

# 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

# Choosing the Right Model

## One-Line Displays

- 1-1/4", 2" characters
- Models with 12 or 24 characters per line
- Approximate viewing distance up to 100 ft

### MD4-0112T-1

LIQUID SPILL

### MD4-0124T-1

1 x 24 CHARACTER DISPLAY

## Two-Line Displays

- 1-1/4", 2", 4" characters
- Models with 12 or 24 characters per line
- Approximate viewing distance up to 200 ft

### MD4-0212T-1

GATE 1-OPENED  
GATE 2-CLOSED

### MD4-0224T-1

Works great with  
Do-more, P3000, Click

## Four-Line Displays

- 1-1/4", 2", 4", 6", 8" characters
- Models with 12 or 24 characters per line
- Approximate viewing distance up to 400 ft

### MD4-0412T-1

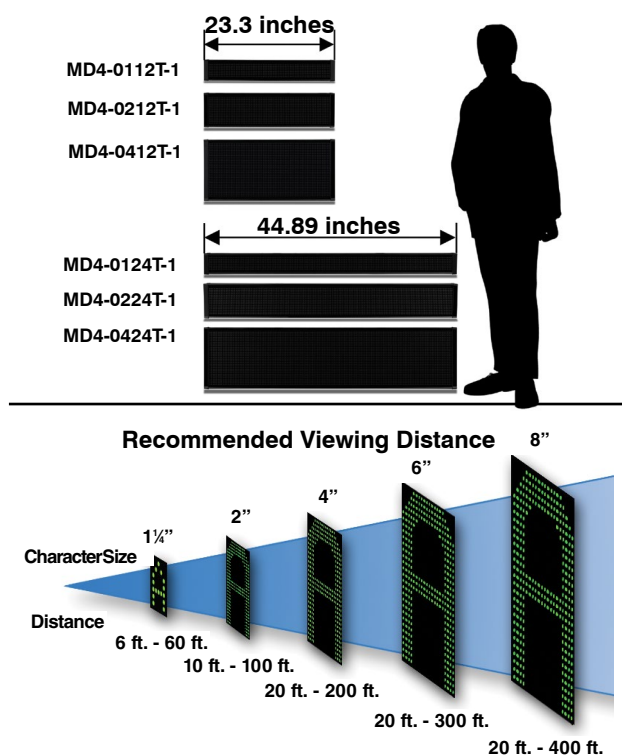
TANK 1= 12391  
TANK 2= 9991  
TANK 3= 20091  
TANK 4= 41091

### MD4-0424T-1







Orders Taken 4400  
Orders Picked 2200  
Orders Shipped 1200  
Time Left 3hrs

Here are the recommended viewing distances based on the character size that can be used:

| Character Size | Minimum Recommended Viewing Distance | Maximum Recommended Viewing Distance | Displays with these character sizes (Part Numbers)                                     |
|----------------|--------------------------------------|--------------------------------------|--|
| 1.25 in        | 6 ft                                 | 60 ft                                | MD4-0112T-1<br>MD4-0124T-1<br>MD4-0212T-1<br>MD4-0224T-1<br>MD4-0412T-1<br>MD4-0424T-1 |
| 2 in           | 10 ft                                | 100 ft                               | MD4-0112T-1<br>MD4-0124T-1<br>MD4-0212T-1<br>MD4-0224T-1<br>MD4-0412T-1<br>MD4-0424T-1 |
| 4 in           | 20 ft                                | 200 ft                               | MD4-0212T-1<br>MD4-0224T-1<br>MD4-0412T-1<br>MD4-0424T-1                               |
| 6 in           | 20 ft                                | 300 ft                               | MD4-0412T-1<br>MD4-0424T-1   |
| 8 in           | 20 ft                                | 400 ft                               | MD4-0412T-1<br>MD4-0424T-1   |



# ViewMarq Message Displays Selection Guide

| ViewMarq Message Displays          |   |   |            |
|------------------------------------|---|---|------------|
| Part Number                        |   | Description   | Price      |
| <a href="#"><u>MD4-0112T-1</u></a> |    | ViewMarq industrial LED message display, 1 line by 12 characters, tri-color, 2-inch maximum character size. Supports red, amber and green characters, embedded string and numeric variables, scrolling (right, left, up and down). (1) RS-232 port, (1) RS-485 port and (1) 10/100 BaseT Ethernet port for configuration and external message control; supports serial ASCII, Modbus RTU, and Modbus TCP protocols. NEMA 4 / NEMA 12 (Indoor only) extruded aluminum housing. UL61010 listed, CE marked. Includes 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. Requires configuration software ( <a href="#"><u>MD-PGMSW</u></a> ) which can be downloaded for free.    | \$721.00   |
| <a href="#"><u>MD4-0124T-1</u></a> |    | ViewMarq industrial LED message display, 1 line by 24 characters, tri-color, 2-inch maximum character size. Supports red, amber and green characters, embedded string and numeric variables, scrolling (right, left, up and down). (1) RS-232 port, (1) RS-485 port and (1) 10/100 BaseT Ethernet port for configuration and external message control; supports serial ASCII, Modbus RTU, and Modbus TCP protocols. NEMA 4 / NEMA 12 (Indoor only) extruded aluminum housing. UL61010 listed, CE marked. Includes 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. Requires configuration software ( <a href="#"><u>MD-PGMSW</u></a> ) which can be downloaded for free.    | \$997.00   |
| <a href="#"><u>MD4-0212T-1</u></a> |    | ViewMarq industrial LED message display, 2 line by 12 characters, tri-color, 4.75 inch maximum character size. Supports red, amber and green characters, embedded string and numeric variables, scrolling (right, left, up and down). (1) RS-232 port, (1) RS-485 port and (1) 10/100 BaseT Ethernet port for configuration and external message control; supports serial ASCII, Modbus RTU, and Modbus TCP protocols. NEMA 4 / NEMA 12 (Indoor only) extruded aluminum housing. UL61010 listed, CE marked. Includes 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. Requires configuration software ( <a href="#"><u>MD-PGMSW</u></a> ) which can be downloaded for free. | \$1,023.00 |
| <a href="#"><u>MD4-0224T-1</u></a> |  | ViewMarq industrial LED message display, 2 line by 24 characters, tri-color, 4.75 inch maximum character size. Supports red, amber and green characters, embedded string and numeric variables, scrolling (right, left, up and down). (1) RS-232 port, (1) RS-485 port and (1) 10/100 BaseT Ethernet port for configuration and external message control; supports serial ASCII, Modbus RTU, and Modbus TCP protocols. NEMA 4 / NEMA 12 (Indoor only) extruded aluminum housing. UL61010 listed, CE marked. Includes 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. Requires configuration software ( <a href="#"><u>MD-PGMSW</u></a> ) which can be downloaded for free. | \$1,549.00 |
| <a href="#"><u>MD4-0412T-1</u></a> |  | ViewMarq industrial LED message display, 4 line by 12 characters, tri-color, 9.5 inch maximum character size. Supports red, amber and green characters, embedded string and numeric variables, scrolling (right, left, up and down). (1) RS-232 port, (1) RS-485 port and (1) 10/100 BaseT Ethernet port for configuration and external message control; supports serial ASCII, Modbus RTU, and Modbus TCP protocols. NEMA 4 / NEMA 12 (Indoor only) extruded aluminum housing. UL61010 listed, CE marked. Includes 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. Requires configuration software ( <a href="#"><u>MD-PGMSW</u></a> ) which can be downloaded for free.  | \$1,518.00 |
| <a href="#"><u>MD4-0424T-1</u></a> |  | ViewMarq industrial LED message display, 4 line by 24 characters, tri-color, 9.5 inch maximum character size. Supports red, amber and green characters, embedded string and numeric variables, scrolling (right, left, up and down). (1) RS-232 port, (1) RS-485 port and (1) 10/100 BaseT Ethernet port for configuration and external message control; supports serial ASCII, Modbus RTU, and Modbus TCP protocols. NEMA 4 / NEMA 12 (Indoor only) extruded aluminum housing. UL61010 listed, CE marked. Includes 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. Requires configuration software ( <a href="#"><u>MD-PGMSW</u></a> ) which can be downloaded for free.  | \$2,568.00 |

# ViewMarq Message Displays Specifications

| ViewMarq 1-Line Message Displays Specifications                        |  |                        |
|--|--|------------------------|
| Part Number  | MD4-0112T-1  | MD4-0124T-1            |
| Description  | 1 Line X 12 Characters   | 1 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  | 1 (Based on 5 x 7 pixel sized characters)  |                        |
| • Text Height  | 1.25 in, 2in (Depends on character set selected)   |                        |
| • Character Set  | Printable ASCII  |                        |
| • Approximate Viewing Distance   | 100ft  |                        |
| AC Electrical  |  |                        |
| • Input Voltage  | 100-240 VAC (+10% / -15%), 50 / 60 Hz  |                        |
| • Maximum Current  | 0.5 A  | 0.8 A                  |
| • Power Consumption (MAX)  | 22W  | 38W                    |
| • Maximum Inrush Current (Cold and Hot)                                | 25A  | 26A                    |
| • 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  | 1A   | 1.5 A                  |
| • Maximum Inrush Current (Cold and Hot)                                | 3A   | 4.5 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   | 4.9 lbs [2.2 kg]   | 9.0 lbs [4.1 kg]       |
| • Drawing Link   | <a href="#">PDF</a>  | <a href="#">PDF</a>    |
| 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<br>CE EN61010, EN61010-2-201 (Safety) EN61131-2 (EMC) |                        |

\* Not evaluated by UL



# ViewMarq Message Displays Specifications

| ViewMarq 2-Line Message Displays Specifications                        |  |                     |
|--|--|---------------------|
| Part Number  | MD4-0212T-1  |                     |
| Description  | 2 Line X 12 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   | <a href="#">PDF</a>  | <a href="#">PDF</a> |
| 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<br>CE EN61010, EN61010-2-201 (Safety) EN61131-2 (EMC) |                     |

\* Not evaluated by UL

# ViewMarq Message Displays Specifications

| ViewMarq 4-Line Message Displays Specifications                        |  |                     |
|--|--|---------------------|
| Part Number  | MD4-0412T-1  |                     |
| Description  | 4 Line X 12 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  | 4 (Based on 5 x 7 pixel sized characters)  |                     |
| • Text Height  | 1.25 in, 2in, 4in, 6in, 8in (Depends on character set selected)  |                     |
| • Character Set  | Printable ASCII  |                     |
| • Approximate Viewing Distance   | 400ft  |                     |
| AC Electrical  |  |                     |
| • Input Voltage  | 100-240 VAC (+10% / -15%), 50 / 60 Hz  |                     |
| • Maximum Current  | 2A   | 2A                  |
| • Power Consumption (MAX)  | 74W  | 123W                |
| • Maximum Inrush Current (Cold and Hot)                                | 24A  | 9.5 A               |
| • 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  | 3.5 A  | 4A                  |
| • Maximum Inrush Current (Cold and Hot)                                | 10.5 A   | 12A                 |
| • 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   | 12.1 lbs [5.5 kg]  | 22.5 lbs [10.2 kg]  |
| • Drawing Link   | <a href="#">PDF</a>  | <a href="#">PDF</a> |
| 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<br>CE EN61010, EN61010-2-201 (Safety) EN61131-2 (EMC) |                     |

\* Not evaluated by UL

# 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. Download for free from the 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

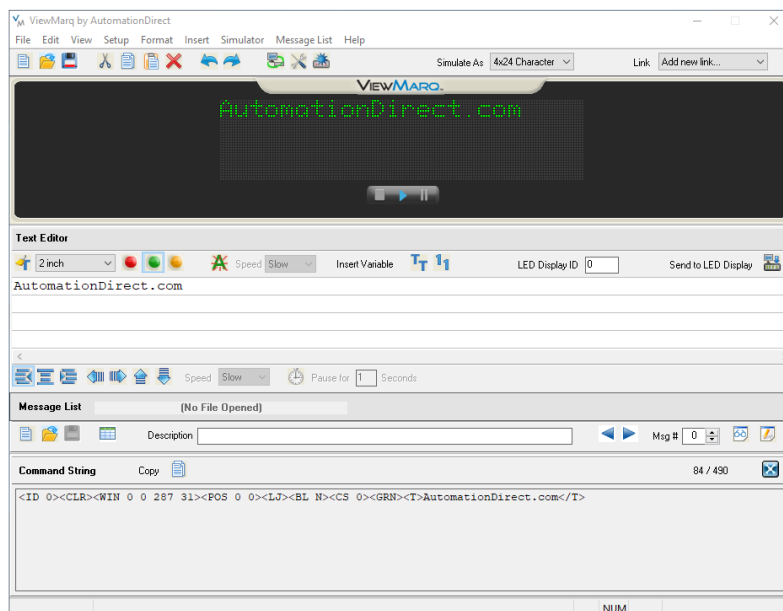
- Allows you to copy and paste the command string needed for your PLC ladder code.

## 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
- 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. Help files are included in the software.