



Digital Lighting Systems, Inc.

PROTOCOL

PD104

1 x 4 A. outputs

PD104-120 : 1 x 500 Watts @ 120 VAC

PD104-277 : 1 x 1000 Watts @ 277 VAC



USER'S MANUAL



GENERAL DESCRIPTION

The **PD104** is a 1-channel **PROTOCOL** compatible dimmer pack. It is equivalent to 1 solid-state relays (SSR's) and a INT04 Logic assembled on a single circuit board. Power is fed to the **PD104** from a **breaker 20 A. Maximum.** the output is rated for a maximum output current of 4 **amperes**, The **PD104 Dimming Module** has an open plate Frame and is designed to mount on a 2 Gang electric connection box, 2" deep. The logic signals are optically-isolated from all line voltage elements. The **PROTOCOL** Network DATA (2 wires) control cable connects directly to the board or via **an optional RJ45 Jack.** Several Dimmer packs may be daisy-chained together. Each **PD104** may be easily set to a unique address with 2 hexadecimal selectors Each of the **PD104** outputs may be independently configured to dim or switch from the **PSCXX** wall stations.

PD104 is available for **120VAC or 277VAC** operation to provide full range dimming to **LEDs** and other ELV or electro magnetic loads loads.

Enclosure Installation

Surface mount the dimmer pack in a well ventilated area where the ambient temperature does not exceed 104° F for full load operation.

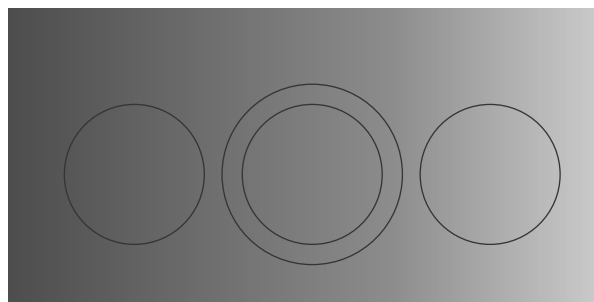
PD104 Dimensional Diagram

Dimension front panel

4.80 x 4.80"



Surface Mounted
2 Gang Electric junction box
2" Deep

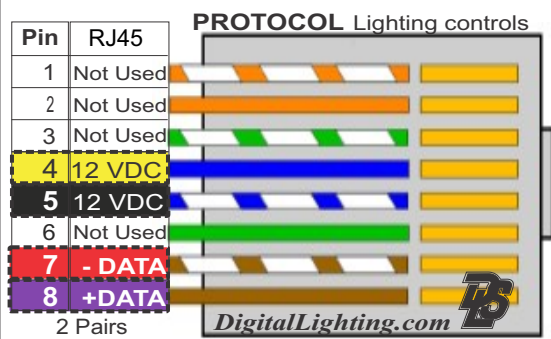


Wiring Notes

- DO NOT EXCEED 500 W (4 Amps.) per each dimmer @ 120VAC.
- DO NOT EXCEED 1000 W (4 Amps.) per each dimmer @ 277VAC.
- All wiring From control to dimmers is low voltage (NEMA Class 2)
- PD104 PROTOCOL dimmer may be fed by up to 20 A Breaker, (Up to 4 PD104 dimmers packs may be fed one 20 A Breaker)
- CAUTION: **DO NOT** parallel outputs to increase capacity
- Installations must conform to local and/or NEC code

PD104 could be hard wired to the PROTOCOL DATA bus or could be connected with an optional RJ45 Jack with a pigtail
Optional; Not Included

PD104 Protocol RJ45 connector.



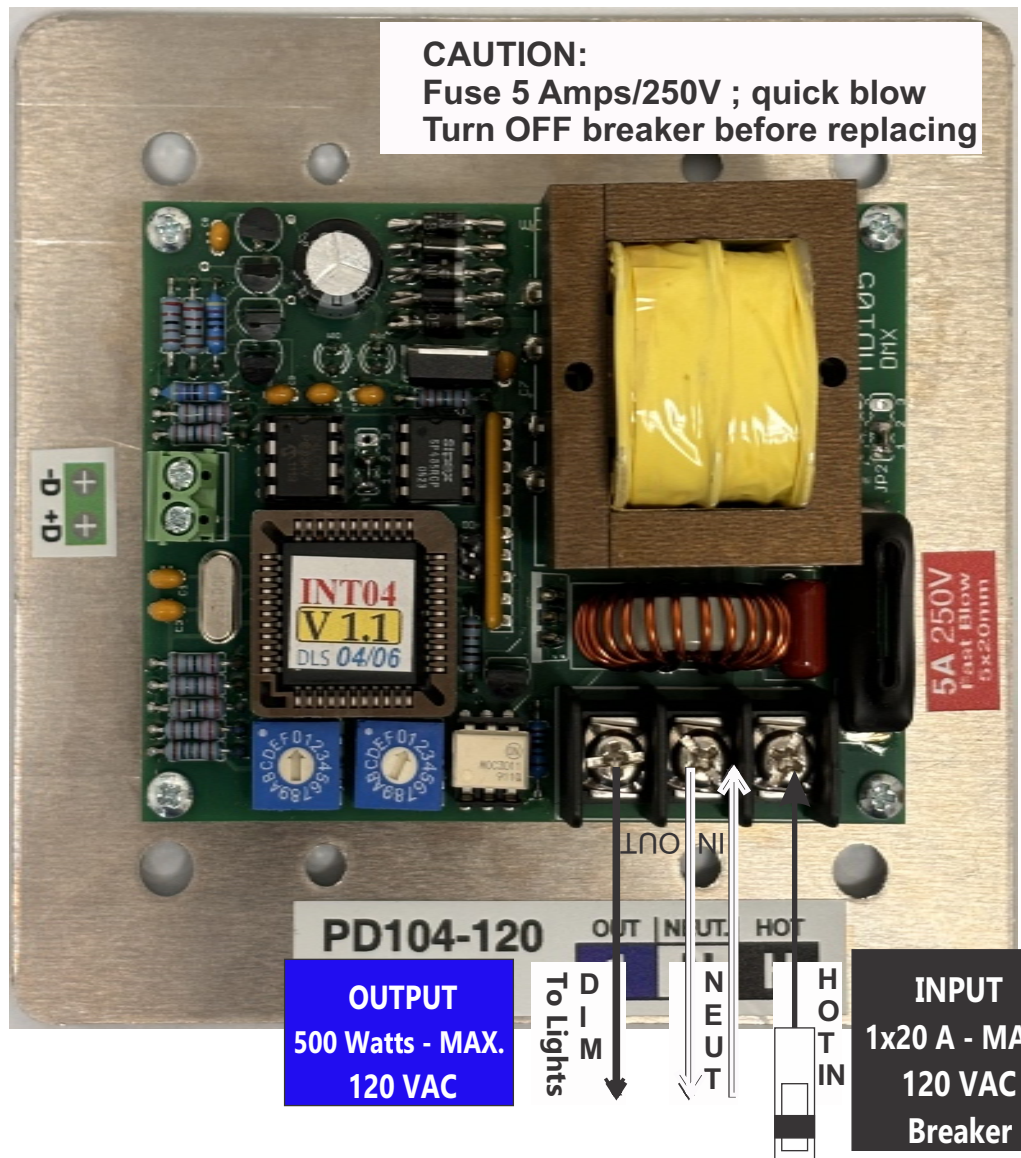
Only PIN 7 **-DATA** & PIN 8 **+DATA** are connected to PD104 DATAconnector

PD104-120
120 VAC wiring

CAUTION:
Fuse 5 Amps/250V ; quick blow
Turn OFF breaker before replacing

DATA connector
IN / OUT

Mount on a
grounded
2 gang metal box.



OUTPUT
500 Watts - MAX.
120 VAC

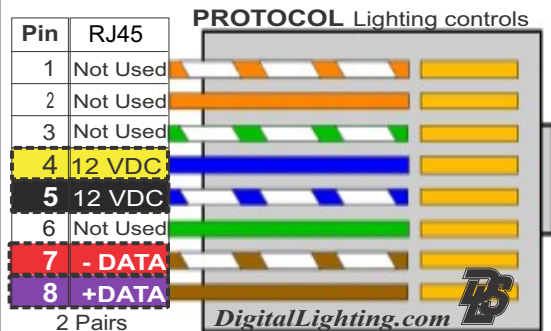
To Lights
D - M
NEUT
HOT IN

INPUT
1x20 A - MAX.
120 VAC
Breaker

Wiring Notes

- DO NOT EXCEED 500 W (4 Amps.) per each dimmer @ 120VAC.
- DO NOT EXCEED 1000 W (4 Amps.) per each dimmer @ 277VAC.
- All wiring From control to dimmers is low voltage (NEMA Class 2)
- PD104 PROTOCOL dimmer may be fed by up to 20 A Breaker, (Up to 4 PD104 dimmers packs may be fed one 20 A Breaker)
- CAUTION: **DO NOT** parallel outputs to increase capacity
- Installations must conform to local and/or NEC code

PD104 Protocol RJ45 connector.



PD104 could be hard wired to the PROTOCOL DATA bus or could be connected with an optional RJ45 Jack with a pigtail
Optional; Not Included

Only PIN 7 **-DATA** & PIN 8 **+DATA** are connected to PD104 DATAconnector

PD104-277
220 - 277 VAC wiring

CAUTION:
Fuse 4 Amps; quick blow
Turn OFF breaker before replacing

DATA connector
IN / OUT

Mount on a
grounded
2 gang metal box.

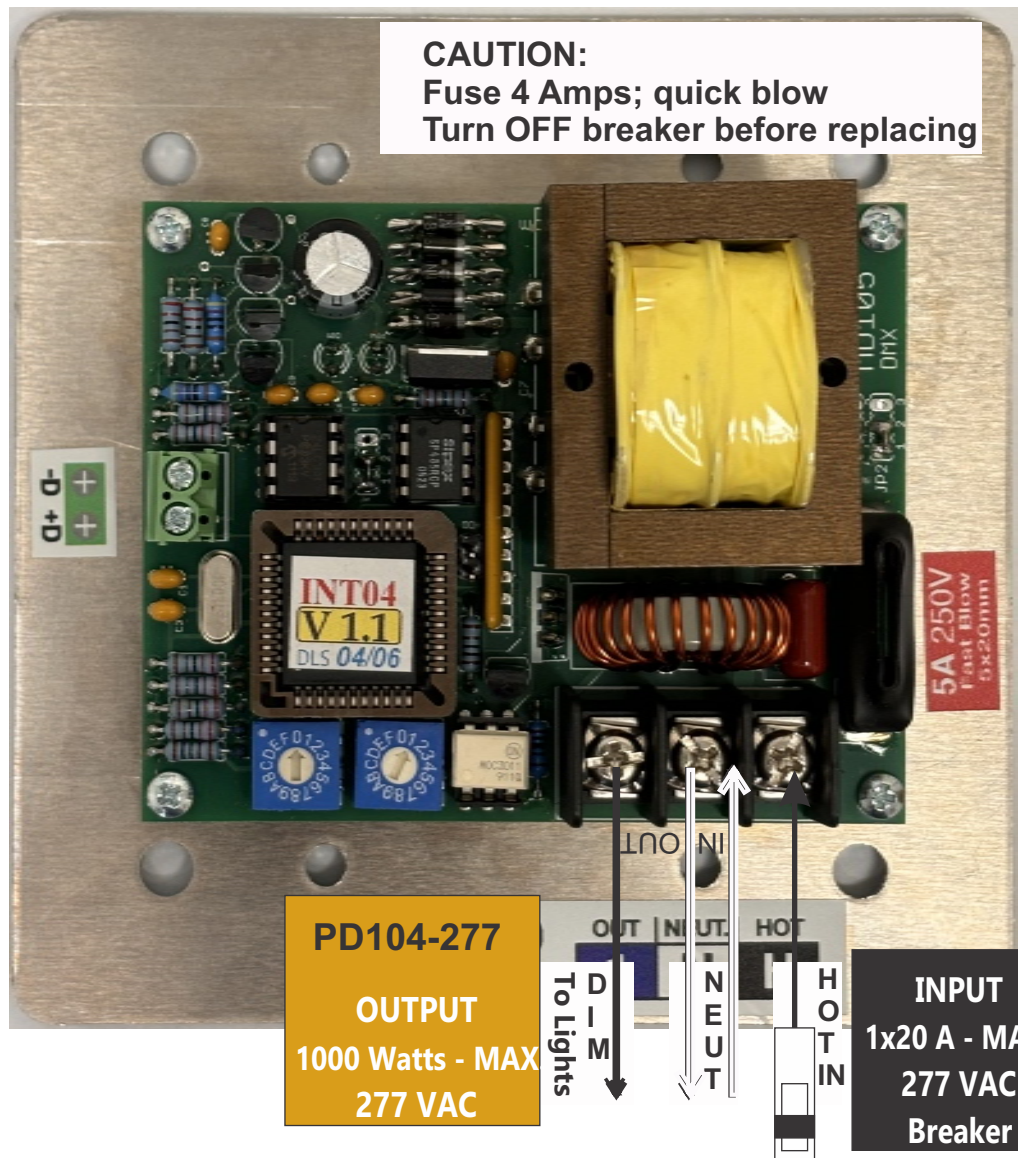




Table 4 - PD DIMMER Address Selection Information

00	INVALID ADDRESS	33	set S2,S1 to 2,1
01	set S2,S1 to 0,1	34	set S2,S1 to 2,2
02	set S2,S1 to 0,2	35	set S2,S1 to 2,3
03	set S2,S1 to 0,3	36	set S2,S1 to 2,4
04	set S2,S1 to 0,4	37	set S2,S1 to 2,5
05	set S2,S1 to 0,5	38	set S2,S1 to 2,6
06	set S2,S1 to 0,6	39	set S2,S1 to 2,7
07	set S2,S1 to 0,7	40	set S2,S1 to 2,8
08	set S2,S1 to 0,8	41	set S2,S1 to 2,9
09	set S2,S1 to 0,9	42	set S2,S1 to 2,A
10	set S2,S1 to 0,A	43	set S2,S1 to 2,B
11	set S2,S1 to 0,B	44	set S2,S1 to 2,C
12	set S2,S1 to 0,C	45	set S2,S1 to 2,D
13	set S2,S1 to 0,D	46	set S2,S1 to 2,E
14	set S2,S1 to 0,E	47	set S2,S1 to 2,F
15	set S2,S1 to 0,F	48	set S2,S1 to 3,0
16	set S2,S1 to 1,0	49	set S2,S1 to 3,1
17	set S2,S1 to 1,1	50	set S2,S1 to 3,2
18	set S2,S1 to 1,2	51	set S2,S1 to 3,3
19	set S2,S1 to 1,3	52	set S2,S1 to 3,4
20	set S2,S1 to 1,4	53	set S2,S1 to 3,5
21	set S2,S1 to 1,5	54	set S2,S1 to 3,6
22	set S2,S1 to 1,6	55	set S2,S1 to 3,7
23	set S2,S1 to 1,7	56	set S2,S1 to 3,8
24	set S2,S1 to 1,8	57	set S2,S1 to 3,9
25	set S2,S1 to 1,9	58	set S2,S1 to 3,A
26	set S2,S1 to 1,A	59	set S2,S1 to 3,B
27	set S2,S1 to 1,B	60	set S2,S1 to 3,C
28	set S2,S1 to 1,C	61	set S2,S1 to 3,D
29	set S2,S1 to 1,D	62	set S2,S1 to 3,E
30	set S2,S1 to 1,E	63	set S2,S1 to 3,F
31	set S2,S1 to 1,F		
32	set S2,S1 to 2,0		

NOTES:

00 Decimal (S2,S1 = 0,0) is not allowed on any device.

PD104 address is output number 1 of the 4 channel module.

Max **PD104** Address: 63 Decimal (S2,S1 = 3,F)



LIMITED WARRANTY

Digital Lighting Systems warrants to the purchaser that its products have been carefully manufactured and inspected and are warranted to be free from defects of workmanship and materials when used as intended. Any abuse or misuse contrary to normal operation shall void this warranty.

Digital Lighting Systems' obligation under this warranty shall be limited to replacement or repair of any units as shall within two years of date of invoice from Digital Lighting Systems, prove defective; and Digital Lighting Systems shall not be liable for any other damages, whether direct or consequential. The implied warranties of merchantability and fitness for a particular purpose are limited to the duration of the expressed warranty. Some states do not allow the exclusion of the limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, you may also have other legal rights which vary from state to state.

Defective merchandise may be returned to Digital Lighting Systems, prepaid, after prior notification has been given and approval obtained for the return. To obtain prior approval for the return of the defective items, contact your local Digital Lighting Systems distributor, representative, or:

Digital Lighting Systems, Inc.

1

Digital Lighting Systems, Inc.
12302 SW 128 Ct.
Miami, FL 33186
www.digitallighting.com



Tel 305-969-8442
Fax 305-969-8675
e-info@digitallighting.com

Upon request, replacement unit(s) will be shipped as soon as available. Unless immediate shipment of replacement merchandise is requested, Digital Lighting Systems will not ship replacement merchandise until defective merchandise is received, inspected, and determined to be defective.

No labor charges in connection with warranty problems will be reimbursed by Digital Lighting Systems without prior written approval from the factory.

Digital Lighting Systems distributors and representatives have no authority to change this warranty without written permission.

Digital Lighting Systems reserves the right to determine the best method of correcting warranty problems.

Printed in USA
January 2025

