

# PRODUCT MANUAL

## ***ELECTRONIC DISPLAYS INC.***

135 S. CHURCH STREET  
ADDISON, ILL. 60101

***www.electronicdisplays.com***



### PRODUCT PART NUMBER:

ED206-110-4D-N1-3INP..... 2.25" HIGH DIGITS

ED406-110-4D-N1-3INP..... 4.0" HIGH DIGITS

### DESCRIPTION :

- Up or down counter by 1 with a reset to 0.
- Options for a "wet" or "dry" contact to operate.
- Terminal block on endplate to wire contacts.
- Power: 120VAC @ 60Hz.
- NEMA rated aluminum enclosure.

### OPERATION :

This model is designed to count by 1 for every contact closure or to count down by 1 for every contact closure or reset to zero (switch, photo-eye, etc.). The display will have 3 inputs- 1 for up count, 1 for down count and 1 for reset. The display will power up with a "0" in the least significant position. The aluminum enclosure is NEMA rated with a black, powder coat finish. A 6 foot line cord is supplied to plug into a standard outlet.

### INPUT OPERATION:

1. IN1 – This is used to increment the display by 1. To activate this input, place a momentary contact closure between VEXT and IN1.
2. IN2 – This is used to decrement the display by 1. To activate this input, place a momentary contact closure between VEXT and IN2.
3. IN3 – This is used to preset the display to "0" or any preset number. To activate this input, place a momentary contact closure between VEXT and IN3. (A momentary switch is supplied for this input.)

If there are any questions or comments regarding this order, please call our Toll-free number: 1 - 800 - 367 - 6056

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## Unpacking Instructions:

A copy of these instructions is packed with each unit. Open carefully to avoid scratching the unit's paint and plastic lens or cutting the line cord.

## Mechanical Mounting Instructions:

This unit is equipped with two rivnuts in the top of the unit for mechanical mounting purposes. The bolts that are screwed into these rivnuts are standard 5/16 by 1 1/4" bolts. To avoid damaging the rivnuts, do not tighten these bolts more than 10 ft/lbs.

## Power Requirements:

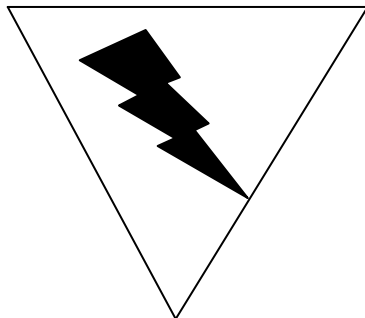
This unit is equipped with a standard, eighteen-gauge, three-wire line cord that is designed to be plugged into a standard, 120 VAC, 60 Hertz, grounded outlet. The maximum current draw at 120 VAC for ED400 is 1 ampere and for ED225 is 3/4 ampere.

## Accessing Wiring Connections:

All external connections to the display are made to a terminal strip mounted inside the display. This terminal strip can be accessed by removing the inside right endplate (opposite the line cord).

## WARNING – SHOCK HAZARD

*Always completely disconnect power from the display before opening the unit. Do not reapply power to the display until the unit has been securely closed.*



## Customer Power Supply:

If this unit is equipped with optically coupled inputs, these inputs prevent any electrical or electronic signal from passing directly from the outside world into the logic circuits on the printed circuit boards that we have supplied.

For your convenience, we have also supplied this board with an 'isolated customer power supply' that can be used to drive the customer side of these optically coupled inputs. This isolated supply does not have a direct current connection to the power supply that is used to power the display and logic chips. It will provide 12 VDC to 14 VDC at up to 500mA of current. This voltage is unregulated.

## 'Dry' Contact Configuration:

To use 'dry' contacts, the user need only supply a contact closure between the desired optically coupled input and the positive terminal of the 'isolated customer power supply'. The negative terminal of the isolated supply is already connected to the negative side of each optically coupled input. See Figure A.

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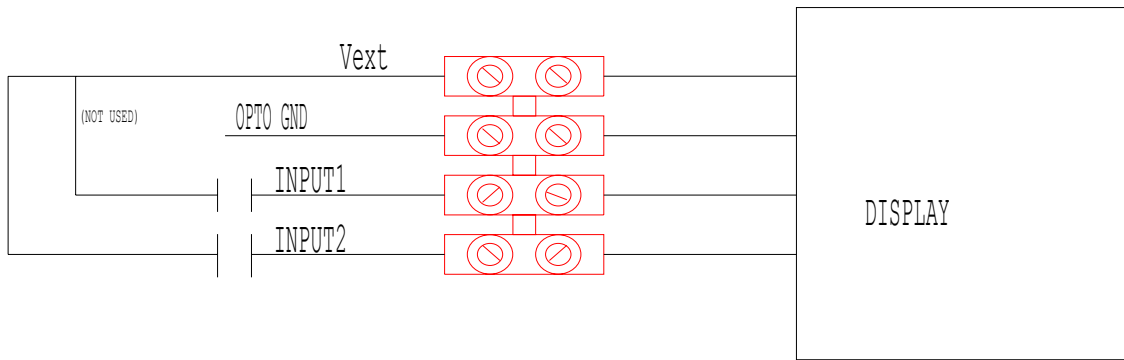


Figure A

## 'Wet' Contact Configuration:

To use 'wet' contacts, the user must supply power to activate the desired optically coupled input. The user may also wish to provide a contact closure in this circuit. The user's power supply must be capable of providing approximately 20mA of current at 5 to 24 volts of direct current. If necessary, these inputs can also be ordered for use with higher voltages and / or with alternating current inputs. See Figure B.

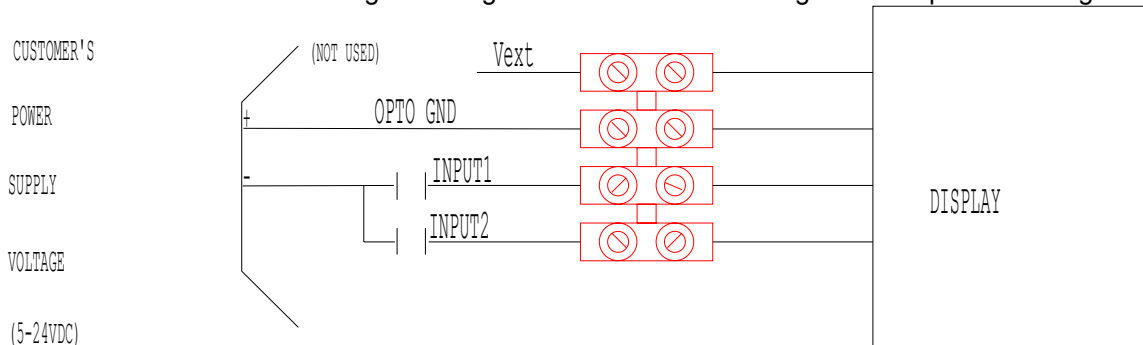


Figure B

## Label Definitions:

The following page shows some commonly used labels and their definitions.

LABEL	DEFINITION
IN1, IN2, IN3	Optically coupled input, active high, requires 12mA of current to activate.
GND	"OPTO GRD" - Negative voltage output terminal of the customer power supply.
VEXT	"VEXT" - Positive voltage output terminal of the customer power supply.

## Service:

There are no parts in your unit classified as 'user serviceable' parts. The plastic or glass cover can be cleaned using a soft cloth and a gentle glass cleaning solution.

## Warranty:

The standard warranty for all products is one year on all parts and labor at our facilities. All products are designed and manufactured by Electronic Displays Inc. If you need assistance, please call or FAX us and we will be happy to provide technical assistance. If you feel that your unit needs repair, please call us first and then ship the unit to:

Electronic Displays Inc.  
 135 South Church Street  
 Unit A  
 Addison, Ill. 60101  
 Attn: Repair department

Our telephone number is: (630) 628-0658: Our FAX number is: (630) 628-0936