

General Description

The Protocol dimming and control systems offer **microprocessor based control stations** with distributed intelligence (no central controller) over a 4-wire (2 twisted pairs) network bus, increasing the reliability and versatility of the system. Button functions and control channel assignment are programmed and loaded into the station by means of our "SOFTPRO" programming software. These can be assigned at the factory and easily reprogrammed in the field whenever necessary to accommodate the changing needs of the application. Protocol control stations offer the flexibility to **change function, zone assignment, quantity and location of buttons** on the station - changing the appearance is as simple as removing or adding buttons to the station and replacing the face plate. Download a new station configuration file and a new station is created with no rewiring or major expense.

Single gang stations are available with up to **8 buttons** with or without infrared capability. Double gang stations are available with up to **16 buttons** (single system address) with or without infrared capability. Consult factory for custom variations. Protocol control stations feature attractive, thin profile, face-plates with no visible mounting hardware. Face Plates are available in various styles. Each style features a slightly different look and construction to best fit **residential, commercial** or **industrial** applications. Face Plates are available in a variety of colors and textures. Buttons are available in **white, black** and **grey**. Consult factory for availability of special colors and textures.

Button Functions

- Dimmer w/preset On and Off
- Raise
- Lower
- On
- Off
- Toggle
- Momentary
- Preset

Function Load Assignment

- Single load.
- Group of loads (up to 24)
- All Loads (global)
- All loads excluding a group.

Above load assignment options are available with any button function.

Fade Rate Assignment

- Level Control (0 to 25 seconds)
- Preset Fade (0 to 60 minutes)

Software Diagnostics

- Auto Detect Station.
- Send ID and Code Version.
- Check Station.
- Send Factory Settings.
- Modify Settings.
- Default To Factory Settings.
- Save Current Settings.
- Soft Reset.
- Initialize Memory.
- Monitor Button Presses.
- Send Button Configuration.
- Swap Buttons.
- Lock/unlockPreset Save.
- Flash Station LED's.
- Download Configuration File.

Infrared Features

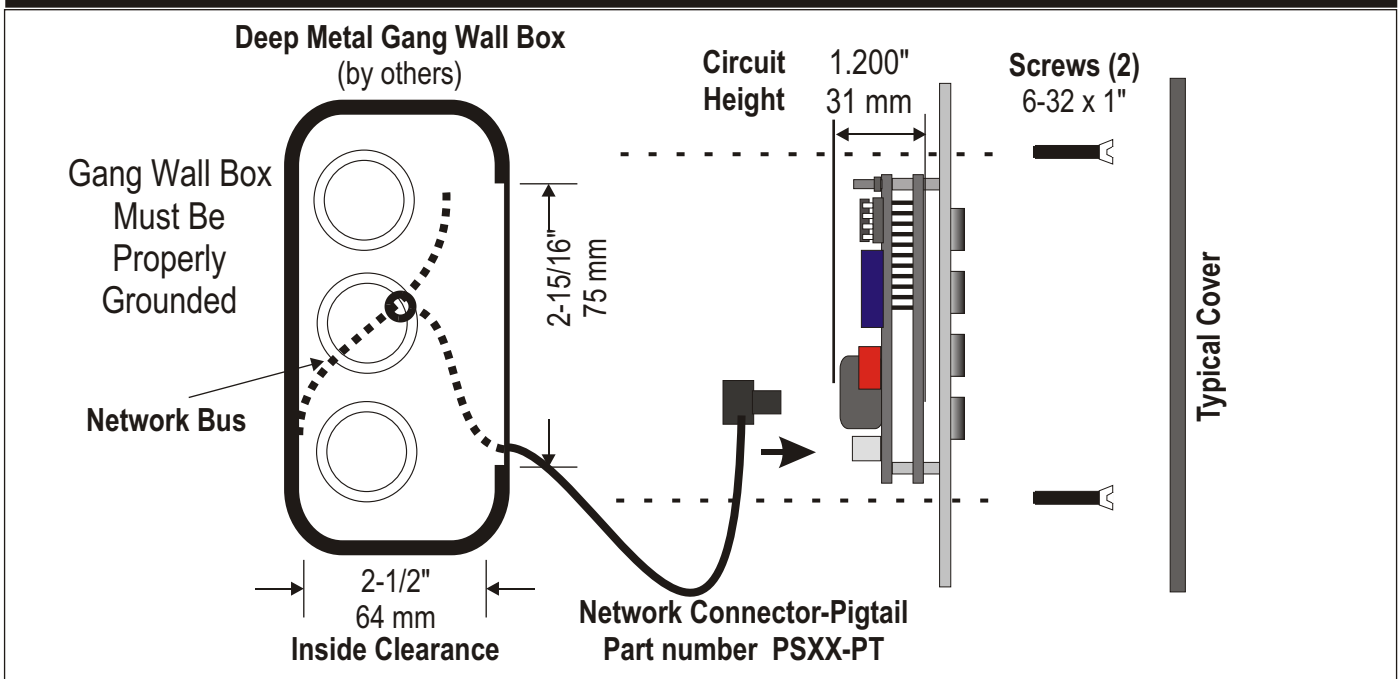
- Infrared receiver does not replace any buttons on the station.
- All functions including Raise and Lower are accessible by IR control. Dimmer is restricted to on-off.

Other Features

- Maximum and minimum trim levels of the loads assigned to a button may be adjusted directly at the station.
- Stations may have up to 16 configured "phantom" buttons which can be activated from a universal infrared remote controller.
- Scene Presets may be adjusted and saved at the station. Station LED's Flash to indicate that preset has been saved.
- Station LED's remain dimly lit to help locate buttons in a dark room.

Physical and Electrical Specifications

Back Plate: Metal Construction.
 Dimensions: See Table Above.
 Power: Max. 80mA at 10 VAC-50/60Hz.
 Data Input: RS485 Compliant.
 Data Output: RS485 Compliant.
 Data Format: Proprietary.
 Data Retention: 10 years, no batteries required.
 ESD Protection: 15 KV on data input and output.
 Network Port: 0.1" c-c, 8 Position, Male Header.

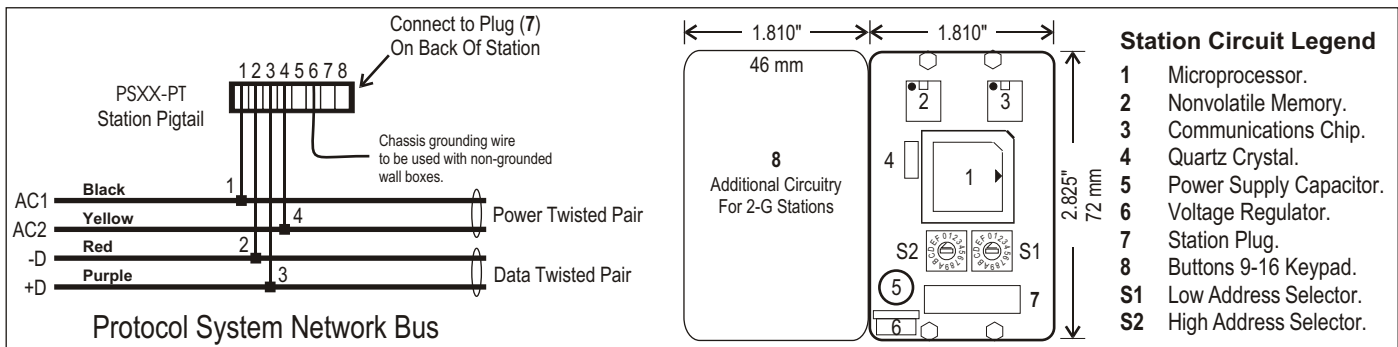


Mounting requirements

- The **PS Series** control stations with 8 buttons or less mount in single gang deep Gang Wall boxes. Stations with 9 buttons or more require double gang boxes.
- Both types of boxes must have a minimum depth of 2-1/2" and a minimum inside height of 2-15/16" to allow clearance for printed circuit board. (See above illustration.)
- Station chassis must be Grounded for ESD protection.
- Gang Wall boxes to be supplied by others.
- Refer to the Protocol Hardware Installation Manual or consult factory for more details.

Wiring Notes

- 1 All wiring between the control stations, load drivers, and other system accessories (network bus) is low voltage (NEMA Class 2) and may be run with two twisted pair # 18 AWG wire. Refer to Protocol Installation Manual, Appendix E, for maximum wire length.
Network Bus may be Carol Cable #C3362 or equivalent.
- 2 Do not run Network Bus cable in the same conduit with non-class 2 circuits.
- 3 Network Bus wire may be run in any combination of daisy chain (T-tap), home run, star, and/or branch.
- 4 Power for all stations of a system must be on the same power phase.
- 5 Installation must conform to local and/or NEC code requirements.



Ordering Information

- Consult the Protocol Dimming System price list/ordering guide for information on part numbers for standard and custom face plate styles and colors.