

PRODUCT MANUAL

ELECTRONIC DISPLAYS INC.

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UP-TIMER W/ RUN/HOLD, & RESET

PRODUCT PART NUMBER:

ED206-102-4D-N1..... 2.25 inch digits

DESCRIPTION:

- Indoor numeric 2.25 inch high, 4digits, red LED display.
- Up-timer in MM:SS format; 2 contact closure operation (run/hold and reset).

- NEMA 1 rated enclosure

OPERATION:

This model is designed to up-time to 99:59 (MM:SS mode). Two contact closure inputs are located on the right endplate for run/hold and reset. A terminal block inside the right endplate can be used to wire remote switches. "IN1" and "IN2" are used for run/hold and reset respectively. When "IN1" is activated (on/off switch), the display will up-time. The reset to 000.0 switch is a momentary input. By shorting "VEXT" to "IN1" and keeping it there, the unit will start to up-time. Shorting "VEXT" to "IN2" will reset the display to 00:00.

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 ED400-104-4D-N1 is 1 ampere and for ED225-104-4D-N1 is 3/4 ampere.

Label Definitions:

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

LABEL	DEFINITION
IN1, IN2	Optically coupled input, active high, requires 12 milli-amperes of current to activate.
Vext	+12 VDC from display. Can be used for IN1 & IN2
GND	Used with customer's power supply, Connect ground from customer's power source to this input.

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 500 milli-amperes 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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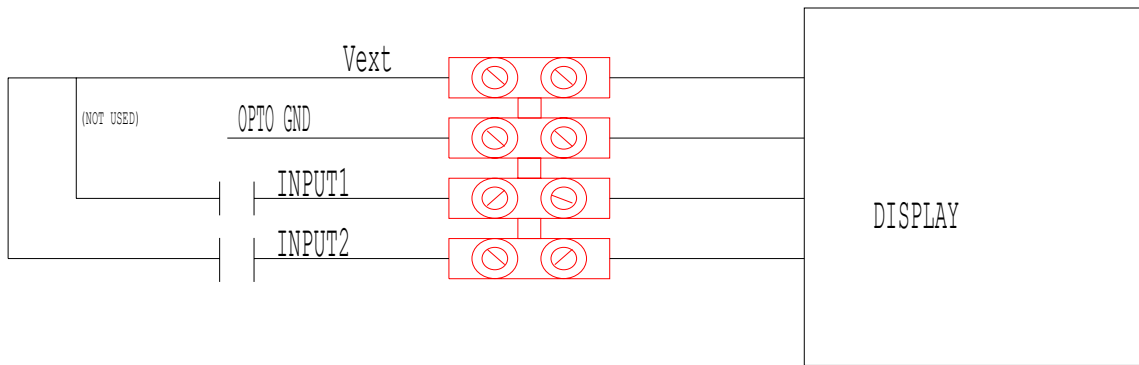


Figure A

'Wet' Contact Configuration:

To use 'wet' contacts, the user must supply his own 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 twenty milli-amperes 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.

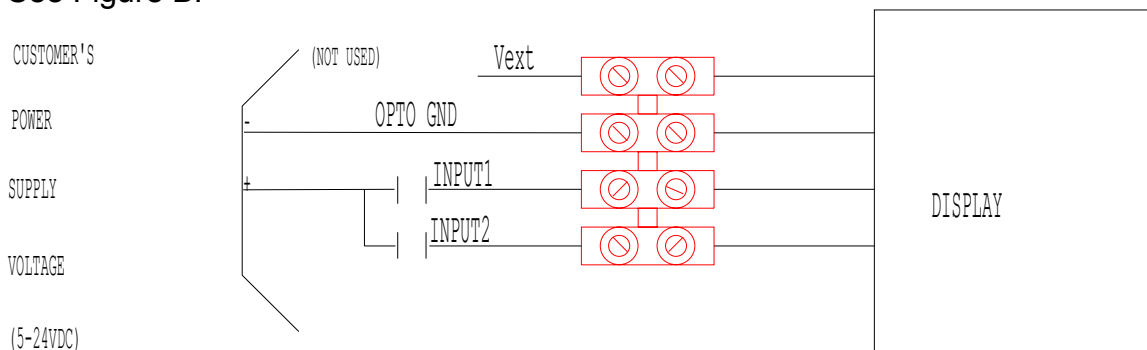


Figure B

Power-up Response:

When power is first applied, the display will show four "0"s. If the 'Run/Hold' input (labeled "IN1") is active, it will start up-timing at one per second.

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