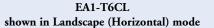
Quick Start Guide

3505 HUTCHINSON ROAD CUMMING, GA 30040-5860

C-more 6" Micro-Graphic Panels, Accessories & Replacement Parts







EA1-T6CL shown in Portrait (Vertical) mode

NOTE: Software and Firmware Version 2.5 or later is required with model EA1-T6CL. Available for free download at www.automationdirect.com.

General Description

cro-Graphic panel has a 5.7-inch TFT LCD color 320 x 240 dot display with an LED backlight. It features five user-defined function keys, each key with a user-defined red LED indicator. The panel displays up to 40 lines by 80 characters of static text and up to 40 lines by 40 characters of dynamic text with embedded variables and phrases mixed with graphics at landscape orientation. Portrait orientation can display 60 characters and 53 lines of static text and 40 lines by 40 characters of dynamic text. EA1-T6CL is rated UL for use on a flat surface of Type 1, 4X enclosure (for indoor use only). The C-more 6" Micro-Graphic panels are powered from a 12-24 VDC power supply during operation, or can be powered in low power mode thru the USB port from a PC during programming. Other features include

- USB Type B programming port
- Built in 15-pin serial communications port (RS-232/422/485)
- 2 optional keypad bezels, 20-button landscape and 21-button portrait mount
- Optional replaceable clear screen overlay
- Built in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- Up to 999 screens, limited only by memory usage
- 0 to 50 °C (32 to 122 °F) operating temperature range
- UL, cUL & CE agency approvals (see below for details)
- 2-year warranty from date of purchase

Safety Information

HMI Parts Center | C-more 6" Micro-Graphic Panel WARNING: To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call us at 1-800-633-0405 or 770-844-4200.

This publication is based on information available at the time it was printed. At Automation direct. com® we constantly strive to improve our products and services, so we reserve the right to make changes to the products and/or publications at any time without notice and without obligation. This publication may also discuss features that may not be available in certain revisions of the

Before you begin...

- items required to create a working system:
- **C-more** 6" Micro-Graphic panel • **C-more** Micro-Graphic Programming Software EA-MG-PGMSW (Downloadable version available from the Automation Direct web site at no charge.)
- $\hbox{\it \textbf{-}C-more} \ {\sf Micro-Graphic} \ {\sf USB} \ {\sf Programming} \ {\sf Cable} \ {\sf such} \ {\sf as} \ {\sf USB-CBL-AB6}, used \ {\sf to} \ {\sf connect} \ {\sf between} \ {\sf a} \ {\sf PC} \ {\sf and} \ {\sf the} \ {\sf the}$ Micro-Graphic panel's built-in serial port. The panel will operate in Low-Power mode when powered by the PC and the screen brightness is diminished.
- Power source An external 12-24 VDC class 2 power source is required for normal High-Power operation. Recommended power supplies are AutomationDirect part numbers PSC-24-015 or PSC-24-030.
- Personal computer to run the *C-more* Micro-Graphic programming software
- Communications Cable (serial) to connect the *C-more* Micro-Graphic panel to your controller.

Unpack and Inspect

- Unpack the C-more Micro-Graphic panel from its shipping carton. Included in the carton are the following:
 - C-more 6" Micro-Graphic panel
 - cutout template
 - · mounting clips

 - · function key label insert
 - Quick Start Guide

Shown is an example of a C-more 6" Micro-Graphic

panel being assembled with

an optional 20-button

NOTE: Mounting clips for the

panel or keypad bezel are

included with each product

Keypad Bezel.

- DC Power Connector
- Unpack any accessories that have been ordered, such as: Keypad Bezel, DC Power Supply, programming cable, communications cable, etc.
- Inspect all equipment for completeness. If anything is missing or damaged, immediately call the Automa department @ 1-800-633-0405.

2. Use the (4) Panel Mounting Clips that are supplied with the panel, to secure panel to

anel and the keypad bez

ighten screws to a torque of 21-28 oz-in [0.15-0.2 Nm



Keypad Beze EA-MG6-BZ2

C-more 6 Inch

Accessories (sold separately)



EA-MG6-BZ2





21-Button Keypad Bezel



EA-MG6-BZ2P

USB-CBL-AB6

CE

EN61131-2

ISO-9000

EA-6-COV2

Programming Software & Programming Cable (sold separately)

NOTE: Free download of the

C-more Micro-Graphic

AutomationDirect web site.

ing software at th

Accessory details shown on the reverse side.

Programming Software

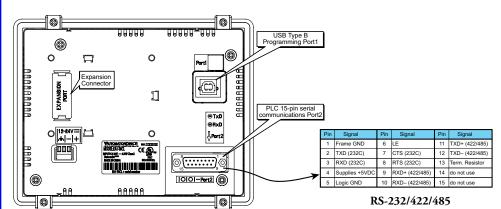
EA-MG-PGMSW

C-more Micro-Graphic Panels & Accessories

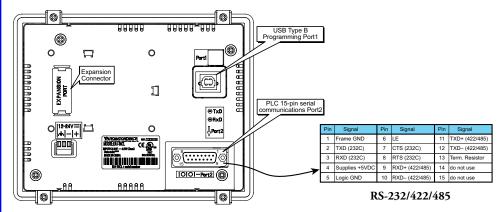
Agency Approvals

Become Familiar with Available Communication Ports

Install Optional Hardware Accessories (sold separately)



The C-more 6" Color Micro-Graphic panels include a built-in USB Type B port used to communicate with a PC during project development. There is a 15-pin RS-232/RS-422/RS-485 port for communications to



0.04"-0.2" [1-5 mm]. Mounting screw torque is 21-28 oz-in [0.15-0.2 Nm].

The C-more 6" Micro-Graphic panel can be

mounted through a cutout in an enclosure by using

the template provided with the panel, or using the

dimensions shown. The optional keypad bezels also

include templates. The enclosure mounting thick-

ness range for the panels and the keypad bezels is



Install the Software and Develop a Project



NOTE: Software and Firmware Version 2.5 or later is required with model EA1-T6CL. Available for free download at www.automationdirect.com.

Panel Cutout (all models)

Landscape cutout shown

CUTOUT

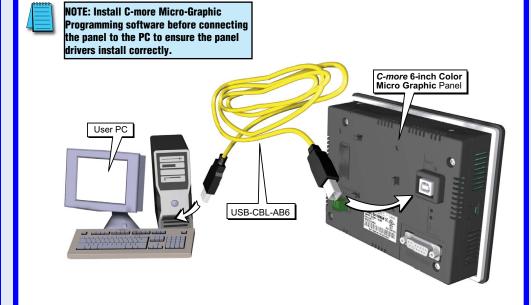
Following are the minimum system requirements for running C-more Micro-Graphic Programming Software, EA-MG-PGMSW, on a PC:

- Operating System Windows* XP Home / Professional Edition Service Pack 2, Windows* 2000 with Service Pack 4, Windows® Vista (32 and 64 bit), Windows® 7 (32 and 64 bit), Windows 8 (32 and 64 bit)
- Keyboard and Mouse or compatible pointing device
- Super VGA color video adapter and monitor with at least 800 x 600 pixels resolution (1024 x 768 pixels recommended) 64K color minimum

- CD-ROM or DVD drive for installing software from the CD, or internet access to download free programming
- USB port for project transfer from software to touch panel

Connect C-more Color Micro-Graphic Panel to Computer

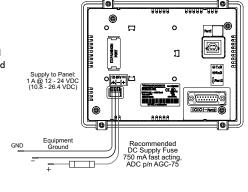
Use a Programming Cable such as USB-CBL-AB6, from a USB port type A on the project development PC to the USB port on the C-more 6" Micro-Graphic panel as shown below.



Provide Power to the *C-more* 6" Color Micro-Graphic Panel

- 1). The panel is powered by a 1 Amp @ 12-24 VDC class 2 power source in normal operation
- 2). The *C-more* 6" Micro-Graphic panel can be powered during programming from the PC through a USB Programming Cable such as USB-CBL-AB6. When powered from the PC, the panel will operate in Low-Power mode and the screen brightness is diminished.

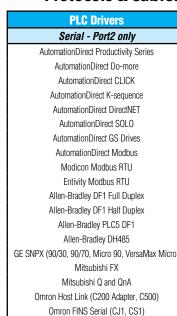
| Tightening Torque | |
|------------------------------|--------------------|
| Power supply wire connection | 1.7 lb-in (0.2 Nm) |
| Required Wire | Specification |
| Supported temperature | Over 60 °C |
| Wire Material | Copper |
| Wire Size | 16 - 22 AWG |



NOTE: Recommended DC power supply to power the *C-more* Micro-Graphic Panel, *AutomationDirec*i Part No. PSC-24-015 or PSC-24-030.

Accessing the C-more Micro-Graphic Panel Setup Screens To access the **Setup Menu** of the panel's setup Menu flow Chart screens, press the the BAK [F1] and ENT [F5] function keys simultaneously for three (3) seconds. om the Setup Menu, information about the panel can be obtained, settings can be adjusted, and panel functions can be tested. . Clear User Memory 5. Reset to Factory Defaul 3. Hourglass Example 3. Test Menu 1. Serial Port – Loop Back Test 2. PLC Enquiry Test 3. Buzzer Test 4. Touch Panel Test

Choose C-more 6" Color Micro-Graphic Panel to PLC **Protocols & Cables**

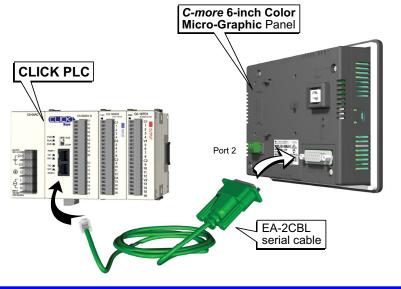


Siemens PPI (S7-200 CPU) NOTE: For the latest list of available PLC drivers and PLC cables go www.automationdirect.com

Cable Part No. Cable Description Cables used with Serial Port2 EA-2CBL EA-2CBL-1 Direct LOGIC PLC RJ-11 port, D3-340 EA-3CBL **Direct** LOGIC DL405 PLC 15-pin D-sub port, DL405 (RS-232C). EA-4CBL-1 Direct LOGIC PLC 25-pin D-sub port, DL405, D3-350, DL305 DCU and all DCM EA-4CBL-2 Allen-Bradley MicroLogix 1000, 1100 200 & 1500 (RS-232C) EA-MLOGIX-CBL Allen-Bradley SLC 5-03/04/05, ControlLogix, CompactLogix, FlexLogix DF1 port (RS-232C) EA-SLC-232-CBL Allen-Bradley PLC-5 DF1 port (RS-232C) EA-PLC5-232-CBL Allen-Bradley MicroLogix, SLC 5-01/02/03, DH485 port (RS-232C) EA-DH485-CBL GE 90/30, 90/70, Micro 90, Versamax Micro (Port2) EA-90-30-CBL MITSUBISHI FX Series 25-pin port EA-MITSU-CBL ITSUBISHI FX Series 8-pin mini-DIN IS-422A) EA-MITSU-CBL-1 OMRON Host Link (C200 Adapter, C500) EA-OMRON-CBL

10 Connect *C-more* 6" Micro-Graphic Panel to PLC

Connect the serial communications cable between the *C-more* Micro-Graphic panel and the PLC. The panel can be connected to the PLC via the panel's built-in 15-pin serial communications port with either RS-232, RS-422 or RS-485 communications.



Additional Help and Support

- tion troubleshooting, a Hardware User Manual can be downloaded from the On-line Documentation area of the AutomationDirect web site or purchased through the AutomationDirect Sales team @ 1-800-633-0405 as part number EA1-MG6CL-M.
- For software programming help, refer to the *C-more* Micro-Graphic Programmin Software on-line embedded help.
- Refer to demos of the product at: www.CmoreMicro.com/software/software_demo.html
- \bullet For additional technical support and questions, call our Technical Support team @ 1-800-633-0405 or 770-844-4200



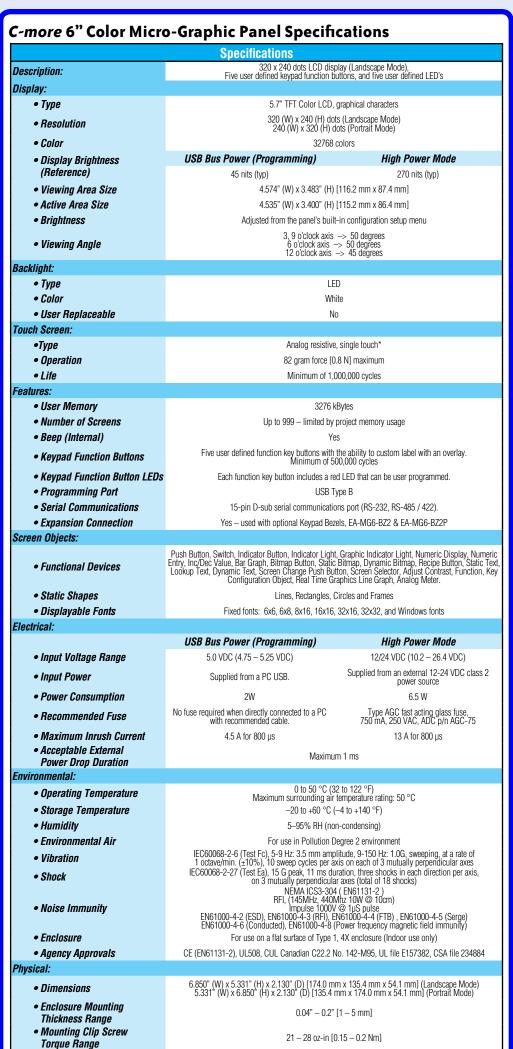


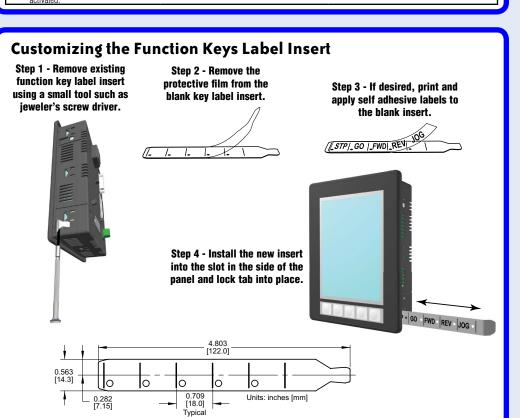
III /CIII /CSA/CF Certification Number

234884

UL508

UL/CUL





creen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected object may be

1.894" [47.1 mm]

29.63 oz. (840 g)

Depth from bezel rear

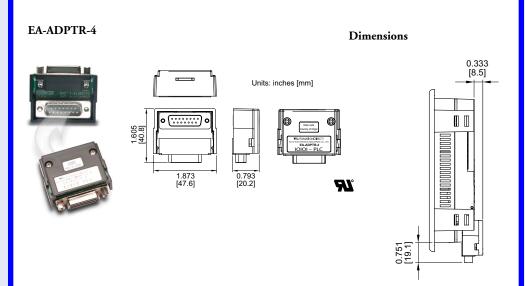
with options Module

EA1-T6CL Panel Shown in Landscape (Horizontal) orientation Fig. 19 | 1,53,31 | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4| | 1,135,4|

Communication Port Adapters

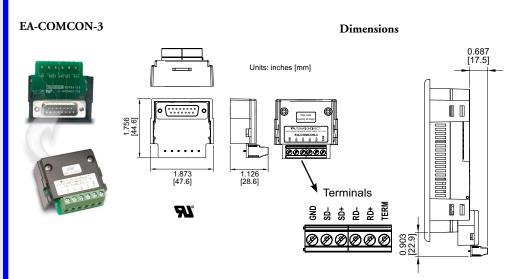
D-SUB 15-pin 90-degree Communication Port Adapter (EA-ADPTR-4)

The EA-ADPTR-4 adapter plugs into the 15-pin serial port on the rear of the 6" panel to allow a PLC communication cable to be plugged in at a 90 degree angle to reduce panel depth requirements. 15-pin straight through pin-out. UL Recognized.

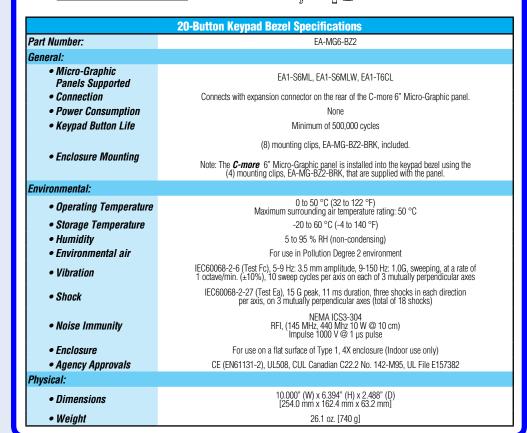


D-SUB 15-pin to Terminal Block Adapter (EA-COMCON-3)

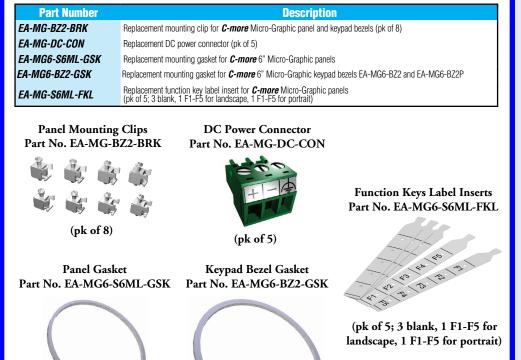
The EA-COMCON-3 adapter plugs into the 15-pin serial port on the rear of the 6"panel to allow wire terminal connections for an RS-422/RS-485/DH-485 PLC communication cable. UL Recognized.

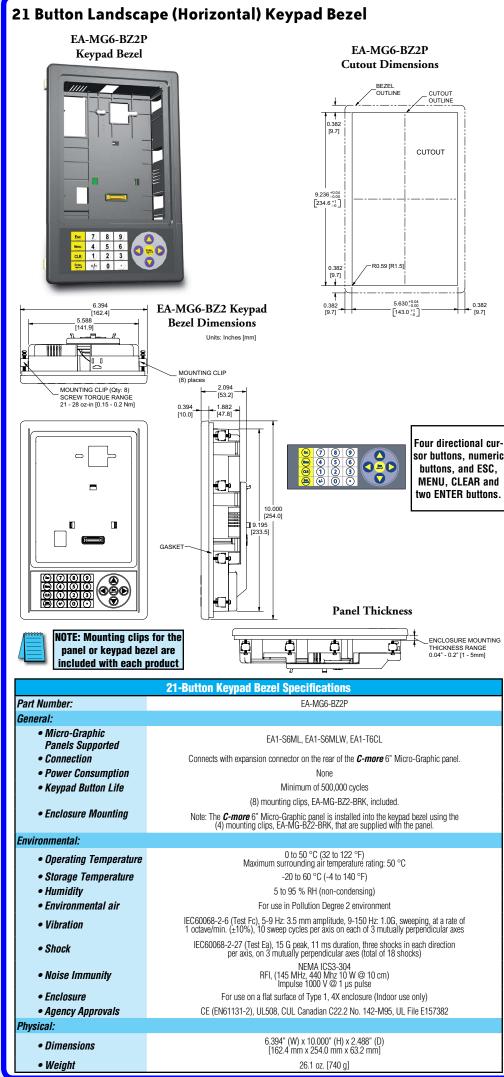


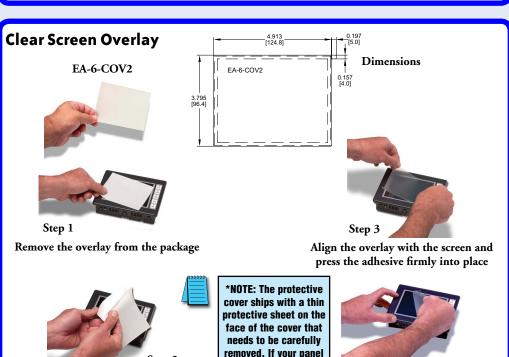
VICPAS HMI Parts Center ndscape (Horizontal) Keypad Bezel EA-MG6-BZ2 **Keypad Bezel** EA-MG6-BZ2 **Cutout Dimensions** CUTOUT EA-MG6-BZ2 Keypad Units: Inches [mm] **Bezel Dimensions** ______ MOI INTING CLIP (Qty:8) O to O Four directional cursor buttons, numeric buttons and ESC. MENU. CLEAR and ENTER buttons. Panel Thickness NOTE: Mounting clips for the panel or keypad bezel are included with each product











is not clear, the protec

been removed.

tive sheet may not have Remove the protective film*

Remove the paper backing from

the overlay