PRODUCT MANUAL

Electronic Displays Inc.
135 South Church Street Unit A
Addison , IL 60101

Addressable Serial Interface
4 Digit Display

PRODUCT PART NUMBER :

ED400D –I- 117-4D– N1……4.0” HIGH DIGITS

DESCRIPTION :

- **4.0”, 4-digits, 5x7 dot matrix, indoor display with data converter RS232/RS422.**
- **NEMA 1 aluminum extrusion.**

OPERATION :

This model is designed to receive serial data from PC through a data converter RS232/RS422. The display is factory set to 1200-Baud; no parity; 1stop bit and 8 data bits with address 01. 10' serial cable is provided, too.

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 ¼" 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 ED400D-117-4D-N1 is 1.2 Ampere

Signal Requirements:

Your unit has serial input interface RS-422, the standard communication format for this unit is 1200 bits per second (baud rate) with one start bit, eight data bits, no parity, and one stop bit per character. The expected sequence of characters is specified in a later section of this manual entitled 'Protocol'.

Label Definitions:

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

LABEL	DEFINITION
Rx+	To connect data wire from your RS-485 signals
Rx-	To connect data wire from your RS-485 signals

Power-up Response:

Upon power up, the display will show a test pattern until data is received. This pattern will show the address, baud rate and data parameters (no parity, 8 data bits, 1 or 2 stop bits.) See appendix C for power up descriptions.

Addressing:

Factory set @ 01 unless multiple units were shipped (address 02, 03 …nn). (In order to communicate always use 2 digit address – 01)
See appendix C for address switch settings.

Protocol:

See Appendix E.

Appendixes:

APPENDIX E

PROTOCOL FOR NUMERIC DISPLAYS

ASCII CODE	VALUE (Decimal)	FUNCTION

STX	2	'Start of text', also known as a 'control B', this character must be the first character of each message
AD1 **AD2**	48-57 48-57	These two ASCII decimal digits represent the address of the display as set on the display. See appendix C for address setting information
DATA	48-57	Numeric value to be displayed in ASCII decimal digits. It is also permissible to include space characters (character value 32 decimal), minus sign characters (character value 45 decimal), and one decimal point character (character value 46 decimal) with the digits.
ETX	3	'End of text', also known as a control C, this character must be the last character of each message

Example:

To set the display that has an address of '01' to a value of "1234", the following **<STX>011234<ETX>**

NOTE: the <>'s are not to be included in the message.

from a terminal program such as Hyper-terminal, or a TELNET screen if the display has the Ethernet Option.

character sequence should be sent:
'Ctrl+B' "01" "1234" 'Ctrl+C'

The leading zeros will remain blank in all cases.

Factory set @ 1200BPS ; No parity ; 8 Data bits ; 1 or 2 Stop bits.

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