

General Description

The **DB44** low voltage network power and data distribution panel provides a convenient way to interconnect different home runs of the system network bus and also provides a direct connection for the **RAU-96** on its front panel. Power from an external Class 2 Power Supply provides 12 VDC to all wall control stations of the system through the **DB44**. A fast-blow fuse mounted on the circuit board provides an additional short circuit protection. The toggle switch on the front panel is used to power down and/or reset the wall stations and the RAU-96. Two LED's are also provided on the front panel to indicate power status. The PD Series dimmer pack control boards do not draw power from the stations' network 12 VDC Power Supply. Each dimmer pack has an integral transformer used to power its individual control board.

Main Features

- . Convenient Network Bus Splicing.
- . Replaces Wire-Nut and Crimp-type Splicing Methods.
- . Compact Size.
- . Network Power Short-Circuit Protection.
- . Screw Terminal and Detachable Connections.
- . Network Power Interrupt Switch.
- . LED Power Monitors.
- . Convenient RAU-96 & PDxxx RJ45 plugs.

Mounting requirements

- ! The **DB44** low voltage power and distribution panel mounts in a double gang junction box.
- ! Junction box 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.)
- ! Use Grounded metal boxes only.
- ! Junction boxes to be supplied by others.

Wiring Notes

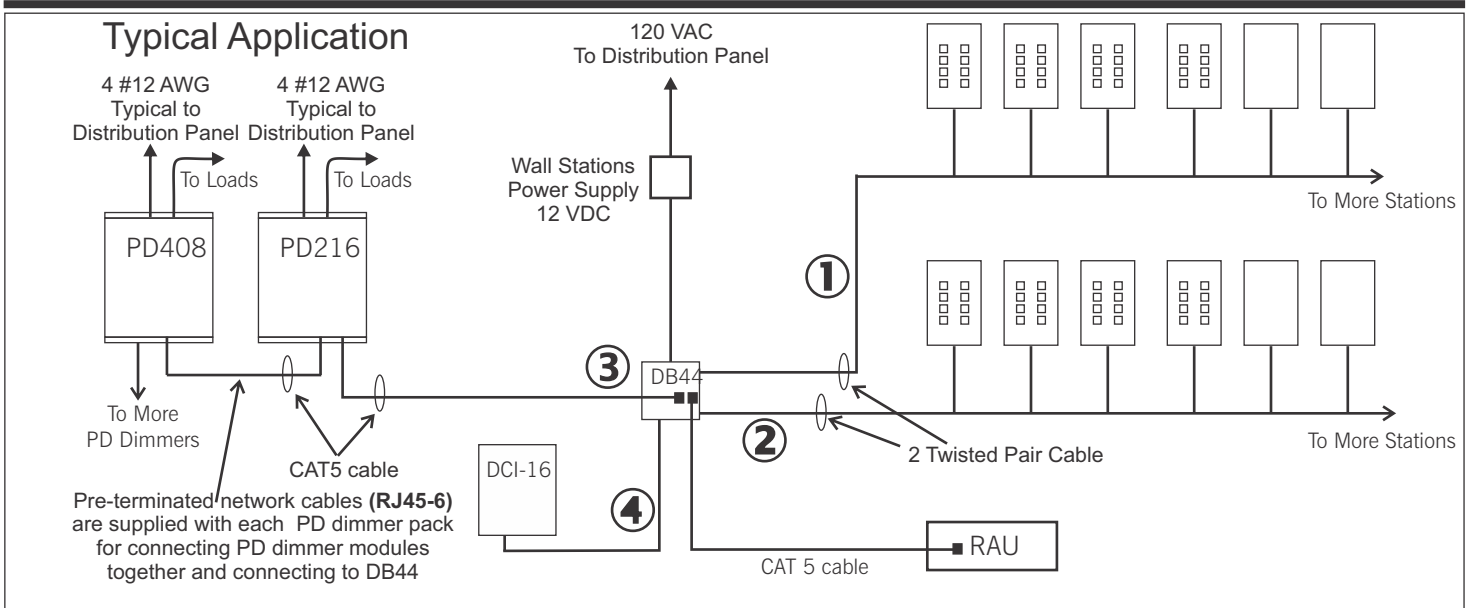
- K All wiring between the control stations, load drivers, and other system accessories (network bus) is low voltage (NEMA Class 2) and may be run with two twisted pair # 18 AWG wire. Refer to Protocol Installation Manual, Appendix E, for maximum wire length.
- L Do not run Network Bus cable in the same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

Ordering Information

- 0 Panel Part Number: **DB44**
- 0 Power supply is 12 VDC up to 60Watts (class 2)

Physical and Electrical Specifications

- Front Plate: 0.065" Aluminum (1.65 mm)
- Dimensions: See Drawing Above.
- Weight: 0.5 lbs. (.25 Kg.)
- Power Supply : Class 2, 12 VDC 1-5 Amps
- Fuse Rating: Max 5 A Fast Blow, AGC3 or equivalent.
- Network Ports: 2 RJ45 jacks on front panel
 - 4 0.1" c-c, 8 Position, Male Headers (J1-J4).
 - 4 0.2" c-c, 5-Position Screw Terminal Blocks (TB1-TB4).
- Power input : One 0.2" c-c, 3-Position Screw Terminal Block TB5



Typical Application Details

To Power Distribution Ground Bar

Power Supply 12 VDC Class II

120 VAC INPUT

12 VDC Input

DB44

TB4 V -D +D V G

TB3 V -D +D V G

TB5

TB1 V -D +D V G

TB2 V -D +D V G

J1

J2

J3

Black

Red

Purple

Yellow

Ground

Black

Red

Purple

Yellow

Ground

Pin	RJ45	PROTOCOL Lighting controls
1	Not Used	
2	Not Used	
3	Not Used	
4	9 VAC	
5	9 VAC	
6	Not Used	
7	- DATA	
8	+ DATA	

RJ45 Connectors Pins assignment

2 Pairs: Data & Power

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Cable(2 twisted pairs) connecting the PSFxx wall stations keypads to the 12 VDC power and the Protocol Data bus.
Green wire (ground) is used to connect PSFxx to earth ground to protect from static. (not needed if PSFxx are mounted on grounded metal boxes.)

TB1, TB2, TB3, TB4 are all the same parallel connections.
J1, J2, J3, are all the same parallel connections.

SIGNAL COLOR CONNECTOR POSITION			
VDC	Black	TB1-TB4, J1-J3	1
-Data	Red	TB1-TB4, J1-J3	2
+Data	Purple	TB1-TB4, J1-J3	3
VDC	Yellow	TB1-TB4, J1-J3	4
GND	Green	TB1-TB4	5
GND	Green	J1-J3	6
GND	Green	TB5	3
VDC	Black	TB5	1
VDC	Yellow	TB5	2