## Digital Lighting Systems, Inc.

## PD408-AN10-277 <br> ANALOG 0-10 V

$0-10 \mathrm{~V}$ analog control
4 Channel x 2250 W Dimmer \& Switch Packs 220/240/277 Volts operation


## USER'S MANUAL

## PD408-AN10-277 Load Driver Module Information

Figure 1 - PD408-AN10-277 LDM Detail


Table 1 - Terminals Definition

## NAME DESCRIPTION

1 Output Of Solid-State Relay \#1
2 Output Of Solid-State Relay \#2
3 Output Of Solid-State Relay \#3
$4 \quad$ Output Of Solid-State Relay \#4
H1 Hot Line Feed For Relays 1 \& 2.
H2 Hot Line Feed For Relays $3 \& 4$.
N1-N6 Neutral Bus Connections.

Table 2 - Absolute Maximum Electrical Ratings

| Electrical Characteristic | Terminal | Maximum |
| :--- | :---: | :---: |
| Relay Load Current | 1 to 4 | 8 Amps. |
| Input Current For Relays 1 \& 2 | H1 | 20 Amps. |
| Input Curent For Relays 3 \& 4 | H2 | 20 Amps. |
| Input Voltage | H1-H2 | 220 to 277 VAC, |
| 1-Phase. |  |  |
|  |  |  |

## Specifications: PD408-AN10-277

$4 \times 2250$ Watts @ 277 VAC dimmer pack which is designed to be controlled either by a $4 \times 100$ KOHM potentiometers ; one for each dimmer, or by a standard 0-10 V analog signal from a sinking or sourcing controller.

Control Input specifications:
1 mA . current; Response range :
$1 \mathrm{~V}=0 \%$; $10 \mathrm{~V}=100$ \%
Dimmer power specifications:
Operating Voltage: 277 VAC Input : $2 \times 20$ Amp Breaker on 1 phase
Outputs: $4 \times 2250$ Watts

Figure 2 - INT-AN04 control board


Each channel of the PD408-AN10-277 could be set to dim or switch. 4 Jumpers, 1 for each channel, are located on the back of the front cover. Place jumper on D side for normal 0-10V dimmer operation, place jumper on S side for switch operation.
Switching control Voltage level could be set from 0 to 10 V with the TrimPot.

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## Enclosure Installation

Surface mount the dimmer pack in a well ventilated area where the ambient temperature does not exceed $104^{\circ} \mathrm{F}$ for full load operation. Allow 2" of side clearance for proper air circulation and servicing. 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 drawings below (FIGURE 3) for the correct dimensions. Conduit shall be pulled to the top of the dimmer packs.

## NOTE

The PD408-AN10-277 may create a slight buzzing noise and should not be located where this is objectionable.
Figure 3 - PD408-AN10-277 Dimensional Diagram


## PD408-AN10-277 General Wiring Instructions

## Wiring Notes

- DO NOT EXCEED 2216 W (8 Amps.) per dimmer output @ 277 VAC.
$\square$ All wiring between the control stations, dimmers, and other system controllers (network bus) is low voltage (NEMA Class 2)
- PD408-AN10-277 dimmer packs may be fed by one or two 20 A (maximum) branch circuits and may have up to four separately dimmed loads.
$\square$ Both breakers must be on the same power phase.
- CAUTION: DO NOT attempt to parallel outputs to increase capacity. - Installations must conform to local and/or NEC code requirements.
- Each load must have its own Neutral wire for full load operation.
- All line voltage wires must have copper conductors of adequate Gauge with $90^{\circ} \mathrm{C}$ wire insulation.
- POWER EACH LOAD DIRECTLY BEFORE CONNECTING IT TO THE PD408-AN10-277 TO ENSURE PROPER WIRING.

Figure 4 - PD408-AN10-277 Typical Control Wiring.
Analog 0-10V Control inputs


Optional:
Could be also controlled with $4 \times 100 \mathrm{KOHM}$ potentiometers

Figure 7 - PD408-AN10-277 Typical 277 VAC Wiring.


For Full Load Operation Use:
\#12 AWG copper conductor wire for Line \& Neutral Feeds. \#14 AWG copper conductors in/out to each load.
Max. Load: 8 Amperes per output.

## 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.

Attn: Customer Service Department
12302 SW 128 Ct. Bay \#105
Miami, FL 33186
(305) 969-8442

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.


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Printed in U.S.A
December 2012

