



12V LED Tube install

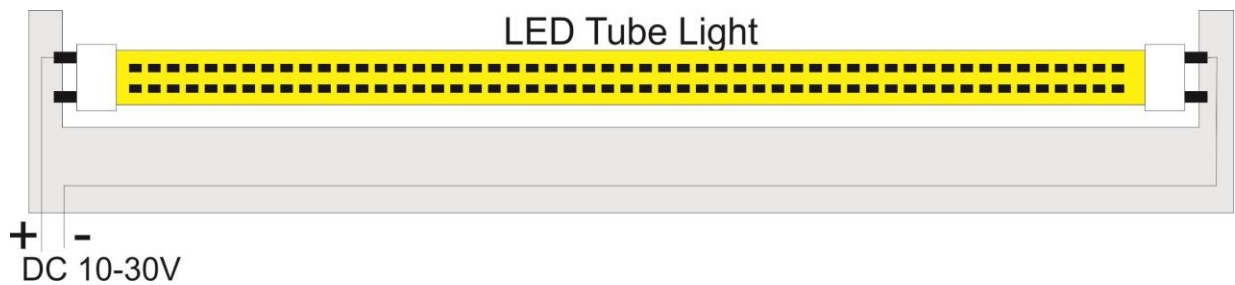
DO NOT USE on 110/120V AC FIXTURES! LOW Voltage ONLY

Most Ballast in 12V RV/Marine will also Damage the Tube, so remove the Ballast

WARNING !!! - Danger - Risk Of Shock - Disconnect Power Before Installation.

12V DC Wiring with a LED Driver

Remove the old Ballast, Connect 12V DC Positive to one end, negative to the other end.



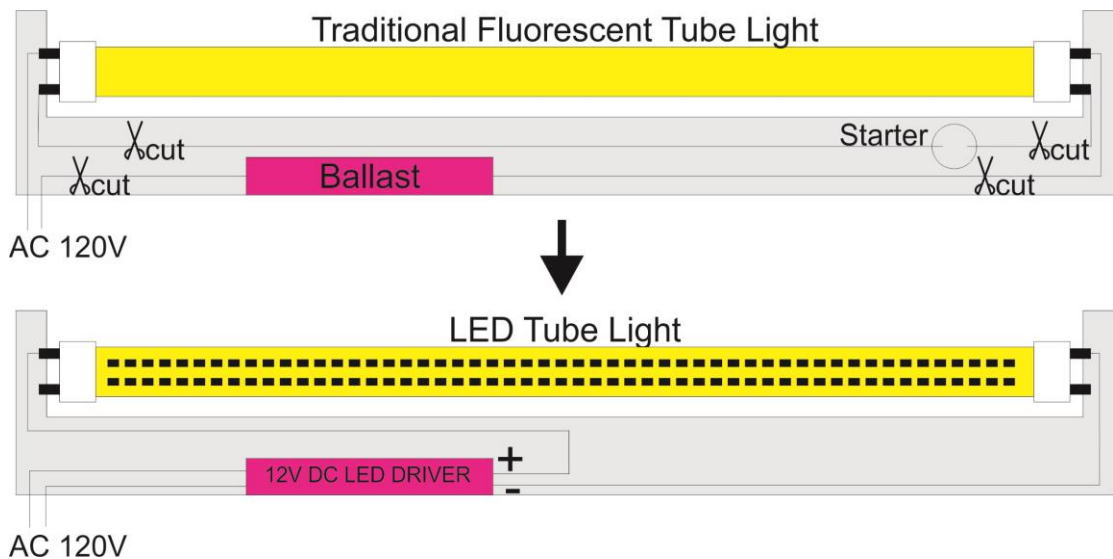
120V AC Wiring with a LED Driver

If your Fixture is 120V AC, then a suitable 12V DC driver will be required, i.e illuminous EV-12V-1000-12D (12V DC, 12W LED Driver)

Step 1: Remove ballast and starter where applicable, and the corresponding wires including branch circuit wires and ballast wires.

Step 2: Simply, Connect the L & N AC120V to the input of the 12V DC Driver (i.e illuminous EV-12V-1000-12D)

The output 12V DC from the driver connects to the ends of the T8 Tube, Positive to one end, negative to the other end.



12V ONLY conversion with NO Ballast Required – i.e Lightco 179 Fixture Example



Removing the OLD Ballast

- 1) Drill out the rivets in the top cover
- 2) Drill out the rivets holding the PCB
- 3) Cut the wires – remove the PCB

Fitting the illuminous LED tube

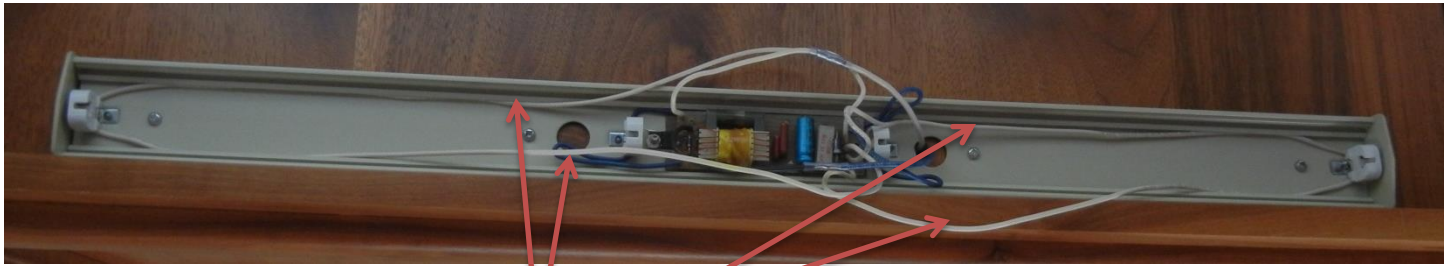
- 1) You Only need 1 wire to each Socket at each end of the Tube. Some Fixtures have 2 Wires, some have 1 wire to each socket. Pick One.
- 2) Each tube has 2 pins each end, you ONLY need to connect to ONE of the pins on each end, pick either one ! One end is Positive, the other end is GND / Negative
- 3) Change the wiring to look like this:



- a) Wire One End to Positive (just one Wire from each End Socket)
- b) Wire the other end to Negative (just one wire from each Socket)



12V ONLY conversion with NO Ballast Required Thin-Lite 1724 example

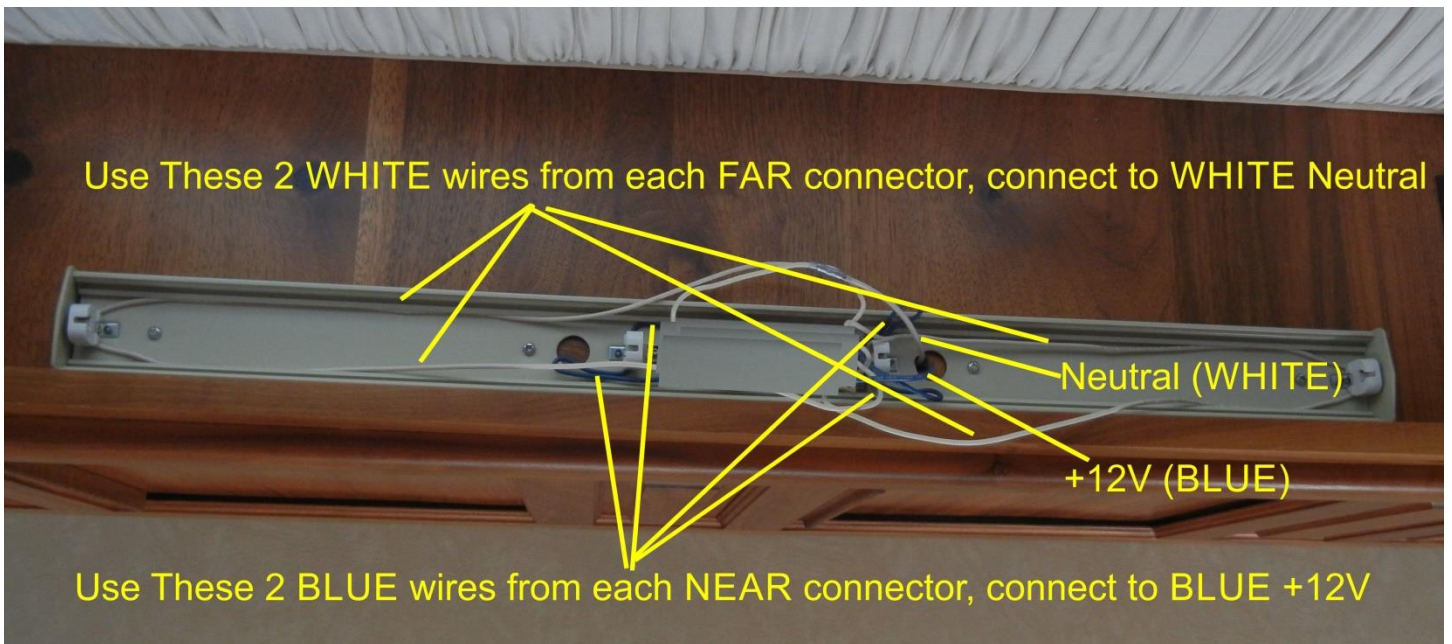


Removing the OLD Ballast

- 4) Remove cover, expose the Ballast (PCB in the middle)
- 5) Drill out the rivets holding the Ballast PCB (or leave in, unconnected)
- 6) Cut the wires – remove the PCB

Fitting the illuminous LED tube

- 4) You Only need 1 wire to each Socket at each end of the Tube. Some Fixtures have 2 Wires, some have 1 wire to each socket. Pick One (This fixture has 2 wires, you can use 1, or both. If one, then sap off the unused wire with a wire nut).
- 5) For the Tube, One end is Positive, the other end is GND / Negative
- 6) Change the wiring to look like this:



- c) Wire One End to Positive (just one or 2 Wire from each End Socket)
- d) Wire the other end to Negative (just one or 2 wire from each Socket)