

T-Series OEM Solutions

T-Series LED Drivers provide a high-performance tunable white solution. The following document describes how to easily configure, control, and test the T-Series driver. For more information on the T-Series driver see the specification submittal (P/N 3691099) at www.lutron.com

1. Configuration

Lutron QwikFig technology allows fixture manufacturers to shorten fixture lead times and streamline their supply chain by ordering QwikFig compatible bulk model numbers from Lutron and storing them in their respective warehouses. Using intuitive, production-friendly software, the fixture manufacturer can configure these LED drivers to their own custom output parameters.

Configuration Setup

The following materials are necessary to configure the T-Series driver:

1. QwikFig Air tabletop reader (QWIKFIG-TTR-NFC).
2. Windows PC/tablet with Windows 7 operating system or higher.
3. Lutron configuration software
 - Download software from the OEM portal of your myLutron account at www.lutron.com
 - When installing the software the first time, use the registration key provided by oemorders@lutron.com
 - A physical and logical CCT (Correlated Color Temperature) are needed to create a T-Series profile in the QwikFig software.
 - Physical CCT indicates actual Kelvin value of CCT of the individual LED strings.
 - Logical CCT is the desired maximum or minimum Kelvin value of CCT for the fixture. The logical CCTs must be within the bounds of the physical CCTs. This is analogous to a high-end and low-end trim for intensity.
 - A cool channel and warm channel current are needed to create a T-Series profile in the QwikFig software.
 - To maintain consistent lumen output over a wide range of CCT, it is recommended that the two channels be set so that their power is within 10% of each other.

The Zebra® ZD220t thermal transfer printer has been fully tested and is compatible with the Lutron QwikFig software.

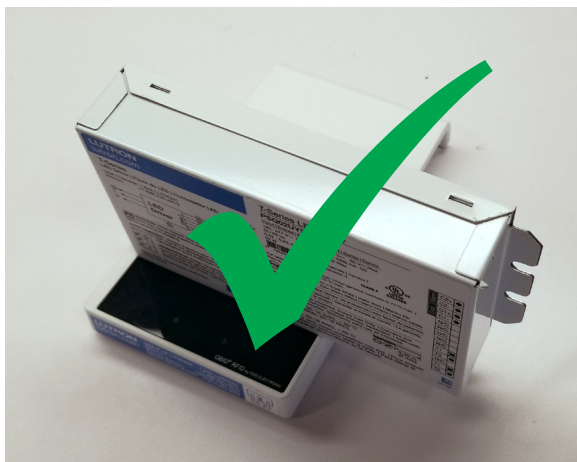


1. Configuration (continued)

Best Practices

Configuration Orientation

Use the orientation seen below to configure the T-Series driver. Note that the blue rectangle on the driver is held to the QwikFig Air tabletop reader. The driver should remain in this position until the QwikFig GUI visually and audibly indicates that the driver configuration was successful. Do not pull the driver away from the reader until the configuration is complete.



Note: Orientation of the Y-Case driver to the QwikFig Air tabletop reader is crucial to performance. Make sure the orientation matches the picture above. The W-Case driver can be programmed in either orientation.

For more detailed information on QwikFig setup and operation, please refer to the Lutron QwikFig LED Driver Configuration User Guide (P/N 041473) at www.lutron.com

1. Configuration *(continued)*

Profile Settings

When creating or editing a profile, the QwikFig software requires an output current for each channel. Output current amps indicates the maximum current each channel will achieve. For the profile example below, when the load is coolest (6500 K), Channel 1 = 200 mA, Channel 2 = 0 mA. When the load is warmest (2700 K), Channel 1 = 0 mA, Channel 2 = 200 mA.

Channel 1 (Cool)	
Output Current Amps	0.200
Physical CCT	6500
Logical CCT	6500
Channel 2 (Warm)	
Output Current Amps	0.200
Physical CCT	2700
Logical CCT	2700

2.Engineering Testing

The Lutron T-Series OEM controller enables users to control Lutron T-Series drivers using an intuitive, easy-to-use interface. This application allows the user to independently control the intensity and color temperature of multiple tunable white loads on one T-Series digital link.

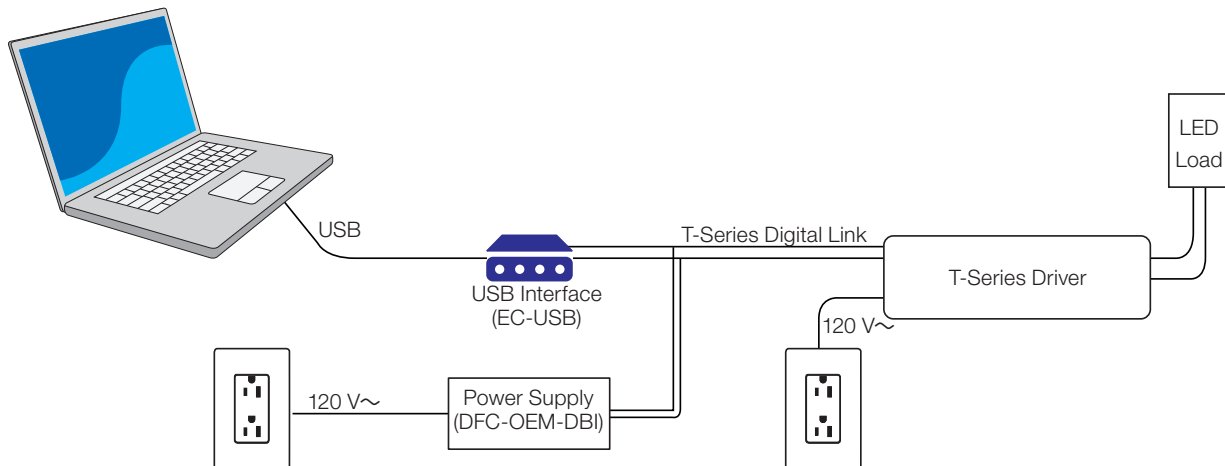
Engineering Testing Setup

⚠ WARNING: ELECTRIC SHOCK HAZARD. May result in Serious Injury or Death. Turn off power at circuit breaker or fuse before installing.

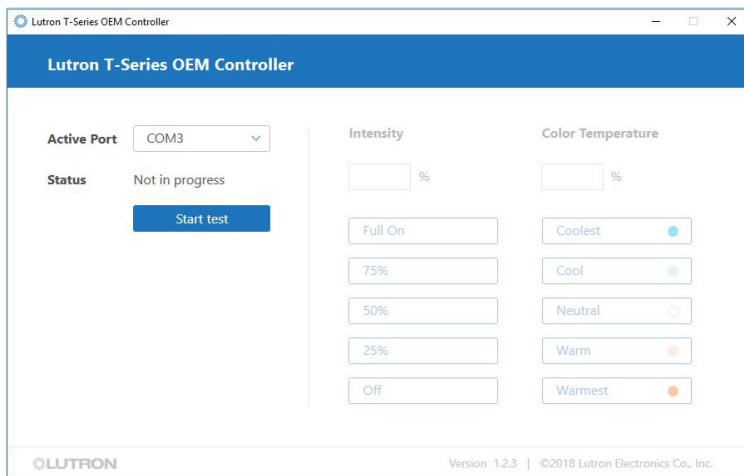
To use the Lutron T-Series OEM controller with the T-Series driver, the following materials are necessary:

1. EC-USB (USB cable not included)
2. USB A to Mini B cable. USB 2.0/3.0 Compatible
3. Fixture control digital link interface (DFC-OEM-DBI)
4. Windows PC/tablet with Windows 7 operating system or higher
5. Lutron T-Series OEM controller software
 - Download software from the OEM portal of your myLutron account at www.lutron.com

The following diagram illustrates the proper setup of the T-Series OEM Controller.



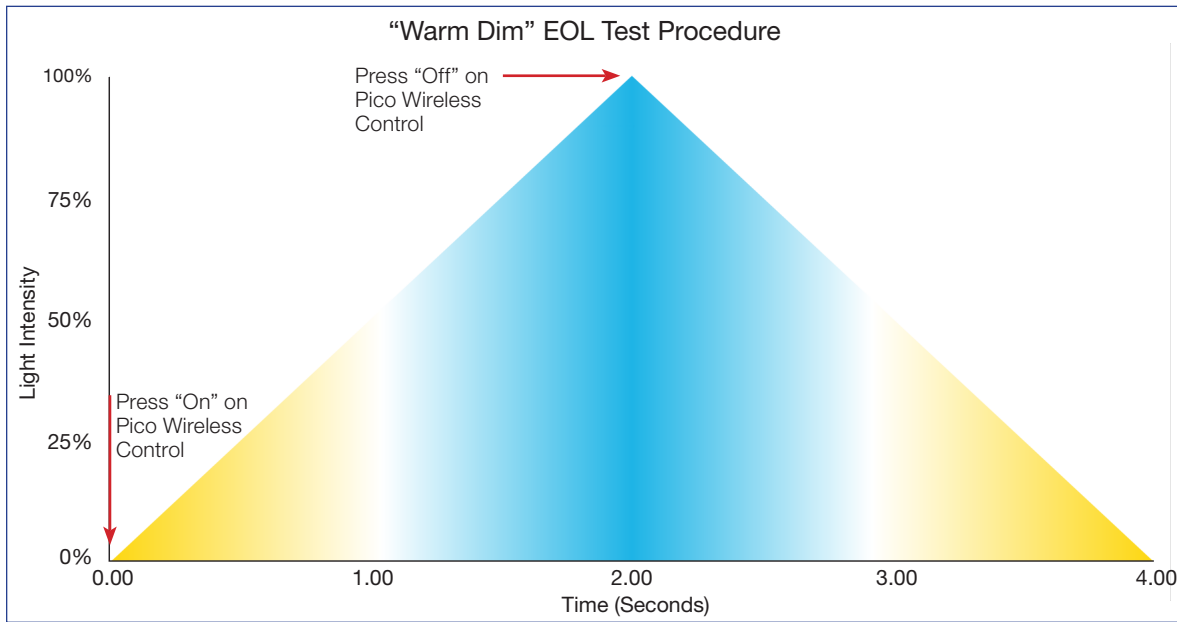
Lutron T-Series OEM Controller Interface:



For more detailed information on the setup and operation of the T-Series OEM controller, please refer to the Lutron T-Series OEM Controller Application User Guide (P/N 032524) at www.lutron.com

3.End-of-Line Testing

Using the PowPak wireless zone control (RMJS-ECO32-SZ) paired to a Pico wireless control offers a simple end-of-line testing solution for the T-Series driver. The PowPak wireless zone controller is able to control up to 32 T-Series drivers. Using this solution to control the T-Series driver will produce a warm-dim effect, simultaneously changing the intensity and color of the attached loads. This ensures that the fixture has been wired properly before leaving the factory. The graph below illustrates the light and color changing at the same time by pressing the “On” and then “Off” button on the Pico wireless control.



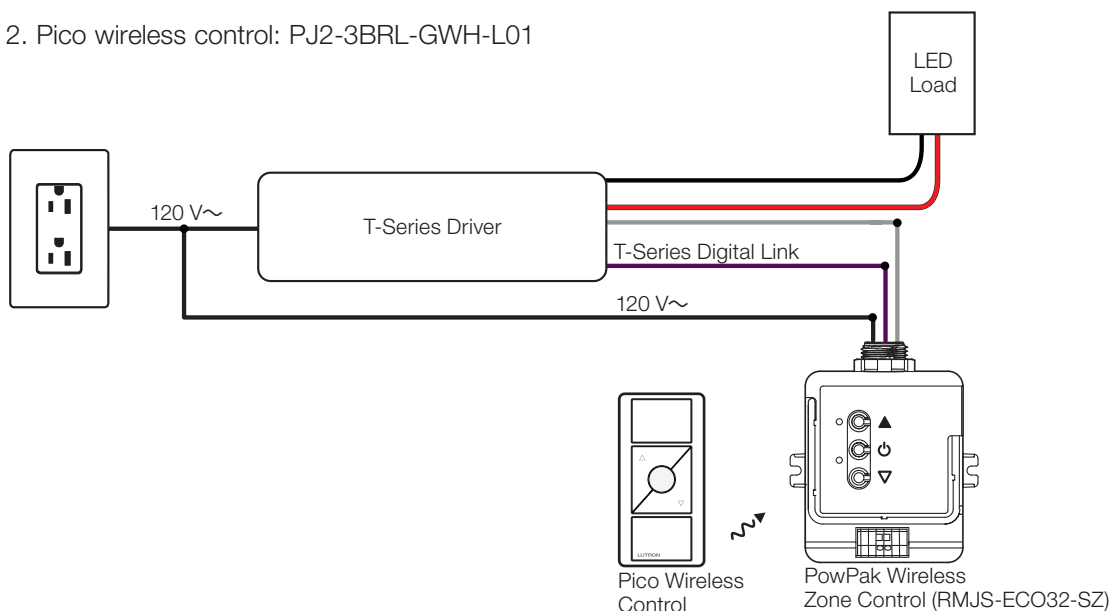
Note: The default fade time of a Pico wireless control is 2 seconds.

End of Line Test Setup

⚠ WARNING: ELECTRIC SHOCK HAZARD. May result in Serious Injury or Death. Turn off power at circuit breaker or fuse before installing.

The following materials are necessary to achieve this T-Series driver end of line setup:

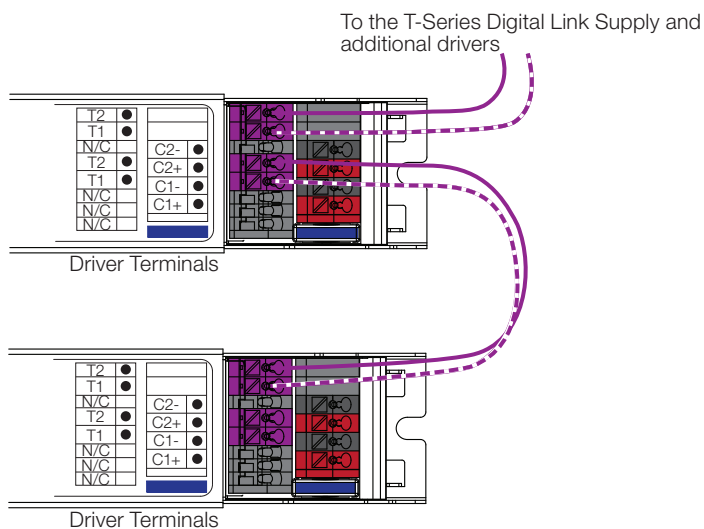
1. PowPak wireless zone control: RMJS-ECO32-SZ
2. Pico wireless control: PJ2-3BRL-GWH-L01



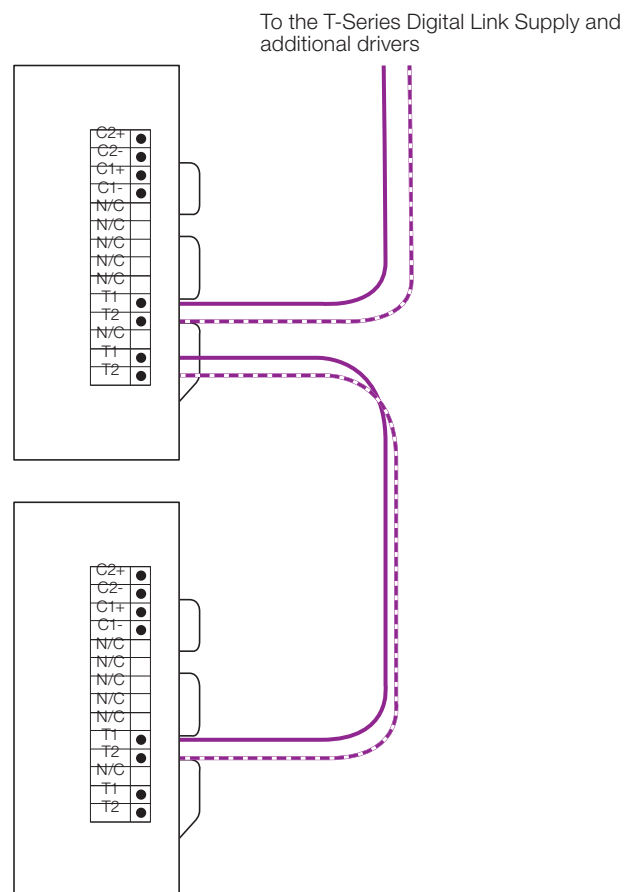
3. End-of-Line Testing (*continued*)

Best Practices

1. Using the instructions for the PowPak wireless zone control, pair the RMJ-ECO32-SZ to a Pico wireless control (PJ2-3BRL-GWH-L01). The buttons on the RMJS-ECO32-SZ are not intended for repeated use.
2. Using the instructions for the Pico wireless control, set the Pico wireless control favorite button to the driver's low-end.
3. End of line test up to 32 drivers by daisy-chaining the T-Series Digital Link (2 sets of T1/T2 terminals per driver). See figure below for proper daisy chain wiring.
4. Consider mounting the Pico wireless control and RMJS control to a junction box to prevent misplacing components. The PICO-WBX-ADAPT may be used to mount a Pico wireless control to a junction box.



Daisy chain wiring for the W case



Daisy chain wiring for the YS and YN case

End-of-Line Testing Troubleshooting

1. If the color is fading the opposite direction of the diagram on page 5, the warm and cool channel wires need to be swapped.
2. If the LED's dim to off when pressing the on button the Pico wireless control, the cool channel may be disconnected.
3. If the LED's are off at low end, the warm channel may be disconnected.

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Lutron Contact Numbers

WORLD HEADQUARTERS USA

Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299
TEL: +1.610.282.3800
FAX: +1.610.282.1243
Customer Assistance:
1.844.LUTRON1
support@lutron.com
www.lutron.com/support

North & South America Customer Assistance

USA, Canada, Caribbean:
1.844.LUTRON1 (1.844.588.7661)
Mexico:
+1.888.235.2910
Central/South America:
+1.610.282.6701

EUROPEAN HEADQUARTERS United Kingdom

Lutron EA Limited
125 Finsbury Pavement
4th floor, London EC2A 1NQ
United Kingdom
TEL: +44.(0)20.7702.0657
FAX: +44.(0)20.7480.6899
FREEPHONE (UK): 0800.282.107
Technical Support: +44.(0)20.7680.4481
lutronlondon@lutron.com

ASIAN HEADQUARTERS Singapore

Lutron GL Ltd.
390 Havelock Road
#07-04 King's Centre
Singapore 169662
TEL: +65.6220.4666
FAX: +65.6220.4333
Technical Support: 800.120.4491
lutronsea@lutron.com

Asia Technical Hotlines

Northern China: 10.800.712.1536
Southern China: 10.800.120.1536
Hong Kong: 800.901.849
Indonesia: 001.803.011.3994
Japan: +81.3.5575.8411
Macau: 0800.401
Taiwan: 00.801.137.737
Thailand: 001.800.120.665853
Other Countries: +65.6220.4666