ViewMarq 2-Line Message Displays

Description

ViewMarq models MD4-0212T-1 and MD4-0224T-1 are 2-line, tri-color, 4.75-inch maximum character size LED message displays. Model MD4-0212T-1 is a 2-line x 12 character display. Model MD4-0224T-1 is a 2-line x 24 character display. Each supports red, amber and green characters, embedded string and numeric variables and scrolling (right, left, up and down). There are (1) RS-232 port, (1) RS-485 port and (1) 10/100 BaseT Ethernet port for configuration and external message control. They support serial ASCII, Modbus RTU, and Modbus TCP protocols. The extruded aluminum housing is NEMA 4 / NEMA 12 (Indoor only) rated. They are UL61010 listed and CE marked. Included are wall-mount and chain-mount bracket assemblies, 1/2-and 3/4-inch cable glands for input wiring and one 7-foot Ethernet patch cable. The required configuration software (MD-PGMSW) can be downloaded for free or purchased on CD.

MD4-0212T-1

$1,023.00

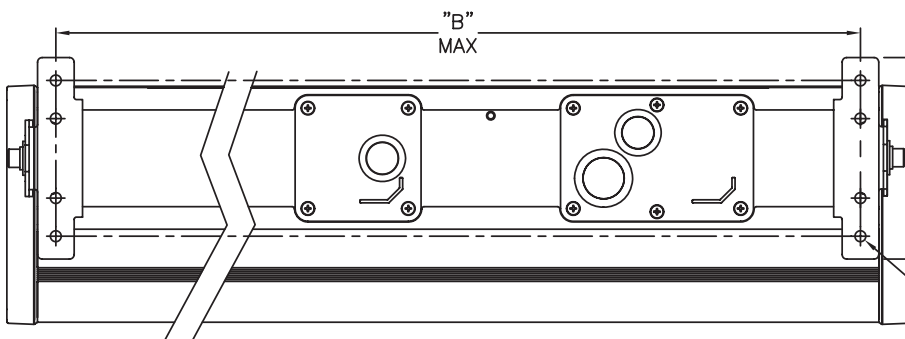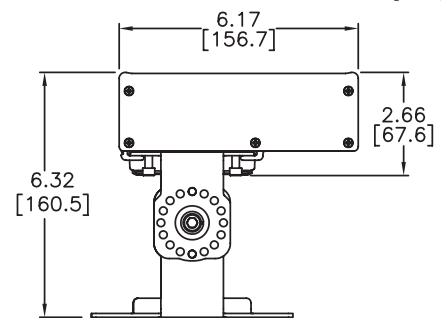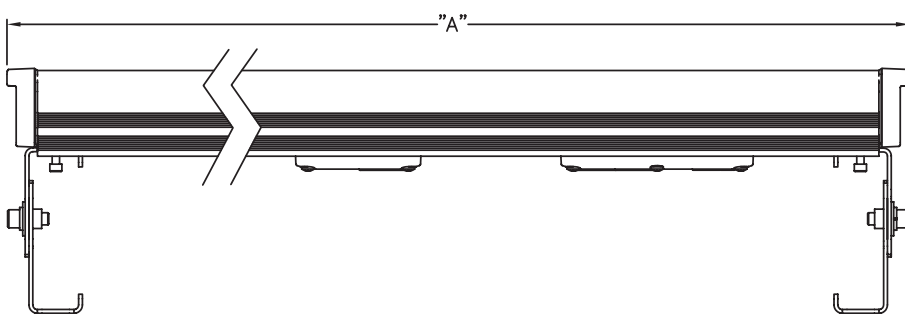### MD4-0224T-1

$1,549.00

file E139594

Features

- Low power consumption, high-efficiency switch mode power supply
- Wall-mount / cabinet top mount and chain-mount - brackets included.
- Free, easy-to-use configuration software package
- The display is fully configurable through the ViewMarq software for ease of use.
- Messages can be sent by an ASCII serial string or through Modbus RTU or Modbus TCP.
- Serial RS-232/485 and Ethernet Modbus TCP communications can be used at the same time.
- Store and trigger up to 200 messages

Dimensions

Units: inches [mm]

6.17 [156.7]

2.66 [67.6]

6.32 [160.5]

"A"

"B" MAX

5.20 [132.1]

8X ø0.28 [ø7.1]

DIMENSION TABLE

PART NO.	DIM "A"	DIM "B" MAX
MD4−0212T−1	23.30 [591.8]	20.77 [527.6]
MD4−0224T−1	44.89 [1140.2]	42.38 [1076.5]

ViewMarq Message Displays Specifications

ViewMarq 2-Line Message Displays Specifications		
Part Number	MD4-0212T-1	MD4-0224T-1
Description	2 Line X 12 Characters	2 Line X 24 Characters
Display		
• **Type**	LED matrix: Tri-color (Green, Red, Amber)	
• **LED Life**	100,000 hours	
• **LED Pitch**	0.19 in [5mm]	
• **Center to Center Spacing of each LED**	0.27 in [7mm]	
• **Number of Lines**	2 (Based on 5 x 7 pixel sized characters)	
• **Text Height**	1.25 in, 2in, 4in (Depends on character set selected)	
• **Character Set**	Printable ASCII	
• **Approximate Viewing Distance**	200ft	
AC Electrical		
• **Input Voltage**	100-240 VAC (+10% / -15%), 50 / 60 Hz	
• **Maximum Current**	1A	2A
• **Power Consumption (MAX)**	38W	74W
• **Maximum Inrush Current (Cold and Hot)**	26A	24A
• **Input Fuse Protection (Internal)**	Yes (not user replaceable)	
• **Output Protection for Overcurrent, Over Voltage and Over Temperature**	Yes – Self Resetting	
• **Insulation Resistance**	> 10 MOhms @ 500VAC	
DC Electrical		
• **Input Voltage**	24VDC (+10% / -15%)	
• **Maximum Current**	2A	3.5 A
• **Maximum Inrush Current (Cold and Hot)**	10.5 A	
• **Input Fuse Protection (Internal)**	Yes (not user replaceable)	
• **Reverse Polarity Protection**	Yes	
Communication		
• **Serial Communications**	Serial RS-232, RS-485 both ASCII and Modbus, 2400 – 38.4KB - Slave only	
• **Ethernet Communications**	Modbus TCP, 10/100BaseT - Server only	
Dimensions / Weight		
• **Enclosure Approximate Weight**	7.3 lbs [3.3 kg]	13.1 lbs [6.0 kg]
• **Drawing Link**	PDF	PDF
Environmental		
• **Storage Temperature**	–30 to +85°C (–22 to +185°F)	
• **Operating Ambient Temperature**	0 to 60°C (32 to +140°F)	
• **Humidity**	5 – 95% non-condensing	
• **Altitude**	Up to 2000 meters (6562ft)	
• **Enclosure Ratings**	UL Rated: Enclosure Type 1, Indoor Use, Dry Locations, NEMA 12 indoor only*, NEMA 4 indoor only*	
• **Vibration**	IEC 60068-2-6 (Test Fc)	
• **Shock**	IEC 60068-2-27 (Test Ea)	
• **Noise Immunity**	EN61131-2	
• **Pollution Degree**	2	
• **Overvoltage Category**	II	
• **Agency Approvals**	UL61010, UL61010-2-201 (E139594), NEMA 4, NEMA 12, RoHS, REACH CE EN61010, EN61010-2-201 (Safety) EN61131-2 (EMC)	

* Not evaluated by UL

ViewMarq Message Displays

Overview

ViewMarq is an LED Message Display utilizing the latest LED and communications technologies for industry. It utilizes both serial and Ethernet communications. The display can be connected to a PLC or any device capable of sending serial ASCII, Modbus RTU, or Modbus TCP communications. It can accept commands over Modbus and Modbus TCP, or serial ASCII.

Applications

The ViewMarq is used to display real time factory floor data or to display PLC triggered messages. The message display is controlled by any of the following:

- ASCII input strings through the RS-232 or RS-485 port
- Modbus RTU messages through the RS-232 or RS-485 port
- Modbus TCP messages through the Ethernet port

Features

- Low power consumption, high-efficiency switch mode power supply
- Wall-mount / cabinet top mount and chain-mount - brackets included
- Free, easy-to-use configuration software package
- The display is fully configurable through the ViewMarq software for ease of use.
- Messages can be sent by an ASCII serial string or through Modbus RTU or Modbus TCP
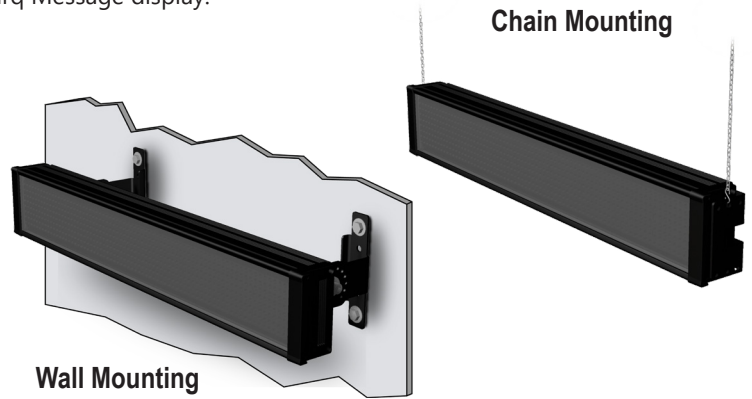- Store and trigger up to 200 messages

Compliances

- UL61010, 61010-2-201, file number E139594
- CE
- NEMA 12 - Indoor use
- NEMA 4 - Indoor use
- RoHS

ViewMarq Message Display Mounting Options
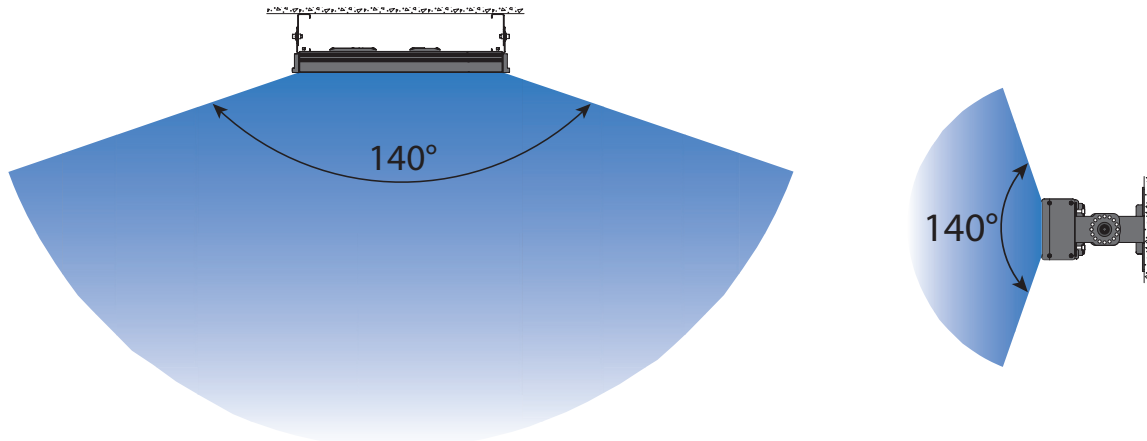
Mounting Options

Two sets of mounting brackets are included with each ViewMarq Message display.

ViewMarq LED Display Mounting Specifications			
Part Numbers	Weight	Weight with Wall Mount Brackets	Weight with Chain Mount Brackets
MD4-0112T-1	4.9 lbs (2.2 kg)	6.1 lbs (2.8 kg)	5.4 lbs (2.5 kg)
MD4-0124T-1	9.0 lbs (4.1 kg)	10.2 lbs (4.6 kg)	9.6 lbs (4.4 kg)
MD4-0212T-1	7.3 lbs (3.3 kg)	8.5 lbs (3.9 kg)	7.8 lbs (3.5 kg)
MD4-0224T-1	13.1 lbs (6.0 kg)	14.3 lbs (6.5 kg)	13.6 lbs (6.2 kg)
MD4-0412T-1	12.1 lbs (5.5 kg)	13.3 lbs (6.0 kg)	12.6 lbs (5.7 kg)
MD4-0424T-1	22.5 lbs (10.2 kg)	23.7 lbs (10.8 kg)	23.0 lbs (10.5 kg)

Chain Mounting

Wall Mounting

Viewing Angle

The ViewMarq display should be mounted for the optimum viewing angle.

140°

140°

Viewing Distances

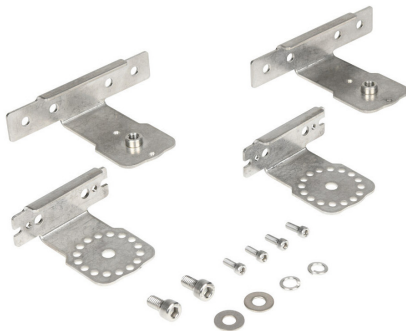| ViewMarq Message Displays Viewing Distances			
Part Numbers	Font Size	Minimum Recommended Viewing Distance	Maximum Recommended Viewing Distance
MD4-0112T-1 MD4-0124T-1 MD4-0212T-1 MD4-0224T-1 MD4-0412T-1 MD4-0424T-1	1-1/4 in	6ft (1.8 m)	60ft (18m)
MD4-0112T-1 MD4-0124T-1 MD4-0212T-1 MD4-0224T-1 MD4-0412T-1 MD4-0424T-1	2in	10ft (3.0 m)	100ft (31m)
MD4-0212T-1 MD4-0224T-1 MD4-0412T-1 MD4-0424T-1	4in	20ft (6.1m)	200ft (61m)
MD4-0412T-1 MD4-0424T-1	6in	20ft (6.1m)	300ft (91m)
MD4-0412T-1 MD4-0424T-1	8in	20ft (6.1m)	400ft (122m)
MD4-0412T-1 MD4-0424T-1	10in	20ft (6.1m)	500ft (152m)

ViewMarq Message Display Replacement Parts

The optional replacement parts can be used to replace damaged, worn or lost ViewMarq message display components.
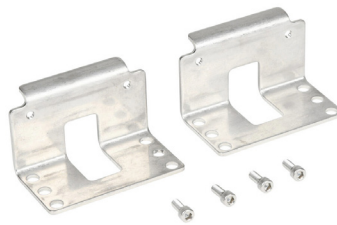
Replacement parts at a glance:

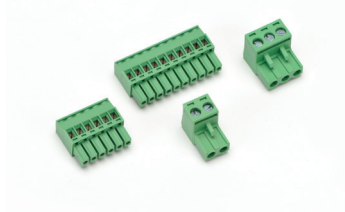| ViewMarq Message Display Replacement Parts		
Part Number	Description	Price
MD-BRK-1	ViewMarq wall mounting bracket assembly, replacement. Package of 2. For use with ViewMarq message display.	$58.00
MD-BRK-2	ViewMarq chain mounting brackets, replacement. Package of 2. For use with ViewMarq message display.	$28.50
MD-TERM-SET	ViewMarq pluggable terminal block set, replacement. For use with ViewMarq message display. Includes (1) 2-pole DC power connector, (1) 3-pole AC power connector, (1) 10-pole discrete input connector, and (1) 6-pole serial communications connector.	$25.50
MD-PWR-COV	ViewMarq power connection cover, replacement. For use with ViewMarq message display. (1) cover and (1) 1/2in NPT cable gland included.	$59.00
MD-COM-COV	ViewMarq communications cover, replacement. For use with ViewMarq message display. (1) cover and (2) 1/2in NPT cable gland and (1) 3/4in NPT cable gland with 6mm and 10mm hole plugs included.	$25.50

**Wall Mount Bracket
Part No. MD-BRK-1**

**Chain Mount Brackets
Part No. MD-BRK-2**

**Terminal Block Set
Part No. MD-TERM-SET**

**Power Back Cover w/ Cable Gland
Part No. MD-PWR-COV**

**Communication Back Cover w/ Cable Glands
Part No. MD-COM-COV**

ViewMarq Message Display Configuration Software

Free Software!
Part Number: MD-PGMSW

ViewMarq LED message display Windows-based configuration software. Requires Windows XP (Service Pack 3), Vista, Windows 7,8,10 or 11 (32 and 64 bit). Requires serial or Ethernet connection to the ViewMarq display. Available for purchase on CD or can be downloaded for free from AutomationDirect web site. Ethernet cable ships with display.

Built-in Message Simulator

- Runs the message on your PC as you type.
- Test all of your messages before downloading.
- Time savings saves you money!

Simple Message Creation

- Message creation and editing is made simple and fast with intuitive software. Easy-to-find tools help change the character color, add blinking, and insert embedded variables.

Text Editor

- Simple and intuitive text message creation, editing and formatting.
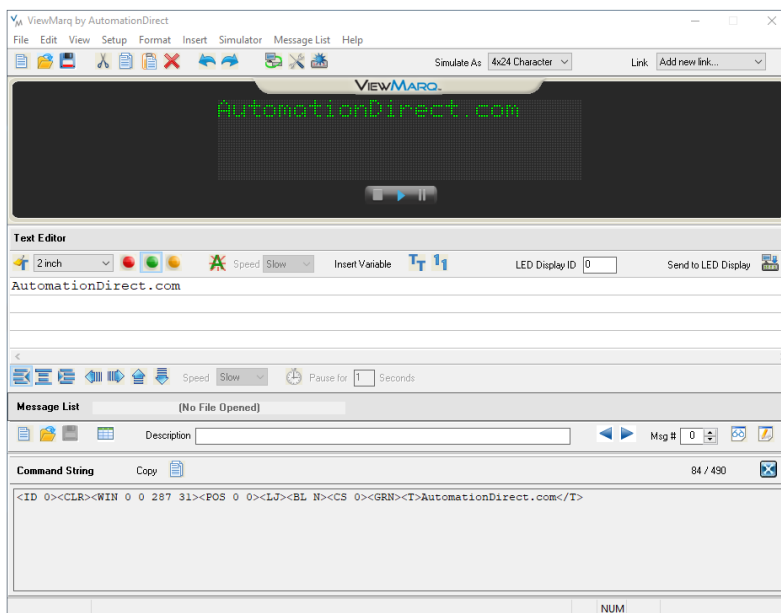
Command String Viewer

- Allows you to copy and paste the command string needed for your PLC ladder code.

Message Lists

- Create message lists that can be downloaded to the LED Display and triggered by a PLC or by discrete inputs.

PC Requirements

- Personal Computer with a 333MHz or higher processor (CPU) clock speed recommended; Intel® Pentium/Celeron family, or AMD® K6/Athlon/Duron family, or compatible processor recommended
- Keyboard and Mouse or compatible pointing device
- XVGA color video adapter and monitor with at least 1024 x 768 pixels required, 64K color minimum
- 50MB free hard-disk space
- 512MB free RAM
- CD-ROM or DVD drive if installing software from the CD
- Serial Port or Ethernet 10/100 Mbps port for configuring LED Display
- Operating System - Windows XP SP3, Windows Vista, Windows 7, 8, 10 or 11.

Download the Software!

The Viewmarq Configuration Software can be downloaded at no charge from the AutomationDirect web site, or a CD version may be purchased for $12.00 by ordering p/n MD-PGMSW. Help files are included in the software.