

C-more Micro

It's a touch panel... at a text panel price

Do more with C-more Micro-Graphic!

C-more Micro-Graphic panels are fast becoming one of the most popular and most reliable value packed operator interfaces in the industrial market. After all, the C-more Micro-Graphic panels are packed with features yet still priced for the tightest of budgets. With the addition of the larger 6-inch sizes, you can display even more text, graphics, or bitmaps to effectively communicate and display data to the operator. Touch and non-touch screen models are available, and the low prices allow customers with tight budgets to take advantage of graphic control panel features that are most often found in more expensive touch screen products. Both the 3-inch and 6-inch units display STN monochrome graphics; standard green and high-contrast white background versions, each with five selectable background colors, allow you to use color to convey meaning. Several options, including plug-and-play keypad bezels, are available for both the 3-inch and 6-inch models.

3" / 6"
touch option
Low Cost



NEW 6-inch C-more Micro Panels

Two models are available, standard and high-contrast, that offer the same base features. Both are touch screen units that support portrait and landscape mounting positions.

3-inch C-more Micro Panels

Four models are available, touch and non-touch, with either standard or high-contrast backgrounds, that offer the same base features. The panels with built-in touch capabilities expand application possibilities for only a few dollars more.

C-more Micro 3-inch and 6-inch Comparison		
Feature	3-inch Models	6-inch Models
Display Resolution	128 x 64	320 x 240
Serial Ports	1 serial (RJ12 and Optional DSUB15)	2 serial(RJ12 and DSUB15)
User Project Memory	768KB	1,792KB
Portrait Mode	NO	YES

Bitmap graphics

- 3-inch models have 128 X 64 pixel graphical display that supports bitmap graphics
- 6-inch models have 320 X 240 pixel graphical display that supports bitmap graphics
- Use bitmap images of pushbuttons, switches, indicators, your company logo
- Use our library of bitmaps
- Create your own library of bitmaps

Real Time Graph

- Each pen displays the value of a single PLC memory location. Values are refreshed by either time or a trigger tag.
- One or two pens can be displayed
- Up to 24 values can be displayed for each pen

Controlled beep

- Beep to indicate an alarm
- Beep for a special message
- Beep to verify when button is pressed

Bar graphs

- Vertical, horizontal, thin, wide, multiple
- Combine with a numeric display for digital readout
- Scrolling text

Data entry

- Pop-up numeric keypad on the screen
- Increment/Decrement a value by touching arrows
- Add an optional keypad bezel

Recipes

Each recipe button transfers up to 99 values from PLC source registers to PLC destination registers and/or from the recipe table to PLC destination registers.

Change background colors

The screen colors are programmable! Use them to convey meaning - see a red alarm screen from across the room, or use a yellow screen as a caution.

All standard models support the following 5 background colors:

Green - Red - Yellow - Amber - Lime

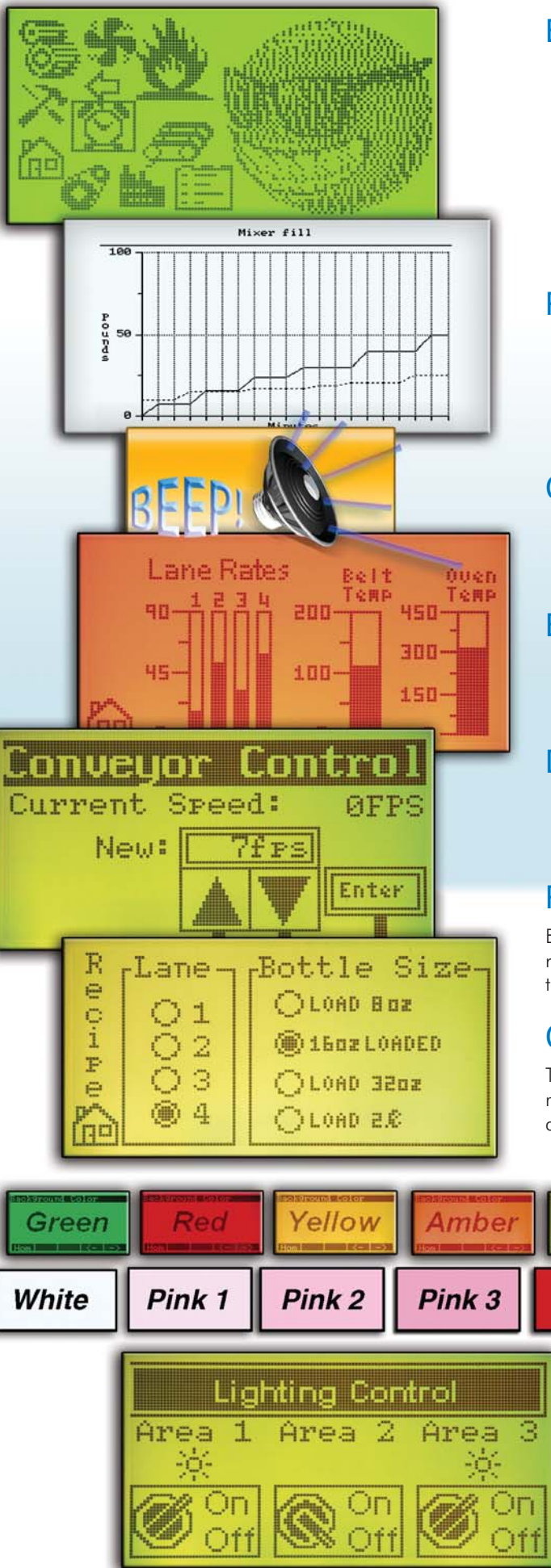
All high-contrast models support the following 5 background colors:

White - Pink1 - Pink2 - Pink3 - Red

Alarm feature

C-more Micro has an Alarm action that can control:

- Backlight color change/flash
- Function Key LED flash
- Beep activation
- Custom alarm banner display
- Up to 16 configurable alarm actions



FREE Configuration Software!

C-more Micro-Graphic Programming Software is based on its powerful sibling, the **C-more** Touch Panel. It offers high end features designed to reduce your configuration time. Simply drag and drop the objects from the Object list (right side of screen) on to the screen construction area. Then configure your PLC tags

and assign them to the objects. Use the built-in simulator to review your work on your PC before ever downloading your project! The time saving benefits of the **C-more** Micro configuration software could easily pay for the panel. Check out www.C-moreMicro.com for a demo.

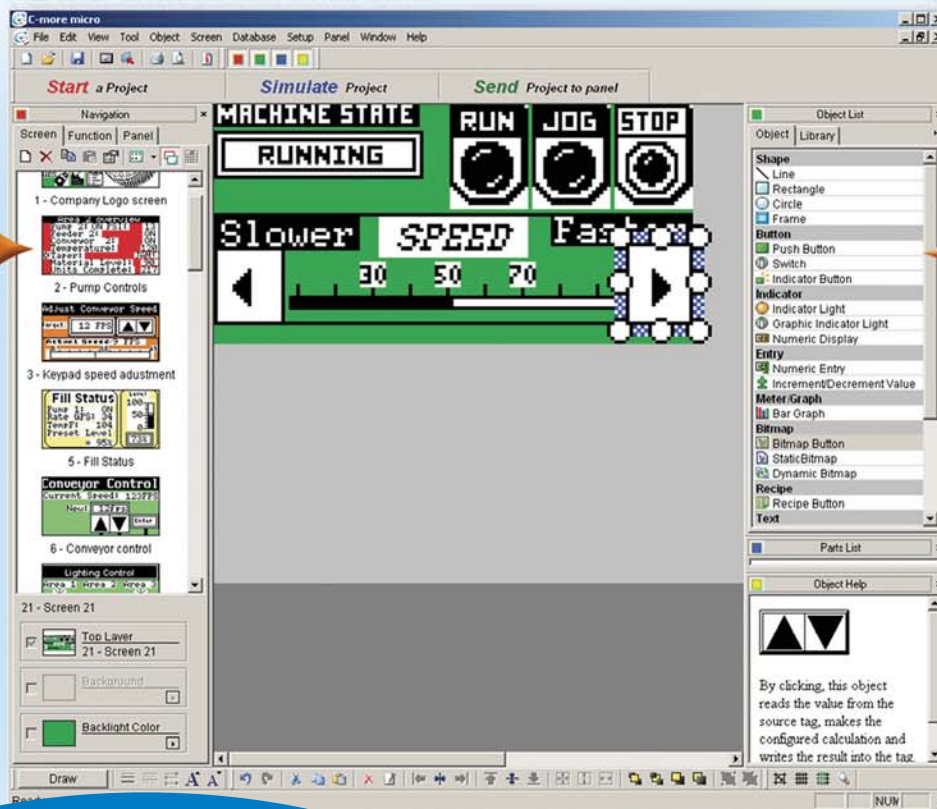
Built-in project simulator

- **Runs your project on your PC**
- **Test all of your screens before downloading**
- **Time savings pays for the panel!**

Built-in user object/screen libraries

Save time by re-using your custom objects and screens.

C-more Micro Programming Software



Thumbnail project preview pane
Helps keep track of multi-screen projects.

Scrolling object selection window
Lets you find the object you want fast. Just drag and drop it on the screen.

Download the Software!

C-more Micro-Graphic Programming Software can be downloaded at no charge from the *AutomationDirect* web site, or a CD version may be purchased by ordering p/n EA-MG-PGMSW. The software requires a USB port on your PC to connect to the **C-more** Micro-Graphic panel. Help files are included in the software. *This software can only be used to program the C-more Micro-Graphic panels, not the C-more 6" through 15" touch panels.*

Scrolling help window
Gives you helpful information on each object

See page B10-50 for software specs and requirements.

Learn more! Go to:

www.C-moreMicro.com

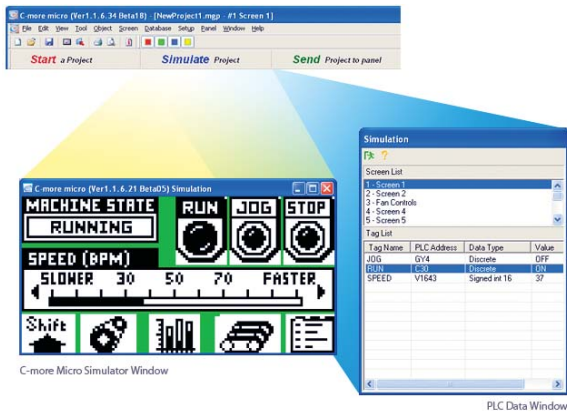
for detailed specifications, a virtual tour of the product, programming examples, newest communication drivers...

C-more Micro Productivity Tools

Built-in Project Simulator

The simulator is a real productivity booster that saves hours of trial-and-error programming and testing, with no need for a panel or PLC.

The simulator pops up on your PC screen, along with the simulated PLC Data Window. Use your mouse to activate objects on the simulated project screens while monitoring the simulated PLC values in the data window. Another option is to adjust simulated PLC values directly in the data window, and see how your C-more Micro screens will react in the simulator window.



Build and Save Custom Objects

Store your objects in the library for fast and easy re-use.

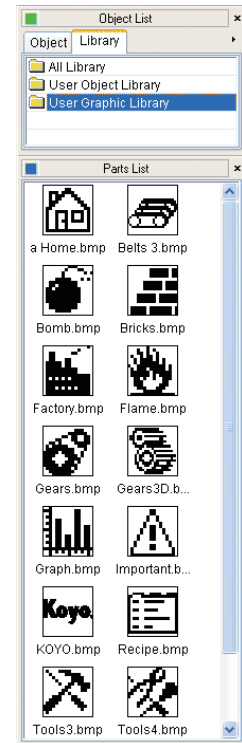
Once you've built a custom object, just right-click on it and select "Object -> Library"

You're then prompted to give your object a name, and you can choose whether to save the PLC tags with the object.

Drag and drop objects from the library onto the workspace

It's easy to re-use an object. Just drag it from the library and drop it on the desired screen. Then double click it if you want to edit the tags or other options.

Download more objects and graphics from our online library at www.c-moremicro.com



Lots of memory lets you get creative

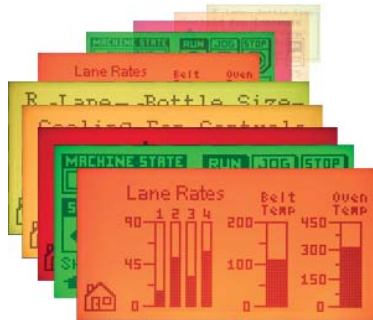
Screens

While many text panels are limited to 256 or fewer messages, C-more Micro allows up to 999 screens for every project. Create all the screens you need to control your machine or process.

Memory

Ample user memory allows tons of objects and graphics on your screens.

- Pictures and icons convey information faster than text
- Use bar graphs and indicator graphics to enhance comprehension



Note: Keep in mind that depending on the complexity of your screens, the limiting factor could be the 999 addressable screens or the panel's memory.

It's easy to track the size of your project:

When you download a project to a C-more Micro panel, the download dialog box shows you the current project size.

- If your project is large you may want to download only the Runtime File and the PLC Driver File, but not the entire Project File.
- If you download the Project File, you will be able to upload the entire project from the panel at a later date.

Overlapping Objects

Our customers loved overlapping objects on the larger C-more panels, and we knew you would expect the same capabilities with C-more Micro. Here are some examples of overlapping objects:

Several "Text" objects and a "Bar Graph" object overlapped on a "Rectangle" object. "Dynamic Bitmap" object overlapped on an "Indicator Light" object



"Static Bitmap" object overlapped on a "Screen Change Pushbutton" object

Obviously, some items should not be overlapped. Multiple overlapping touchable objects, for example, may yield undesirable results.

The C-more Micro programming software will provide warning messages at the time of download that some overlapping objects may be disabled, or not work as intended.

C-more Micro Productivity Tools

New Alarm Control Setup

We have added a new Alarm Control Setup feature that makes configuring alarms fast and easy. Use a PLC tag to activate up to 16 alarm conditions with the built-in Alarm Control feature. Choose from:

- Beep
- LED Blink
- Change Backlight Color
- Blink Selectable Colors
- Show a Banner Message

Event		Action				
No.	Alarm Notification	Beep	LED Blink	Backlight	Blink	Banner Message
01	[PUMP1TEMP] = 1	ON	F1	Current	Yellow	Pump One Alarm
02	[PUMP2TEMP] = 1	ON	F1			Pump Two Alarm
03	[PUMP3TEMP] = 0	ON	F1			Pump Three Alarm
04	[WASHTANK1_OVR]...	ON				Washtank One Overflow
05	[WASHTANK2_OVR]...	OFF				Washtank Two Overflow
06	[WASHTANK1_LO]...	OFF		Current	Red	Washtank One Low Level
07	[WASHTANK2_LO]...	OFF		Current	Red	Washtank Two Low Level
08	[VALVE1_LOWAIR]...	OFF				Valve One Low Air Pressure Level
09	[VALVE2_LOWAIR]...	OFF				Valve Two Low Air Pressure
10						
11						
12						
13						
14						
15						
16						

Use the built-in alarm feature above or create a simple Alarm Screen (right) in conjunction with the message database to display HUNDREDS of different alarm messages.

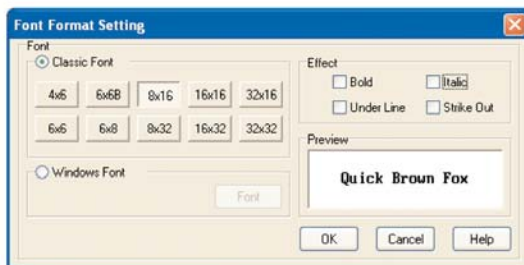
Look-up Text Object



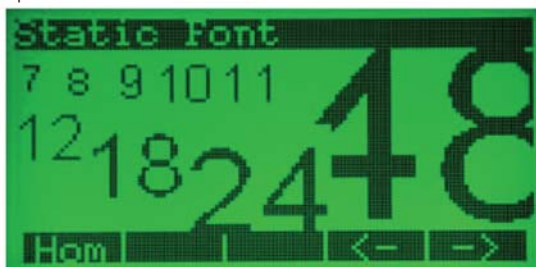
Use any font on your PC

C-more Micro offers 10 built-in fixed-width "Classic" fonts and allows the use of any Windows fonts present on the programming computer.

- Fixed-width fonts allow maximum lines and characters
- Windows fonts can be scaled to many sizes

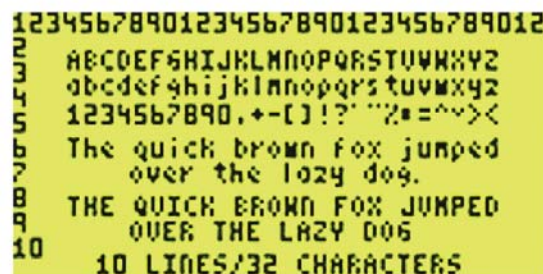


Windows fonts can be sized with their familiar "point" values.



For 3-inch units, the "4x6" fixed font allows a maximum of 32 characters per line and 10 lines for static text.

The 6-inch units support up to 53 lines with 60 characters per line in portrait mode, or 40 lines with 80 characters per line in landscape mode.



3-inch C-more Micro-Graphic Panels

3-inch C-more Micro with touch: EA1-S3ML and EA1-S3MLW



The choice is simple

Four 3-inch models are available, touch and non-touch, with either standard or high-contrast backgrounds, that offer the same base features. The touch units expand application possibilities for very little more.

5 function keys and indicators

You can configure the five function keys to change meaning on every screen. The function key labels are simple to customize to your application. Use the programmable LEDs for alarms or status indication.



8 key bezel:

EA-MG-BZ1

20 key bezel:

EA-MG-BZ2

Optional keypads

Need a hardware keypad for your Micro-Graphic panels? No problem! Just mount and go - no programming, no external power needed!

- 20-key bezel is great for applications requiring extensive numeric entry
- 8-key bezel works well for simple setpoint adjustment and data entry

No extra power supply needed when connecting to many of our PLCs

Most AutomationDirect PLCs have a 6-pin, modular RJ12 communication port. The C-more Micro-Graphic panel can attach directly to this port for communications and power. In this configuration, no external power is needed, saving you time and money.



3-inch C-more Micro: EA1-S3ML-N and EA1-S3MLW-N



Optional power adapters for other configurations

If you are connecting to another brand of PLC, or to a non-RJ12 port on an AutomationDirect PLC, you will need one of the optional snap-on 12-24 VDC power supply units. Two models are available:



EA-MG-SP1:
12-24 VDC power supply with 15-pin D-sub serial port

- 12-24 VDC power adapter with 15-pin D-sub RS-232/RS-422/485 serial port used to connect to a PLC, which allows the panel's built-in port to be free for project development (EA-MG-SP1)
- 12-24 VDC power adapter only (EA-MG-P1)

Available PLC drivers

C-More Micro-Graphic panels have the following drivers available for connection to *Direct*LOGIC and many other PLCs:

- *Direct*LOGIC K-sequence, *Direct*LOGIC *Direct*NET, *Direct*LOGIC Modbus (Koyo Addressing)
- Modbus RTU
- Entity Modbus RTU
- Allen-Bradley DF1 Full Duplex
- Allen-Bradley DF1 Half Duplex
- Allen-Bradley PLC5 DF1
- Allen-Bradley DH485
- Omron Host Link (C200 Adapter, C500),
- Omron FINS serial (CJ1, CS1),
- GE SNPX (90/30, 90/70, VersaMax Micro and Micro 90)
- Mitsubishi Melsec FX
- Siemens PPI



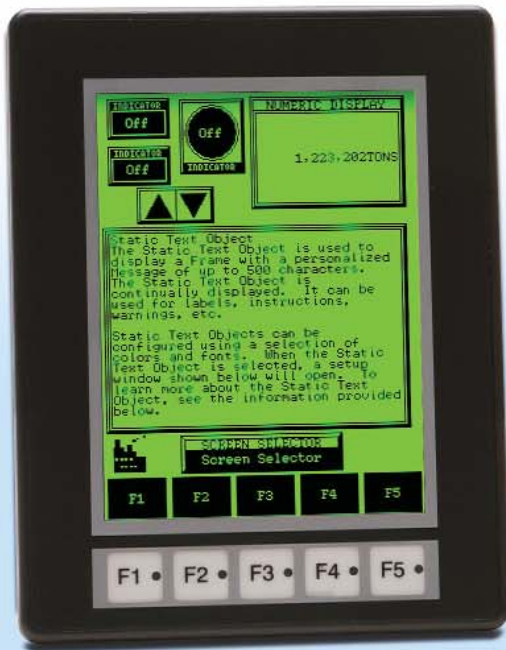
UL, cUL, CE,
NEMA 4,
4X indoor

6-inch C-more Micro-Graphic Panels

The choice is simple

Two 6-inch models are available (standard or high-contrast background), offering the same base features. Both units have touch screens and display STN monochrome graphics, however the configurable screen backgrounds let you use color to convey meaning. The standard unit supports green, lime, yellow, amber

and red background colors. The high contrast unit has background colors that include white, pink1, pink2, pink3 and red. The back-light colors can be controlled by the operator or the PLC, based on the selected configuration.



6-inch C-more micro:
EA1-S6ML Touch Screen

Both units support portrait and landscape mounting



6-inch C-more micro:
EA1-S6MLW Touch Screen with High-contrast White

5 function keys and indicators

You can configure the five function keys to change meaning on every screen. The function key labels are simple to customize to your application. Use the programmable LEDs for alarms or status indication.



Optional keypads

Need a hardware keypad for your Micro-Graphic panels? No problem! Just mount and go - no programming, no external power needed!

- For Portrait (vertical) mounted panels; 21-button keypad bezel with numeric keypad
- For Landscape (horizontal) mounted panels; 20-button keypad bezel with numeric keypad



Portrait keypad bezel:
EA-MG6-BZ2P

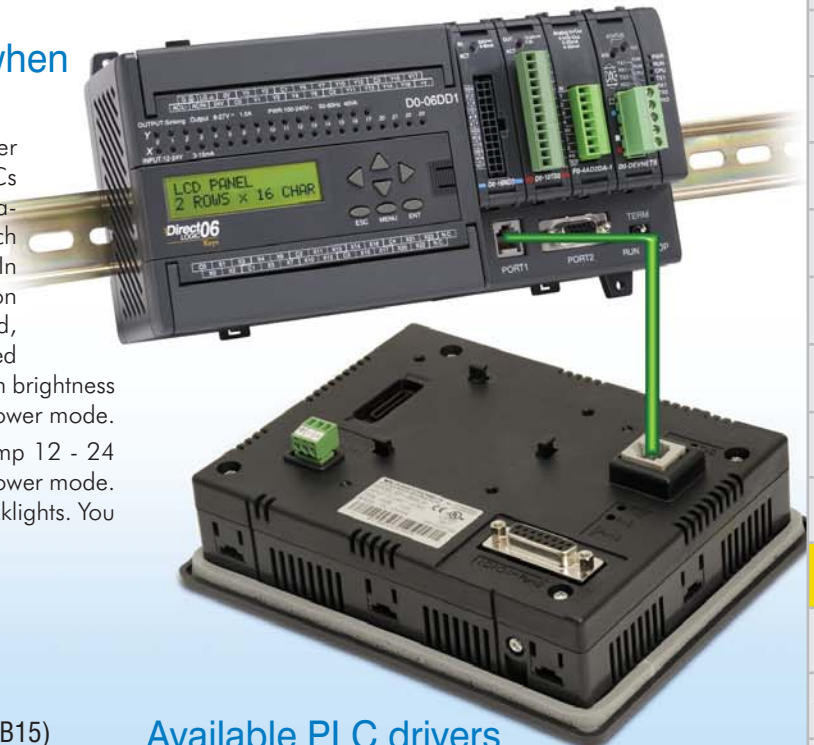
Landscape keypad bezel:
EA-MG6-BZ2

UL, cUL, CE,
NEMA 4,
4X indoor



No extra power supply needed when connecting to many of our PLCs

The 6-inch C-more Micro panels have two power modes, Low and High. Most AutomationDirect PLCs have a 6-pin, modular RJ12 (phone jack) communication port. The **C-more** Micro-Graphic panel can attach directly to this port for communications and power. In this configuration, the 6-inch C-more Micro will function in LOW power mode. No external power is needed, saving you time and money. When the panel is powered through Port 1 from a connected PLC or PC, the screen brightness is diminished because the panel is running in LOW power mode. When external power is supplied by a minimum 1 Amp 12 - 24 VDC power source, the panel will function in HIGH power mode. The panel will then output full power to the display backlights. You can choose which mode fits your application needs.

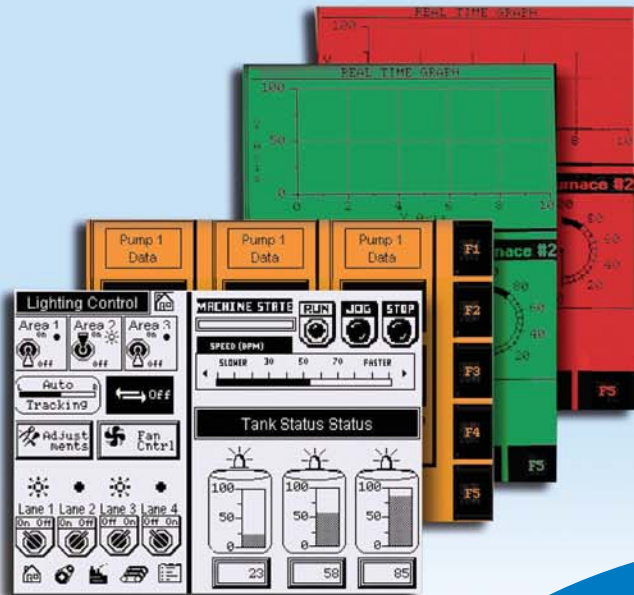


- Display Resolution** 320 x 240
- Serial Ports** 2 serial (RJ12 and DSUB15)
- User Project Memory** 1,792KB
- Portrait Mode** YES

Available PLC drivers

C-More Micro-Graphic panels have the following drivers available for connection to *DirectLOGIC* and many other PLCs:

- **DirectLOGIC K-sequence, DirectLOGIC DirectNET, DirectLOGIC Modbus (Koyo Addressing)**
- **Modbus RTU**
- **Entivity Modbus RTU**
- **Allen-Bradley DF1 Full Duplex**
- **Allen-Bradley DF1 Half Duplex**
- **Allen-Bradley PLC5 DF1**
- **Allen-Bradley DH485**
- **Omron Host Link (C200 Adapter, C500),**
- **Omron FINS serial (CJ1, CS1),**
- **GE SNPX (90/30, 90/70, VersaMax Micro and Micro 90)**
- **Mitsubishi Melsec FX**
- **Siemens PPI**



Download the Software!

C-more Micro-Graphic Programming Software can be downloaded at no charge from the *AutomationDirect* web site, or a CD version may be purchased by ordering p/n EA-MG-PGMSW. The software requires a USB port on your PC to connect to the C-more Micro-Graphic panel. Help files are included in the software. *This software can only be used to program the C-more Micro-Graphic panels, not the C-more 6" through 15" touch panels.*

Learn more! Go to:

www.C-moreMicro.com

for detailed specifications, a virtual tour of the product, programming examples, newest communication drivers...

PLC Overview

DL05/06 PLC

DL105 PLC

DL205 PLC

DL305 PLC

DL405 PLC

Field I/O

Software

C-more HMIs

Other HMI

AC Drives

Motors

Steppers/Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Current Sensors

Pushbuttons/Lights

Process

Relays/Timers

Comm.

TB's & Wiring

Power

Circuit Protection

Enclosures

Appendix

Part Index