

## TL7-B2 Lighting Controller

Load Rating: 110-277VAC

Operating Temperature: -40 to +70 C / Operating Humidity 0 to 90%; non-condensing



### WARNING AND CAUTIONS:

- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE INSTALLING!**
- The TL7-B2 should only be installed in a fixture with a NEMA/ANSI C136.41 receptacle.
- Device is rated up to 6kV surge, take steps to install an external surge protector for additional protection.

### WARNING AND CAUTIONS:

- If you are unsure about any part of these instructions, consult an electrician; all work should be performed by qualified personnel
- Disconnect power at circuit breaker or fuse when servicing, installing or removing fixture or changing lamps.

## INSTALLATION GUIDE

### SPECIFICATIONS

- Relay Max Switch Circuit: 5A at 110-277VAC
- Dim Control Max Load: 20mA
- Radio Frequency: 2.4 GHz (IEEE 802.15.4)
- RF Transmission Output Power: +20dBm
- Operating Temperature: -40 to +70 C
- Operating Humidity: 0 to 90%, non-condensing
- Configuration/Programming: Stored in non-volatile memory
- Dimensions: 3.5" D x 3.86" H  
(88.6mm D x 98mm H)
- Surge Protection: 6kV
- Sensor Input: 24V
- Sensor Power Max Load: 20mA

### CAUTION

- This product must be installed in accordance with national, state, and local electrical codes and requirements
- All work must be performed by qualified personnel
- Disconnect all power before installation or service

### INSTALLATION INSTRUCTIONS

#### WARNING: TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND VERIFY THAT POWER IS OFF BEFORE WIRING!

1. If applicable, remove the lighting control device currently installed in the fixture receptacle.
2. Align the TL7-B2 such that the large contact pin is positioned above the large receptacle contact.
3. Insert the TL7-B2 contacts completely into the receptacle contacts. Twist the TL7-B2 housing clockwise until it locks into place.

### REGULATORY INFORMATION AND CERTIFICATIONS

**RF Exposure Statement:** This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**Industry Canada (IC) certifications:** This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicable aux appareils numeriques de la class B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

FCC certifications and regulatory information (USA only)

**FCC Part 15 Class B:** This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) These devices may not cause harmful interference, and (2) These devices must accept any interference received, including interference that may cause harmful operation.

**RADIO FREQUENCY INTERFERENCE (RFI) (FCC 15.105):** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception,

which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: (1) Re-orient or relocate the receiving antenna; (2) Increase the separation between the equipment and the receiver; (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected; (4) Consult the dealer or an experienced radio/TV technician for help.

**Declaration of Conformity (FCC 96-208 & 95-19):** Synapse Wireless, Inc. declares that the product name "TL7-B2" to which this declaration relates, meet the requirements specified by the Federal Communications Commission as detailed in the following specifications:

- Part 15, Subpart B, for Class B equipment
- FCC 96-208 as it applies to Class B personal computers and peripherals
- This product has been tested at an External Test Laboratory certified per FCC rules and has been found to meet the FCC, Part 15, Emission Limits. Documentation is on file and available from Synapse Wireless, Inc.

If the FCC ID for the module inside this product enclosure is not visible when installed inside another device, then the outside of the device into which this product is installed must also display a label referring to the enclosed module FCC ID. Modifications (FCC 15.21): Changes or modifications to this equipment not expressly approved by Synapse Wireless, Inc., may void the user's authority to operate this equipment.

### CERTIFICATIONS

**Model** : TL7-B2  
**Contains FCC ID:** U90-SM220  
**Contains IC** : 7084A-SM220  
**UL File No** : E493550

**Contact Synapse for Support-** (877) 982-7888