#### VICPAS 1-800-633-0405 C-more Micro 3-inch EA1 STN Touch Panel

Model EA1-S3ML C-more 3-inch Micro touch panel has a 3.1-inch STN LCD monochrome display and five selectable LED-driven backlight colors: Green, Red, Amber, Yellow and Lime. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. The panel can display up to 10 lines by 32 characters of static text and up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics. It is rated UL for use on a flat surface of Type 1, 4X enclosure (for indoor use only). This Micro panel can receive power from the serial communications port of most AutomationDirect PLCs.

# Part No. EA1-S3ML



\$272.00 

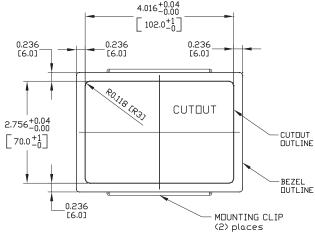
### Features

- Touch screen display
- Free downloadable programming software
- 128 x 64 pixel display with up to 10 lines by 32 characters of text and graphics
- Up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 5-Color LED backlight for longer lifetime; Green, Red, Amber, Yellow and Lime
- 2 optional snap-on keypad bezels
- 768 KB memory
- Panel is powered from PLC comm port when using select AutomationDirect PLCs.Use optional DC power adapter and serial port modules if needed for other controllers (RS-232/422/485)
- Built in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase



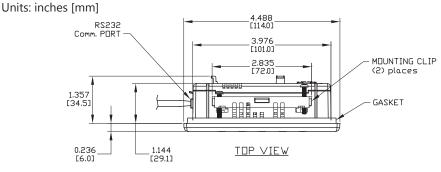
NOTE: Don't forget the optional keypad bezels, DC power adapter and serial port with DC power adapter shown in the Accessories.

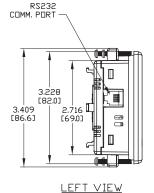
### Panel Cutout



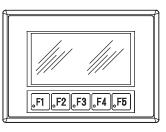
| Function             | Available |
|----------------------|-----------|
| Ethernet             | No        |
| USB Programming Port | No        |
| Serial RJ12 Port     | Yes       |

# Dimensions



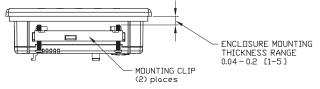


C-more Micro-Graphic Panel



FRONT VIEW

### Panel Thickness



NOTE: The C-more 3-inch Micro cutout dimensions are not equivalent to previous AutomationDirect text panels. The C-more Micro panels will not fit in cutouts for DV-1000, EZText or Optimate panels.

# 1-800-633-0405 VICPAS *C-more* Micro 3-inch EA1 STN Touch Panel

Model <u>EA1-S3MLW</u> *C-more* 3-inch Micro touch panel has a 3.1-inch STN LCD monochrome display and five selectable LED-driven backlight colors: White, Pink1, Pink2, Pink3 and Red. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. The panel can display up to 10 lines by 32 characters of static text and up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics. It is rated UL for use on a flat surface of Type 1, 4X enclosure (for indoor use only). This Micro panel can receive power from the serial communications port of most AutomationDirect PLCs.

### Part No. EA1-S3MLW



\$272.00

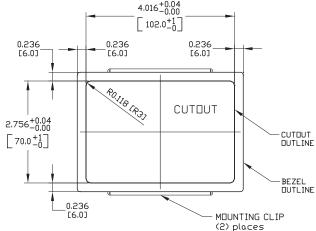
### Features

- Touch screen display
- Free downloadable programming software
- 128 x 64 pixel display with up to 10 lines by 32 characters of text and graphics
- Up to 10 lines by 21 characters of dynamic text with embedded variables and phrases mixed with graphics
- 5 programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 5-Color LED backlight for longer lifetime; White, Pink1, Pink2, Pink3 and Red
- 2 optional snap-on keypad bezels
- 768 KB memory
- Panel is powered from PLC comm port when using select AutomationDirect PLCs.Use optional DC power adapter and serial port modules if needed for other controllers (RS-232/422/485)
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase



NOTE: Don't forget the optional keypad bezels, DC power adapter and serial port with DC power adapter shown in the Accessories.

### Panel Cutout



| Function             | Available |
|----------------------|-----------|
| Ethernet             | No        |
| USB Programming Port | No        |
| Serial RJ12 Port     | Yes       |

### Dimensions

0.236 [6.0]

Π

RS232

3.228

[82.0]

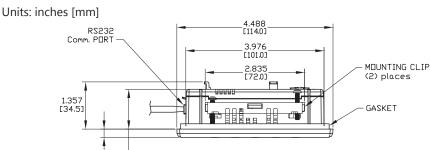
3.409

[86.6]

2.716 [69.0]

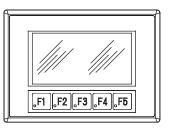
LEFT VIEW

COMM. PORT



<u>C-more Micro-Graphic Panel</u>

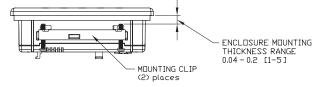
TOP VIEW

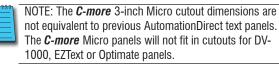


<u>Front view</u>

### **Panel Thickness**

1.144 [29.1]





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For the latest prices, please check AutomationDirect.com.

# 1-800-633-0405 **C-more Micro 3-inch EA1 Specifications**

| Model                                               | 3-inch STN Micro Panel                                                                                                                                                                                                                                                                                                                                                                                         | 3-inch STN Micro Panel                                                                            |  |  |  |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--|--|--|
| Specification                                       | Touch Screen                                                                                                                                                                                                                                                                                                                                                                                                   | Non-Touch Screen                                                                                  |  |  |  |
| Part Number                                         | EA1-S3ML, EA1-S3MLW                                                                                                                                                                                                                                                                                                                                                                                            | EA1-S3ML-N, EA1-S3MLW-N                                                                           |  |  |  |
| Description                                         | 128 x 64 pixel LCD display, five user defined keypad function buttons, and five user defined LED's                                                                                                                                                                                                                                                                                                             |                                                                                                   |  |  |  |
| Display                                             |                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                   |  |  |  |
| • Туре                                              | 3.1-inch STN monochrome LCD, graphical characters                                                                                                                                                                                                                                                                                                                                                              |                                                                                                   |  |  |  |
| Resolution                                          | 128 (W) x 64 (H) pixel                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                   |  |  |  |
| • Color                                             | 2 colors (nor                                                                                                                                                                                                                                                                                                                                                                                                  | mal / inverse)                                                                                    |  |  |  |
| <ul> <li>Viewing Area Size</li> </ul>               | 2.789" (W) x 1.385" (H                                                                                                                                                                                                                                                                                                                                                                                         | ) [70.8 mm x 35.2 mm]                                                                             |  |  |  |
| Active Area Size                                    | 2.670" (W) x 1.259" (H                                                                                                                                                                                                                                                                                                                                                                                         | ) [67.8 mm x 32.0 mm]                                                                             |  |  |  |
| • Contrast                                          | Adjusted from the panel's bui                                                                                                                                                                                                                                                                                                                                                                                  | It-in configuration setup menu                                                                    |  |  |  |
| • Viewing Angle                                     | 3, 9 o'clock axis -> 45 degrees<br>6 o'clock axis -> 45 degrees<br>12 o'clock axis -> 30 degrees                                                                                                                                                                                                                                                                                                               |                                                                                                   |  |  |  |
| Backlight                                           |                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                   |  |  |  |
| • Туре                                              | LE                                                                                                                                                                                                                                                                                                                                                                                                             | ED                                                                                                |  |  |  |
| • Color                                             | 5 user defined colors: EA1-S3ML, EA1-S3ML-N - Red, Green, Amber, Lime, and Yellow<br>EA1-S3MLW, EA1-S3MLW-N - White, Pink1, Pink2, Pink3 and Red                                                                                                                                                                                                                                                               |                                                                                                   |  |  |  |
| <ul> <li>User Replaceable</li> </ul>                | Ν                                                                                                                                                                                                                                                                                                                                                                                                              | lo                                                                                                |  |  |  |
| Touch Screen                                        |                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                   |  |  |  |
| • Туре                                              | Analog touch panel, single touch*                                                                                                                                                                                                                                                                                                                                                                              | N/A                                                                                               |  |  |  |
| <ul> <li>Operation</li> </ul>                       | 51 gram force [0.5 N] maximum                                                                                                                                                                                                                                                                                                                                                                                  | N/A                                                                                               |  |  |  |
| • Life                                              | Minimum of 1,000,000 cycles                                                                                                                                                                                                                                                                                                                                                                                    | N/A                                                                                               |  |  |  |
| Features                                            |                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                   |  |  |  |
| User Memory                                         | 768                                                                                                                                                                                                                                                                                                                                                                                                            | КВ                                                                                                |  |  |  |
| Number of Screens                                   | Up to 999 – limited by project memory usage                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                   |  |  |  |
| • Beep (Internal)                                   | Yes                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                   |  |  |  |
| <ul> <li>Keypad Function<br/>Buttons</li> </ul>     | Five user defined function key buttons with the ability to customize the label.<br>Minimum of 500,000 cycles                                                                                                                                                                                                                                                                                                   |                                                                                                   |  |  |  |
| <ul> <li>Keypad Function<br/>Button LEDs</li> </ul> | Each function key button includes a re                                                                                                                                                                                                                                                                                                                                                                         | ed LED that can be user programmed.                                                               |  |  |  |
| Serial Communications                               |                                                                                                                                                                                                                                                                                                                                                                                                                | nunications port (RS-232).<br>hen using the optional EA-MG-SP1 Serial Port with DC Power<br>pter. |  |  |  |
| • Expansion Connection                              | Yes – used with optional <u>EA-MG-P</u><br>and <u>EA-MG-SP1</u> Serial Port with                                                                                                                                                                                                                                                                                                                               |                                                                                                   |  |  |  |
| Screen Objects                                      |                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                   |  |  |  |
| • Functional Devices                                | Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Ba<br>Graph,<br>Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Scroll Text,<br>Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Realtime Graph, Line Graph<br>Analog Meter |                                                                                                   |  |  |  |
| Static Shapes                                       | Lines, Rectangles,                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                   |  |  |  |
| Displayable Fonts                                   |                                                                                                                                                                                                                                                                                                                                                                                                                | 6, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts                                           |  |  |  |
| , ,                                                 | bond to a single touch. If it is touched at multiple points at the                                                                                                                                                                                                                                                                                                                                             |                                                                                                   |  |  |  |
| C-more 3-inch Micro panel specifications c          | • • • •                                                                                                                                                                                                                                                                                                                                                                                                        | , p                                                                                               |  |  |  |

1-800-633-0405



# **C-more Micro 3-inch EA1 Specifications**

VICPAS

|                                                                   |                                                                                                                                                                                                                                                               | -                                                                        |  |  |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--|--|
| Model Specification                                               | 3-inch STN Micro Panel<br>Touch Screen                                                                                                                                                                                                                        | 3-inch STN Micro Panel<br>Non-Touch Screen                               |  |  |
| Part Number                                                       | EA1-S3ML, EA1-S3MLW                                                                                                                                                                                                                                           | EA1-S3ML-N, EA1-S3MLW-N                                                  |  |  |
| Electrical                                                        |                                                                                                                                                                                                                                                               |                                                                          |  |  |
| • Input Voltage Range                                             | 5.0 VDC (4.75 – 5.25 VDC)                                                                                                                                                                                                                                     |                                                                          |  |  |
| • Input Power                                                     | Supplied through the panel's RJ12 serial communications port connection when used with any AutomationDirect PLC havin RJ12 communication port.                                                                                                                |                                                                          |  |  |
| • Power Consumption                                               | 1.05W (220m/                                                                                                                                                                                                                                                  | A @ 4.75 VDC)                                                            |  |  |
| • Recommended Fuse                                                |                                                                                                                                                                                                                                                               | 50 mA, 250 VAC, ADC p/n AGC-25<br>to a PLC or PC with recommended cable. |  |  |
| • Maximum Inrush<br>Current                                       | 1 A for                                                                                                                                                                                                                                                       | 500 µs                                                                   |  |  |
| <ul> <li>Acceptable External<br/>Power Drop Duration</li> </ul>   | Maximum 1ms                                                                                                                                                                                                                                                   |                                                                          |  |  |
| Environmental*                                                    |                                                                                                                                                                                                                                                               |                                                                          |  |  |
| • Operating Temperature                                           | 0 to 50 °C (32 to 122 °F) Maximum surrounding air temperature rating: 50 °C                                                                                                                                                                                   |                                                                          |  |  |
| • Storage Temperature                                             | –20 to +60 °C (–4 to +140 °F)                                                                                                                                                                                                                                 |                                                                          |  |  |
| • Humidity                                                        | 5–95% RH (non-condensing)                                                                                                                                                                                                                                     |                                                                          |  |  |
| • Environmental Air                                               | For use in Pollution Degree 2 Environment                                                                                                                                                                                                                     |                                                                          |  |  |
| • Vibration                                                       | IEC60068-2-6 (Test Fc), 5-9 Hz: 3.5 mm amplitude, 9-150 Hz: 1.0G, sweeping, at a rate of 1 octave/min. (±10%),<br>10 sweep cycles per axis on each of 3 mutually perpendicular axes                                                                           |                                                                          |  |  |
| • Shock                                                           | IEC60068-2-27 (Test Ea), 15 G peak, 11ms duration, three shocks in each direction per axis,<br>on 3 mutually perpendicular axes (total of 18 shocks)                                                                                                          |                                                                          |  |  |
| • Noise Immunity                                                  | NEMA ICS3-304 ( EN61131-2 )<br>RFI, (145MHz, 440Mhz 10W @ 10cm)<br>Impulse 1000V @ 1µS pulse<br>EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4-5 (Surge)<br>N61000-4-6 (Conducted), EN61000-4-8 (Power frequency magnetic field immunity) |                                                                          |  |  |
| • Enclosure                                                       | For use on a flat surface of Type                                                                                                                                                                                                                             | 1, 4X enclosure (Indoor use only)                                        |  |  |
| • Agency Approvals                                                | CE (EN61131-2), UL508, CUL Canadian C22.2 I                                                                                                                                                                                                                   | No. 142-M95, UL File E157382, CSA File 234884                            |  |  |
| Physical                                                          |                                                                                                                                                                                                                                                               |                                                                          |  |  |
| • Dimensions                                                      | 4.488" (W) x 3.228" (H) x 1.593" (D                                                                                                                                                                                                                           | ) [114.0 mm x 82.0 mm x 40.5 mm]                                         |  |  |
| • Enclosure Mounting<br>Thickness Range                           | 0.04" – 0.2" [1 – 5 mm]                                                                                                                                                                                                                                       |                                                                          |  |  |
| • Mounting Clip Screw<br>Torque Range                             | 21 – 28 oz·in [0.15 – 0.2 N·m]                                                                                                                                                                                                                                |                                                                          |  |  |
| <ul> <li>Depth from bezel rear<br/>with options Module</li> </ul> | 2.295" [                                                                                                                                                                                                                                                      | 58.3 mm]                                                                 |  |  |
| • Weight                                                          | 5.82 oz                                                                                                                                                                                                                                                       | . (165 g)                                                                |  |  |
|                                                                   | hanna a shekara a sh                                                                                                                                                |                                                                          |  |  |



NOTE: The environmental specifications for the panels shown above are also applicable for the *C-more* 3" Micro accessories shown later in this section of the catalog.

| Supported Protocols / Drivers             |
|-------------------------------------------|
| Serial - Panel port1                      |
| AutomationDirect Productivity Series      |
| AutomationDirect CLICK                    |
| AutomationDirect Do-more / BRX*           |
| AutomationDirect K-sequence               |
| AutomationDirect DirectNET                |
| AutomationDirect Modbus                   |
| Modicon Modbus RTU                        |
| Entivity Modbus RTU                       |
| Note: * <u>BX-P-SER2-RJ12</u> is required |



For a list of supported protocols and cabling options refer to the 3-inch *C-more* Micro Protocols and cabling chart starting on pagepage tCMM-12

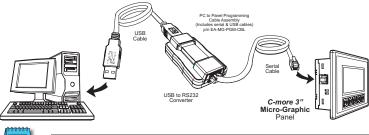
# 1-800-633-0405 For the late C-more Micro 3-inch EA1 Series Programming Connections C-more STN Micro Programming Connection

Using the *C-more* Micro Programming Software for project development, STN *C-more* Micro panels can be connected to a PC (personal computer) by using <u>EA-MG-PGM-CBL</u>, the USB-to-RS-232 cable assembly.

• Connect the USB programming cable (included) from a USB port type A on the PC to the USB type B port on the converter (included). Next connect the serial programming cable from the

converter's RJ12 port to the panel's RJ12 serial port. The panel receives power from the USB port of the PC that it is connected to through the USB to RS-232 converter assembly.

#### **USB** Connectivity



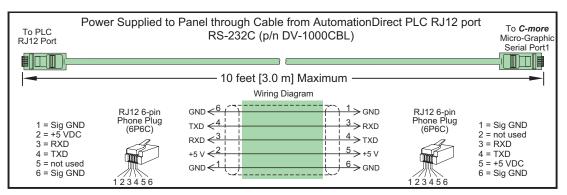
USB to RS-232 Programming Cable Assembly



Part No. <u>EA-MG-PGM-CBL</u> \$50.00

NOTE: <u>EA1-T4CL</u> does NOT use the <u>EA-MG-PGM-CBL</u> assembly. <u>EA1-T4CL</u> panel uses a standard USB A-to-B type cable such as <u>USB-CBL-AB6</u>.

| USB to RS-232 Converter Specifications |                                                                                                              |  |  |  |  |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Part Number                            | EA-MG-PGM-CBL                                                                                                |  |  |  |  |
| Hardware                               |                                                                                                              |  |  |  |  |
| USB Interface                          | USB Specification Rev. 1.1<br>Connector: USB Type B jack to accept USB Type B cable plug                     |  |  |  |  |
| Serial Interface                       | RS-232 (EIA-232-E)<br>Connector: RJ12 phone jack 6p to accept RJ12 cable plug                                |  |  |  |  |
| Baud Rate                              | 115.2 kbps Maximum                                                                                           |  |  |  |  |
| Input Voltage                          | 5 VDC (Supplied thru serial interface cable.)                                                                |  |  |  |  |
| Power Consumption                      | 50 mA (Does not include power to panel and/or bezel.)                                                        |  |  |  |  |
| Accessory Cables (included)            |                                                                                                              |  |  |  |  |
| USB Cable                              | USB Type A plug to PC on one end, USB Type B plug to converter on other end, 0.30 m [1 foot] length (* Note) |  |  |  |  |
| Serial Cable                           | RJ12 phone plug connectors on both ends, 2.0 m [6.56 feet] length (* Note)                                   |  |  |  |  |
| Physical                               |                                                                                                              |  |  |  |  |
| Dimensions                             | 2.559" (W) x 1.417" (H) x 0.886" (D)<br>[65.0 mm x 36.0 mm x 22.5 mm]                                        |  |  |  |  |
| Weight                                 | 1.06 oz. [30 g]                                                                                              |  |  |  |  |
| Environmental                          | See Micro panel specifications at the beginning of this catalog section.                                     |  |  |  |  |
| * Note: Maximum cable length for eit   | Note: Maximum cable length for either the USB or serial cable should not exceed 2.0 m [6.56 feet] in length. |  |  |  |  |

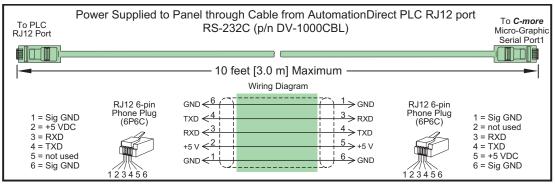


# 1-800-633-0405 *C-more* Micro 3-inch EA1 Power Connection Wiring

### Providing power to the touch panel

- The *C-more* 3-inch Micro panel is powered during programming from the PC through the USB to RS-232 Programming Cable Assembly, <u>EA-MG-PGM-CBL</u>.
- During operation, the *C-more* Micro panel can be powered from most AutomationDirect PLC's RJ12 serial communications port by using the <u>DV-1000CBL</u> communications cable.

#### 3-inch Panel powered from AutomationDirect PLC via communications cable



# 1-800-633-0405 VICPAS *C-more* Micro 3-inch EA1 PLC Connections

### **Cabling requirements**

The following cables can be used when connecting the *C-more* 3-inch Micro panel's built-in RJ12 serial port (Port1) with the Productivity Series, Do-more/BRX\*, CLICK, DL05, DL06, DL105, DL205, D3-350 and DL405 CPUs.

- <u>DV-1000CBL</u> connects to Productivity Series, Do-more/BRX\* CLICK, DL05, DL06, DL105, DL205, D3-350 and D4-450 phone jack.
- <u>D4-1000CBL</u> connects to all DL405 CPU 15-pin ports.

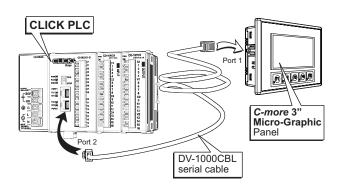
A maximum cable length of 10 feet between the *C-more* Micro panel and the PLC is recommended when powering the panel from the PLC.

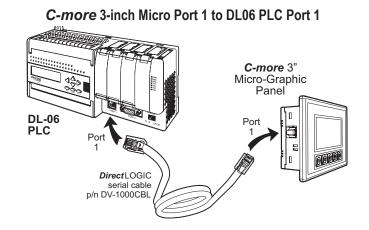
See the Communication Protocols & Cabling Charts in this catalog section for details on the selection of various controllers, protocols, and connectivity.

## **Drivers for your Controller**

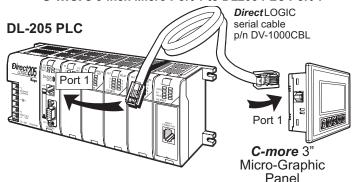
- AutomationDirect Productivity Series
- AutomationDirect Do-more/BRX\*
- AutomationDirect CLICK (Modbus)
- *Direct*LOGIC K-sequence, *Direct*LOGIC *Direct*NET, *Direct*LOGIC Modbus (Koyo Addressing)
- Modbus RTU
- Allen Bradley DF1 Full Duplex, Allen Bradley DF1 Half Duplex, Allen Bradley PLC5 DF1, AB DH485
- Omron Host Link (C200 Adapter, C500) Omron FINS serial (CJ1, CS1)
- GE SNPX (90/30, 90/70, Micro 90, VersaMax Micro)
- Mitsubishi Melsec FX
- Siemens PPI
- Entivity Modbus RTU
- AutomationDirect GS Drives
- AutomationDirect SOLO Temperature Controllers
- Mitsubishi Q/QnA
  - \* BX-P-SER2-RJ12 is required

#### C-more 3-inch Micro Port 1 to CLICK PLC Port 2









# 1-800-633-0405 For the latest prices, please check AutomationDirect.com. **C-more** Micro 3-inch EA1 Communication Protocols & Cabling Chart

|                            |              |                                                        | patibility & Connection Char                                                          |                                                           |
|----------------------------|--------------|--------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Ú.                         | PLC          |                                                        | C-more 3-inch                                                                         |                                                           |
| Family                     | CPU          | Port & Type                                            | Panel to PLC Cabling Components Required<br>PLC Port<br>Powered with 5 VDC from the o | Powered                                                   |
|                            |              |                                                        | Using panel's RJ12 port 1                                                             |                                                           |
|                            |              |                                                        | Protocol(s)<br>Supported                                                              | Components &<br>Network Type                              |
|                            | all versions | Port 1<br>RJ12 - 6 pin                                 |                                                                                       | DV-1000CBL                                                |
| CLICK                      |              | Port 2<br>RJ12 - 6 pin                                 | AutomationDirect Modbus (CLICK)                                                       | RS-232                                                    |
|                            | Analog CPU's | Port 3<br>Terminal block - 3-pin                       |                                                                                       | N/A                                                       |
|                            |              | RS-232<br>RJ12 - 6 pin                                 | AutomationDirect<br>Productivity Serial                                               | DV-1000CBL<br>RS-232                                      |
| Productivity Series        | all versions | RS-485 Port<br>Term block 3-pin                        |                                                                                       | N/A                                                       |
| Do-more                    | all versions | Port 2<br>RJ12 - 6 pin                                 | AutomationDirect<br>Do-more Serial                                                    | DV-1000CBL<br>RS-232                                      |
| BRX                        | all versions | RS-232<br>POM module<br>BX-P-SER2-RJ12                 |                                                                                       | DV-1000CBL<br>RS-232                                      |
|                            |              | RS-485 Port<br>Term block 3-pin                        | Do-more Serial                                                                        | N/A                                                       |
| DirectLOGIC<br>DL05        | ollyestime   | Port 1<br>RJ12 - 6 pin                                 | K-sequence,                                                                           | DV-1000CBL                                                |
| (see DO-DCM under<br>DL06) | all versions | Port 2<br>RJ12 - 6 pin                                 | <i>Direct</i> NET,<br>Modbus RTU                                                      | RS-232                                                    |
| DirectLOGIC                | all versions | Port 1<br>RJ12 - 6 pin<br>Port 2<br>DB15HD<br>(female) | K-sequence,<br><i>Direct</i> NET,<br>Modbus RTU                                       | DV-1000CBL<br>RS-232<br>DV-1000CBL<br>+ FA-15HD<br>RS-232 |
| DL06                       | D0-DCM       | Port 1<br>RJ12 - 6 pin<br>Port 2<br>DB15HD<br>(female) | K-sequence,<br><i>Direct</i> NET,<br>Modbus RTU                                       | DV-1000CBL<br>RS-232<br>DV-1000CBL<br>+ FA-15HD<br>RS-232 |
| DirectLOGIC<br>DL105       | all versions | Port 1<br>RJ12 - 6 pin                                 | K-sequence                                                                            | DV-1000CBL<br>RS-232                                      |

Note: See the C-more Micro Hardware User Manual, Chapter 6: PLC Communications, for wiring diagrams that the user can use to construct their own cables Available for download at www.automationdirect.com. PLC Compatibility & Connection Chart continued on next page.

# 1-800-633-0405 For the latest prices, please check AutomationDirect.com. **C-more** Micro 3-inch EA1 Communication Protocols & Cabling Chart (cont'd)

|                      | PLC                   |                                     | C-more 3-inch                                                                           | Micro Panel.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|----------------------|-----------------------|-------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Family               | CPU                   | Port & Type                         | Panel to PLC Cabling Components Required<br>PLC Port I<br>Powered with 5 VDC from the c | Powered                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                      |                       |                                     |                                                                                         | Using panel's RJ12 port 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                      |                       |                                     | Protocol(s)<br>Supported                                                                | Components &<br>Network Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|                      | D2-230                | Port 1<br>RJ12 - 6 pin              | K-sequence                                                                              | DV-1000CBL<br>RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|                      | D2-240                | Port 1<br>RJ12 - 6 pin              | K-sequence                                                                              | DV-1000CBL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                      | DZ-240                | Port 2<br>RJ12 - 6 pin              | K-sequence,<br><i>Direct</i> NET                                                        | RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| DirectLOGIC<br>DL205 | D2-250-1              | Port 1<br>RJ12 - 6 pin              | K-sequence,                                                                             | DV-1000CBL<br>RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|                      | D2-230-1              | Port 2<br>DB15HD<br>(female)        | <b>Direct</b> NET,<br>Modbus RTU                                                        | DV-1000CBL<br>+ FA-15HD<br>RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|                      | D2-260                | Port 1<br>RJ12 - 6 pin              | K-sequence,                                                                             | DV-1000CBL<br>RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|                      |                       | Port 2<br>DB15HD<br>(female)        | <i>Direct</i> NET,<br>Modbus RTU                                                        | DV-1000CBL<br>+ FA-15HD<br>RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|                      | D2-DCM                | Port 1<br>DB 25 pin<br>(female)     | K-sequence,<br><i>Direct</i> NET,<br>Modbus RTU                                         | See Note<br>RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
|                      | WINPLC                | Port 1<br>RJ12 - 6 pin              | Modbus RTU                                                                              | DV-1000CBL<br>RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|                      | D3-330 or             | D3-232-DCU<br>DB 25 pin<br>(female) | N/A                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|                      | D3-340                | D3-422-DCU<br>DB 25 pin<br>(female) | N/A                                                                                     | N Contraction of the second seco |  |
|                      | D3-340                | Port 1<br>RJ11 - 4 pin              | N/A                                                                                     | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| DirectLOGIC<br>DL305 | 00-040                | Port 2<br>RJ11 - 4 pin              | N/A                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|                      |                       | Port 1<br>RJ12 - 6 pin              | K-sequence,<br><i>Direct</i> NET                                                        | DV-1000CBL<br>RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|                      | D3-350                | Port 2<br>DB 25 pin<br>(female)     | N/A                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|                      | D3-DCM<br>D3-350 only | Port 1<br>DB 25 pin<br>(female)     | K-sequence,<br><i>Direct</i> NET,<br>Modbus RTU                                         | See Note<br>RS-232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |

Note: See the *C-more* Micro Hardware User Manual, Chapter 6: PLC Communications, for wiring diagrams that the user can use to construct their own cables. Available for download at www.automationdirect.com. PLC Compatibility & Connection Chart continued on next page.

# 1-800-633-0405 For the latest prices, please check AutomationDirect.com. **C-more** Micro 3-inch EA1 Communication Protocols & Cabling Chart (cont'd)

|                                | PLC                             |                                                           | C-more 3-inch Micro Panel.                           |                                                                                                  |
|--------------------------------|---------------------------------|-----------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Family                         | CPU                             | CPU Port & Type                                           | PLC Por                                              | ed for Specific Port and Protocol being used.<br><b>Powered</b><br>e connected PLC's comm. port. |
|                                |                                 |                                                           | Using panel<br>Protocol(s)<br>Supported              | 's RJ12 port 1<br>Components &<br>Network Type                                                   |
| D4-430                         | Port 0<br>DB 15 pin<br>(female) | K-sequence                                                | D4-1000CBL<br>or DV-1000CBL<br>& FA-CABKIT<br>RS-232 |                                                                                                  |
|                                |                                 | Port 1<br>DB 25 pin<br>(female)                           | N/A                                                  |                                                                                                  |
| D4-440<br>DirectLOGIC<br>DL405 | D4-440                          | Port 0<br>DB 15 pin<br>(female)                           | K-sequence                                           | D4-1000CBL<br>or DV-1000CBL<br>& FA-CABKIT<br>RS-232                                             |
|                                |                                 | Port 1<br>DB 25 pin<br>(female)                           | N/A                                                  |                                                                                                  |
|                                | Port 0<br>DB 15 pin<br>(female) | K-sequence                                                | D4-1000CBL<br>or DV-1000CBL<br>& FA-CABKIT<br>RS-232 |                                                                                                  |
|                                | D4-450 /<br>D4-454              | Port 1<br>DB 25 pin<br>(female)                           | N/A                                                  |                                                                                                  |
|                                |                                 | Port 2<br>RJ12 - 6 pin<br>Port 3<br>DB 25 pin<br>(female) | K-sequence,<br><i>Direct</i> NET                     | DV-1000CBL<br>RS-232                                                                             |
| C                              | D4-DCM                          | Port 1<br>DB 25 pin<br>(female)                           | K-sequence,<br><i>Direct</i> NET,<br>Modbus RTU      | See Note<br>RS-232                                                                               |
| SOLO                           | N/A                             | Data +/-<br>terminals                                     | ١                                                    | I/A                                                                                              |
| GS Drives                      | N/A                             | RS-485 Interface                                          | Ν                                                    | I/A                                                                                              |

Note: See the *C-more* Micro Hardware User Manual, Chapter 6: PLC Communications, for wiring diagrams that the user can use to construct their own cables. Available for download at www.automationdirect.com. PLC Compatibility & Connection Chart continued on next page.

# 1-800-633-0405 For the latest prices, please check AutomationDirect.com. **C-more Micro 3-inch EA1 Communication Protocols & Cabling Chart (cont'd)**

|                               | PLC                                                                          | Controller Com                                   | 0                                                                                                                                                                                             | 2 inch Miere Denel           |
|-------------------------------|------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
|                               | FLG                                                                          |                                                  |                                                                                                                                                                                               | e 3-inch Micro Panel.        |
| Family                        | СРИ                                                                          | Port & Type                                      | Panel to PLC Cabling Components Required for Specific Port and Protocol being use<br>PLC Port Powered<br>Powered with 5 VDC from the connected PLC's comm. port.<br>Using panel's RJ12 port 1 |                              |
|                               |                                                                              |                                                  | Protocol(s)<br>Supported                                                                                                                                                                      | Components &<br>Network Type |
| Allen-Bradley<br>MicroLogix   | 1000, 1100,<br>1200, 1400, 1500                                              | 8-pin<br>mini-din port                           |                                                                                                                                                                                               |                              |
| MICIOLOGIX                    | 1200, 1400, 1300                                                             | RJ45 8-pin<br>phone plug                         |                                                                                                                                                                                               |                              |
| Allen-Bradley                 | 5/03, 5/04,<br>5/05                                                          | 9-pin<br>D-sub port                              |                                                                                                                                                                                               |                              |
| SLC500                        | 5/01, 5/02,<br>5/03                                                          | RJ45 8-pin<br>phone plug                         |                                                                                                                                                                                               |                              |
| Allen-Bradley<br>ControlLogix | all                                                                          | 9-pin<br>D-sub port                              |                                                                                                                                                                                               |                              |
| Allen-Bradley<br>CompactLogix | all                                                                          | 9-pin<br>D-sub port                              |                                                                                                                                                                                               |                              |
| Allen-Bradley<br>FlexLogix    | all                                                                          | 9-pin<br>D-sub port                              |                                                                                                                                                                                               |                              |
| Allen-Bradley                 | all                                                                          | 25-pin<br>D-sub port                             |                                                                                                                                                                                               |                              |
| PLC5                          | aii                                                                          | RJ45 8-pin<br>phone plug                         |                                                                                                                                                                                               |                              |
|                               | 90/30                                                                        | 15-pin<br>D-sub port                             |                                                                                                                                                                                               |                              |
| GE                            | Micro 90,<br>VersaMax<br>Micro                                               | RJ45<br>Port 1<br>15-pin<br>D-sub port<br>Port 2 | N/A                                                                                                                                                                                           | N/A                          |
|                               | Melsec                                                                       | 25-pin<br>D-sub port                             |                                                                                                                                                                                               |                              |
| N#14                          | FX Series                                                                    | 8-pin<br>mini-din port                           |                                                                                                                                                                                               |                              |
| Mitsubishi                    | Q / QnA                                                                      | 9-pin<br>D-sub port                              |                                                                                                                                                                                               |                              |
|                               |                                                                              | 6-pin<br>mini-din port                           |                                                                                                                                                                                               |                              |
|                               | C200 (Adapter),<br>C500                                                      | 25-pin<br>D-sub port                             |                                                                                                                                                                                               |                              |
| Omron                         | CJ1, CS1,<br>CQM1,<br>CPM1,<br>CPM2,<br>C200                                 | 9-pin<br>D-sub port                              |                                                                                                                                                                                               |                              |
| Modicon                       | 984 CPU,<br>Quantum<br>113 CPU,<br>AEG<br>Modicon<br>Micro Series<br>110 CPU | varies                                           |                                                                                                                                                                                               |                              |
| Siemens                       | S7-200<br>CPU                                                                | 9-pin<br>D-sub port<br>0 or 1                    |                                                                                                                                                                                               |                              |

### **VICEPAS** For the latest prices, please check AutomationDirect.com. 1-800-633-0405 **C-more Micro 3-inch EA1 Communication Cables and Cable Kits**

| Cable<br>Description                                                                                                                                                                   | Cable<br>Part Number | Price   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|
| Cables for direct connect to panel's serial Port1<br>(Panel powered from PLC's serial port.)                                                                                           |                      |         |
| AutomationDirect communication cable, 6-pin RJ12 to 6-pin RJ12, 2m/6.6ft cable length. For use with DV-1000 or <b>C-more</b> Micro panels and AutomationDirect PLCs with an RJ12 port. | <u>DV-1000CBL</u>    | \$21.50 |
| AutomationDirect communication cable, 6-pin RJ12 to 15-pin male D-sub, shielded, 2m/6.6ft cable length. For use with DV-1000 or <i>C-more</i> Micro panels and any DL405 CPU.          | <u>D4-1000CBL</u>    | \$26.00 |
| <i>Direct</i> LOGIC DL06 connector, 15-pin D-sub HD15 male to RJ12 female. For use with DL06 CPUs and DL205 D2-250, D2-250-1, D2-260 and D2-262 CPUs.                                  | <u>FA-15HD</u>       | \$20.00 |
| <i>Direct</i> LOGIC universal cable kit, for use with all DirectLOGIC PLCs with RS-232 ports.                                                                                          | FA-CABKIT            | \$68.00 |



**FA-CABKIT** 

# VICPAS For the latest prices, please check AutomationDirect.com.

## 1-800-633-0405 **C-more Micro 3-inch EA1 Panel Accessories**

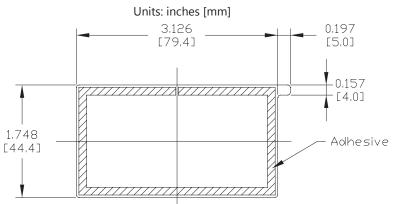
# **Clear Screen Overlay**

Optional clear screen overlay used to protect **C-more** 3-inch Micro displays from minor scratches and wear. Package contains 5 clear screen overlays.

#### Part No. EA-MG-COV-CL



### **Dimensions**



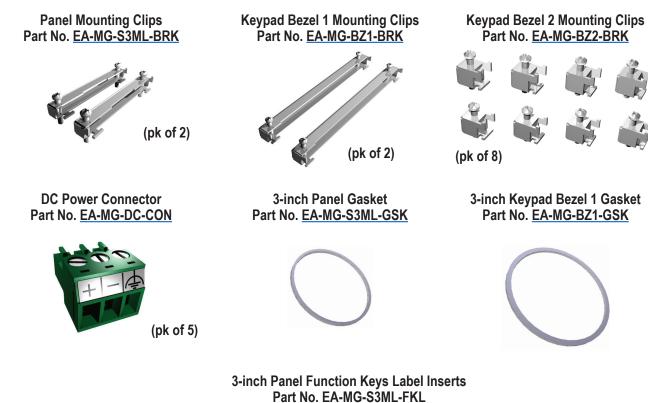
#### For the latest prices, please check AutomationDirect.com.

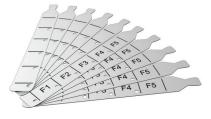
#### VICPAS 1-800-633-0405 **C-more Micro 3-inch EA1 Replacement Parts**

The optional replacement parts can be used to replace damaged, worn or lost *C-more* 3-inch Micro panel components.

### Replacement parts at a glance:

| Part Number           | ber Description                                                                                                                                                                   |         |  |  |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--|--|
| <u>EA-MG-S3ML-BRK</u> | C-more Micro panel mounting brackets, replacement. Package of 2. For use with C-more Micro 3in and EA3-<br>T4CL HMIs.                                                             | \$22.00 |  |  |
| <u>EA-MG-BZ1-BRK</u>  | C-more Micro panel mounting brackets, replacement. Package of 2. For use with C-more Micro bezel EA-MG-<br>BZ1.                                                                   | \$22.00 |  |  |
| EA-MG-BZ2-BRK         | C-more Micro panel mounting brackets, replacement. Package of 8. For use with C-more Micro 4in and 6in panels, all 6in bezels, and 3in bezel EA-MG-BZ2.                           | \$24.00 |  |  |
| EA-MG-DC-CON          | C-more Micro DC 3-terminal power connector, replacement. Package of 5. For use with all C-more Micro 4in,<br>6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1. |         |  |  |
| <u>EA-MG-S3ML-GSK</u> | C-more Micro panel mounting gasket, replacement. For use with C-more Micro EA1 series 3in HMIs.                                                                                   | \$15.50 |  |  |
| EA-MG-BZ1-GSK         | C-more Micro panel mounting gasket, replacement. For use with C-more Micro 3in bezel EA-MG-BZ1.                                                                                   | \$19.50 |  |  |
| EA-MG-S3ML-FKL        | C-more Micro function key label insert, replacement. Package of 10. For use with C-more Micro 3in HMIs. (5) blank labels and (5) landscape F1-F5 label included.                  | \$12.00 |  |  |





(pk of 10 - 5 blank, 5 F1-F5)



#### For the latest prices, please check AutomationDirect.com.

# C-more Micro Programming Software

### **FREE software!**

C-more Micro Programming Software

is a spin-off of its powerful sibling

Touch Panel. It offers very high end

configuration time. Simply drag and

features designed to reduce your

**C-more** Micro Programming Software can be downloaded at no charge or a CD version may be purchased by ordering <u>EA-MG-PGMSW</u>. The software requires a USB port or Ethernet connection\* on your PC to connect to the **C-more** Micro panel. Software Help Files are included in the download. This software programs all the **C-more** Micro panels (does not program the **C-more** 6-inch through 15-inch touch panels).





Note: This software is used to program *C-more* Micro panels only.



C-more

free version

Note: The Ethernet port is built in to <u>EA3-S3ML</u> and <u>EA3-T4CL</u> and <u>EA3-T6CL</u> requires the optional <u>EA-ECOM</u> module for Ethernet.

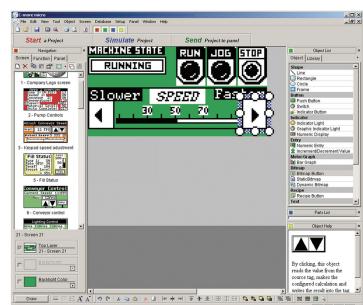
| Part Number | Panel Software / Firmware Version Required |
|-------------|--------------------------------------------|
| EA3-S3ML-RN | 4.30 or later                              |
| EA3-S3ML-R  |                                            |
| EA3-S3ML    | 4.20 or later                              |
| EA3-T4CL    |                                            |
| EA3-T6CL    | 3.6 or later                               |

### Built-in project simulator

- Runs your project on your PC
- Test all of your screens before downloading
- Time savings pays for the panel
- Simulate function keys and keypad bezel

### Built-in user object/ screen libraries

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



#### Scrolling object selection window

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

### **PC requirements**

Following are the minimum system requirements for running *C-more* Micro Programming Software, <u>EA-MG-PGMSW</u>, on a PC:

- Windows® Operating System (See automationdirect.com for specific operating system requirements.)
- 150 MB free hard-disk space
- CD-ROM or DVD drive for installing software from the CD, or internet access to download free programming software
- USB port to use with the correct Programming Cable Assembly for project transfer from the programming software to the panel

### Scrolling help window

Gives you helpful information on each object

drop the objects from the object list (right side of screen) onto the screen construction area. Then configure your PLC tags and click on the objects you wish to use. 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.CmoreMicro.com to download a

### Thumbnail project preview pane

Helps keep track of multi-screen projects.