# Digital Lighting Systems, Inc. <br> <br> PD216-AN10-3WB-277 <br> <br> PD216-AN10-3WB-277 <br> 0-10V analog control <br> 2 Channel x 4450 W Dimmer \& Switch Packs <br> For 3 wire Dimmable ballasts 

## ANALOG 0-10 V



## USER'S MANUAL

## PD216-AN10-3WB-277 Load Driver Module Information

Figure 1 - PD216-AN10-3WB-277 LDM Detail


Contro Input connector

Table 1 - Terminals Definition

## NAME DESCRIPTION

1D Output Of Solid-State Relay \#1
1S Output Of Solid-State Relay \#2
2D Output Of Solid-State Relay \#3
2S Output Of Solid-State Relay \#4
H1 Hot Line Feed For Relays 1 \& 2.
H2 Hot Line Feed For Relays 3 \& 4

Table 2 -
Absolute Maximum Electrical Ratings

| Electrical Characteristic | Terminal | Maximum |
| :--- | :---: | :--- |
| Relay Load Current | $(1,2) \&(3,4)$ | 16 Amps. |
| Input Current For Relay $1 \& 2$ | H 1 | 20 Amps. |
| Input Current For Relay 3\&4 | H 2 | 20 Amps. |
| Input Voltage | $\mathrm{H} 1-\mathrm{H} 2$ | 277 VAC, 1-Phase. |

## Specifications:

The PD216-AN10-3WB-277 is a $2 \times 4450$ Watts @ 277 VAC dimmer pack which is designed to be controlled either by a 100 KOHM potentiometer for each dimmer or by a standard 0-10 V analog signal from a sinking or sourcing controller.
Control Input specifications:
Sinking signal 1 mAmp .
Response range : $1 \mathrm{~V}=0 \% ; 10 \mathrm{~V}=100 \%$
Dimmer power specifications:
Operating Voltage: 120 VAC
Inputs : $2 \times 20$ Amp Breakers on same
phase
Outputs: $2 \times 4450$ Watts Sets Switch \&
Dimmer for 3 wire ballasts

Figure 2 - INT-AN04 control board


Each channel of the PD216-AN10-3WB-277 Has a dimmer and a switch output combination to connect to 3 wire Fluorescent dimming ballasts.
Channel \# 1 uses outputs 1 as a dimmer and 2 as a switch both controlled by the same 0-10V signal.
Channel \# 2 uses outputs 3 as a dimmer and 4 as a switch both controlled by the same 0-10V signal.
Switching Voltage level (Power OFF) could be set from $0-10 \mathrm{~V}$ with the Trim Pot.

## 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 PD216-AN10-3WB-277 may create a slight buzzing noise and should not be located where this is objectionable.


0-10 Volt Input Low Voltage

## Bottom View




PD216-AN10-3WB-277 Front Cover
PD216-3WB ( LDM) Load Driver Module

Figure 3 - PD216-AN10-3WB-277 Dimensional Diagram

## PD216-AN10-3WB-277 General Wiring Instructions

## Wiring Notes

— DO NOT EXCEED 4432 W (16 Amps. ) per each dimmer @ 277 VAC.
— All wiring From control to dimmers is low voltage (NEMA Class 2)
— PD216-AN10-3WB-277 dimmer packs may be fed by one or two 20 A (maximum) branch circuits and may have up to two separately dimmed loads.

- Both breakers must be on the same power phase.
— CAUTION: DO NOT attempt to parallel outputs to increase capacity.
O Installations must conform to local and/or NEC code requirements.
$\square$ 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 PD216-AN10-3WB-277 TO ENSURE PROPER WIRING.

Figure 4 -
PD216-AN10-3WB-277 Typical Control Wiring.
Analog 0-10V Control inputs
Compatible with sinking or sourcing standard $0-10 \mathrm{~V}$ signals

| Optional: <br> Could be controlled <br> directly with a 100 <br> KOHM <br> potentiometer. |
| :--- |

Figure 5 - PD216-AN10-3WB-277 Typical 277 VAC ( for 3 wire dimmable ballasts ) Wiring.
Earth Ground


## 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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