) If the current or voltage limitations of the product have been exceeded.

Requests for warranty service must include a dated proof of purchase, a written description of the problem, and return shipping and handling (\$10.00 inside U.S./\$20.00 outside U.S. - U.S. funds only). Except as written above, no other warranty or guarantee, either expressed or implied by any other person, firm or corporation, applies to this product.

Technical Support

We hope the preceding instructions sufficiently answer any questions you might have about the installation of this product. However, technical support is available should you need it. You can reach us via phone or email.