touch-plate®
LIGHTING CONTROLS

Supra Premier Wiring Manual

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Table Of Contents

Preparation

Unpack the SPR-PB and inspect the contents for damaged or missing products. If any problems arise, please contact Touch-Plate at 260.426.1565 for assistance.

Precautions

The SPR-PB hardware is designed to be in environments that have a temperature range of 0-60°C (non-condensing atmosphere). Installing in an environment outside of these parameters will shorten the life span of the hardware.

Touch-Plate recommends the use of 18 to 22 AWG wire for low voltage wiring of Contact Closure products, 18 AWG wire for all 24V power connections, and 16 AWG wire for Smart Control Stations.

All 120VAC wiring must use wire as specified by National Electric Code for load size and wire length.

Warranty

Touch-Plate warrants this product against defects in materials or workmanship, under normal use, for a period of ONE (1) year from date of shipment. If a defect arises and a valid claim is received within the Warranty Period, Touch-Plate will repair or replace the product at no charge.

This warranty does not apply to:

a. Damage to unit(s) caused by accident, acts of God, inappropriate installation, faulty installation, or any negligent use;
b. Unit(s) which have been subject to being taken apart or otherwise modified;
c. Unit not used in accordance with instructions;
d. The finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear;
e. Non-Touch-Plate hardware installed by the user;
f. Damage caused by Non-Touch-Plate products;
g. Damage caused by operating the product outside the permitted or intended uses described by Touch-Plate;
h. -or- Specific plans or specific application requirements, unless the plans and specifications have been forwarded to Touch-Plate and they were approved and accepted in writing.

EXCEPT AS PROVIDED IN THIS WARRANTY, TOUCH-PLATE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, INCLUDING BUT NOT LIMITED TO, INSTALLATION OR REPLACEMENT LABOR COSTS.

Supra Premier Overview

The Supra Premier is a powerful and versatile controller with the capability to control relays in a BACnet integrated system. The Supra Premier will be referenced throughout as: SPR-PB.

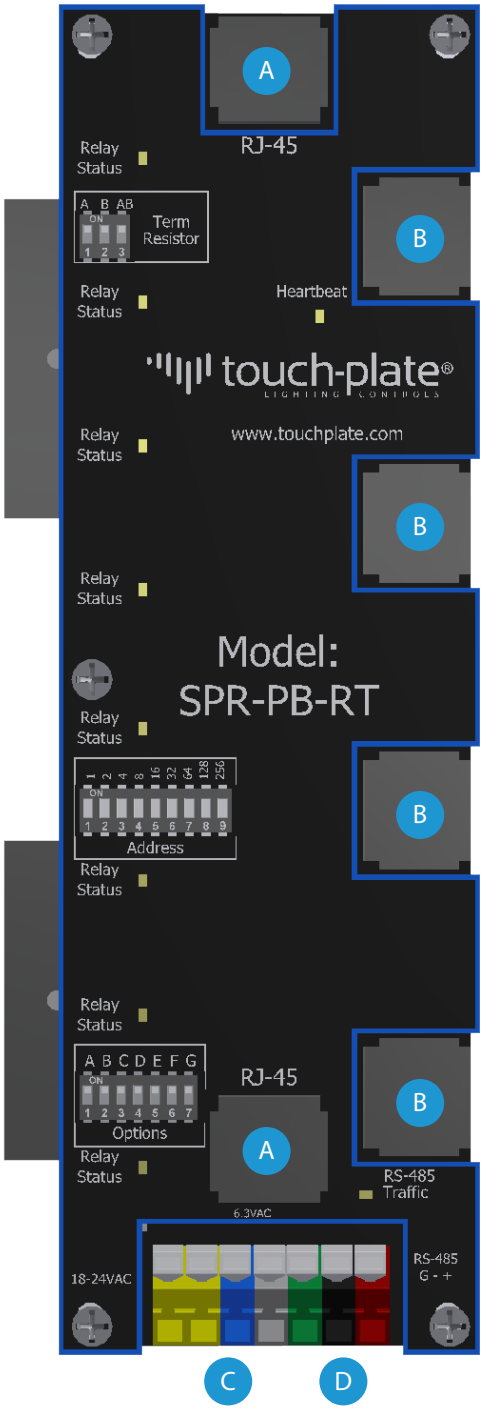
The Supra Premier has the following options:

A Firing Card Connection
(See page 10 for further information)

B Firing Card to WCR Relays

C Yellow/Yellow 18-24VDC Power Input.
Blue/Gray 5-12VDC Power Input
(See page 9 for further information)

D BACnet RS-485 Connection
Touch-Plate recommends the use of
Liberty Cable Part #: 18-2C-SH-GRY or equivalent
(See page 8 for further information)

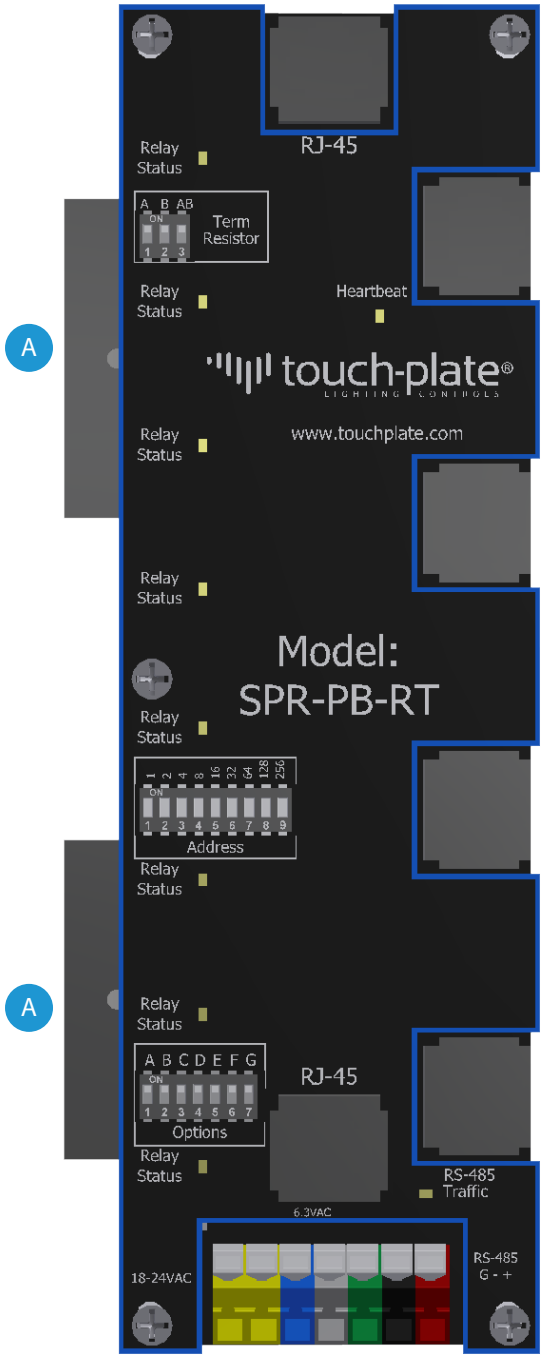


Installation Notes

The SPR-PB can be removed from the system if it ever needs replaced. Use the following diagram and instructions on how to remove the SPR-PB from the system.

A Pull the din rail clip out from the din rail.

B Lift the SPR-PB up from the din rail and slide the SPR-PB out.



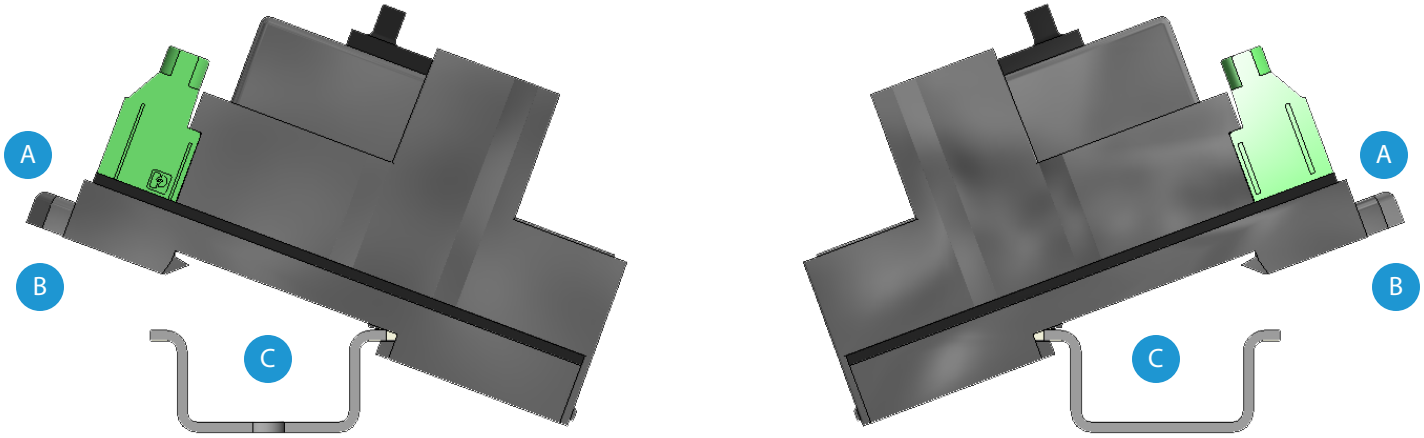
Installation Notes

The WCR Relay(s) can be removed from the system if it ever needs replaced. Use the following diagram and instructions on how to remove the WCR Relay(s) from the system.

A Insert a flathead screwdriver into the slot located on the din rail clip.

B Using the flathead screwdriver, pry the din rail clip away from the din rail.

C Lift the WCR up from the din rail and slide the WCR out.



WCR Relay Wiring and Connections

Use the WCR Relay wiring connections diagram to setup your system. This diagram does not show all possible connections and configurations.

The WCR Relays are capable of handling either a 120V or 277V feed. Be sure to only use one of these types, as the WCR Relays are not capable of handling both types of feeds.

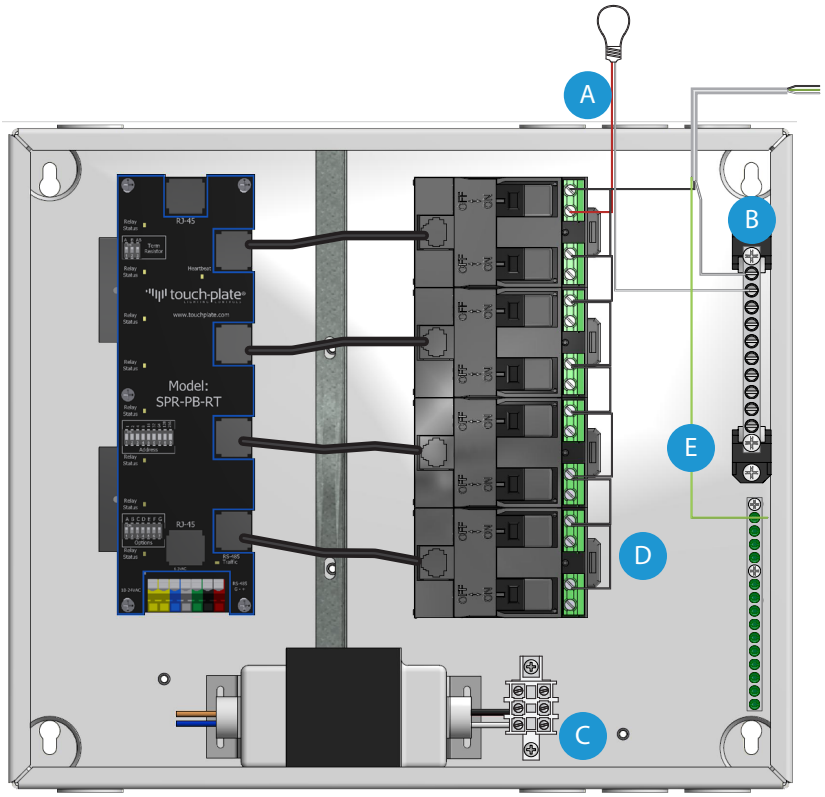
A Connect Switch Leg 1 from the lighting load to the first connector WCR Relay. The Switch Leg can be wired to either terminal on the connector. Continue to do the same for all remaining switch legs.

B Connect the neutral wires from each lighting load to the neutral bar.

C Bring a neutral feed from the breaker panel to the neutral bar. Bring a neutral feed from the neutral bar to the KT3 block terminal labeled 'Neutral'.

D Connect the hot wire from the breaker panel to the first connector on the WCR Relay. The hot wire can be wired to either terminal on the connector, but cannot be wired to the same terminal as the switch leg. Continue to do the same for all remaining hot feeds.

E Connect the ground wire from the breaker panel to the ground bar or ground lug.



MS/TP Communication Wiring and Connections

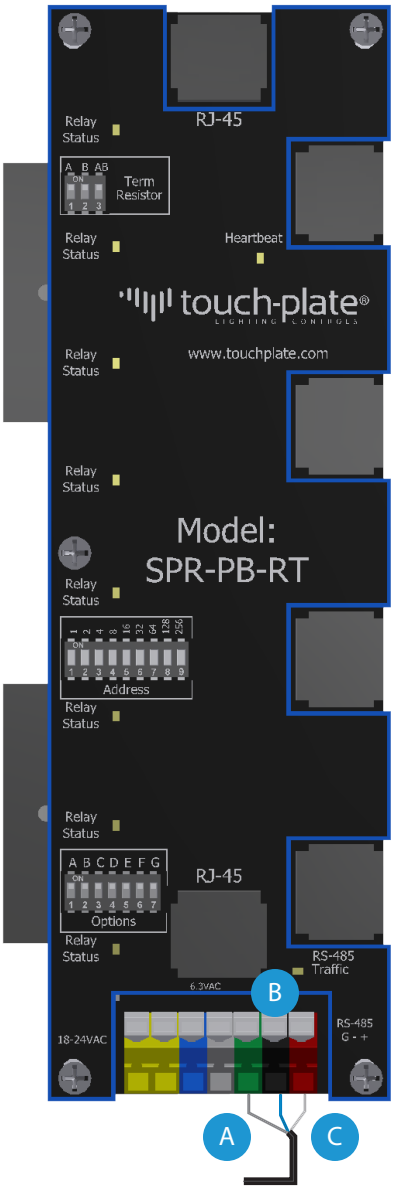
Use the MS/TP Communication wiring connections diagram to setup your system. This diagram does not show all possible connections and configurations.

Touch-Plate recommends the use of Liberty Cable Part #: 18-2C-SH-GRY or equivalent for wiring.

A Connect the Ground wire to the green terminal on the SPR-PB.

B Connect the - wire to the black terminal on the SPR-PB.

C Connect the + wire to the red terminal on the SPR-PB.

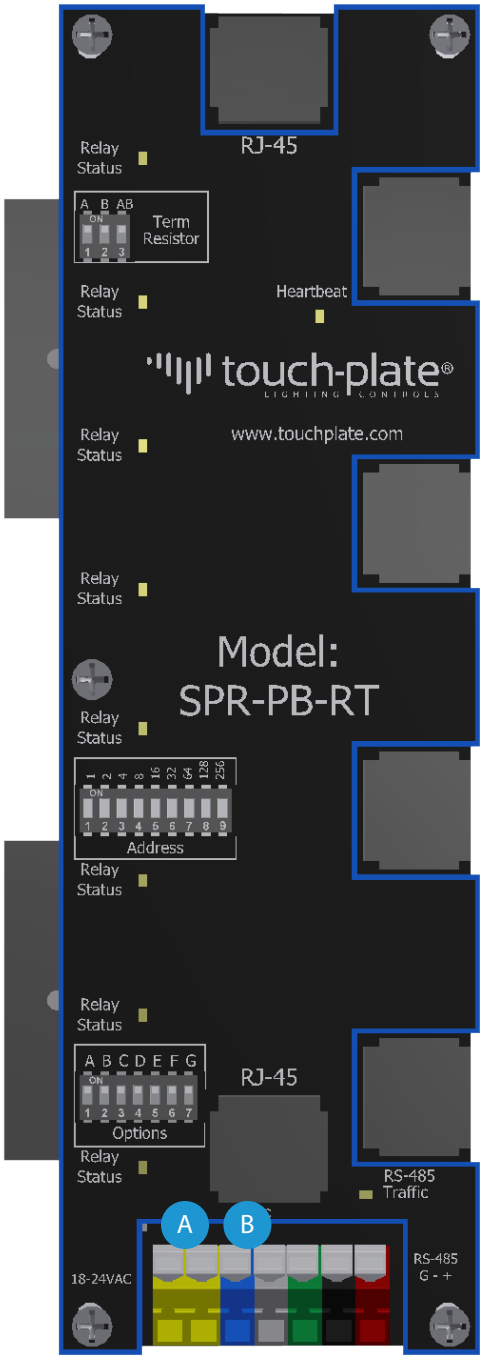


Power Wiring and Connections

Use the Power wiring connections diagram to setup your system. This diagram does not show all possible connections and configurations.

A Connect the orange wires from the transformer to the yellow terminals on the SPR-PB. This is the 24VAC connection. Both 24VAC and 6.3VAC are required.

B Connect the blue wires from the transformer to the blue and gray terminals on the SPR-PB. This is the 6.3VAC connection. Both 24VAC and 6.3VAC are required.



Firing Card Wiring and Connections

Use the Firing Card wiring connections diagram to setup your system. This diagram does not show all possible connections and configurations.

Note that each device needs to have a unique address and a baud rate. See the Supra Premier manual for information on how to verify and if necessary set the address and the baud rate.

A Connect one end of a patch cable into the RJ-45 jack (firing card connection).

B Connect the other end of the patch cable into the RJ-45 jack (firing card connection) on any additional SPR-PB's.

All other SPR-PB's will be connected to the BACnet Front End through the first firing card via patch cables.

Troubleshooting Guide

If no response occurs when the system is powered up, use the following steps to identify the problem.

1. Look for the LED indicator to be blinking on the SPR-PB.
    a. For the indicator to be blinking, power has to be correctly brought to the system.
    b. If the LED indicator is not blinking, confirm power connections and then contact the factory for assistance.

If the communications LED does not stop flashing.

1. Verify that the wiring is correct.
2. Verify that all devices are connected to power.
3. Verify the baud rate.

Frequently Asked Questions

1. What is the Device ID?
    a. The Device ID is a value that ranges from 0 to 4194302 to uniquely identify a BACnet device on a network. Touch-Plate sets the Device ID between 68000 to 68999. This is based on Touch-Plate's BACnet ID of 68.
    b. Although this is not a required practice, it will help create a unique ID when other manufacturers use this method. This value can be changed to any of the valid values.
2. What if there is no response from the BACnet Front End?
    a. Verify that the MS/TP cable is correctly connected.
    b. Verify that there are not conflicts with the MS/TP MAC addresses. Each device on a MS/TP network must have unique MS/TP MAC address.
3. Why are the relays not able to be cycled from the BACnet Front End?
    a. Verify that another controller does not have the relay locked out by using a higher priority.

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Revision: 2.0a

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