

General Description

The **PD216 dimmer pack** contains two solid-state dimmers. Each dimmer is rated for a maximum load of **1920 Watts at 120 VAC**. Power is fed to the **PD216** from **two 20 Amp. breakers on the same power phase**. The dimmers are triggered by a separate firing board (**INT04**). The **INT04** is a microprocessor based control board with a nonvolatile memory chip, a communications chip, and a regulated DC power supply. The **INT04** also contains, address selectors, LED output monitors and other support circuitry. The microprocessor is driven by **powerful distributed intelligence software** which handles all control and communications functions. The memory chip holds all of the **PD216's** pertinent information and settings which include low and high trim levels for each of the outputs. The **PD216 does not rely on any shared data source and functions independently of any other system component** and without a central system controller. The **PD216** communicates with Protocol system stations and controllers over a single twisted-pair of wires and can be connected anywhere on the system network bus. This adds convenience and versatility by allowing **PD216** dimmers to be distributed close to their loads and/or installed next to the service panels.

General Features

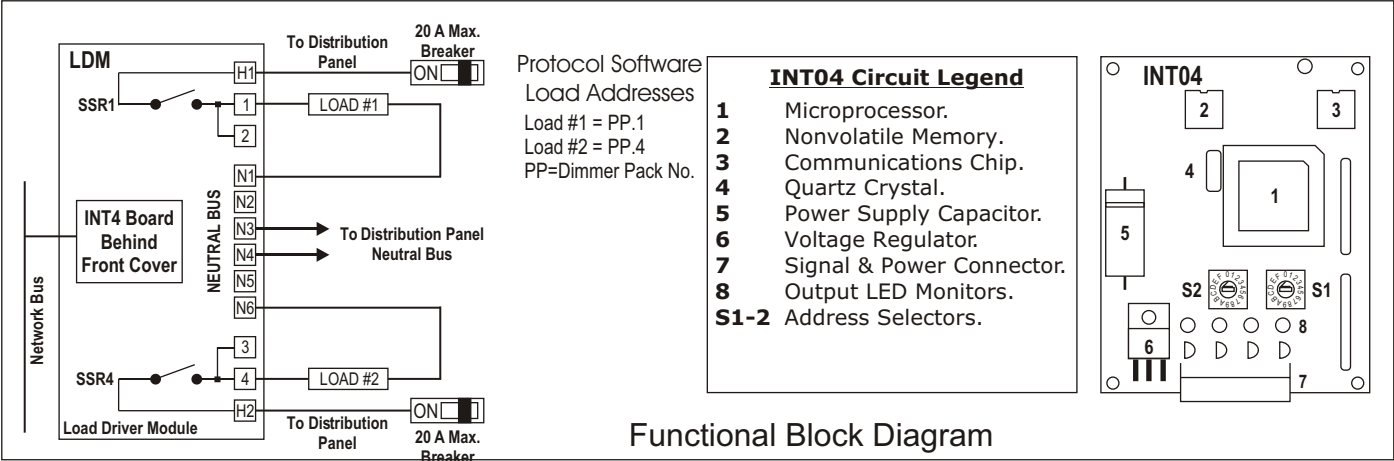
- Distributed Intelligence.
- Modular and Compact Design.
- Twisted-pair Balanced Line Communications.
- Daisy Chain, T-tap, or Star Data Configurations.
- Software Configurable.
- Automatic 50/60 Hz Detection.
- Dimming Disable Jumper.

Control & Diagnostics

- Set Load Intensity Level.
- Save/Recall Presets.
- Blink Load.
- Set Load Max. & Min. Trims.
- View Max. & Min. Trim Settings
- View Current Output Levels.
- View ID and Code Version.
- Default to Factory settings.
- Save Settings in memory.
- Download Configuration File.
- Check Status.

Physical and Electrical Specifications

Enclosure: 16 Gauge Aluminum.
 Weight: 4.5 Lbs. (2 Kgs.)
 Power Feed: **2 x 20 Amp. Feeds SAME PHASE.**
 Voltage Feed: 120 VAC, 50/60Hz, Single Phase.
 Output Rating: **2 x 1920 Watts at 120 VAC.**
 Output Triacs: Max. Rating 40 A-400 VAC
 Connector: 12-position screw terminal block.
 Data Network: RS485 Compliant, Proprietary Protocol.
 Data Retention: 10 years, no batteries required.
 ESD Protection: 15 KV on data input and output.

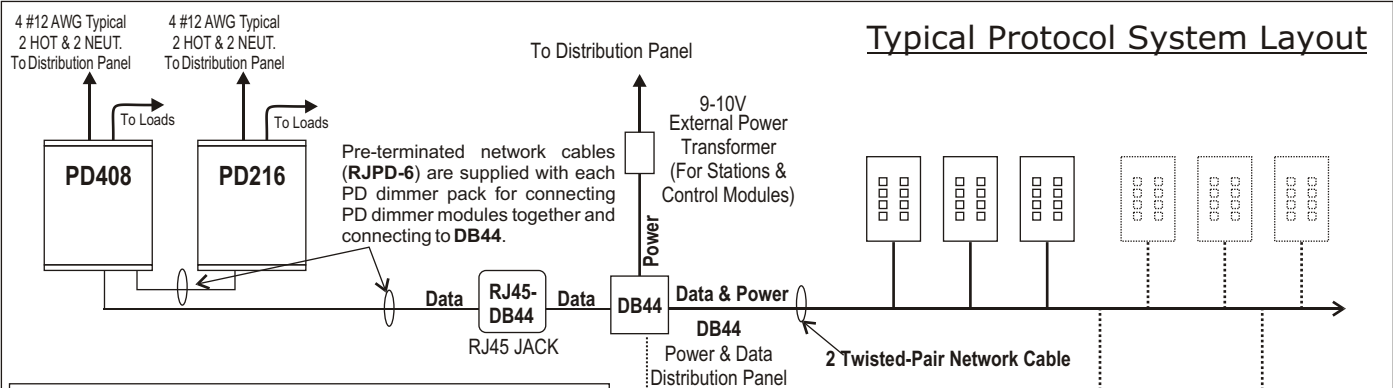


Mounting Requirements

Surface mount the dimmer pack in a well ventilated area. Allow 2" of side clearance for proper air circulation. Installation clearance shall meet local and/or NEC code requirements. Enclosures may be attached to the wall or other mounting surface by holes in the heat sink flanges. Refer to the drawing on the front side of this sheet for the proper dimensions. Conduit shall be pulled to the top of the dimmer packs.

Wiring Notes

- 1 **DO NOT EXCEED 1920W** per dimmer output.
- 2 All wiring between the control stations, dimmers, and other system controllers (network bus) is low voltage (NEMA Class 2) and may be run with two twisted pair #18 AWG wire. Control network bus may be Carol Cable #C3362 unless otherwise required. Consult the Protocol Hardware Installation manual, appendix E, for maximum wire length.
- 3 When system is fed by 120V/208V three phase service, **the 2 breakers must be on the same power phase.** The voltage from any input terminal to neutral must not be greater than 120 VAC.
- 4 **PD216** may be fed by two 20 A breakers and may have up to two separately dimmed loads.
- 5 Please refer to the **PD216** and Protocol system installation manuals for complete wiring information.
- 6 **CAUTION: DO NOT** attempt to parallel outputs to increase capacity.
- 7 Installations must conform to local and/or NEC code requirements.
- 8 Power for all control stations of a system must be on the same phase. bus may be Carol Cable #C3362 unless otherwise required. Consult the Protocol Hardware Installation manual, appendix E, for maximum wire length.
- 9 **RJPD-6' - RJ45** Daisy-Chain Network Cable is supplied with each **PD216** to connect to other **PD Series** units.



Small Protocol Systems

A small Protocol system can be built using only one **PD216** and one station. The station gets its power from the **PD216**'s transformer by installing jumpers W1 & W2 on the load driver module (LDM). The **DB44** and external transformer are not required in small systems. (See the Protocol and the **PD216** installation manuals for more details.)