## **Numeric Displays**

Choose on of our numeric display models to monitor count, rate, down time, cycle time, target count, efficiency or variance.

## **Information Displays**

MINUTE SECOND

HOUR

DAYS

34.

Display real-time production information to your floor personnel.

TAKT

GOAL

ACTUAL

## **Production Scoreboards**

Improve productivity and cost effectiveness with any of our industrial scoreboards.

Your Logo Here

Your Logo Here

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## **Safety Scoreboards**

Increase your employees awareness of safety issues, help prevent accidents in the workplace and reduce liability costs.



## **Table of Contents**

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## **History of EDI**

Electronic Displays, Inc. specializes in large LED digit technology and applications. Established in 1982, our product line includes: **counters, timers, industrial scoreboards and moving message marquees.** EDI moved into its new manufacturing site, outside Chicago, in 1995. With over 25,000 square feet this facility houses all of our production needs, including software development, circuit board design, systems integration and full-service engineering and manufacturing of our products. Targeting the global market, Electronic Displays, Inc. has set up an international division to continue the expansion and growth of the business.

With over 20 years experience in the Information Communication Industry, EDI has improved efficiency, productivity and enhanced lean manufacturing for thousands of customers including top Fortune 500 companies





Electronic Displays, Inc.

Specialists in Information Displays

## **SAFETY DISPLAYS**

# **Indoor / Outdoor Custom Safety Scoreboards**

### **Design Your Safety Scoreboard!**

Whether it's indoors or outdoors, EDI can build YOUR safety scoreboard. Fields can increment automatically every 24 hours with our rate over time displays.





- Increment by One every 24 hours OR Decrement by One every 24 hours
- Battery backup to keep Internal timing
- IR Remote to easily program
- Decimal point pulses when the unit
- Bright 3" or 8" high numbers
- Battery backup to retain the last

- Factory service one-year warranty on
- Unlimited technical phone support





Specialists in Information <u>Displays</u>





## LED Double-Line Message Centers



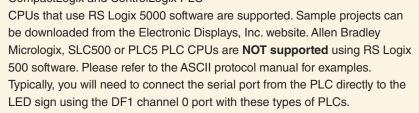
## 6 to 64 Characters EDV111 Series

These double-line, tri-color models are a ready-to-run indoor message sign board. Using 5mm Super bright tri-color LEDS, it can store up to 100 messages or a total length of characters not to exceed 7000. Ideal to display production numbers, employee messages and lean manufacturing data. Multi-color message centers let you specify red, green and yellow characters or any combination of these to get you message across. Ideal to promote your business, safety messages, employee messages and more.

### **Communication Options**

### 1) Ethernet IP

Sample Add On Instructions Provided. At this time only Allen Bradley CompactLogix and ControlLogix PLC



EtherNet/I

Add-on instructions provided are used to make ladder logic based programming very easy. These set of AOIs can be imported into your project and reused in ladder flow.

### 2) Ethernet Interface

All EDI models are available with high speed Ethernet TCP/IP communication interface in addition to RS232 and RS422/485 communication ports. This interface allows the marquee to reside on a 10/100 Mbps TCP/IP network (10 Base/100 Base T Ethernet) via an RJ45 port. Use Ethernet models for easy networking of the EDI marquees with 100 meters being the maximum distance between two nodes. For distances greater

than 100 meters repeaters can be used to extend the distance between any two nodes.

### **FEATURES**

- PLC Interface Sample AOI's Provided
- Ethernet IP Ready
- Bright, Multicolor Display w/ ASCII Protocol To Incorporate Into Existing Software
- 15 Foot, RS232 Data Cable
- 12 Foot, 120VAC Power Plug
- 160 Degree Viewing Angle
- Mounting Brackets
- Complete Instructions
- Factory Service One-Year Warranty on Parts and Labor
- Unlimited Technical Phone
  Support







### **TECHNICAL INFORMATION**

				A				6" (152.4mm)	3.5" (89mm) (79.75mr (79.75mr (79.75mr (79.75mr (79.75mr (79.75mr)	
Part. N	0.	EDV111-1680-	MC ED\	/111-16128	-MC	EDV111-16 <sup>-</sup>	160-MC	EDV111-16240-I	MC EDV111-16	6320-MC
Dimens	sion A	26" (660.4mm)		40" 52" (1016mm) (1320.8mm)			nm)	73" 96" (1854.2mm) (2438.4mm)		
<b>Cat. No.</b> EDV111- 1680-MC	Power 120V AC ± 10% 40 watt max.	No. of Characters/Line (max.) One line 8 Two lines 16	Character size Array One line 4.6" Two line 2.0" Array 80 x 16 pixels	Pixel Size Diameter Pixel Pitch .2" (5mm) .3" (7.68mm)	Pixel Color 8 colors and 5 rainbow effects		Max. viewing distance w/largest font* 200 ft.	Message Capacity 100 different messages can be stored & displayed, 28,000 characters	Operating Environment 32-120°F 0-95% relative humidity non- condensing	Case Dimensions Display Dimensions 26"L 3"D 6"H/ 4.7"H 24.4"L
EDV111- 6128-MC	120V AC ± 10% 40 watt max.	One line 12 Two lines 24	One line 4.6" Two line 2.0" Array 120 x 16 pixels	.2" (5mm) .3" (7.68mm)	8 colors and 5 rainbow effects	20 lbs.	200 ft.	100 different messages can be stored & displayed, 28,000 characters	32-120°F 0-95% relative humidity non- condensing	40"L 3"D 6"H/ 4.7"H 38.4"L
EDV111- 6160-MC	120V AC ± 10% 40 watt max.	One line 16 Two lines 32	One line 4.6" Two line 2.0" Array 160 x 16 pixels	.2" (5mm) .3" (7.68mm)	8 colors and 5 rainbow effects		200 ft.	100 different messages can be stored & displayed, 28,000 characters	32-120°F 0-95% relative humidity non- condensing	52"L 3"D 6"H/ 4.7"H 50.4"L
EDV111- 6240-MC	120V AC ± 10% 50 watt max.	One line 24 Two lines 38	One line 4.6" Two line 2.0" Array 240 x 16 pixels	.2" (5mm) .3" (7.68mm)	8 colors and 5 rainbow effects		200 ft.	100 different messages can be stored & displayed, 28,000 characters	32-120°F 0-95% relative humidity non- condensing	73"L 3"D 6"H/ 4.7"H 70.4"L
EDV111- 6320-MC	120V AC ± 10% 100 watt max.	One line 32 Two lines 64	One line 4.6" Two line 2.0" Array 320 x 16 pixels	.2" (5mm) .3" (7.68mm)	8 colors and 5 rainbow effects		200 ft.	100 different messages can be stored & displayed, 28,000 characters	32-120°F 0-95% relative humidity non- condensing	96"L 3"D 6"H/ 4.7"H 94.4"L

\*Seven fonts available including wide, bold and international character sets.



# LED Multi-Line Message Centers

## Up to 4 lines of Text 8 to 64 Characters EDV111 Series

# LINE JAN-CALL MAINTENANCE!

These multi-line, tri-color models are a ready-to-run indoor message sign board. Using 5mm Super bright tri-color LEDS, it can store up to 100 messages or a total length of characters not to exceed 7000. Ideal to display production numbers, employee messages and lean manufacturing data. Multi-color message centers let you specify red, green and yellow characters or any combination of these to get you message across. Ideal to promote your business, safety messages, employee messages and more.

### **Communication Options**

### 1) Ethernet IP

Sample Add On Instructions Provided. At this time only Allen Bradley



CompactLogix and ControlLogix PLC CPUs that use RS Logix 5000 software are supported. Sample projects can be downloaded from the Electronic Displays, Inc. website. Allen Bradley Micrologix, SLC500 or PLC5 PLC CPUs are **NOT supported** using RS Logix 500 software. Please refer to the ASCII protocol manual for examples. Typically, you will need to connect the serial port from the PLC directly to the LED sign using the DF1 channel 0 port with these types of PLCs.

Add-on instructions provided are used to make ladder logic based programming very easy. These set of AOIs can be imported into your project and reused in ladder flow.

### 2) Ethernet Interface

All EDI models are available with high speed Ethernet TCP/IP communication interface in addition to RS232 and RS422/485 communication ports. This interface allows the marquee to reside on a 10/100 Mbps TCP/IP network (10 Base/100 Base T Ethernet) via an RJ45 port. Use Ethernet models for easy networking of the EDI marquees with 100 meters being the maximum distance between two nodes. For distances greater than 100 meters repeaters can be used to extend the distance between any two nodes.



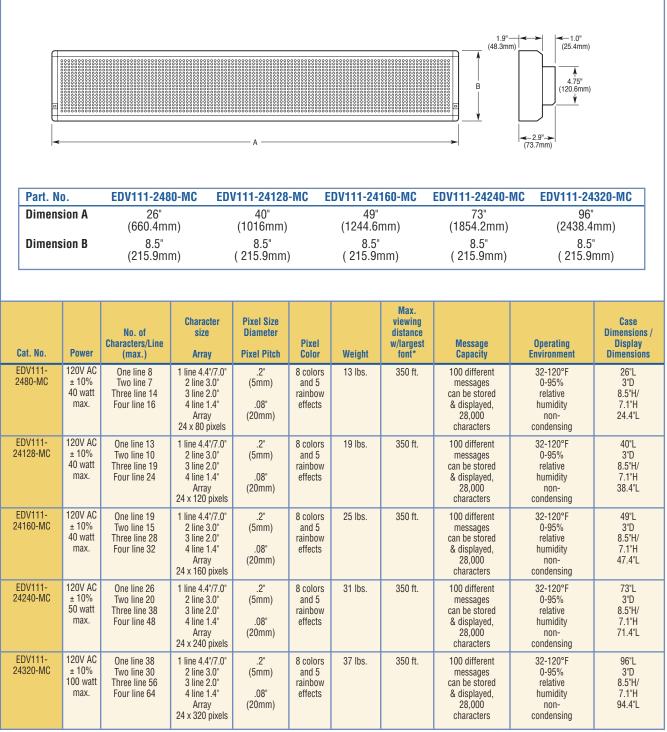
### **FEATURES**

- PLC Interface Sample AOI's Provided
- Ethernet IP Ready
- Bright, Multicolor Display w/ ASCII Protocol To Incorporate Into Existing Software
- 15 Foot, RS232 Data Cable
- 12 Foot, 120VAC Power Plug
- 160 Degree Viewing Angle
- Mounting Brackets
- Complete Instructions
- Factory Service One-Year
   Warranty on Parts and Labor
- Unlimited Technical Phone
   Support



Electronic Displays, Inc.

### **TECHNICAL INFORMATION**



\*Seven fonts available including wide, bold and international character sets.

**EDI** Specialists in Information Displays

# LED Multi-Line Message Centers

## Up to 5 lines of Text 6 to 64 Characters EDV111 Series

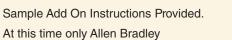




These multi-line, tri-color models are a ready-to-run indoor message sign board. Using 5mm Super bright tri-color LEDS, it can store up to 100 messages or a total length of characters not to exceed 7000. Ideal to display production numbers, employee messages and lean manufacturing data. Multi-color message centers let you specify red, green and yellow characters or any combination of these to get you message across. Ideal to promote your business, safety messages, employee messages and more.

### **Communication Options**

### 1) Ethernet IP



CompactLogix and ControlLogix PLC CPUs that use RS Logix 5000 software are supported. Sample projects can be downloaded from the Electronic Displays, Inc. website. Allen Bradley Micrologix, SLC500 or PLC5 PLC CPUs are **NOT supported** using RS Logix 500 software. Please refer to the ASCII protocol manual for examples. Typically, you will need to connect the serial port from the PLC directly to the LED sign using the DF1 channel 0 port with these types of PLCs. **FEATURES** 

- PLC Interface Sample AOI's Provided
- Ethernet IP Ready
- Bright, Multicolor Display w/ ASCII Protocol To Incorporate Into Existing Software
- 15 Foot, RS232 Data Cable
- 12 Foot, 120VAC Power Plug
- 160 Degree Viewing Angle
- Mounting Brackets
- Complete Instructions
- Factory Service One-Year
  Warranty on Parts and Labor
- Unlimited Technical Phone
   Support

Add-on instructions provided are used to make ladder logic based programming very easy. These set of AOIs can be imported into your project and reused in ladder flow.

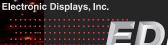
EtherNet/IP

### 2) Ethernet Interface

All EDI models are available with high speed Ethernet TCP/IP communication interface in addition to RS232 and RS422/485 communication ports. This interface allows the marquee to reside on a 10/100 Mbps TCP/IP network (10 Base/100 Base T Ethernet) via an RJ45 port. Use Ethernet models for easy networking of the EDI marquees with 100 meters being the maximum distance between two nodes. For distances greater than 100 meters repeaters can be used to extend the distance between any two nodes.

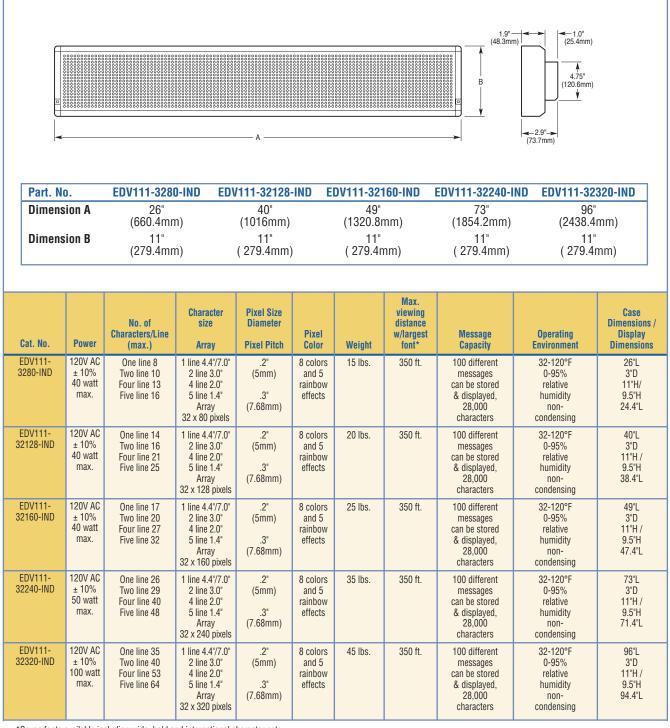






Specialists in Information Displays

### **TECHNICAL INFORMATION**



\*Seven fonts available including wide, bold and international character sets.



**ANDON SYSTEMS** 

Specialists in Information Displays

An **ANDON** is a visual and audible response notification tool (Jidoka), which is comprised of various combinations of lights and sounds. When production personnel have any issue on the floor, they simply turn on the ANDON to signal for help.

Once the system is turned on, the lights and sounds alert the support personnel who can quickly address the problem.

An ANDON promotes visual factory and serves two goals. First, it enables the production personnel to remain at their workstation when they have an issue.

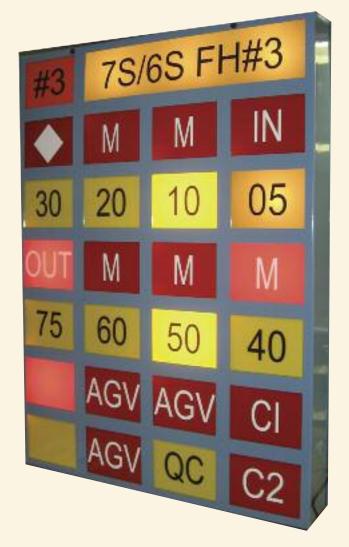
Second, it reduces response time and more efficiently gets the support personnel to the line where they are needed to get the line back up and running.

### What an ANDON System Does

- Allows timely corrective actions by alerting personnel when abnormal conditions occur.
- Allows team leaders to spend less time and effort monitoring the situation, and more time solving abnormalities.
- Allows operation teams to monitor equipment and personnel more effectively.
- It can act as a two way communication device e.g. when indicator returns to green; this tells everybody it has "back to normal".

### The Direct Benefits of an ANDON System

- Control of the production.
- Operators have the ability to "stop call wait".
- Defect reportability & correction, operators can report faults immediately and countermeasures can be implemented at source.
- Workable design highlights problems with work density.



- Factory Direct Sales
- Worldwide Sales
- Ultra-High Precision Oscillator
- Super-Bright LEDS
- Anodized Aluminum Frame

## **ANDON SYSTEMS**

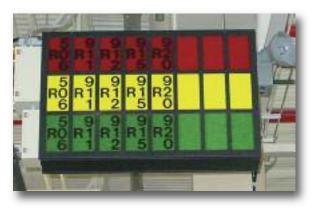


### What's An ANDON?

An ANDON is a visual and audible response notification tool (Jidoka), which is comprised of various combinations of lights and sounds. When production personnel have any issue on the floor, they simply turn on the ANDON to signal for help. Once the system is turned on, the lights and sounds alert the support personnel who can quickly address the problem.

An ANDON promotes visual factory and serves two goals. First, it enables the production personnel to remain at their workstation when they have an issue. Second, it reduces response time and more efficiently gets the support personnel to the line where they are needed to get the line back up and running.

OPERATION	GOAL	ACTUAL	SCRAP
	CEL	L#1	
A61	123	348	- HBB
CAPS.	659	186	BH8
A71	988	188	765
	CEL	L#2	
A61	64	765	0.88
CAPS	-80	659	888
A71	879	855	1.98





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## **UP-TIMERS**

Specialists in Information Displays

## **4 Digit Up-Timers** 102 Series



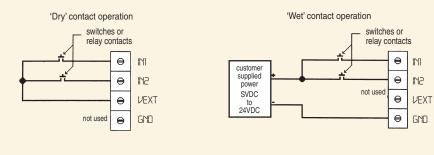


2.25" and 4" Bar Segment

## 1 line of text *4 Characters*

6" / 8" and 12" Dot Matrix

A four digit up-timer, that times by MM:SS or HH:MM. Other formats are available (see next page). A terminal strip is provided to wire two customersupplied, contact closure inputs for counting and resetting to "00:00." Either a "wet" or "dry" contact can be used. EDI supplies an on-board power supply (14VDC) to hardwire a photo-eye, foot switch, push-button switch, etc. The timer starts at "00:00" and increments by the specified time using an on/off switch. A momentary switch will reset the unit to "00:00. Up to 12 digits available.



Two types of wiring inputs are provided. A "**wet**" contact is designed for the customer to apply a voltage to activate the display. A "**dry**" contact is activated by using an on-board voltage (14VDC) that allows the customer activate the display. Typical customer-supplied driving devices include a photo-eye, limit switch, PLC, etc.

### **FEATURES**

- Long Durability 10 Years
- Durable NEMA rated enclosure
- Mounting Brackets
- Low maintenance cost
- 6 ft. business line cord
- One-year limited warranty
- Low energy consumption
- Acrylic face
- Attention-getting LEDS



### **TECHNICAL INFORMATION**

	-								_
Cat. No.	Power	No. of Characters/Line (max.)	Character size Array	Pixel Size Diameter Pixel Pitch	Pixel Color	Weight	Max. viewing distance w/largest font*	Operating Environment	Case Dimensions / Display Dimensions
ED206-102-4D-N1	120V AC ± 10% 40 watt max.	One line 4	2.25"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	6 lbs.	100 ft.	32-120°F 0-95% relative humidity non-condensing	12"L 2.5"D 4"H/ 2.5"H 10.4"L
ED406-102-4D-N1	120V AC ± 10% 40 watt max.	One line 4	4.0"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	10 lbs.	200 ft.	32-120°F 0-95% relative humidity non-condensing	20"L 2.5"D 8"H / 6.5"H 18.4"L
ED600D-102-4D-N1	120V AC ± 10% 40 watt max.	One line 4	6.0"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	16 lbs.	300 ft.	32-120°F 0-95% relative humidity non-condensing	26"L 2.5"D 9.5"H / 7.9"H 24.4"L
ED800D-102-4D-N1	120V AC ± 10% 50 watt max.	One line 4	8.0"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	32 lbs.	400 ft.	32-120°F 0-95% relative humidity non-condensing	36"L 2.5"D 11.5"H / 9.9"H 34.4"L
ED1200D-102-4D-N1	120V AC ± 10% 100 watt max.	One line 4	12.0"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	40 lbs.	600 ft.	32-120°F 0-95% relative humidity non-condensing	54"L 2.5"D 17.5"H / 16.1"H 52.4"L
ED1800D-102-4D-N1	120V AC ± 10% 100 watt max.	One line 4	18"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	58 lbs.	900 ft.	32-120°F 0-95% relative humidity non-condensing	74"L 2.5"D 23.3"H / 21.8"H 72.4"L

**OPTIONS** 

DISPLAY:	Add 2 digits up to	12. Green or Amber digits	available				
ENCLOSURE:	NEMA12 / NEMA	NEMA12 / NEMA4 or NEMA4X (stainless steel) enclosure					
OPERATION:	Increment by MN	ncrement by MM:SS or HH:MM (Standard), other formats (see below)					
<b>RESOLUTION FORMATS:</b>	SS.TH -						
	SSS.T -	tenths of a second (3 positi	ons for seconds)				
	MM:SS -	minutes and seconds (stan	dard)				
	MMM.S -	tenths of a second (3 positi	ons for minutes)				
	HH:MM -	hours and minutes (standard)					
	HHH.M -	tenths of minutes (3 positions for hours)					
	MM:SS:TH -	minutes, seconds, tenths and hundredths of seconds					
	HH:MM:SS -	- hours, minutes, seconds					
	DD:HH:MM:SS -	DD:HH:MM:SS - days, hours, minutes, seconds					
Optional battery backup for time memory upon loss of power							
	Relay output to a	Relay output to activate an alarm, horn, light, etc. when unit reaches a preset value.					
	Optional Pollable	Feature using a Serial Output	ut				
	Optional Serial P	reset and Control					
Power Source: 120 Volts	AC / 60 Hz		LED Life: 100,000 Hours				
Power Consumption: Ma			UL Listed Power Supply: Yes				
Current Draw: 1.0 - 3.0 A			Enclosure Material: Rugged Aluminum Enclosure				
Line Cord Length 6 Ft. Pl			Enclosure Color: Black Powder-Coat Finish (Scratch Resistant)				
Indoor / Outdoor: Indoor	lug		Enclosure Rating: NEMA1 Standard / NEMA12 Optional				
Operating Environment: 3	32º - 120º E (0º - 4	9°C) / 0 - 90% Humidity	Mounting Method: Brackets Provided for Ceiling/Wall Mount				
Number of Digits: 4 Digit	`	5 0) / 0 - 50 /8 Harmany	Limited Warranty: Factory Service One-Year Parts & Labor				
Viewing Distance: 1" = 4			Elimited Warranty. Factory Service One Tear Farts & Eason				
LED Intensity: 10 MCD H		Discrete LEDS					
LED Color: Red Standard	0 , 0						

## **ANALOG TO DIGITAL DISPLAYS**



Specialists in Information Displays



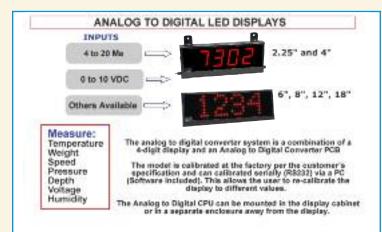




**Outdoor Models Available** 

### What's in the Box:

- Bright 2.25" / 4" / 6" / 8" or 12" LED Display with Four Digits
- Display Will Receive an Analog Input and Convert it to Digital
- Analog to Digital Display
- Terminal Block to Wire Customer Supplied Inputs (0 to 10VDC/4 to 20mA / More Available)
- Mounting Brackets
- Complete Instructions
- Factory Service One-Year Warranty on Parts and Labor
- Unlimited Technical Phone Support



Model Number	Digit Height	Length	Height	Depth
ED206-105-4D-N1	2.25"	12"	4"	2.5"
ED406-105-4D-N1	4.0"	20"	8"	2.5"
ED600D-1-105-4D-N1	6.0"	26"	9.4"	3"
ED800D-1-105-4D-N1	8.0"	36"	11.4"	3"
ED1200D-I-105-4D	12.0"	48"	17.6"	3"

### **MEASURE**

- Temperature
- Speed
- Depth
- Humidity
- Weight
- Pressure
- Voltage

## **ANALOG TO DIGITAL DISPLAYS**





### Available in double sided format

### ED206-105-4D-N1

2.25" High, 4 Digit, Analog to Digital System. Indoor, 4- digit, Viewable up to 100 Feet Away Standard 4 to 20 mA Input / Other Available Dimensions: 12"L x 4"W x 2.25"D Keep your employees and customers informed with large analog to digital readouts. Convert your analog signal for temperature, speed, weight measurements to a large digital display. Standard analog inputs include: 4 to 20 mA or 0 to 10VDC. Others Available Upon Request.



### ED406-105-4D-N1

4" High, 4 Digit, Analog to Digital System. CALL FOR QUANTITY DISCOUNTS! Indoor, 4- digit, Viewable up to 200 Feet Away Standard 4 to 20 mA Input / Other Available Dimensions: 20"L x 8"W x 2.25"D

Keep your employees and customers informed with large analog to digital readouts. Convert your analog signal for temperature, speed, weight measurements to a large digital display. Standard analog inputs include: 4 to 20 mA or 0 to 10VDC. Others Available Upon Request.



### • ED600D-105-4D-N1

6" High, 4 Digit, Analog to Digital System. Indoor,4- Digit, Standard 4 to 20 mA Input / Other Available. Dimensions: 26" L x 9.4" H x 3.0" D

Keep you employees and customers informed with large analog to digital readouts. Convert your analog signal for temperature, speed, weight measurements to a large digital display.



### ED800D-105-4D-N1

8." High, 4 Digit, Analog to Digital System. Indoor, 4- digit, Standard 4 to 20 mA Input / Other Available. Dimensions: 36" L x 11.4" H x 3.0" D

Keep your employees and customers informed with large analog to digital readouts. Convert your analog signal for temperature, speed, weight measurements to a large digital display.



12.0" High Digits

DIGITS

### ED1200D-105-4D-N1

12.0 inch, 4 digit, Analog to Digital System. Indoor, 4- digit, Standard 4 to 20 mA Input / Other Available. Dimensions: 48" L x 17.62" H x 2.25" D

Keep you employees and customers informed with large analog to digital readouts. Convert your analog signal for temperature, speed, weight measurements to a large digital display.



### OUTDOOR - ED1200D-E-105-4D-N4

12" High, 4 Digit, Analog to Digital System. Outdoor, 4- digit, Dimensions: 44" L x 15" H x 4" D



" High Digits 4 DIGITS

18.0"

### ED1800D-I-105-4D-N4

18" High, 4 Digit, Analog to Digital System. Indoor, 4- digit, Dimensions: 69" L x 23.25" H x 3.0" D

Electronic Displays, Inc.

Specialists in Information Displays

## **UP-COUNTERS AND TOTALIZERS**

# **4 Digit Up-Counters** 2.25" and 4" Bar Segment 6" / 8" and 12" Dot Matrix

A four digit up-counter, that increments by one from "0" to "9999". A terminal strip is provided to wire two customer-supplied, contact closure inputs for counting and reset to 0. Either a "wet" or "dry" contact can be used. EDI supplies an on-board power supply to hardwire a photo-eye, foot switch, push-button switch, etc.

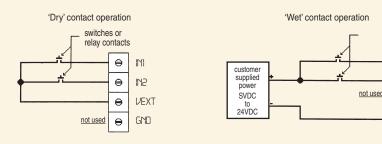
### **Options**

**1** line of text

4 Characters

**109 Series** 

DISPLAY:	Add 2 digits up to 12. I Green or amber digits
ENCLOSURE:	NEMA12 or NEMA4X (stainless steel) enclosure
OPERATION:	Variable count: Increment by a different value (ex. count by 2 for every contact closure) Multiple inputs: a secondary input will be used for incrementing or decrementing
OTHER:	Battery backup to retain number of counts upon loss of power Relay output to activate an alarm, horn, light, etc. when unit reaches a preset value Polling option to a PC to record results



WIRING: Two types of wiring inputs are provided. A "wet" contact is designed for the customer to apply a voltage to activate the display. A "dry" contact is an on-board voltage that the customer uses to activate the display. Input specifications: 5 to 24VDC

### **FEATURES**

Outdoor Model

- Long Durability 10 Years
- Durable NEMA rated enclosure
- Mounting Brackets
- Low maintenance cost
- 6 ft. business line cord
- One-year limited warranty
- Low energy consumption
- Acrylic face

⊜

⊜

⊜ VEXT

N1

N2

GND

- Attention-getting LEDS •
- Option for 6, 8, 10, 12 digits

## **UP-COUNTERS AND TOTALIZERS**

Specialists in Information Displays

### **TECHNICAL INFORMATION**

INDOOR STYLE									
Cat. No.	Power	No. of Characters/Line (max.)	Character size Array	Pixel Size Diameter Pixel Pitch	Pixel Color	Weight	Max. viewing distance w/largest font*	Operating Environment	Case Dimensions / Display Dimensions
ED206-109-4D-N1	120V AC ± 10% 40 watt max.	One line 4	2.25"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	6 lbs.	100 ft.	32-120°F 0-95% relative humidity non-condensing	12"L 2.5"D 4"H/ 2.5"H 10.4"L
ED406-109-4D-N1	120V AC ± 10% 40 watt max.	One line 4	4.0"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	10 lbs.	200 ft.	32-120°F 0-95% relative humidity non-condensing	20"L 2.5"D 8"H / 6.5"H 18.4"L
ED600D-109-4D-N1	120V AC ± 10% 40 watt max.	One line 4	6.0"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	16 lbs.	300 ft.	32-120°F 0-95% relative humidity non-condensing	26"L 2.5"D 9.4"H / 7.9"H 24.4"L
ED800D-109-4D-N1	120V AC ± 10% 50 watt max.	One line 4	8.0"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	32 lbs.	400 ft.	32-120°F 0-95% relative humidity non-condensing	36"L 2.5"D 11.4"H / 9.9"H 34.4"L
ED1200D-109-4D-N1	120V AC ± 10% 100 watt max.	One line 4	12.0"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	40 lbs.	600 ft.	32-120°F 0-95% relative humidity non-condensing	54"L 2.5"D 17.6"H / 16.1"H 52.4"L
D1800D-109-4D-N1	120V AC ± 10% 100 watt max.	One line 4	18"	.2" (5mm) .08" (20mm)	Red (Standard) Green or Amber	58 lbs.	900 ft.	32-120°F 0-95% relative humidity non-condensing	74"L 2.5"D 23.3"H / 21.8"H 72.4"L
OUTDOOR STYLE									
Cat. No.	Power	No. of Characters/Line (max.)	Character size Array	Pixel Size Diameter Pixel Pitch	Pixel Color	Weight	Max. viewing distance w/largest font*	Operating Environment	Case Dimensions / Display Dimensions
ED400D-109-4D-N4	120V AC ± 10% 40 watt max.	One line 4	4"	.2" (5mm) .08" (20mm)	Red	6 lbs.	200 ft.	32-120°F 0-95% relative humidity non-condensing	22"L 3"D 11"H/ 9.5"H 20.4"L
ED600D-109-4D-N4	120V AC ± 10% 40 watt max.	One line 4	6.0"	.2" (5mm) .08" (20mm)	Red	10 lbs.	300 ft.	32-120°F 0-95% relative humidity non-condensing	28"L 3"D 12"H / 10.5"H 26.4"L
ED000D 100 4D NA	1201/ AC -	Onalina	0.0"	0"	Ded	10 lba	400 #	20 100°E	00"

135 S. Church Street • Addison, IL 60101 Phone: 630-628-0658 • Toll-Free: 800-367-6056 • Fax: 630-628-0936 www.electronicdisplays.com

Red

Red

Red

.2" (5mm)

.08" (20mm)

.2" (5mm)

.08" (20mm)

.2" (5mm)

.08" (20mm)

8.0"

12.0"

18.0"

36"L 3"D 14"H / 12.5"H 34.4"L

51"L 3"D 21"H / 19.5"H 49.4"L

75"L 3"D 26"H / 24.5"H 73.4"L

400 ft.

600 ft.

900 ft.

32-120°F 0-95% relative humidity non-condensing

32-120°F 0-95% relative humidity

non-condensing

32-120°F 0-95% relative humidity

non-condensing

16 lbs.

32 lbs.

40 lbs.

ED800D-109-4D-N4

ED1200D-109-4D-N4

ED1800D-109-4D-N4

120V AC ±

10% 40 watt

max.

120V AC ±

10% 50 watt

max.

120V AC ± 10%

100 watt

max.

One line

4

One line 4

One line 4

## RATE OVER TIME COUNTERS (115 Models)



Specialists in Information Displays

## **Rate Counters With Large, Bright LED Numbers**





6", 8", 12", 18" DOT MATRIX





A multiple digit display that **increments by a user specified time and amount.** Free PC-based software or an optional remote keyboard (ED4150 can be used to present and run/hold the display.

### Available with up to 16 Digits

Takt time indicates a pace or rate of manufacturing matched to customer demand. Takt time is used in lean manufacturing to align production time to demand where there are linked manufacturing processes. For example, advance by 3 every 10 seconds, advance by 1 every minute.

The display can also "freeze" (pause) and resume timing, reset to "0" by using the keypad (included) or through two customer-supplied cintact closures. The increment value and the time interval are entered through the remote keypad (ED4150) or serially via a PC- based program (provided with the display).

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**PC Software Program** 

Available model lengths						
	2.25"	4.0"				
4 Digit Model	12"	16"				
6 Digit Model	16"	20"				
8 Digit Model	20"	34"				
10 Digit Model	24"	42"				
12 Digit Model	28"	50"				
14 Digit Model	32"	58"				
16 Digit Model	36"	64"				

### **PERFECT FOR**

- Assembly Line Production
- Exhibits and Museums
- Trade Shows
- Schools and Retail Locations

## **RATE OVER TIME COUNTERS (115 Models)**

**INCLUDES KEYPAD!** Takt time indicates a pace or rate of manufacturing matched to customer demand. Takt time is used in lean manufacturing to align production time to demand where there are linked manufacturing processes. For example, advance by 3 every 10 seconds, advance by 1 every minute.

Available in double sided format



### ED406-115-4D-N1-KY

4" High, 4 Digit Variable "Rate Over Time" Counter. **CALL FOR QUANTITY DISCOUNTS!** Indoor, 4 Digit, Dimensions: 20" L x 8" H x 2.25" D

Electronic Displays, Inc.

Specialists in Information Displays



### ED600D-115-4D-N1-KY

6" High, 4 Digit, Variable "Rate Over Time" Counter. Indoor, 4 Digit, Dimensions: 26" L x 9.4" H x 3.0" D



### ED800D-I-115-6D-N1-KY

8" High, 6 Digit, Variable "Rate Over Time" Counter. Indoor, 6 Digit, Dimensions: 48" L x 11.4" H x 3.0" D



### ED1200D-115-4D-N1-KY

12" High, 4 Digit, Variable "Rate Over Time" Counter. Indoor, 4 Digit, Dimensions: 54" L x 17.6" H x 3.0" D



### → ED1800D-115-4D-N1

18" High, 4 Digit, Variable "Rate Over Time" Counter. Indoor, 4 Digit, Dimensions: 69" L x 23.25" H x 3.0" D



### ED4150 - Remote Numeric Keypad

Remote Keypad with 10 feet of cable (standard). Other lengths available. Communicate to our numeric displays including serial, timers, rate over time and production scoreboards.

ACTUAL

Specialists in Information Displays

## **System Integration**



## Pushbutton (Optional)

### What's in the Box:

- Bright 2.25" High LED Display with Four Digits / Five Digits on the Bottom Line ("-" Sign)
- 2 Lines of Numerics / Bottom Line is a Scrolling Message Sign
- Top Line Counts Up or is Fixed / 2nd Line Upcounts / 3rd Line Calculates the Difference
- Customer-Designed Lettering (White, Vinyl)
- Mounting Brackets
- Complete Instructions (Download a .pdf)
- Factory Service One-Year Warranty on Parts and Labor
- Unlimited Technical Phone Support

Operation: The top line is set as a fixed number or advance by a specified value at a specified time (count by one every 10 seconds).

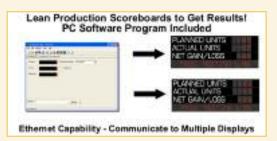
The middle line advances by one for every contact closure. Inputs can be a momentary switch, photo-eye, PLC, etc.

The third line internally calculates the difference. The customer can define lettering, number of digits and lines and operation.

The bottom line is an optional 16 character moving sign that scrolls preprogrammed messages.

Ideal to show employees production status and improve efficiency.

Network Communication: An Ethernet card option is available with these scoreboard displays that will easily add it to an existing network. Each display can be given an individual IP address and then accessed from anywhere in the plant.

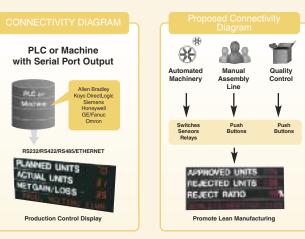


### **IMPROVE**

- Efficiency
- Quality
- **Cost Savings**
- Production
- **Employee Motivation**

### MONITOR

- Production Hours
- Line Speed
- Line-Down Time
- Loading / Unloading Time



## ED225MPC-3L/4L-N1

Specialists in Information Displays

EEKLY GOAL

ANCE DUS

### Ideal to:

- Measure OEE (Overall Equipment Effectiveness). This frequently used metric is used to monitor and improve efficiency leading to reduced costs and increased profits.
- Improve communication between employees and management.
- Reach maximum performance and efficiency.
- Increase productivity and boost employee performance.

### **Applications**

EDI has worked with companies in many industries including automotive, food processing, packaging, printing and many more. Any place where displaying real-time information to improve production and efficiency is critical.

### **Electrical Specifications**

Power Source Power Consumption Current Draw Activation Voltage Supplied On-Board Voltage Power Cord Length

### **Physical Specifications**

Indoor / Outdoor Operating Environment Dimensions Weight Number of Digits

Character Height Viewing Distance LED Color / Acrylic Face

LED Intensity

U.L. Listed Power Supply Enclosure Color / Material Enclosure NEMA Rating

Mounting Method

Limited Warranty





120 Volts AC / 60 Hz.
Max. 25 Watts (All LEDS On)
Typical 500 mA per Field
5 to 24VDC@ 15 mA source current-active high or low
12 VDC @ 15 mA isolated power supply
6 Foot Business Plug

Designed to be Installed and Viewed Indoors 32° to 120° F (0° to 49°C) / 0 to 95% Humidity 42" L x 16.0" H (w/message sign) x 2.25" D Approx. 35 Lbs. (w/scrolling sign) Four (4) Digits on the Top Two Lines / Five Digits on the Bottom Line For "-" Sign 2.25" High Numbers 80 - 100 Feet Bright Red Standard Green/Amber - Optional: Call For Details Bright 10 MCD High-Intensity Digits

### Yes

Black Extruded Aluminum NEMA1 Rated- Standard NEMA12 Rated - Optional

### Two Mounting Brackets Provided

Mounting Method Examples (.pdf) Factory Service One-Year Parts & Labor

## **COMMUNICATION OPTIONS**

Electronic Displays, Inc.

**EDI** Specialists in Information Displays



### **Communication Options**

### 1) Ethernet IP

Sample Add On Instructions Provided. At this time only Allen Bradley CompactLogix and ControlLogix PLC CPUs that use RS Logix 5000 software are supported. Sample projects can be downloaded from the Electronic Displays, Inc. website. Allen Bradley Micrologix, SLC500 or PLC5 PLC CPUs are **NOT supported** using RS Logix 500 software. Please refer to the ASCII protocol manual for examples. Typically, you will need to connect the serial port from the PLC directly to the LED sign using the DF1 channel 0 port with these types of PLCs.

Add-on instructions provided are used to make ladder logic based programming very easy. These set of AOIs can be imported into your project and reused in ladder flow.

### 2) Ethernet Interface

All EDI models are available with high speed Ethernet TCP/IP communication interface in addition to RS232 and RS422/485 communication ports. This interface allows the marquee to reside on a 10/100 Mbps TCP/IP network (10 Base/100 Base T Ethernet) via an RJ45 port. Use Ethernet models for easy networking of the EDI marquees with 100 meters being the maximum distance between two nodes. For distances greater than 100 meters repeaters can be used to extend the distance between any two nodes.



DATS

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### **COMMUNICATION VIA**

• Ethernet IP

88

- Ethernet Interface
- Serial RS232
- Serial RS485
- Wireless
- ASCII Protocol To Incorporate Into Existing Software

## **COMMUNICATION OPTIONS**

Electronic Displays manufactures **serial input displays** with numeric digits ranging from 2.25" to 18" in character height. Flexibility in design enables these large digital serial displays to be interfaced with many host devices including PCs, PLCs, scales, master clocks, and panel meters that feature a serial communication port. In multi-drop applications, several options of interface and addressing further enhance the flexibility of these large digital serial displays. Furthermore, an optional output relay can be provided for annunciation purposes.

Electronic Displays, Inc.

Specialists in Information Displays

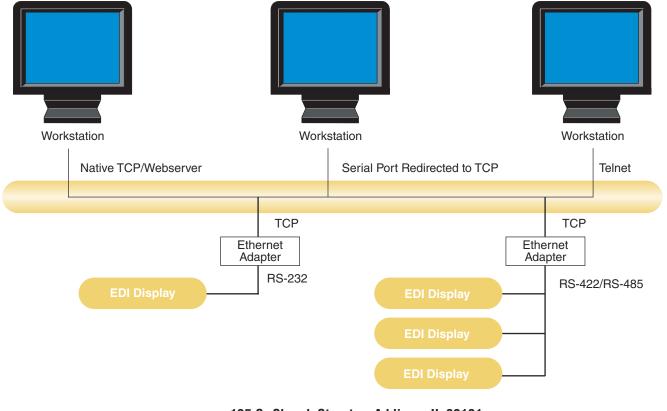
<u>Network Communication</u> – An Ethernet card option is available to add these serial displays to an existing network. Each display will be given an individual IP address and then accessed from anywhere in the plant.

### COMMUNICATION

RS232	Serial communication for use when a single display is located less than 50 feet from the controlling display.
RS422/485	Serial communication for distances greater than 50 feet from the controlling display or when multi-dripping displays (more than one display from the same controlling device).
LAN/Ethernet	With this option, displays can act as nodes on a LAN system and receive information via Ethernet. Each display has an IP address.
Modem	With this option, displays include a modem package and can be communicated with over the phone lines.
Wireless	With this option, each display has a wireless receiver that can be controlled from 500 feet away from the transmitter.

### PROTOCOL

Proprietary	Protocol used with all Electronic Displays software packages.
ASCII	User written code. Standard protocol using typical 128 ASCII code.





## Electronic Displays Inc. Full Service Systems Integrator



### **Communication Options**

### 1) Ethernet IP

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## **PLC Interface**

AOI's included for A/B CompactLogix and ControlLogix Systems

> Quick Simple AOI's Easy to Integrate!



## **TESTIMONIALS**

Specialists in Information Displays

### **LED UP-TIMER**

#### **Used to Time Truck Loading Times**

"This LED Timer display is acting exactly as we planned. The dock workers have to keep up with our schedule and this display alerts them throughout the docking area." Logistics Planner

**Popular Delivery Company** 



### ED400MQC Production Control Board

### **Used to Establish Production Schedules**

"We installed the new firmware, and it is operating as expected. Please accept a hearty thank you to your management, engineering staff, and yourself for all of your effort. Please note that this will be added to our standard product offering, and we're expecting an order for 14 more of the signs within the next 2 months. We appreciate your support and effort."

Vice-president, Sales Fortune 500 Company



### **Digital Safety Scoreboards**

## Used to Inform Employees and Management that "Safety is Number One!"

"These LED safety displays are perfect for keeping track of our days since the last injury. Our employees notice them as they begin their shifts and our insurance company is reducing our liability insurance! Thanks to the entire EDI staff for their help in picking out the right sign for our needs."

Safety Officer Fortune 500 Company



**Electronic Displays, Inc.** is a full service manufacturer dedicated to providing quality LED displays to the Manufacturing Industry. We offer a complete range of LED communication products.

We have designed this catalog to make your information display selection and purchase as easy as possible. We look forward to serving your informational display needs.

### **General Policies**

Payment Terms	Net 30 days to approved firms.
Shipping Terms	F.O.B. shipping point. A percent handling charge will apply to all orders.
Return Policy	Merchandise that is received damaged or not in accordance with packaging papers should be reported within five days. Do not return items without an RMA number from your EDI Representative. Items incorrectly ordered are subject to a restocking charge.
Warranty	Items sold by EDI are covered by our warranty. All warranty claims are subject to the conditions of our warranty.
Technical Data	Technical data contained in this catalog has been compiled by EDI. Every attempt has been made to ensure it's accuracy. However, EDI does not assume responsibility for any inaccuracies.

Electronic Displays Inc. reserves the right to change the terms and conditions at any time.

Electronic Displays, Inc. 135 S. Church Street Addison, IL 60101

Phone: 630-628-0658 Fax: 630-628-0936 Toll-Free: 800-367-6056 www.electronicdisplays.com