C-more Micro EA1 Series Selection Guide

Part Number		Description	Price
C-more Micro EA1 Series Panels			
EA1-S3ML		*C-more* Micro EA1 series touch screen HMI, 3in monochrome STN LCD, analog resistive, 128 x 64 pixel, LED backlight, (1) serial port.	$272.00
EA1-S3ML-N	Non-Touch	*C-more* Micro EA1 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, (1) serial port.	Retired
EA1-S3MLW		*C-more* Micro EA1 series touch screen HMI, 3in monochrome STN LCD, analog resistive, 128 x 64 pixel, high-contrast white LED backlight, (1) serial port.	$272.00
EA1-S3MLW-N	Non-Touch	*C-more* Micro EA1 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, high-contrast white LED backlight, (1) serial port.	Retired

Part Number	Panel Software / Firmware Version Required
EA1-S3ML	1.0 or later
EA1-S3ML-N	
EA1-S3MLW	1.5 or later
EA1-S3MLW-N	

C-more Micro EA1 Series Selection Guide

C-more Micro EA1 Series Panels Programming Software & Programming Cable			
Part Number		**Description**	**Price**
EA-MG-PGMSW		*C-more* Micro Windows programming software, USB or free download. For use with *C-more* Micro panels. Requires USB port connection from PC to *C-more* Micro panel.	$31.50
EA-MG-PGM-CBL		AutomationDirect programming cable assembly, USB A to 6-pin RJ12, 6ft cable length. For use with *C-more* Micro panels, CLICK CPUs, Do-more H2 series CPUs, and DirectLOGIC CPUs.	$52.00

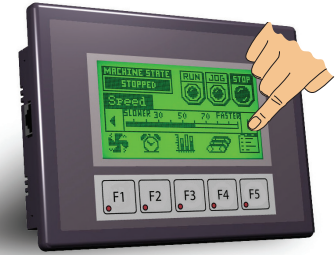| C-more Micro EA1 Series Panel Accessories			
Part Number		**Description**	**Price**
EA-COMCON-3		*C-more* DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, right angle cable entry. For use with *C-more* Micro EA1 series 4in and 6in HMIs, *C-more* Micro EA3 series 3in, 4in, and 6in HMIs, *C-more* EA9 6in and 7in HMIs.	$55.00
EA-COMCON-3A		*C-more* Micro DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with *C-more* Micro EA1 series 3in with EA1-MG-SP1, *C-more* Micro EA3 series 8in and 10in HMIs, *C-more* EA9 8in, 10in, 12in and 15in HMIs.	$30.50
EA-MG-COV-CL		*C-more* screen protector, clear, 3in. Package of 5. For use with *C-more* Micro 3in HMIs.	$47.50
EA-4-COV2		*C-more* Micro screen protector, non-glare, 4in. Package of 3. For use with *C-more* Micro EA1-T4CL 4in HMIs.	Retired
EA-6-COV2		*C-more* screen protector, non-glare, 6in. Package of 3. For use with *C-more* and *C-more* Micro 6in HMIs.	$49.50

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

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.

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

Dimensions

Units: inches [mm]
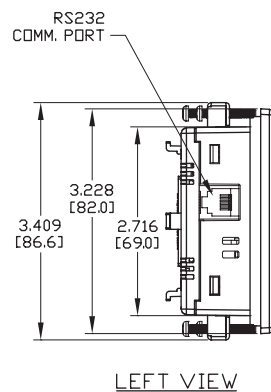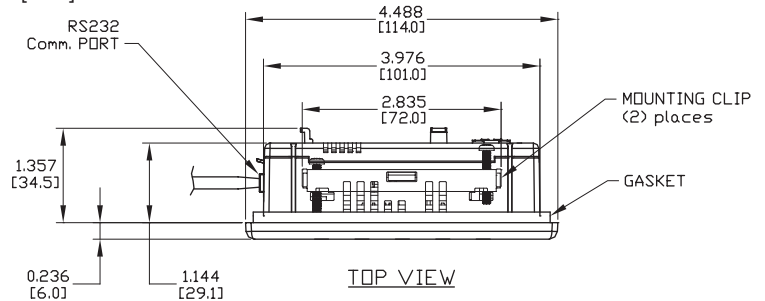
TOP VIEW

LEFT VIEW

C-more Micro-Graphic Panel

FRONT VIEW

Panel Cutout

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.

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

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

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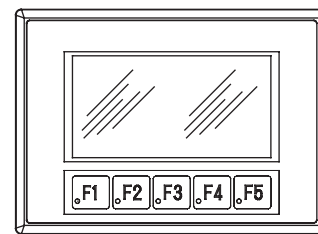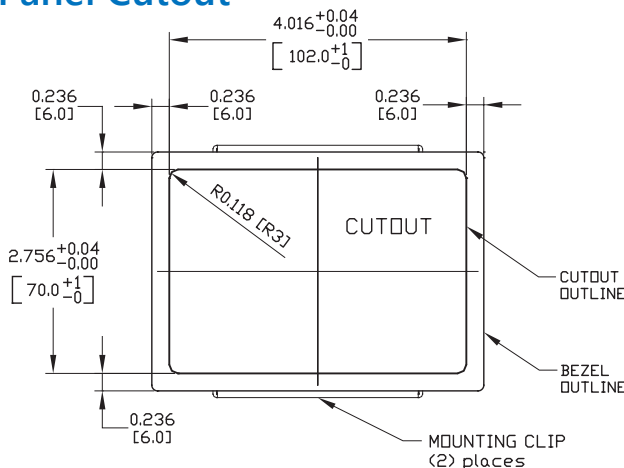
Dimensions

Units: inches [mm]
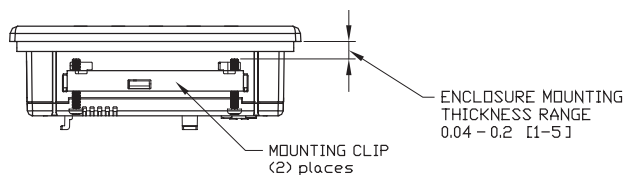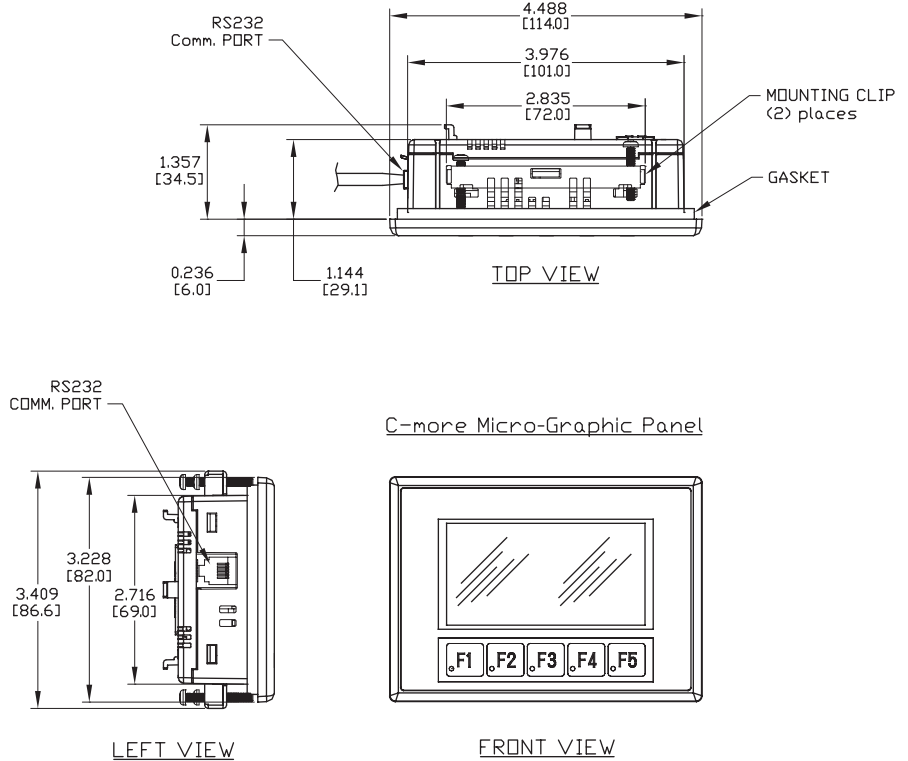

Panel Cutout

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.

Operator Interface tCMM-4

C-more Micro 3-inch EA1 STN Non-Touch

Model EA1-S3ML-N *C-more* 3-inch Micro non-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-N

Retired

Features

- 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

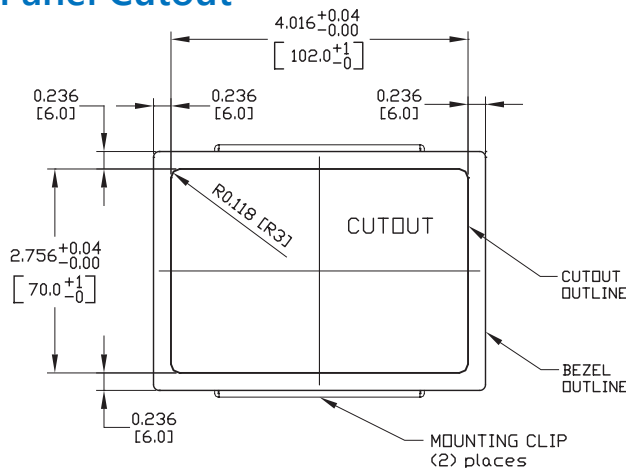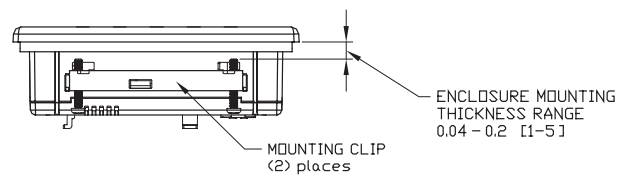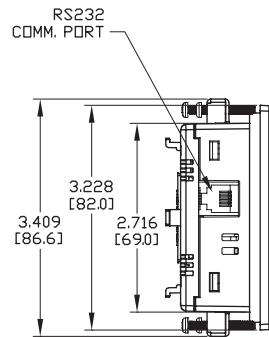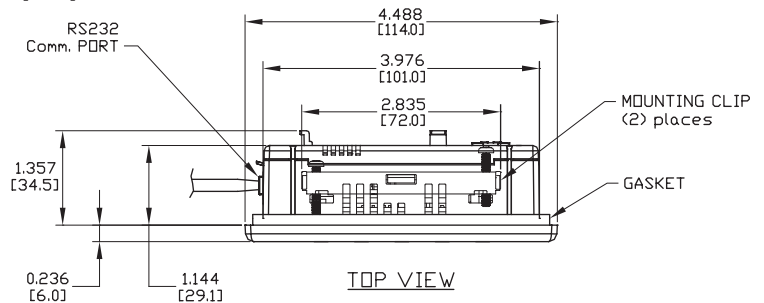| Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes

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

Dimensions

Units: inches [mm]

RS232 Comm. PORT

4.488 [114.0]
3.976 [101.0]
2.835 [72.0]
MOUNTING CLIP (2) places
1.357 [34.5]
GASKET
0.236 [6.0]
1.144 [29.1]
TOP VIEW

RS232 COMM. PORT
3.228 [82.0]
3.409 [86.6]
2.716 [69.0]
LEFT VIEW

C-more Micro-Graphic Panel

F1 F2 F3 F4 F5
FRONT VIEW

Panel Cutout

4.016 +0.04 -0.00 [102.0 +1 -0]
0.236 [6.0]
0.236 [6.0]
0.236 [6.0]
R0.118 [R3]
CUTOUT
2.756 +0.04 -0.00 [70.0 +1 -0]
CUTOUT OUTLINE
BEZEL OUTLINE
0.236 [6.0]
MOUNTING CLIP (2) places

Panel Thickness

ENCLOSURE MOUNTING THICKNESS RANGE 0.04 - 0.2 [1-5]
MOUNTING CLIP (2) places

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.

C-more Micro 3-inch EA1 STN Non-Touch

Model <u>EA1-S3MLW-N</u> *C-more* 3-inch Micro non-touch panel has a 3.1-inch STN LCD monochrome display and five selectable LED-driven backlight colors including 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-N

Retired

Features

- 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
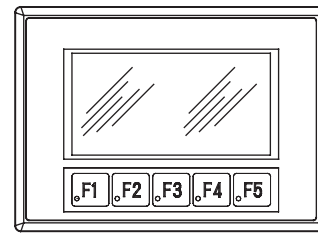- 2-year warranty from date of purchase

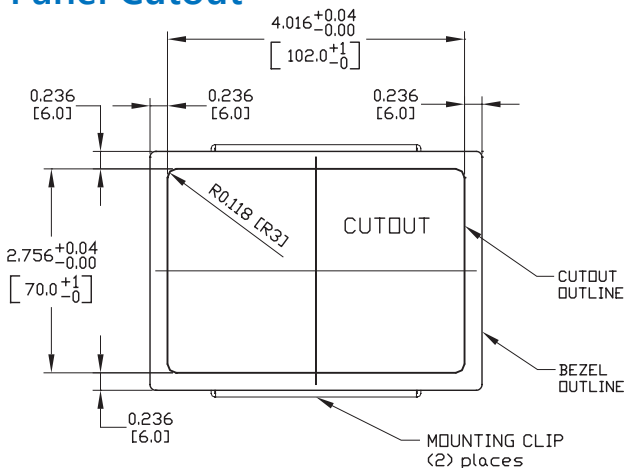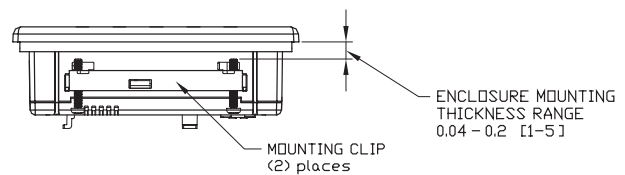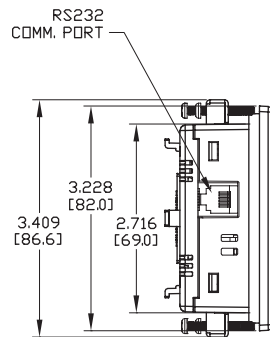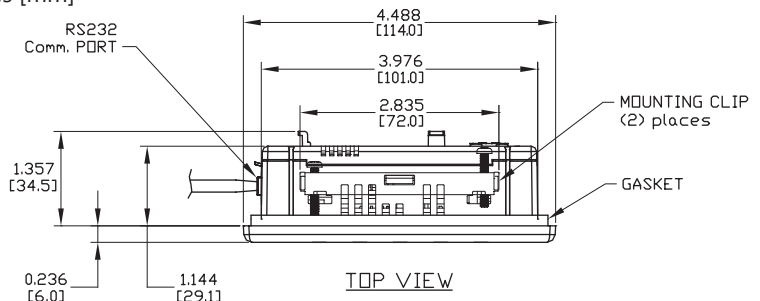| Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes

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

Dimensions

Units: inches [mm]

RS232 Comm. PORT

4.488 [114.0]
3.976 [101.0]
2.835 [72.0]

MOUNTING CLIP (2) places

GASKET

1.357 [34.5]

0.236 [6.0]   1.144 [29.1]

TOP VIEW

RS232 COMM. PORT

3.228 [82.0]
3.409 [86.6]   2.716 [69.0]

LEFT VIEW

C-more Micro-Graphic Panel

F1 F2 F3 F4 F5

FRONT VIEW

Panel Cutout

4.016 +0.04 −0.00 [102.0 +1 −0]

0.236 [6.0]   0.236 [6.0]   0.236 [6.0]

2.756 +0.04 −0.00 [70.0 +1 −0]

R0.118 [R3]   CUTOUT

CUTOUT OUTLINE

BEZEL OUTLINE

0.236 [6.0]

MOUNTING CLIP (2) places

Panel Thickness

ENCLOSURE MOUNTING THICKNESS RANGE 0.04 − 0.2 [1−5]

MOUNTING CLIP (2) places

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.

C-more Micro 3-inch EA1 Specifications

Specification \ Model	3-inch STN Micro Panel Touch Screen	3-inch STN Micro Panel 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		
• **Type**	3.1-inch STN monochrome LCD, graphical characters	
• **Resolution**	128 (W) x 64 (H) pixel	
• **Color**	2 colors (normal / inverse)	
• **Viewing Area Size**	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 built-in configuration setup menu	
• **Viewing Angle**	3, 9 o'clock axis –> 45 degrees 6 o'clock axis –> 45 degrees 12 o'clock axis –> 30 degrees	
Backlight		
• **Type**	LED	
• **Color**	5 user defined colors: EA1-S3ML, EA1-S3ML-N - Red, Green, Amber, Lime, and Yellow EA1-S3MLW, EA1-S3MLW-N - White, Pink1, Pink2, Pink3 and Red	
• **User Replaceable**	No	
Touch Screen		
• **Type**	Analog touch panel, single touch*	N/A
• **Operation**	51 gram force [0.5 N] maximum	N/A
• **Life**	Minimum of 1,000,000 cycles	N/A
Features		
• **User Memory**	768 KB	
• **Number of Screens**	Up to 999 – limited by project memory usage	
• **Beep (Internal)**	Yes	
• **Keypad Function Buttons**	Five user defined function key buttons with the ability to customize the label. Minimum of 500,000 cycles	
• **Keypad Function Button LEDs**	Each function key button includes a red LED that can be user programmed.	
• **Serial Communications**	Built-in RJ12 serial communications port (RS-232). Optional serial communications port (RS-232, RS-485/422) when using the optional EA-MG-SP1 Serial Port with DC Power Adapter.	
• **Expansion Connection**	Yes – used with optional EA-MG-P1 DC Power Adapter (discontinued), and EA-MG-SP1 Serial Port with DC Power Adapter (discontinued).	
Screen Objects		
• **Functional Devices**	Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Bar Graph, Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Scroll Text, Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Realtime Graph, Line Graph, Analog Meter	
• **Static Shapes**	Lines, Rectangles, Circles and Frames	
• **Displayable Fonts**	Fixed fonts: 4x6, 6x6, 6x6B, 6x8, 8x16, 8x32, 8x64, 16x16, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts	

*Note: The Touchscreen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected object may be activated.

C-more 3-inch Micro panel specifications continued on next page.

C-more Micro 3-inch EA1 Specifications

Specification / Model	3-inch STN Micro Panel Touch Screen	3-inch STN Micro Panel 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 having an RJ12 communication port.	
• *Power Consumption*	1.05W (220mA @ 4.75 VDC)	
• *Recommended Fuse*	Type AGC fast acting glass fuse, 250 mA, 250 VAC, ADC p/n AGC-25 No fuse required when directly connected to a PLC or PC with recommended cable.	
• *Maximum Inrush Current*	1 A for 500 µs	
• *Acceptable External Power Drop Duration*	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%), 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, on 3 mutually perpendicular axes (total of 18 shocks)	
• *Noise Immunity*	NEMA ICS3-304 (EN61131-2) RFI, (145MHz, 440Mhz 10W @ 10cm) Impulse 1000V @ 1µS pulse EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4-5 (Surge) 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 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 Thickness Range*	0.04" – 0.2" [1 – 5 mm]	
• *Mounting Clip Screw Torque Range*	21 – 28 oz·in [0.15 – 0.2 N·m]	
• *Depth from bezel rear with options Module*	2.295" [58.3 mm]	
• *Weight*	5.82 oz. (165 g)	

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: * **BX-P-SER2-RJ12** 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

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 EA-MG-PGM-CBL, the USB-to-RS-232 cable assembly.
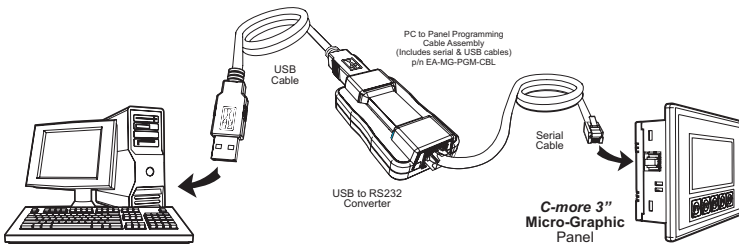
- Connect the USB programming cable (included) from a USB port type A on the PC to the USB type B port on the converter (included). Next connect the serial programming cable from the converter's RJ12 port to the panel's RJ12 serial port. The panel receives power from the USB port of the PC that it is connected to through the USB to RS-232 converter assembly.

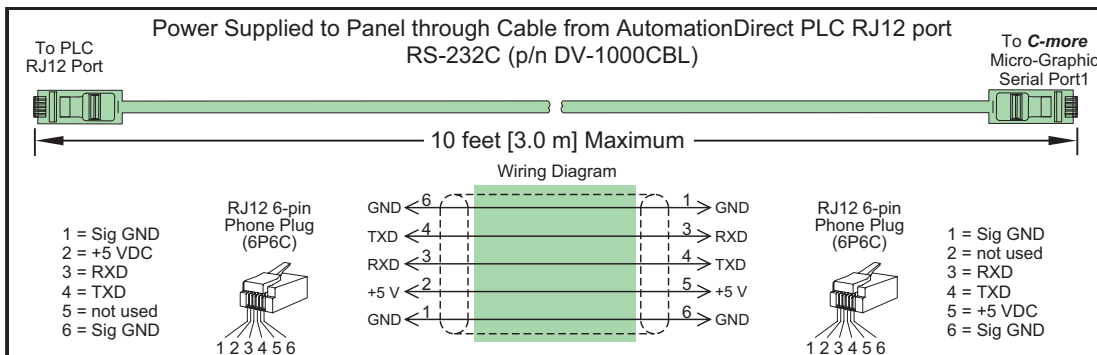### USB to RS-232 Programming Cable Assembly

Part No. EA-MG-PGM-CBL
$52.00

USB Connectivity

USB Cable

PC to Panel Programming Cable Assembly (Includes serial & USB cables) p/n EA-MG-PGM-CBL

Serial Cable

USB to RS232 Converter

C-more 3" Micro-Graphic Panel

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

USB to RS-232 Converter Specifications	
Part Number	EA-MG-PGM-CBL
Hardware	
USB Interface	USB Specification Rev. 1.1 Connector: USB Type B jack to accept USB Type B cable plug
Serial Interface	RS-232 (EIA-232-E) 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) [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 either the USB or serial cable should not exceed 2.0 m [6.56 feet] in length.	

Power Supplied to Panel through Cable from AutomationDirect PLC RJ12 port
RS-232C (p/n DV-1000CBL)

To PLC RJ12 Port

To **C-more** Micro-Graphic Serial Port1

10 feet [3.0 m] Maximum

Wiring Diagram

RJ12 6-pin Phone Plug (6P6C)

1 = Sig GND
2 = +5 VDC
3 = RXD
4 = TXD
5 = not used
6 = Sig GND

1 2 3 4 5 6

GND	6	1	GND
TXD	4	3	RXD
RXD	3	4	TXD
+5 V	2	5	+5 V
GND	1	6	GND

RJ12 6-pin Phone Plug (6P6C)

1 = Sig GND
2 = not used
3 = RXD
4 = TXD
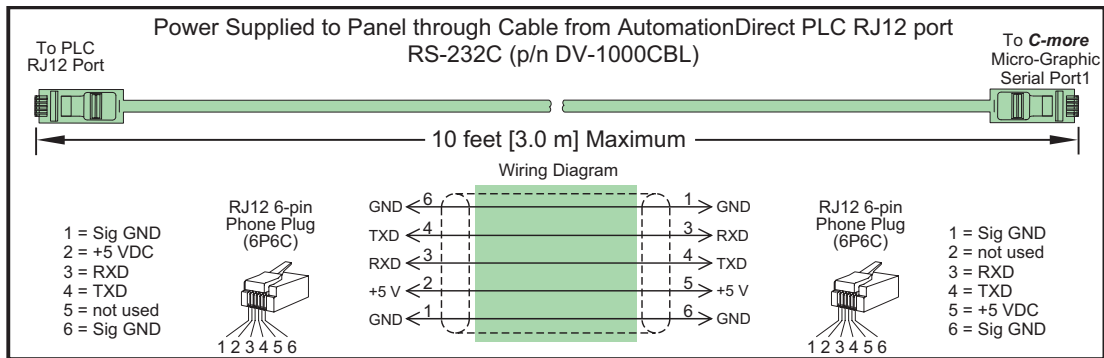5 = +5 VDC
6 = Sig GND

1 2 3 4 5 6

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, EA-MG-PGM-CBL.

• During operation, the **C-more** Micro panel can be powered from most AutomationDirect PLC's RJ12 serial communications port by using the DV-1000CBL communications cable.

3-inch Panel powered from AutomationDirect PLC via communications cable

Power Supplied to Panel through Cable from AutomationDirect PLC RJ12 port RS-232C (p/n DV-1000CBL)

To PLC RJ12 Port

To **C-more** Micro-Graphic Serial Port1

10 feet [3.0 m] Maximum

Wiring Diagram

RJ12 6-pin Phone Plug (6P6C)

1 = Sig GND
2 = +5 VDC
3 = RXD
4 = TXD
5 = not used
6 = Sig GND

1 2 3 4 5 6

GND 6 — 1 GND
TXD 4 — 3 RXD
RXD 3 — 4 TXD
+5 V 2 — 5 +5 V
GND 1 — 6 GND

RJ12 6-pin Phone Plug (6P6C)

1 = Sig GND
2 = not used
3 = RXD
4 = TXD
5 = +5 VDC
6 = Sig GND

1 2 3 4 5 6

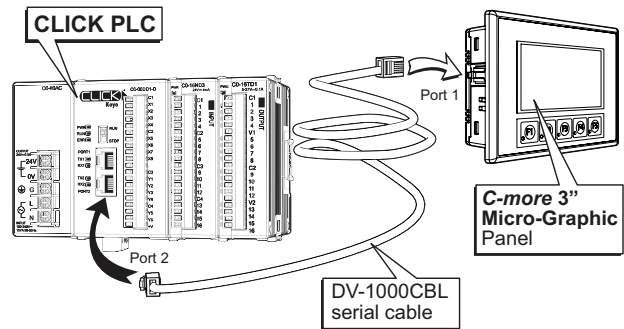# *C-more* Micro 3-inch EA1 PLC Connections

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.

- DV-1000CBL — connects to Productivity Series, Do-more/BRX* CLICK, DL05, DL06, DL105, DL205, D3-350 and D4-450 phone jack.
- D4-1000CBL — 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

C-more 3-inch Micro Port 1 to DL06 PLC Port 1
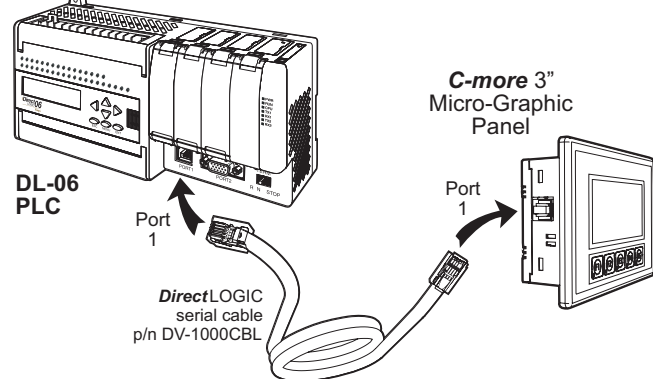
C-more 3-inch Micro Port 1 to DL205 PLC Port 1
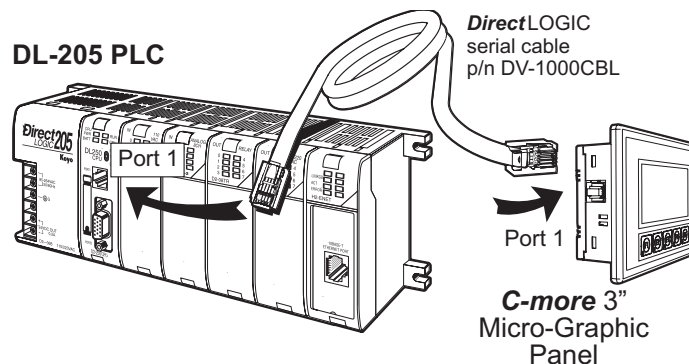
C-more Micro 3-inch EA1 Communication Protocols & Cabling Chart

Controller Compatibility & Connection Chart					
PLC			**C-more 3-inch Micro Panel.**		
			Panel to PLC Cabling Components Required for Specific Port and Protocol being used.		
			PLC Port Powered Powered with 5 VDC from the connected PLC's comm. port.		
Family	*CPU*	*Port & Type*	Using panel's RJ12 port 1		
			Protocol(s) Supported	Components & Network Type	
CLICK	all versions	Port 1 RJ12 - 6 pin	AutomationDirect Modbus (CLICK)	DV-1000CBL RS-232	
		Port 2 RJ12 - 6 pin			
	Analog CPU's	Port 3 Terminal block - 3-pin		N/A	
Productivity Series	all versions	RS-232 RJ12 - 6 pin	AutomationDirect Productivity Serial	DV-1000CBL RS-232	
		RS-485 Port Term block 3-pin		N/A	
Do-more	all versions	Port 2 RJ12 - 6 pin	AutomationDirect Do-more Serial	DV-1000CBL RS-232	
BRX	all versions	RS-232 POM module BX-P-SER2-RJ12	AutomationDirect Do-more Serial	DV-1000CBL RS-232	
		RS-485 Port Term block 3-pin		N/A	
DirectLOGIC DL05 (see D0-DCM under DL06)	all versions	Port 1 RJ12 - 6 pin	K-sequence, *Direct*NET, Modbus RTU	DV-1000CBL RS-232	
		Port 2 RJ12 - 6 pin			
DirectLOGIC DL06	all versions	Port 1 RJ12 - 6 pin	K-sequence, *Direct*NET, Modbus RTU	DV-1000CBL RS-232	
		Port 2 DB15HD (female)		DV-1000CBL + FA-15HD RS-232	
	D0-DCM	Port 1 RJ12 - 6 pin	K-sequence, *Direct*NET, Modbus RTU	DV-1000CBL RS-232	
		Port 2 DB15HD (female)		DV-1000CBL + FA-15HD RS-232	
DirectLOGIC DL105	all versions	Port 1 RJ12 - 6 pin	K-sequence	DV-1000CBL 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.

C-more Micro 3-inch EA1 Communication Protocols & Cabling Chart (cont'd)

Controller Compatibility & Connection Chart				
PLC			**C-more 3-inch Micro Panel.**	
			Panel to PLC Cabling Components Required for Specific Port and Protocol being used.	
			PLC Port Powered Powered with 5 VDC from the connected PLC's comm. port.	
Family	*CPU*	*Port & Type*	Using panel's RJ12 port 1	
			Protocol(s) Supported	Components & Network Type
DirectLOGIC DL205	D2-230	Port 1 RJ12 - 6 pin	K-sequence	DV-1000CBL RS-232
	D2-240	Port 1 RJ12 - 6 pin	K-sequence	DV-1000CBL RS-232
		Port 2 RJ12 - 6 pin	K-sequence, *Direct*NET	
	D2-250-1	Port 1 RJ12 - 6 pin	K-sequence, *Direct*NET, Modbus RTU	DV-1000CBL RS-232
		Port 2 DB15HD (female)		DV-1000CBL + FA-15HD RS-232
	D2-260	Port 1 RJ12 - 6 pin	K-sequence, *Direct*NET, Modbus RTU	DV-1000CBL RS-232
		Port 2 DB15HD (female)		DV-1000CBL + FA-15HD RS-232
	D2-DCM	Port 1 DB 25 pin (female)	K-sequence, *Direct*NET, Modbus RTU	See Note RS-232
	WINPLC	Port 1 RJ12 - 6 pin	Modbus RTU	DV-1000CBL RS-232
DirectLOGIC DL305	D3-330 or D3-340	D3-232-DCU DB 25 pin (female)	N/A	
		D3-422-DCU DB 25 pin (female)	N/A	
	D3-340	Port 1 RJ11 - 4 pin	N/A	
		Port 2 RJ11 - 4 pin	N/A	
	D3-350	Port 1 RJ12 - 6 pin	K-sequence, *Direct*NET	DV-1000CBL RS-232
		Port 2 DB 25 pin (female)	N/A	
	D3-DCM D3-350 only	Port 1 DB 25 pin (female)	K-sequence, *Direct*NET, Modbus RTU	See Note 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.

C-more Micro 3-inch EA1 Communication Protocols & Cabling Chart (cont'd)

Controller Compatibility & Connection Chart				
PLC			*C-more 3-inch Micro Panel.*	
Family	*CPU*	*Port & Type*	Panel to PLC Cabling Components Required for Specific Port and Protocol being used.	
			PLC Port Powered Powered with 5 VDC from the connected PLC's comm. port.	
			Using panel's RJ12 port 1	
			Protocol(s) Supported	Components & Network Type
DirectLOGIC DL405	D4-430	Port 0 DB 15 pin (female)	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232
		Port 1 DB 25 pin (female)	N/A	
	D4-440	Port 0 DB 15 pin (female)	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232
		Port 1 DB 25 pin (female)	N/A	
	D4-450 / D4-454	Port 0 DB 15 pin (female)	K-sequence	D4-1000CBL or DV-1000CBL & FA-CABKIT RS-232
		Port 1 DB 25 pin (female)	N/A	
		Port 2 RJ12 - 6 pin	K-sequence, *Direct*NET	DV-1000CBL RS-232
		Port 3 DB 25 pin (female)	N/A	
	D4-DCM	Port 1 DB 25 pin (female)	K-sequence, *Direct*NET, Modbus RTU	See Note RS-232
SOLO	N/A	Data +/- terminals	N/A	
GS Drives	N/A	RS-485 Interface	N/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.

C-more Micro 3-inch EA1 Communication Protocols & Cabling Chart (cont'd)

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

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. Available cables with descriptions shown on the next page.

C-more Micro 3-inch EA1 Communication Cables and Cable Kits

Cable Description	Cable Part Number	Price
Cables for direct connect to panel's serial Port1 (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 *C-more* Micro panels and AutomationDirect PLCs with an RJ12 port.	*DV-1000CBL*	$23.00
AutomationDirect communication cable, 6-pin RJ12 to 15-pin male D-sub, shielded, 2m/6.6ft cable length. For use with DV-1000 or *C-more* Micro panels and any DL405 CPU.	*D4-1000CBL*	$27.00
*Direct*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.	*FA-15HD*	$21.00
*Direct*LOGIC universal cable kit, for use with all DirectLOGIC PLCs with RS-232 ports.	*FA-CABKIT*	$71.00

DV-1000CBL

D4-1000CBL

FA-15HD

FA-CABKIT

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

$47.50

Dimensions

Units: inches [mm]

3.126 [79.4]

0.197 [5.0]

0.157 [4.0]

1.748 [44.4]

Adhesive
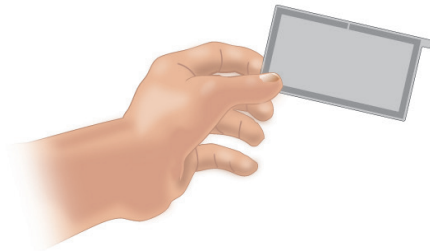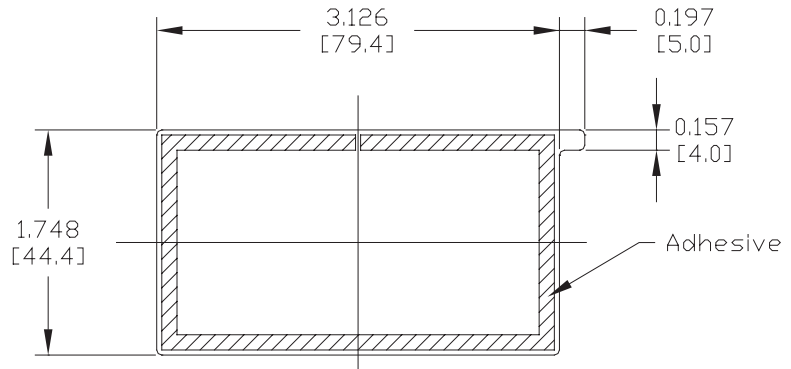
C-more Micro 3-inch EA1 Replacement Parts

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	Description	Price
EA-MG-S3ML-BRK	**C-more** Micro panel mounting brackets, replacement. Package of 2. For use with **C-more** Micro 3in and EA3-T4CL HMIs.	$23.00
EA-MG-BZ1-BRK	**C-more** Micro panel mounting brackets, replacement. Package of 2. For use with **C-more** Micro bezel EA-MG-BZ1.	Retired
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, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	$19.00
EA-MG-S3ML-GSK	**C-more** Micro panel mounting gasket, replacement. For use with **C-more** Micro EA1 series 3in HMIs.	$16.00
EA-MG-BZ1-GSK	**C-more** Micro panel mounting gasket, replacement. For use with **C-more** Micro 3in bezel EA-MG-BZ1.	Retired
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.	$29.50

**Panel Mounting Clips
Part No. EA-MG-S3ML-BRK**

(pk of 2)
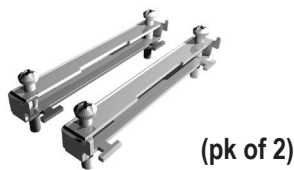
**Keypad Bezel 1 Mounting Clips
Part No. EA-MG-BZ1-BRK**

(pk of 2)
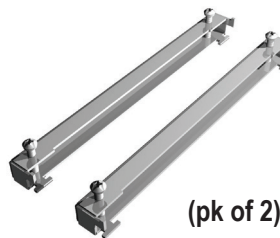
**Keypad Bezel 2 Mounting Clips
Part No. EA-MG-BZ2-BRK**

(pk of 8)

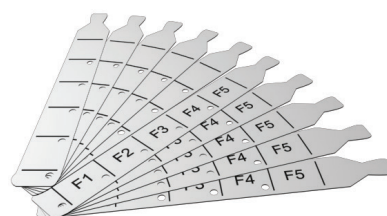**DC Power Connector
Part No. EA-MG-DC-CON**

(pk of 5)
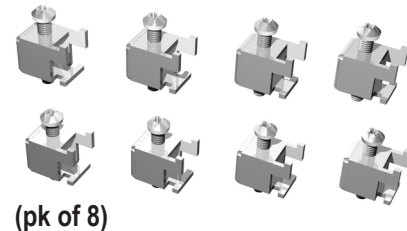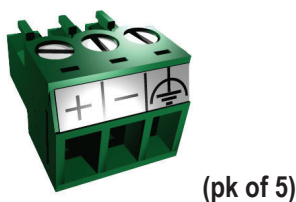
**3-inch Panel Gasket
Part No. EA-MG-S3ML-GSK**

**3-inch Keypad Bezel 1 Gasket
Part No. EA-MG-BZ1-GSK**

**3-inch Panel Function Keys Label Inserts
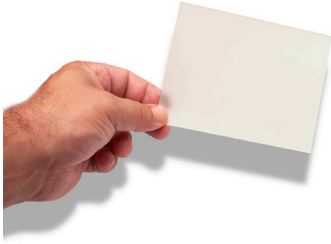Part No. EA-MG-S3ML-FKL**

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

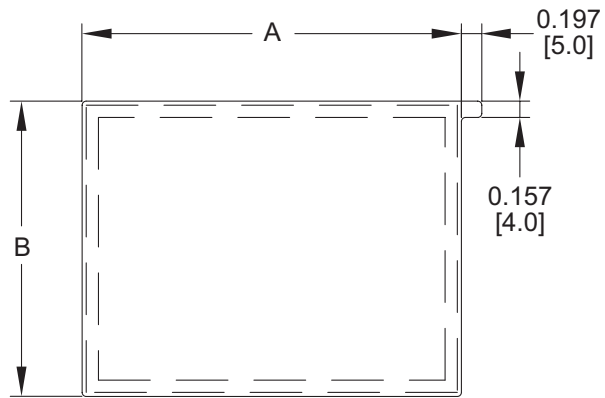# *C-more* Micro 4-inch EA1 Panel Accessories

Clear Screen Overlay

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

Part No. EA-4-COV2
Retired

Dimensions

Units: inches [mm]

0.197 [5.0]

0.157 [4.0]

Part Number	Dimensions - inch [mm]	
	A	B
EA-4-COV2	3.66 [93.0]	2.85 [72.5]

C-more Micro 4-inch EA1 Replacement Parts

The optional replacement parts can be used to replace damaged, worn or lost EA1-T4CL components.

Replacement parts at a glance:

Part Number	Description	Price
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, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	$19.00
EA-MG4-GSK	*C-more* Micro panel mounting gasket, replacement. For use with *C-more* Micro EA1-T4CL 4in HMIs.	Retired
EA-MG4-FKL	*C-more* Micro function key label insert, replacement. Package of 4. For use with *C-more* Micro EA1-T4CL 4in HMIs. (3) blank label inserts and (1) landscape F1-F5 label insert included.	Retired

**Panel Mounting Clips
Part No. EA-MG-BZ2-BRK**
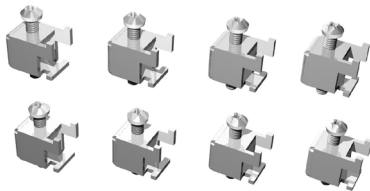
(pk of 8)
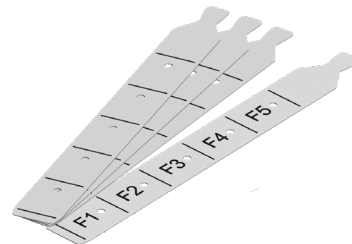
**DC Power Connector
Part No. EA-MG-DC-CON**
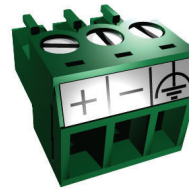
(pk of 5)

**Panel Gasket
Part No. EA-MG4-GSK**

**Function Keys Label Inserts
Part No. EA-MG4-FKL**

(pk of 4; 3 blank, 1 F1-F5 for land-scape)
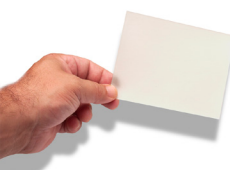
C-more Micro EA3 Series Selection Guide

Part Number		Description	Price
EA3-S3ML-RN		*C-more* Micro EA3 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, (1) serial port.	$146.00
EA3-S3ML-R		*C-more* Micro EA3 series touch screen HMI, 3in monochrome STN LCD, analog resistive, 128 x 64 pixel, LED backlight, (1) serial port.	$208.00
EA3-S3ML		*C-more* Micro EA3 series touch screen HMI, 3in monochrome STN LCD, analog resistive, 128 x 64 pixel, LED backlight, (2) serial, (1) Ethernet and (1) microB-USB ports.	$280.00
EA3-T4CL		*C-more* Micro EA3 series touch screen HMI, 4in color TFT LCD, analog resistive, widescreen, 480 x 272 pixel, WQVGA, LED backlight, (2) serial, (1) Ethernet and (1) microB-USB ports.	$394.00
EA3-T6CL		*C-more* Micro EA3 series touch screen HMI, 6in color TFT LCD, analog resistive, 320 x 240 pixel, QVGA, LED backlight, (2) serial and (1) USB B ports.	$466.00

C-more Micro EA3 Series Panels (table title)

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

C-more Micro EA3 Series Selection Guide

C-more Micro Programming Software

Part Number		Description	Price
EA-MG-PGMSW		*C-more* Micro Windows programming software, USB or free download. For use with *C-more* Micro panels. Requires USB port connection from PC to *C-more* Micro panel.	$31.50
EA-MG-PGM-CBL		AutomationDirect programming cable assembly, USB A to 6-pin RJ12, 6ft cable length. For use with *C-more* Micro panels, CLICK CPUs, Do-more H2 series CPUs, and DirectLOGIC CPUs.	$52.00
USB-CBL-AB3		AutomationDirect programming cable, USB A to USB B, 3ft cable length. For use with *C-more* HMIs, Do-more and Productivity series CPUs and most USB devices.	$12.00
USB-CBL-AB6		AutomationDirect programming cable, USB A to USB B, 6ft cable length. For use with *C-more* HMIs, Do-more and Productivity series CPUs and most USB devices.	$16.00
USB-CBL-AB10		AutomationDirect programming cable, USB A to USB B, 10ft cable length. For use with *C-more* HMIs, Do-more and Productivity series CPUs and most USB devices.	$36.50
USB-CBL-AB15		AutomationDirect programming cable, USB A to USB B, 15ft cable length. For use with *C-more* HMIs, Do-more and Productivity series CPUs and most USB devices.	$42.50
USB-CBL-AMICB6		AutomationDirect programming cable, USB A to microB-USB, 6ft cable length. For use with Productivity1000 and Productivity2000 CPUs and most USB devices.	$5.25

C-more Micro EA3 Series Panel Accessories

Part Number		Description	Price
EA-ECOM		*C-more* communication expansion module, (1) RJ45 10/100 Mbps Ethernet port. For use with *C-more* Micro EA3 series 6in, 8in and 10in panels and all *C-more* HMIs except -R models.	$73.00
EA-ADPTR-4		*C-more* DSUB port adapter, 15-pin male to 15-pin female, right angle cable entry. For use with *C-more* Micro EA1 series 4in and 6in HMIs, *C-more* Micro EA3 series 3in, 4in, and 6in HMIs, *C-more* EA9 6in and 7in HMIs.	$52.00
EA-COMCON-3		*C-more* DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, right angle cable entry. For use with *C-more* Micro EA1 series 4in and 6in HMIs, *C-more* Micro EA3 series 3in, 4in, and 6in HMIs, *C-more* EA9 6in and 7in HMIs.	$55.00
EA-COMCON-3A		*C-more* Micro DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with *C-more* Micro EA1 series 3in with EA1-MG-SP1, *C-more* Micro EA3 series 8in and 10in HMIs, *C-more* EA9 8in, 10in, 12in and 15in HMIs.	$30.50
EA-MG-COV-CL		*C-more* screen protector, clear, 3in. Package of 5. For use with *C-more* Micro 3in HMIs.	$47.50
EA-4-COV3		*C-more* Micro screen protector, non-glare, 4in. Package of 3. For use with *C-more* Micro EA3-T4CL 4in HMIs.	$45.50
EA-6-COV2		*C-more* screen protector, non-glare, 6in. Package of 3. For use with *C-more* and *C-more* Micro 6in HMIs.	$49.50
EA-8-COV2		*C-more* screen protector, non-glare, 8in. Package of 3. For use with *C-more* and *C-more* Micro 8in HMIs.	$53.00
EA-10-COV2		*C-more* Micro screen protector, non-glare, 10in. Package of 3. For use with *C-more* EA9-T10CL and *C-more* Micro EA3-T10CL HMIs.	$59.00

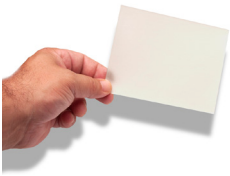# *C-more* Micro EA3-S3ML-RN and EA3-S3ML-R Panels Overview

	C-more Micro EA3 Series Panels		
Part Number	Description		Price
EA3-S3ML-RN	*C-more* Micro EA3 series HMI, 3in monochrome STN LCD, 128 x 64 pixel, LED backlight, (1) serial port.		$146.00
EA3-S3ML-R	*C-more* Micro EA3 series touch screen HMI, 3in monochrome STN LCD, analog resistive, 128 x 64 pixel, LED backlight, (1) serial port.		$208.00

Part Number	Panel Software / Firmware Version Required
EA3-S3ML-RN	4.30 or later
EA3-S3ML-R	

	C-more Micro Programming Software		
Part Number	Description		Price
EA-MG-PGMSW	*C-more* Micro Windows programming software, USB or free download. For use with *C-more* Micro panels. Requires USB port connection from PC to *C-more* Micro panel.		$31.50
EA-MG-PGM-CBL	AutomationDirect programming cable assembly, USB A to 6-pin RJ12, 6ft cable length. For use with *C-more* Micro panels, CLICK CPUs, Do-more H2 series CPUs, and DirectLOGIC CPUs.		$52.00

	C-more Micro EA3 Series Panel Accessories		
Part Number	Decription		Price
EA-MG-COV-CL	*C-more* screen protector, clear, 3in. Package of 5. For use with *C-more* Micro 3in HMIs.		$47.50

C-more Micro 3-inch EA3 Non-Touch Panel

Model EA3-S3ML-RN *C-more* 3-inch Micro non-touch panel has a 3.1-inch STN LCD monochrome display and twelve selectable LED-driven backlight colors. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. This *C-more* Micro panel is powered through the RJ-12 serial communications port of most AutomationDirect PLC's or from the USB port of a PC using the EA-MG-PGM-CBL programming cable assembly. This panel supports only AutomationDirect PLC protocols and Modbus RTU (master only). (For other controllers consider the EA3-S3ML). The panel is NEMA 1 as shipped but is NEMA 4/4X indoor, when installed correctly with the optional gasket EA-MG-S3ML-GSK (sold separately).

NOTE: EA3-S3ML-RN is NEMA 1 compliant. Add optional gasket EA-MG-S3ML-GSK for NEMA 4/4X compliance (sold separately).

Part No. EA3-S3ML-RN

$146.00

Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes
Serial DB15 Port	No

Features

- 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.
- 12-Color LED backlight for longer lifetime; Red, Green, Amber, Yellow, Lime, Pink 1, Pink 2, Pink 3, Emerald 1, Emerald 2, Emerald 3 and White
- Optional clear screen overlay
- 1MB memory
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red LED blinking
- 0 to 50 °C (32 to 122 °F) operating temperature range (IEC 60068-2-14)
- NEMA 1 compliant: NEMA 4/4X, IP65 compliant when mounted correctly with optional gasket (EA-MG-S3ML-GSK sold separately), indoor use only
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

Dimensions

Units: inches [mm]

Panel Cutout

Panel Thickness

C-more Micro 3-inch EA3 Touch Panel

Model EA3-S3ML-R *C-more* 3-inch Micro touch panel has a 3.1-inch STN LCD monochrome display and twelve selectable LED-driven backlight colors. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. This *C-more* Micro panel is powered through the RJ-12 serial communications port of most AutomationDirect PLC's or from the USB port of a PC using the EA-MG-PGM-CBL programming cable assembly. This panel supports only AutomationDirect PLC protocols and Modbus RTU (master only). (For other controllers consider the EA3-S3ML). The panel is NEMA 4/4X indoor when installed correctly.

Part No. EA3-S3ML-R

$208.00

Function	Available
Ethernet	No
USB Programming Port	No
Serial RJ12 Port	Yes
Serial DB15 Port	No

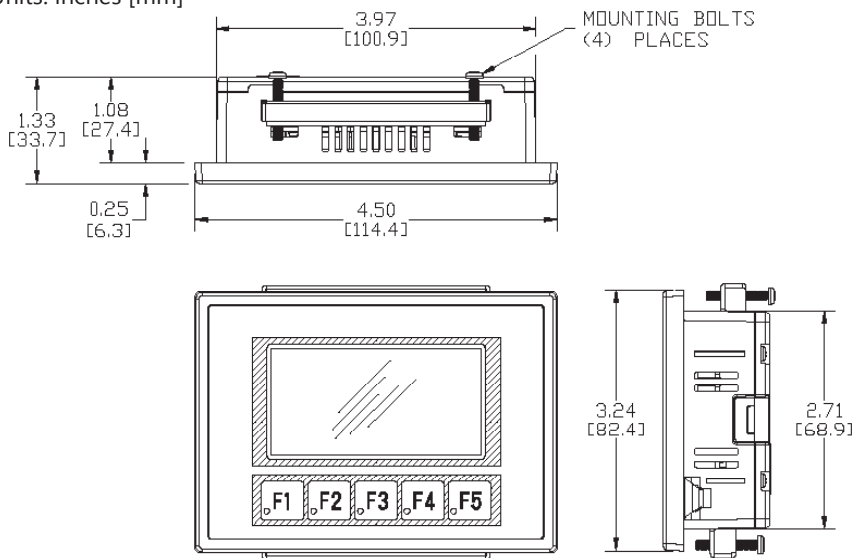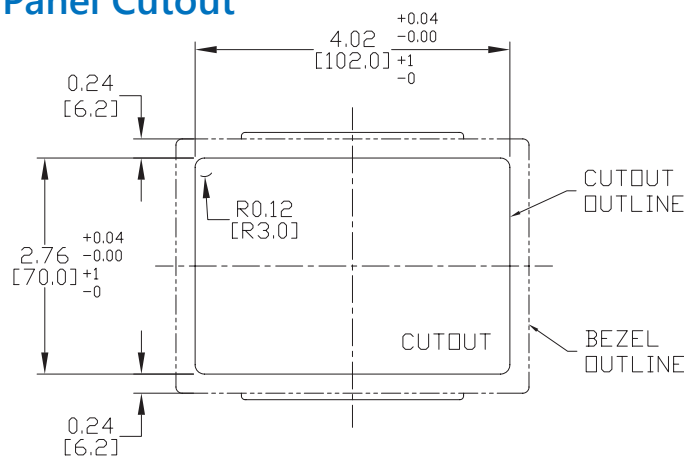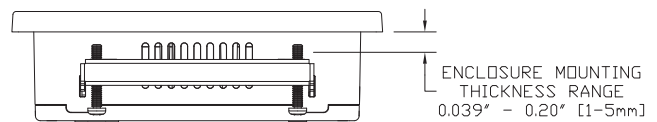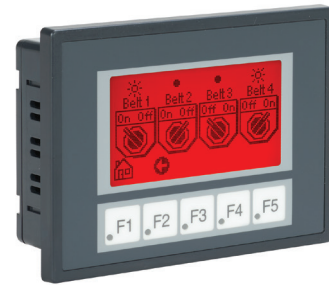## Features

- 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.
- 12-Color LED backlight for longer lifetime; Red, Green, Amber, Yellow, Lime, Pink 1, Pink 2, Pink 3, Emerald 1, Emerald 2, Emerald 3 and White
- Optional clear screen overlay
- 1MB memory
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red 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

Dimensions

Units: inches [mm]

Panel Cutout

Panel Thickness

C-more Micro EA3-S3ML-RN and EA3-S3ML-R Panels Specifications

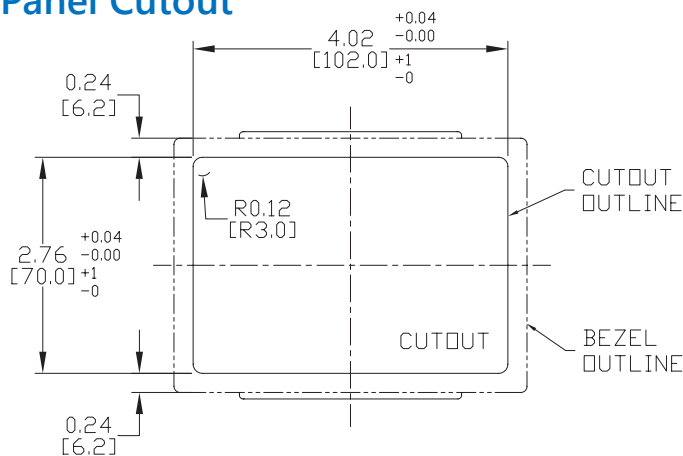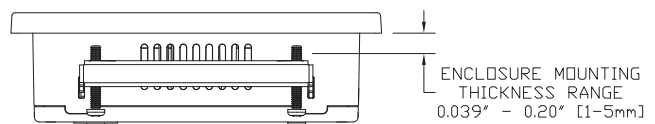| EA3-S3ML-RN and EA3-S3ML-R Specifications		
Part Number:	**EA3-S3ML-RN**	**EA3-S3ML-R**
Description:	128 x 64 pixel LCD display Five user defined keypad function buttons with five user defined LED indicators	
Display:		
• **Type**	3.1" STN Monochrome with LED Backlight	
• **Resolution**	128 (W) x 64 (H) pixel	
• **Color**	2 colors (normal / inverse)	
• **Display Brightness** **(Reference)**	W: Typ. 150 nit G: Typ. 150 nit R: Typ. 40 nit	
• **Viewing Area Size**	2.78" (W) x 1.53" (H) 70.7 mm x 38.8 mm	
• **Active Area Size**	2.62" (W) x 1.31" (H) mm 66.52 mm x 33.24 mm	
• **Contrast / Brightness**	Adjusted from the panel's built-in configuration setup menu	
• **Viewing Angle** **(Landscape Mode)**	3, 6, 9 o'clock axis –> 45 degrees 12 o'clock axis –> 30 degrees	
Backlight:		
• **Type**	LED	
• **Color**	White, Red, Green (12 colors)	
• **User Replaceable**	No	
Touch Screen:		
•**Type**	N/A	Analog resistive, single touch*
• **Operation**		100 gram force [0.8 N] maximum
• **Life**		Minimum of 1,000,000 cycles
Features:		
• **User Memory**	1MB	
• **Number of Screens**	Up to 999 – limited by project memory usage	
• **Beep (Internal)**	Yes	
• **Keypad Function Buttons**	Five user defined function key buttons with the ability to customize label with an overlay. Minimum of 500,000 cycles	
• **Keypad Function Button** **LEDs**	Each function key button includes a red LED that can be user programmed.	
• **Programming Port**	RJ12 serial	
• **Serial Communications**	RJ12 serial communications port (RS-232)	
• **Ethernet Communications**	N/A	
Screen Objects		
• **Functional Devices**	Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Bar Graph, Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Real Time Graphics Line Graph, Analog Meter.	
• **Static Shapes**	Lines, Rectangles, Circles and Frames	
• **Displayable Fonts**	Fixed fonts: 4x6, 6x6, 6x6B, 6x8, 8x16, 8x32, 8x64, 16x16, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts	
***Note: The Touchscreen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected object may be activated.**		
C-more Micro EA3-S3ML-RN and EA3-S3ML-R panel specifications continued on next page.		

C-more Micro EA3-S3ML-RN and EA3-S3ML-R Panels Specifications
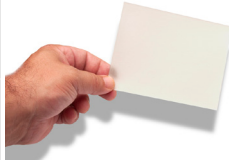
EA3-S3ML-RN and EA3-S3ML-R Specifications (cont'd)		
Part Number:	*EA3-S3ML-RN*	*EA3-S3ML-R*
Electrical:		
• *Input Power*	RJ12 port to any AutomationDirect PLC RJ12 port	
• *Power Consumption*	1.05W (RJ12)	
• *Maximum Inrush Current*	3.5 A for 50µs	
• *Acceptable External Power Drop Duration*	Maximum 1ms	
Environmental:		
• *Operating Temperature*	0 to 50 °C (32 to 122 °F); IEC 60068-2-14 (Test Nb, Thermal Shock)	
• *Storage Temperature*	–20 to +60 °C (–4 to +140 °F) IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, Thermal Shock)	
• *Humidity*	5–95% RH (non-condensing)	
• *Environmental Air*	For use in Pollution Degree 2 environment, no corrosive gases permitted	
• *Housing Material*	ABS Plastic	
• *Gasket Material*	Ships without gasket	Silicone Rubber
• *Overlay Sheet Material*	PET	
• *Vibration*	IIEC60068-2-6 (Test Fc)	
• *Shock*	IEC60068-2-27 (Test Ea)	
• *Altitude*	Up to 2000m (6562ft)	
• *Noise Immunity*	(EN61131-2) EN61000-4-2 (ESD), EN61000-4-3 (RFI) EN61000-4-4 (FTB) EN61000-4-5 (Serge) EN61000-4-6 (Conducted) EN61000-4-8 (Power frequency magnetic field immunity) (Local Test) RFI, (145MHz, 440Mhz 10W @ 10cm) Impulse 1000V @ 1µs pulse	
• *Enclosure*	With EA-MG-S3ML-GSK - NEMA 250 type 4/4X indoor use only, UL50 type 4X indoor use only IP-65 indoor use only (Not tested by UL) (When mounted correctly) Without EA-MG-S3ML-GSK - NEMA 250 type 1 indoor use only, UL type 1 indoor use only IP-20 indoor use only (Not tested by UL) (When mounted correctly)	
• *Agency Approvals*	CE (EN61131-2), UL61010, CUL Canadian C22.2, UL E157382, RoHS (2011/65/EU) To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page	
Physical		
• *Enclosure Mounting Thickness Range*	0.04" – 0.2" [1 – 5 mm]	
• *Mounting Clip Screw Torque Range*	21 – 28 oz·in [0.15 – 0.20 Nm]	
• *Weight*	5.4 oz. (152g)	5.5 oz. (156g)

C-more Micro EA3-S3ML and EA3-T4CL Panels Overview

C-more Micro EA3 Series Panels		
Part Number	**Description**	**Price**
EA3-S3ML	*C-more* Micro EA3 series touch screen HMI, 3in monochrome STN LCD, analog resistive, 128 x 64 pixel, LED backlight, (2) serial, (1) Ethernet and (1) microB-USB ports.	$280.00
EA3-T4CL	*C-more* Micro EA3 series touch screen HMI, 4in color TFT LCD, analog resistive, widescreen, 480 x 272 pixel, WQVGA, LED backlight, (2) serial, (1) Ethernet and (1) microB-USB ports.	$394.00

Part Number	Panel Software / Firmware Version Required
EA3-S3ML	4.20 or later
EA3-T4CL	

C-more Micro Programming Software		
Part Number	**Description**	**Price**
EA-MG-PGMSW	*C-more* Micro Windows programming software, USB or free download. For use with *C-more* Micro panels. Requires USB port connection from PC to *C-more* Micro panel.	$31.50
USB-CBL-AMICB6	AutomationDirect programming cable, USB A to microB-USB, 6ft cable length. For use with Productivity1000 and Productivity2000 CPUs and most USB devices.	$5.25

C-more Micro EA3 Series Panel Accessories		
Part Number	**Description**	**Price**
EA-ADPTR-4	*C-more* DSUB port adapter, 15-pin male to 15-pin female, right angle cable entry. For use with *C-more* Micro EA1 series 4in and 6in HMIs, *C-more* Micro EA3 series 3in, 4in, and 6in HMIs, *C-more* EA9 6in and 7in HMIs.	$52.00
EA-COMCON-3	*C-more* DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, right angle cable entry. For use with *C-more* Micro EA1 series 4in and 6in HMIs, *C-more* Micro EA3 series 3in, 4in, and 6in HMIs, *C-more* EA9 6in and 7in HMIs.	$55.00
EA-MG-COV-CL	*C-more* screen protector, clear, 3in. Package of 5. For use with *C-more* Micro 3in HMIs.	$47.50
EA-4-COV3	*C-more* Micro screen protector, non-glare, 4in. Package of 3. For use with *C-more* Micro EA3-T4CL 4in HMIs.	$45.50

C-more Micro 3-inch EA3 Touch Panel

Model EA3-S3ML *C-more* 3-inch Micro touch panel has a 3.1-inch STN LCD monochrome display and twelve selectable LED-driven backlight colors. It features a 128 x 64 pixel display, and five user-defined function keys each with a user-defined red LED indicator. The EA3-S3ML is powered from a Class 2, 12-24 VDC power supply*. This *C-more* Micro panel can receive power from the serial communications port of most AutomationDirect PLC's or through the USB port when connected to a PC for programming. The panel is NEMA 4/4X indoor when installed correctly.

*NOTE: Recommended DC power supply to power the *C-more* Micro Panel, AutomationDirect Part No. PSL-24-010.

Part No. EA3-S3ML

$280.00

Function	Available
Ethernet	Yes (Built-in)
USB Programming Port	Yes
Serial RJ12 Port	Yes
Serial DB15 Port	No

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.
- 12-Color LED backlight for longer lifetime; Red, Green, Amber, Yellow, Lime, Pink 1, Pink 2, Pink 3, Emerald 1, Emerald 2, Emerald 3 and White
- Optional clear screen overlay
- 3MB memory
- Built-in USB type Micro-B programming port
- Built-in RJ45 Ethernet Port
- Built-in 15-pin serial communications port
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red 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

Dimensions

Units: inches [mm]

Panel Cutout

Panel Thickness

C-more Micro 4-inch EA3 Touch Panel

Model EA3-T4CL *C-more* 4" Micro touch panel has a 4.3-inch TFT LCD 482 x 272 pixel display (WQVGA) and a palette of 32K colors for customizing objects, screen backgrounds and displaying bitmap graphics. EA3-T4CL is powered from a Class 2, 12-24 VDC power supply*. The panel is NEMA 4/4X indoor when installed correctly.

*NOTE: Recommended DC power supply to power the *C-more* Micro Panel, AutomationDirect Part No. PSL-24-010.

Part No. EA3-T4CL

$394.00

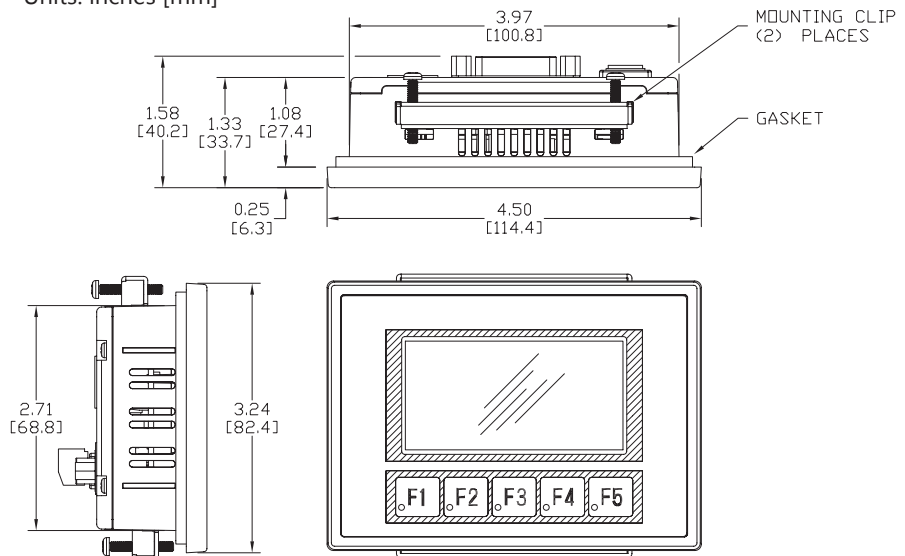| Function	Available
Ethernet	Yes (Built-in)
USB Programming Port	Yes
Serial RJ12 Port	Yes
Serial DB15 Port	No

Features

- Touch screen display
- Free downloadable programming software
- 482 x 272 pixel display (WQVGA) with up to 40 lines by 80 characters of text and graphics
- 32K colors
- Optional clear screen overlay
- 14MB memory
- Built-in USB type Micro-B programming port
- Built-in RJ45 Ethernet Port
- Built-in 15-pin serial communications port
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red 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
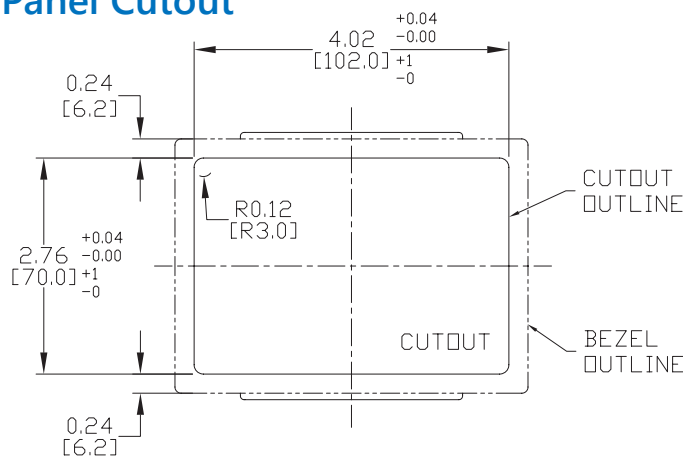- 2-year warranty from date of purchase

Dimensions

Units: inches [mm]

Panel Cutout

Panel Thickness

NOTE: Model EA3-T4CL and EA1-T4CL use different panel cutouts.

C-more Micro EA3-S3ML and EA3-T4CL Panel Specifications

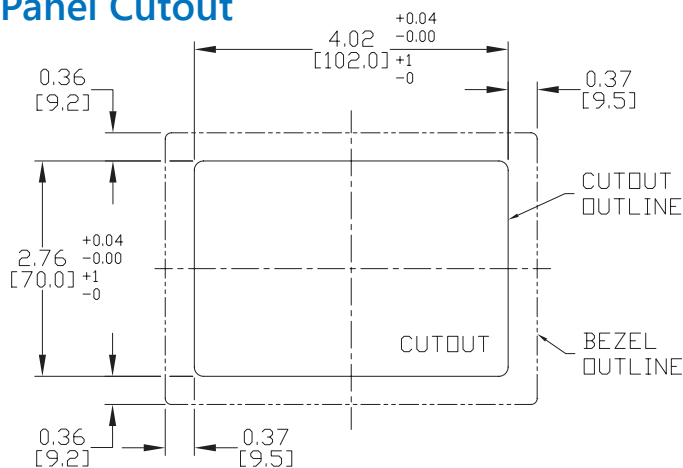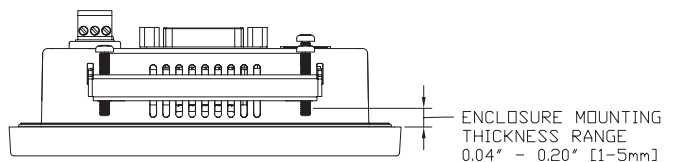| EA3-S3ML and EA3-T4CL Specifications		
Part Number:	*EA3-S3ML*	*EA3-T4CL*
Description:	128 x 64 pixel LCD display Five user defined keypad function buttons with five user defined LED indicators	480 x 272 pixel LCD display
Display:		
• *Type*	3.1" STN Monochrome with LED Backlight	4.3" TFT Graphical type with LED Backlight
• *Resolution*	128 (W) x 64 (H) pixel	480 (W) x 272 (H) pixel
• *Color*	2 colors (normal / inverse)	32768 colors
• *Display Brightness (Reference)*	W: Typ. 150 nit G: Typ. 150 nit R: Typ. 40 nit	370 nits (typ)
• *Viewing Area Size*	2.78" (W) x 1.53" (H) 70.7 mm x 38.8 mm	3.89" (W) x 2.26" (H) 98.70 mm x 57.50 mm
• *Active Area Size*	2.62" (W) x 1.31" (H) mm 66.52 mm x 33.24 mm	3.74" (W) x 2.12" (H) mm 95.04 mm x 53.86 mm
• *Contrast / Brightness*	Adjusted from the panel's built-in configuration setup menu	
• *Viewing Angle (Landscape Mode)*	3, 6, 9 o'clock axis –> 45 degrees 12 o'clock axis –> 30 degrees	3, 6, 9, 12 o'clock axis –> 80 degrees
Backlight:		
• *Type*	LED	
• *Color*	White, Red, Green (12 colors)	White
• *User Replaceable*	No	
Touch Screen:		
•*Type*	Analog resistive, single touch*	
• *Operation*	100 gram force [0.8 N] maximum	82 gram force [0.98 N] maximum
• *Life*	Minimum of 1,000,000 cycles	
Features:		
• *User Memory*	3MB	14MB
• *Number of Screens*	Up to 999 – limited by project memory usage	
• *Beep (Internal)*	Yes	
• *Keypad Function Buttons*	Five user defined function key buttons with the ability to customize label with an overlay. Minimum of 500,000 cycles	N/A
• *Keypad Function Button LEDs*	Each function key button includes a red LED that can be user programmed.	N/A
• *Programming Port*	USB 2.0 Type Micro-B Built-in Ethernet port	
• *Serial Communications*	RJ12 serial communications port (RS-232) 15-pin D-sub serial communications port (RS-232, RS-485 / 422).	
• *Ethernet Communications*	10/100 Base-T (Automatic Negotiation MDI/MDIX)	
Screen Objects		
• *Functional Devices*	Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Bar Graph, Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Real Time Graphics Line Graph, Analog Meter.	
• *Static Shapes*	Lines, Rectangles, Circles and Frames	
• *Displayable Fonts*	Fixed fonts: 4x6, 6x6, 6x6B, 6x8, 8x16, 8x32, 8x64, 16x16, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts	
*Note: The Touchscreen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected object may be activated.		
C-more **Micro EA3-S3ML and EA3-T4CL panel specifications continued on next page.**		

C-more Micro EA3-S3ML and EA3-T4CL Panel Specifications

EA3-S3ML and EA3-T4CL Specifications (cont'd)		
Part Number:	**EA3-S3ML**	**EA3-T4CL**
Electrical:		
• *Input Power*	RJ12 port to any AutomationDirect PLC RJ12 port (for serial communication only) USB Micro-B port to PC 10.2 - 26.4 VDC; Class 2 or SELV (Safety Extra-Low Voltage)or Limited Energy Circuit power supply	USB Micro-B port to PC 10.2 - 26.4 VDC; Class 2 or SELV (Safety Extra-Low Voltage)or Limited Energy Circuit power supply
• *Power Consumption*	1.05W (RJ12) 2W (USB) 3W (External Power Supply)	2.5W (USB) 4W (External Power Supply)
• *Maximum Inrush Current*	20A for 240µs (DC power supply)	22A for 240µs (DC power supply)
• *Acceptable External Power Drop Duration*	Maximum 1ms	
Environmental:		
• *Operating Temperature*	0 to 50 °C (32 to 122 °F); IEC 60068-2-14 (Test Nb, Thermal Shock)	
• *Storage Temperature*	–20 to +60 °C (–4 to +140 °F) IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, Thermal Shock)	
• *Humidity*	5–95% RH (non-condensing)	
• *Environmental Air*	For use in Pollution Degree 2 environment, no corrosive gases permitted	
• *Housing Material*	ABS Plastic	ABS-GF20
• *Gasket Material*	Silicone Rubber	
• *Overlay Sheet Material*	PET	
• *Vibration*	IIEC60068-2-6 (Test Fc)	
• *Shock*	IEC60068-2-27 (Test Ea)	
• *Altitude*	Up to 2000m (6562ft)	
• *Noise Immunity*	(EN61131-2) EN61000-4-2 (ESD), EN61000-4-3 (RFI) EN61000-4-4 (FTB) EN61000-4-5 (Serge) EN61000-4-6 (Conducted) EN61000-4-8 (Power frequency magnetic field immunity) (Local Test) RFI, (145MHz, 440Mhz 10W @ 10cm) Impulse 1000V @ 1µs pulse	
• *Enclosure*	NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (not tested by UL) (When mounted correctly)	
• *Agency Approvals*	CE (EN61131-2), UL61010, CUL Canadian C22.2, UL E157382, RoHS (2011/65/EU) To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page	
Physical		
• *Enclosure Mounting Thickness Range*	0.04" – 0.2" [1 – 5 mm]	
• *Mounting Clip Screw Torque Range*	21 – 28 oz·in [0.15 – 0.20 Nm]	
• *Weight*	6.7 oz. (190g)	7.76 oz. (220g)
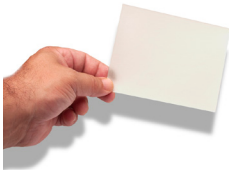
C-more Micro EA3-T6CL Panel Overview

C-more Micro EA3 Series Panels		
Part Number	*Description*	*Price*
EA3-T6CL	*C-more* Micro EA3 series touch screen HMI, 6in color TFT LCD, analog resistive, 320 x 240 pixel, QVGA, LED backlight, (2) serial and (1) USB B ports.	$466.00

Part Number	Panel Software / Firmware Version Required
EA3-T6CL	3.6 or later

C-more Micro Programming Software		
Part Number	*Description*	*Price*
EA-MG-PGMSW	*C-more* Micro Windows programming software, USB or free download. For use with *C-more* Micro panels. Requires USB port connection from PC to *C-more* Micro panel.	$31.50
USB-CBL-AB3	AutomationDirect programming cable, USB A to USB B, 3ft cable length. For use with *C-more* HMIs, Do-more and Productivity series CPUs and most USB devices.	$12.00
USB-CBL-AB6	AutomationDirect programming cable, USB A to USB B, 6ft cable length. For use with *C-more* HMIs, Do-more and Productivity series CPUs and most USB devices.	$16.00
USB-CBL-AB10	AutomationDirect programming cable, USB A to USB B, 10ft cable length. For use with *C-more* HMIs, Do-more and Productivity series CPUs and most USB devices.	$36.50
USB-CBL-AB15	AutomationDirect programming cable, USB A to USB B, 15ft cable length. For use with *C-more* HMIs, Do-more and Productivity series CPUs and most USB devices.	$42.50

C-more Micro EA3-T6CL Panel Overview

C-more Micro EA3 Series Panel Accessories
Part Number	**Description**	**Price**
EA-ECOM	*C-more* communication expansion module, (1) RJ45 10/100 Mbps Ethernet port. For use with *C-more* Micro EA3 series 6in, 8in and 10in panels and all *C-more* HMIs except -R models.	$73.00
EA-ADPTR-4	*C-more* DSUB port adapter, 15-pin male to 15-pin female, right angle cable entry. For use with *C-more* Micro EA1 series 4in and 6in HMIs, *C-more* Micro EA3 series 3in, 4in, and 6in HMIs, *C-more* EA9 6in and 7in HMIs.	$52.00
EA-COMCON-3	*C-more* DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, right angle cable entry. For use with *C-more* Micro EA1 series 4in and 6in HMIs, *C-more* Micro EA3 series 3in, 4in, and 6in HMIs, *C-more* EA9 6in and 7in HMIs.	$55.00
EA-COMCON-3A	*C-more* Micro DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with *C-more* Micro EA1 series 3in with EA1-MG-SP1, *C-more* Micro EA3 series 8in and 10in HMIs, *C-more* EA9 8in, 10in, 12in and 15in HMIs.	$30.50
EA-6-COV2	*C-more* screen protector, non-glare, 6in. Package of 3. For use with *C-more* and *C-more* Micro 6in HMIs.	$49.50
EA-8-COV2	*C-more* screen protector, non-glare, 8in. Package of 3. For use with *C-more* and *C-more* Micro 8in HMIs.	$53.00
EA-10-COV2	*C-more* Micro screen protector, non-glare, 10in. Package of 3. For use with *C-more* EA9-T10CL and *C-more* Micro EA3-T10CL HMIs.	$59.00

C-more Micro 6-inch TFT EA3 Touch Panel

Model EA3-T6CL *C-more* 6-inch Micro touch panel has a 5.7-inch TFT LCD 320 x 240 pixel display and a palette of 32K colors for customizing objects, screen backgrounds and displaying bitmap graphics. It features five user-defined function keys, each key with a user-defined red LED indicator. The *C-more* 6-inch Micro TFT panels are powered from a Class 2, 12-24 VDC power supply*. The panel is NEMA 4/4X indoor when installed correctly.

Part No. EA3-T6CL

Shown in Landscape (Horizontal) mode

$466.00

*NOTE: Recommended DC power supply to power the *C-more* Micro Panel, AutomationDirect Part No. PSL-24-010.

Features

- Touch screen display
- Free downloadable programming software
- 320 x 240 pixel display with up to 40 lines by 80 characters of text and graphics in landscape mode
- Up to 40 characters of dynamic text with embedded variables and phrases mixed with graphics
- Five programmable function keys can change with every screen. Can increment / decrement values, trigger recipes, view index of screens.
- 32K colors
- Optional replaceable clear screen overlay
- 6MB memory
- Supports Ethernet expansion module (EA-ECOM)
- Built-in USB type B programming port
- Built-in 15-pin serial communications port
- Built-in RJ12 serial communications port
- Built-in Alarm Control setup that activates beep, backlight flash, customized alarm banner, and red 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

Function	Available
Ethernet	Optional (EA-ECOM)
USB Programming Port	Yes
Serial RJ12 Port	Yes
Serial DB15 Port	No

*NOTE: The EA3-T6CL can be powered through the USB port when connected to a PC for programming, the screen brightness is diminished because the panel is running in Low-Power Mode. For full brightness, connect an external Class 2, 12-24 VDC power source to the 6" panel's power connection. An external Class 2, 12-24 VDC power source must be used when the panel is installed in its application.

Dimensions

Units: inches [mm]

MOUNTING CLIP (4) PLACES

GASKET

6.30 [159.9]

2.13 [54.1] 1.79 [45.4] 1.55 [39.4]

0.24 [6.0]

6.85 [174.0]

4.77 [121.3]

5.33 [135.4]

Panel Cutout

6.34 [161.0] +0.04 −0.00 / +1 −0

0.26 [6.6]   0.26 [6.5]   0.26 [6.5]

R0.12 [R3.0] TYPICAL

4.81 [122.2] +0.04 −0.00 / +1 −0

CUTOUT OUTLINE

BEZEL OUTLINE

CUTOUT

0.26 [6.6]

Panel Thickness

ENCLOSURE MOUNTING THICKNESS RANGE 0.04" − 0.20" [1−5mm]
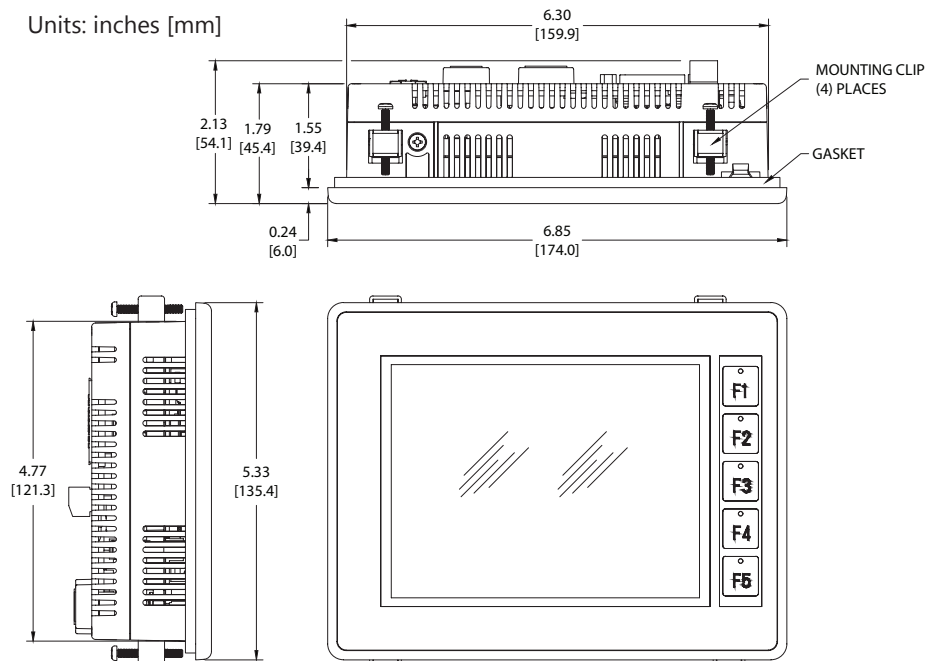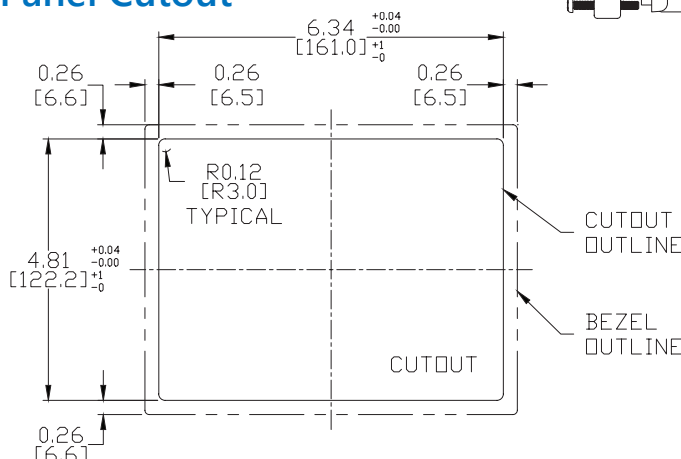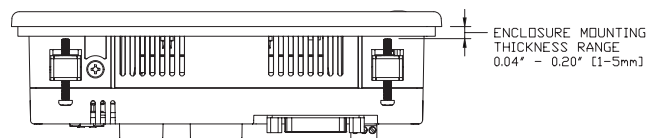
NOTE: The *C-more* 6-inch Micro cutout dimensions are not equivalent to previous AutomationDirect text panels. The *C-more* 6-inch Micro panels will not fit in cutouts for DV-1000, EZText, Optimate panels or *C-more* 6-inch panels.

C-more Micro EA3-T6CL Panel Specifications

EA3-T6CL Specifications	
Part Number:	*EA3-T6CL*
Description:	320 x 240 pixel LCD display (Landscape mode), Five user defined keypad function buttons with five user defined LED indicators
Display:	
• *Type*	5.7" TFT Graphical type with LED Backlight
• *Resolution*	320 (W) x 240 (H) pixel (Landscape Mode) 240 (W) x 320 (H) pixel (Portrait Mode)
• *Color*	32768 colors
• *Display Brightness (Reference)*	270 nits (typ)
• *Viewing Area Size*	4.57" (W) x 3.44" (H) [116.2 mm x 87.4 mm]
• *Active Area Size*	4.54" (W) x 3.40" (H) [115.2 mm x 86.4 mm]
• *Contrast / Brightness*	Adjusted from the panel's built-in configuration setup menu
• *Viewing Angle (Landscape Mode)*	3, 9 o'clock axis –> 80 degrees 6 o'clock axis –> 65 degrees 12 o'clock axis –> 80 degrees
Backlight:	
• *Type*	LED
• *Color*	White
• *User Replaceable*	No
Touch Screen:	
• *Type*	Analog resistive, single touch*
• *Operation*	82 gram force [0.8 N] maximum
• *Life*	Minimum of 1,000,000 cycles
Features:	
• *User Memory*	6MB
• *Number of Screens*	Up to 999 – limited by project memory usage
• *Beep (Internal)*	Yes
• *Keypad Function Buttons*	Five user defined function key buttons with the ability to customize label with an overlay. Minimum of 500,000 cycles
• *Keypad Function Button LEDs*	Each function key button includes a red LED that can be user programmed.
• *Programming Port*	USB 2.0 Type B
• *Serial Communications*	RJ12 serial communications port (RS-232) 15-pin D-sub serial communications port (RS-232, RS-485 / 422).
• *Ethernet Communications*	10/100 Base-T (Automatic Negotiation) with EA-ECOM Module
Screen Objects	
• *Functional Devices*	Pushbutton, Switch, Indicator Button, Indicator Light, Graphic Indicator Light, Numeric Display, Numeric Entry, Inc/Dec Value, Bar Graph, Bitmap Button, Static Bitmap, Dynamic Bitmap, Recipe Button, Static Text, Lookup Text, Dynamic Text, Screen Change Pushbutton, Screen Selector, Adjust Contrast, Function, Key Configuration Object, Real Time Graphics Line Graph, Analog Meter.
• *Static Shapes*	Lines, Rectangles, Circles and Frames
• *Displayable Fonts*	Fixed fonts: 4x6, 6x6, 6x6B, 6x8, 8x16, 8x32, 8x64, 16x16, 16x32, 16x64, 32x16, 32x32, 32x64, and Windows fonts
*Note: The Touchscreen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected object may be activated.	
C-more Micro EA3-T6CL panel specifications continued on next page.	

C-more Micro EA3-T6CL Panel Specifications

EA3-T6CL Specifications (cont'd)	
Part Number:	**EA3-T6CL**
Electrical:	
• *Input Power*	10.2 - 26.4 VDC; Class 2 or SELV (Safety Extra-Low Voltage) or Limited Energy Circuit power supply 5VDC USB B-Port to PC
• *Power Consumption*	7.5 W (External power supply) 2.0 W (USB)
• *Maximum Inrush Current*	13A for 800µs
• *Acceptable External Power Drop Duration*	Maximum 1ms
Environmental:	
• *Operating Temperature*	0 to 50 °C (32 to 122 °F); Maximum surrounding air temperature rating: 50 °C (122 °F) IEC 60068-2-14 (Test Nb, Thermal Shock)
• *Storage Temperature*	–20 to +60 °C (–4 to +140 °F) IEC 60068-2-1 (Test Ab, Cold) IEC 60068-2-2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, Thermal Shock)
• *Humidity*	5–95% RH (non-condensing)
• *Environmental Air*	For use in Pollution Degree 2 environment, no corrosive gases permitted
• *Housing Material*	ABS Plastic
• *Gasket Material*	Silicone Rubber
• *Overlay Sheet Material*	PET
• *Vibration*	IIEC60068-2-6 (Test Fc)
• *Shock*	IEC60068-2-27 (Test Ea)
• *Altitude*	Up to 2000m (6562ft)
• *Noise Immunity*	(EN61131-2) EN61000-4-2 (ESD), EN61000-4-3 (RFI) EN61000-4-4 (FTB) EN61000-4-5 (Serge) EN61000-4-6 (Conducted) EN61000-4-8 (Power frequency magnetic field immunity) (Local Test) RFI, (145MHz, 440Mhz 10W @ 10cm) Impulse 1000V @ 1µs pulse
• *Enclosure*	NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (not tested by UL) (When mounted correctly)
• *Agency Approvals*	CE (EN61131-2), UL508, CUL Canadian C22.2 No. 142-M95, UL E157382, RoHS (2011/65/EU) To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page
Physical:	
• *Enclosure Mounting Thickness Range*	0.04" – 0.2" [1 – 5 mm]
• *Mounting Clip Screw Torque Range*	21 – 28 oz·in [0.15 – 0.20 Nm]
• *Weight*	21.1 oz. (600g)

C-more Micro EA3 Series PLC Drivers
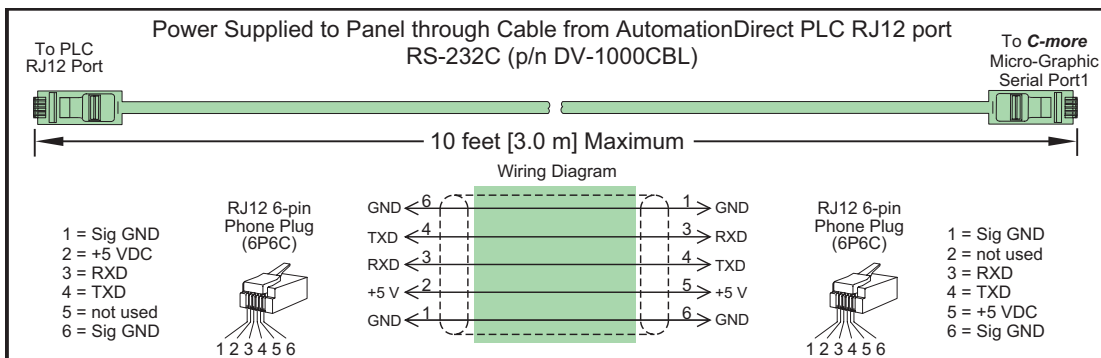
PLC Drivers		
Serial - port1 or port2	*Serial - port2 only*	*Ethernet**
AutomationDirect Productivity Series	Allen-Bradley DF1 Half Duplex	AutomationDirect Productivity Series Ethernet
AutomationDirect Do-more / BRX**	Allen-Bradley DF1 Full Duplex	AutomationDirect Do-more / BRX Ethernet
AutomationDirect CLICK	Allen-Bradley PLC5 DF1	AutomationDirect CLICK Ethernet
AutomationDirect K-sequence	Allen-Bradley DH485	AutomationDirect ECOM Ethernet
AutomationDirect DirectNET	GE SNPX (90/30, 90/70, Micro 90, VersaMax Micro)	Modbus TCP/IP
AutomationDirect Modbus (master only)	Mitsubishi FX	Allen-Bradley EtherNet/IP(Client) SLC5/05
Modicon Modbus RTU (master only)	Mitsubishi Q & QnA	Allen-Bradley EtherNet/IP(Client) ENI Adapter
Entivity Modbus RTU (master only)	Omron Host Link (C200 Adapter, C500)	Allen-Bradley EtherNet/IP(Client) MicroLogix 1100/1400
	Omron FINS Serial (CJ1, CS1)	Allen-Bradley EtherNet/IP (Client) Control/CompactLogix (SLC Mapping only)
	Siemens PPI (S7-200 CPU)	
	AutomationDirect SOLO Temperature Controller	
	AutomationDirect GS Drives	
* Ethernet port is built in to EA3-S3ML and EA3-T4CL. EA3-T6CL requires the optional EA-ECOM module for Ethernet. **Ethernet communications require external power supply.** **** BX-P-SER2-RJ12 is required**		

C-more Micro EA3 Series Power Connection Wiring

## EA3-S3ML-RN and EA3-S3ML-R

- EA3-S3ML-RN and EA3-S3ML-R **C-more** Micro panels are powered during programming from the PC through the USB to RS-232 Programming Cable Assembly, EA-MG-PGM-CBL.

- During operation, EA3-S3ML-RN and EA3-S3ML-R **C-more** Micro panels can be powered from most AutomationDirect PLC's RJ12 serial communications ports by using the DV-1000CBL communications cable.

Power Supplied to Panel through Cable from AutomationDirect PLC RJ12 port RS-232C (p/n DV-1000CBL)

To PLC RJ12 Port

To **C-more** Micro-Graphic Serial Port1

10 feet [3.0 m] Maximum

Wiring Diagram

1 = Sig GND
2 = +5 VDC
3 = RXD
4 = TXD
5 = not used
6 = Sig GND

RJ12 6-pin Phone Plug (6P6C)

GND 6 — 1 GND
TXD 4 — 3 RXD
RXD 3 — 4 TXD
+5 V 2 — 5 +5 V
GND 1 — 6 GND

RJ12 6-pin Phone Plug (6P6C)

1 = Sig GND
2 = not used
3 = RXD
4 = TXD
5 = +5 VDC
6 = Sig GND

1 2 3 4 5 6

1 2 3 4 5 6

EA3-S3ML, EA3-T4CL and EA3-T6CL

EA3-S3ML, EA3-T4CL and EA3-T6CL **C-more** Micro EA3 series panels are powered by a Class 2, 2.5 Amp @ 12-24 VDC power source in normal operation.

Supply to Panel:
2.5A @ 12–24 VDC

Port 2
RxD TxD

12–24V

Equipment Ground
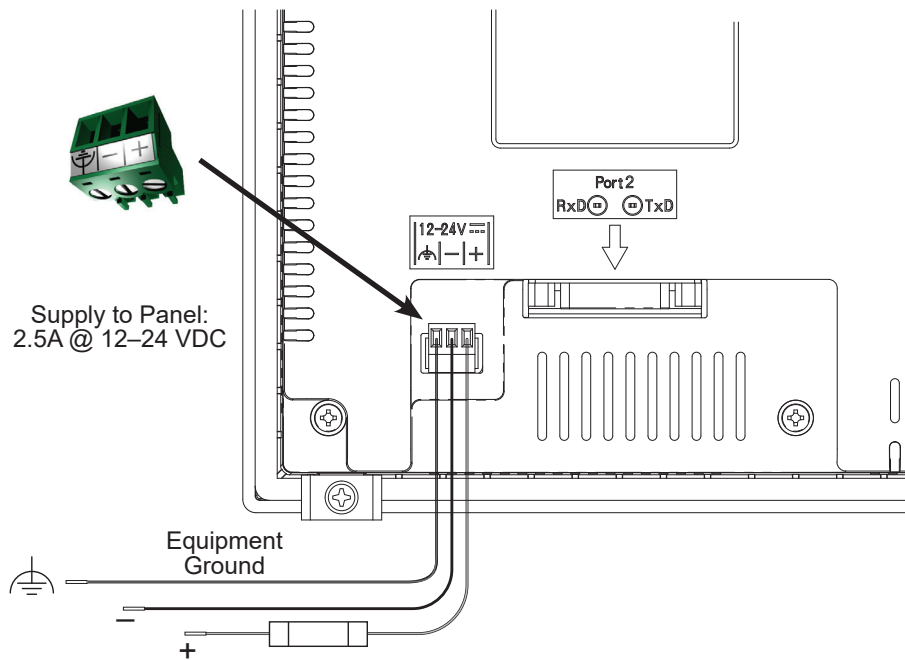
WARNING: USING A DIFFERENTIAL POWER SUPPLY AND CONNECTION THE USB TO A PC CAN DAMAGE BOTH THE PANEL AND THE PC.

C-more Micro EA3 Series PLC Connections

Cabling requirements

Communication Ports

The table below decribes the EA3 series cabling options available for most AutomationDirect PLCs.

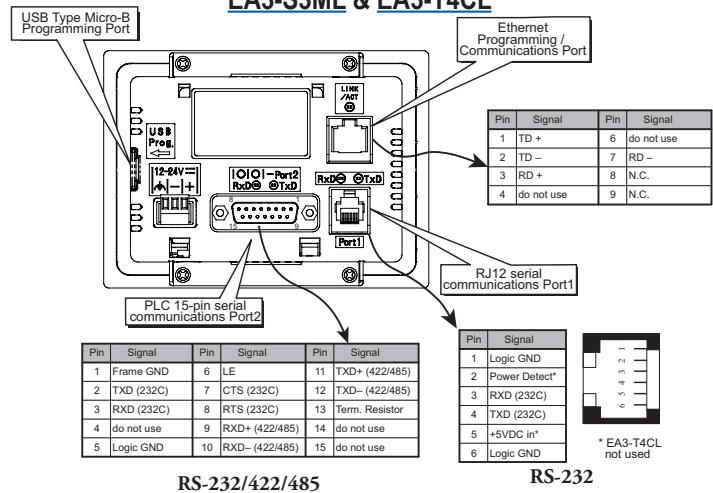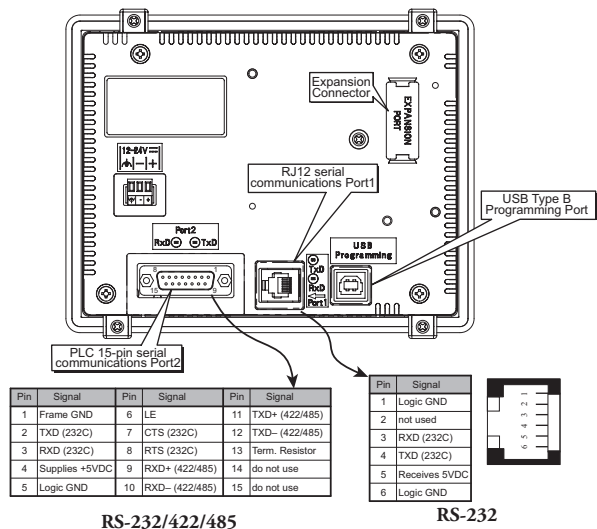| EA3 Series Cabling Options			
Part Number	Port1 RJ12 (RS-232)	Port2 15-pin (RS-232) See PLC List A	Port2 15-pin (RS-232) See PLC List B
EA3-S3ML	DV-1000CBL*	EA-2CBL	EA-2CBL-1
EA3-S3ML-R		N/A	N/A
EA3-S3ML-RN			
EA3-T4CL	DV-1000CBL, D0-CBL	EA-2CBL	EA-2CBL-1
EA3-T6CL			
PLC List A	Productivity Series, Do-more / BRX**, CLICK, DL05, DL105, DL205, D3-350, D4-450 phone jack		
PLC List B	D2-250, D250-1, D2-260, DL06 VGA connector		
*Cable can provide +5VDC for panel power **BX-P-SER2-RJ12 is required			
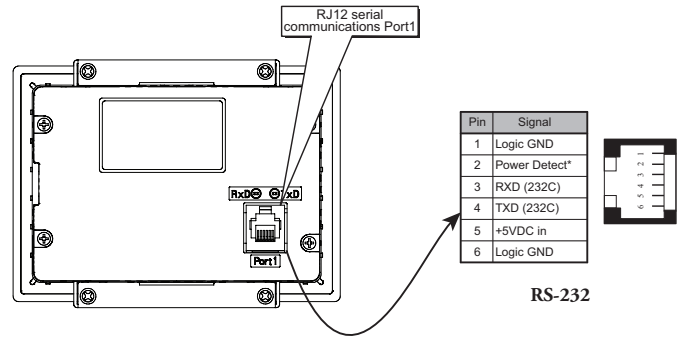
Drivers for your Controller

- AutomationDirect Productivity Series – serial / Ethernet*
- AutomationDirect Do-more / BRX – serial / Ethernet*
- AutomationDirect CLICK (Modbus(master only))– serial / Ethernet*
- *Direct*LOGIC K-sequence, *Direct*LOGIC *Direct*NET, *Direct*LOGIC Modbus (master only) (Koyo Addressing) *Direct*LOGIC ECOM Ethernet*
- Modbus RTU (master only) Modbus TCP/IP*
- Allen-Bradley DF1 Full Duplex, Allen-Bradley DF1 Half Duplex, Allen-Bradley PLC5 DF1, AB DH485, Allen-Bradley EtherNet/IP (Client) SLC5/05, NET-ENI, MicroLogix 1100/1400*, Control/CompactLogix (SLC mapping only)
- 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 (master only)
- AutomatiionDirect GS Drives
- AutomationDirect SOLO Temperature Controllers
- Mitsubishi Q/QnA

* Ethernet port is built in to EA3-S3ML and EA3-T4CL and EA3-T6CL require the optional EA-ECOM module for Ethernet.

EA3-S3ML-RN & EA3-S3ML-R

Pin	Signal
1	Logic GND
2	Power Detect*
3	RXD (232C)
4	TXD (232C)
5	+5VDC in
6	Logic GND

RS-232

EA3-S3ML & EA3-T4CL

Pin	Signal	Pin	Signal
1	TD +	6	do not use
2	TD –	7	RD –
3	RD +	8	N.C.
4	do not use	9	N.C.

Pin	Signal	Pin	Signal	Pin	Signal
1	Frame GND	6	LE	11	TXD+ (422/485)
2	TXD (232C)	7	CTS (232C)	12	TXD– (422/485)
3	RXD (232C)	8	RTS (232C)	13	Term. Resistor
4	do not use	9	RXD+ (422/485)	14	do not use
5	Logic GND	10	RXD– (422/485)	15	do not use

RS-232/422/485

Pin	Signal
1	Logic GND
2	Power Detect*
3	RXD (232C)
4	TXD (232C)
5	+5VDC in*
6	Logic GND

* EA3-T4CL not used

RS-232

EA3-T6CL

Pin	Signal	Pin	Signal	Pin	Signal
1	Frame GND	6	LE	11	TXD+ (422/485)
2	TXD (232C)	7	CTS (232C)	12	TXD– (422/485)
3	RXD (232C)	8	RTS (232C)	13	Term. Resistor
4	Supplies +5VDC	9	RXD+ (422/485)	14	do not use
5	Logic GND	10	RXD– (422/485)	15	do not use

RS-232/422/485

Pin	Signal
1	Logic GND
2	not used
3	RXD (232C)
4	TXD (232C)
5	Receives 5VDC
6	Logic GND

RS-232

# Communication Expansion Module

EA-ECOM Ethernet Communication Module

The EA-ECOM communication module is compatible with EA3 series *C-more* Micro 6-inch, 8-inch and 10-inch panels and most *C-more* panels. It adds an Ethernet (RJ45) port for programming and PLC communications at 10/100 Mbps. *C-more* Micro Software and firmware version 4.0 or later is required. *C-more* Software and firmware version 6.50 or later is required.

Part No. EA-ECOM $73.00

Dimensions

Units: inches [mm]

PANEL CONNECTION

0.98 [24.8]

3.62 [92.0]

3.70 [94.0]
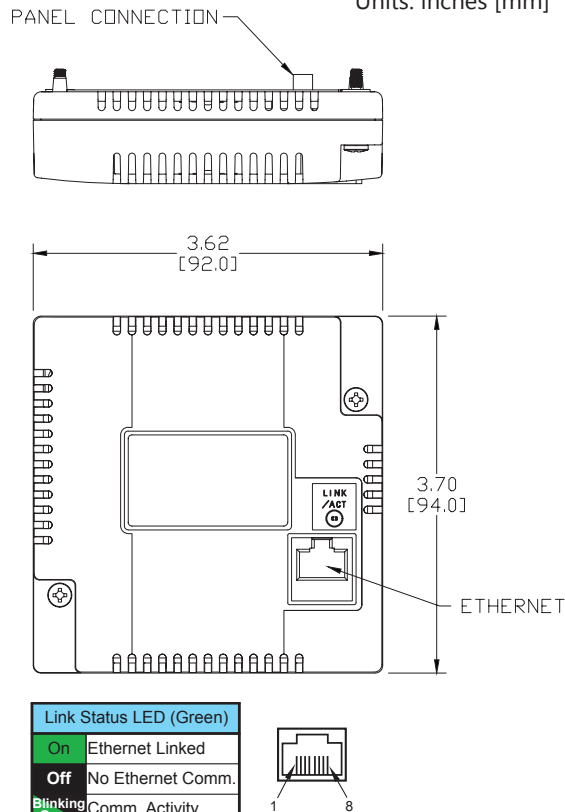
ETHERNET

Ethernet Communication Interface Specifications	
Standard Specification	Conforms to IEEE802.3
Communication Speed	10/100 Base-T (Automatic Negotiation)
Cable Specification	Category 5
Auto MDI / MDI-X	Yes
Connector Type	RJ45

Communication Drivers	
C-more	*C-more Micro*
Supports all *C-more* Ethernet drivers	AutomationDirect Productivity Series Ethernet
	AutomationDirect Do-more / BRX Ethernet
	AutomationDirect CLICK Ethernet
	AutomationDirect ECOM Ethernet
	Modbus TCP/IP
	Allen-Bradley EtherNet/IP (Client) SLC5/05
	Allen-Bradley EtherNet/IP (Client) ENI Adapter
	Allen-Bradley EtherNet/IP (Client) MicroLogix 1100/1400
	Allen-Bradley EtherNet/IP (Client) control/CompactLogix (SLC Mapping only)

LINK /ACT

Link Status LED (Green)	
On	Ethernet Linked
Off	No Ethernet Comm.
Blinking Green	Comm. Activity

1   8

EA-ECOM Specifications	
Part Number	*EA-ECOM*
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%), 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, on 3 mutually perpendicular axes (total of 18 shocks)
Noise Immunity	NEMA ICS3-304 RFI, (145 MHz, 440 MHz 10 W @ 10 cm) Impulse 1000 V @ 1 μs pulse
Emission	EN55011 Class A (Radiated RF emission)
Enclosure (panel door installation)	NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (When mounted correctly)
Agency Approvals	CE (EN61131-2), UL508, CUL Canadian C22.2 To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page
Mounting Torque	50 oz·in [0.35 N·m]
Weight	0.23 lb [105g]

C-more Micro EA3 Panel Accessories

D-SUB 15-pin 90-degree Communication Port Adapter

The EA-ADPTR-4 adapter plugs into the 15-pin serial port on the rear of *C-more* Micro EA3 Series 3-inch*, 4-inch and 6-inch panels to allow a controller communication cable to be plugged in at a 90 degree angle to reduce panel depth requirements. 15-pin straight through pin-out. UL Recognized.

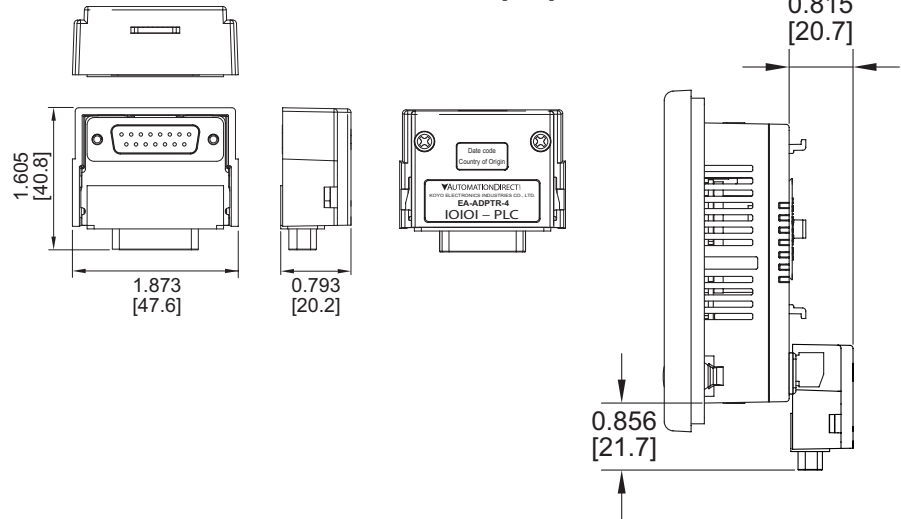* EA3-S3ML-RN and EA3-S3ML-R are not equipped with a 15-pin serial port.

**Part No.
EA-ADPTR-4**

Dimensions
Units: inches [mm]

$52.00

1.605 [40.8]

1.873 [47.6]

0.793 [20.2]

0.815 [20.7]

0.856 [21.7]

D-SUB 15-pin to Terminal Block Adapter

The EA-COMCON-3 adapter plugs into the 15-pin serial port on the rear of *C-more* Micro EA3 Series 3-inch*, 4-inch and 6-inch panels to allow wire terminal connections for an RS-422/RS-485/DH485 PLC communication cable. UL Recognized.

* EA3-S3ML-RN and EA3-S3ML-R are not equipped with a 15-pin serial port.

**Part No.
EA-COMCON-3**

Dimensions
Units: inches [mm]

$55.00

1.756 [44.6]

1.873 [47.6]

1.126 [28.6]

1.15 [29.2]

1.00 [25.4]

Terminals

GND	SD–	SD+	RD–	RD+	TERM

Operator Interface
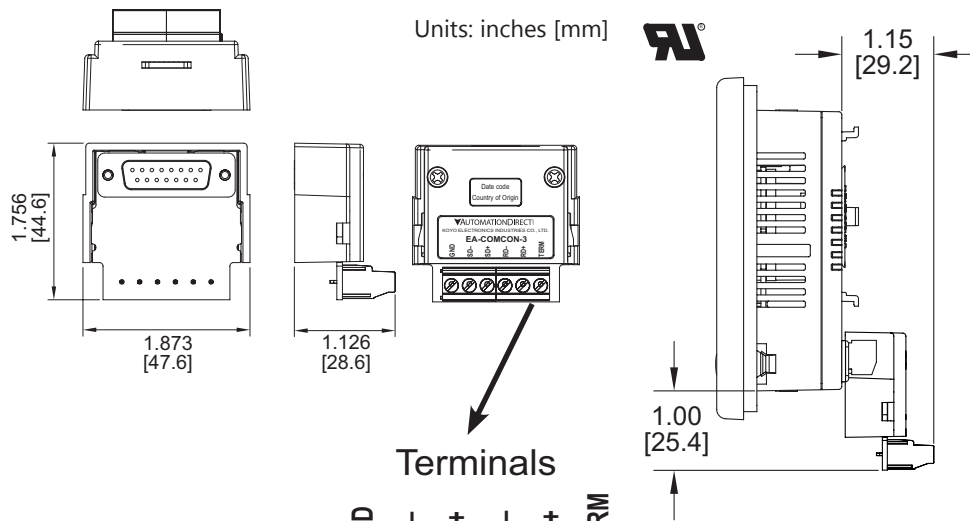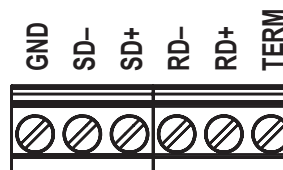
C-more Micro EA3 Panel Accessories

D-SUB 15-pin to Terminal Block Adapter

The EA-COMCON-3A adapter plugs into the 15-pin serial port on the rear of *C-more* Micro EA3 Series 8-inch and 10-inch panels to allow wire terminal connections for an RS-422/RS-485/DH485 PLC communication cable.
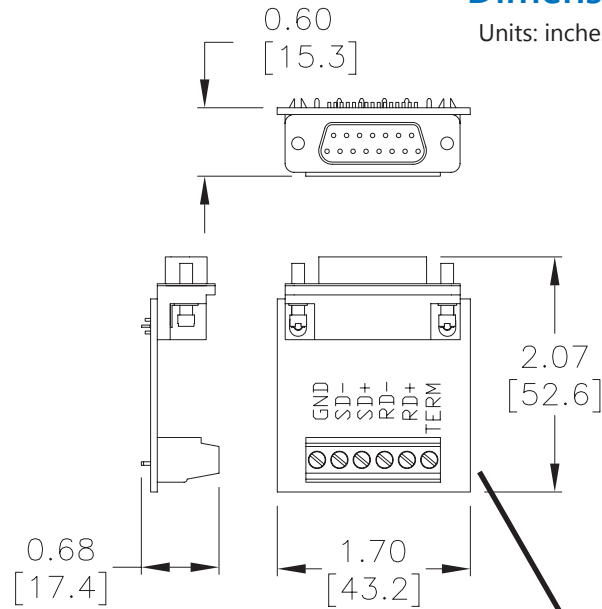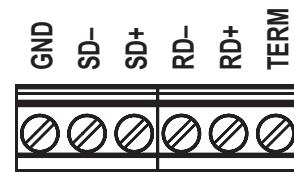
**Part No.
EA-COMCON-3A**

$30.50

Dimensions

Units: inches [mm]

0.60
[15.3]

2.07
[52.6]

0.68
[17.4]

1.70
[43.2]

GND SD− SD+ RD− RD+ TERM

Terminals

GND SD− SD+ RD− RD+ TERM

C-more Micro EA3 Panel Accessories

Clear Screen Overlay

Optional clear screen overlay used to protect **C-more** Micro displays from minor scratches and wear.
EA-MG-COV-CL contains 5 clear screen overlays. All other packages contain 3 clear screen overlays.
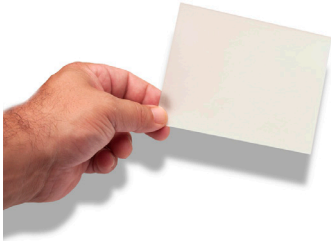
Part No. EA-MG-COV-CL
$47.50

Part No. EA-4-COV3
$45.50

Part No. EA-6-COV2
$49.50

Part No. EA-8-COV2
$53.00

Part No. EA-10-COV2
$59.00

Dimensions
Units: inches [mm]

A

B

0.197 [5.0]

0.157 [4.0]
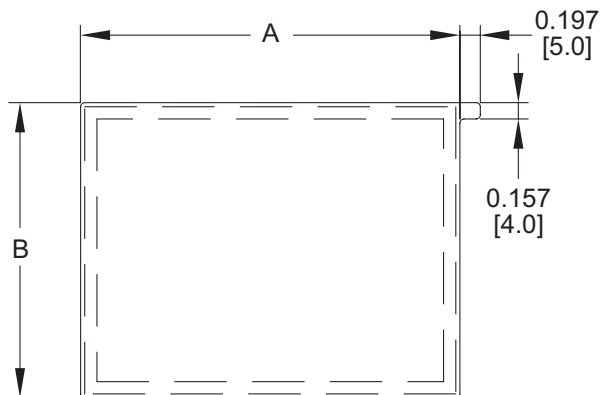
Part Number	Dimensions - inch [mm]	
	A	B
EA-MG-COV-CL	3.13 [79.4]	1.75 [44.4]
EA-4-COV3	4.15 [105.5]	2.52 [64.0]
EA-6-COV2	4.91 [124.8]	3.80 [96.4]
EA-8-COV2	7.32 [185.8]	5.44 [138.2]
EA-10-COV2	8.91 [226.2]	6.61 [168.0]

C-more Micro 3-inch and 4-inch EA3 Panel Replacement Parts

Replacement parts at a glance:

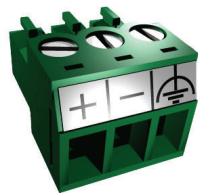| Part Number	Description	Price
EA-MG-S3ML-BRK	*C-more* Micro panel mounting brackets, replacement. Package of 2. For use with *C-more* Micro 3in and EA3-T4CL HMIs.	$23.00
EA-MG-DC-CON	*C-more* Micro DC 3-terminal power connector, replacement. Package of 5. For use with all *C-more* Micro 4in, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	$19.00
EA-MG-S3ML-GSK	*C-more* Micro panel mounting gasket, replacement. For use with *C-more* Micro EA1 series 3in HMIs.	$16.00
EA-4-GSK	*C-more* Micro panel mounting gasket, replacement. For use with *C-more* Micro EA3-T4CL 4in HMIs.	$12.00
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.	$29.50

Panel Mounting Clips
Part No. EA-MG-S3ML-BRK
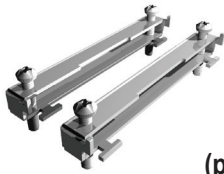
(pk of 2)

3" Panel Gasket
Part No. EA-MG-S3ML-GSK
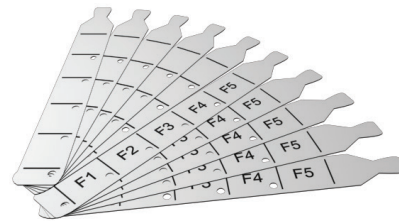
EA3-T4CL Panel Gasket
Part No. EA-4-GSK

DC Power Connector
Part No. EA-MG-DC-CON

(pk of 5)

3" Panel Function Keys Label Inserts
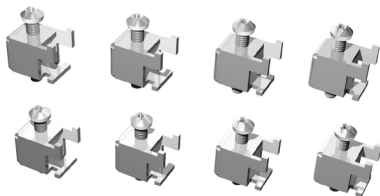**Part No. EA-MG-S3ML-FKL**

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

C-more Micro 6-inch EA3 Panel Replacement Parts
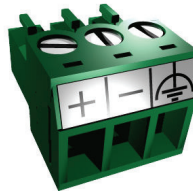
Replacement parts at a glance:

Part Number	Description	Price
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, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	$19.00
EA-MG6-S6ML-GSK	*C-more* Micro panel mounting gasket, replacement. For use with *C-more* Micro 6in panels.	$14.50
EA-MG6-S6ML-FKL	*C-more* Micro function key label insert, replacement. Package of 5. For use with *C-more* Micro 6in HMIs. (3) blank labels, (1) portrait F1-F5 label and (1) landscape F1-F5 label included.	$40.50

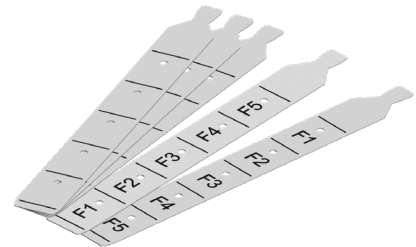**Panel Mounting Clips**
Part No. EA-MG-BZ2-BRK

(pk of 8)

DC Power Connector
Part No. EA-MG-DC-CON

(pk of 5)

Function Keys Label Inserts
Part No. EA-MG6-S6ML-FKL

(pk of 5; 3 blank, 1 F1-F5 for land-scape, 1 F1-F5 for portrait)
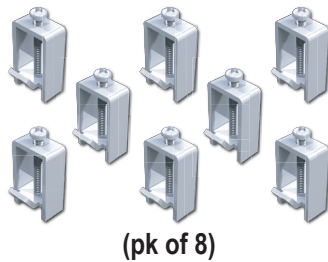
Panel Gasket
Part No. EA-MG6-S6ML-GSK

# *C-more* Micro 8-inch and 10-inch EA3 Panel Replacement Parts

Replacement parts at a glance:

Part Number	Description	Price
EA3-BRK	*C-more* Micro panel mounting brackets, replacement. Package of 8. For use with *C-more* Micro EA3 series touch panels.	$34.50
EA-MG-DC-CON	*C-more* Micro DC 3-terminal power connector, replacement. Package of 5. For use with all *C-more* Micro 4in, 6in, 8in and 10in panels, and power adapters EA-MG-P1 and EA-MG-SP1.	$19.00
EA3-8-GSK	*C-more* Micro panel mounting gasket, replacement. For use with *C-more* Micro EA3-T8CL 8in touch panel.	$22.00
EA3-10-GSK	*C-more* Micro panel mounting gasket, replacement. For use with *C-more* Micro EA3-T10CL 10in touch panel.	$24.50
EA3-MG-8-FKL	*C-more* Micro function key label insert, replacement. Package of 5. For use with *C-more* Micro EA3-T8CL HMI. (3) blank labels, (1) portrait F1-F7 label and (1) landscape F1-F7 label included.	Retired
EA3-MG-10-FKL	*C-more* Micro function key label insert, replacement. Package of 5. For use with *C-more* Micro EA3-T10CL HMI. (3) blank labels, (1) portrait F1-F7 label and (1) landscape F1-F7 label included.	Retired

**Panel Mounting Clips
Part No. EA3-BRK**
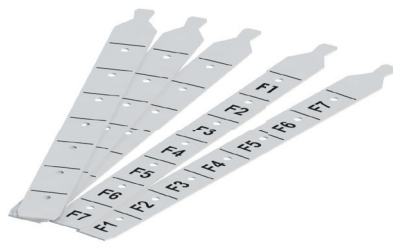

(pk of 8)

**DC Power Connector
Part No. EA-MG-DC-CON**

(pk of 5)
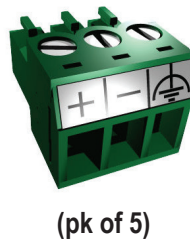
**Panel Gasket
Part No. EA3-8-GSK**

**Panel Gasket
Part No. EA3-10-GSK**

**Function Keys Label Inserts
Part No. EA3-MG-8-FKL**

(pk of 5; 3 blank, 1 F1-F7 for landscape, 1 F1-F7 for portrait)

**Function Keys Label Inserts
Part No. EA3-MG-10-FKL**

(pk of 5; 3 blank, 1 F1-F7 for landscape, 1 F1-F7 for portrait)

For the latest prices, please check AutomationDirect.com.
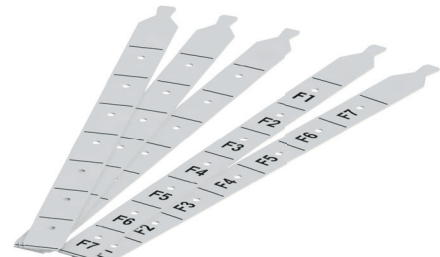
C-more Micro Communication Cables and Cable Kits

Cable Description	Cable Part Number	Price
Cables for direct connect to panel's serial Port1 (Panel powered from PLC's serial port.)		
Networking cable, RS-232 (RJ12 6P6C) to RS-232 (RJ12 6P6C), shielded, 12ft cable length. For use with CLICK, DL05, D2-240, D4-450 and Productivity3000 PLCs.	D0-CBL	$47.50
DirectLOGIC 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.	FA-15HD	$21.00
DirectLOGIC universal cable kit, for use with all DirectLOGIC PLCs with RS-232 ports.	FA-CABKIT	$71.00
Cables used with serial Port2		
AutomationDirect communication cable, 15-pin male D-sub to 6-pin RJ12, shielded, 9.8ft/3m cable length. For use with *C-more* or *C-more* Micro panel and AutomationDirect PLCs with RJ12 ports.	EA-2CBL	$31.00
AutomationDirect communication cable, 15-pin male D-sub to 15-pin D-sub HD15 male, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a DL06, D2-250(-1), D2-260 or D2-262 (bottom port) CPU.	EA-2CBL-1	$31.50
AutomationDirect communication cable, 15-pin male D-sub to 4-pin RJ11, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a D3-340 CPU top or bottom port.	EA-3CBL	Retired
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a DL405 (top port) CPU.	EA-4CBL-1	$31.00
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a D2-DCM, D3-232-DCU, D3-350 (bottom port) or DL405 (bottom port) CPU.	EA-4CBL-2	$32.00
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Allen-Bradley Micrologix CPU.	EA-MLOGIX-CBL	$47.50
AutomationDirect communication cable, 15-pin male D-sub to 9-pin female D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Allen-Bradley SLC 5/03, 5/04 or 5/05 CPU with DF-1 port.	EA-SLC-232-CBL	$31.00
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Allen-Bradley PLC-5 CPU with a DF1 port.	EA-PLC5-232-CBL	$31.00
AutomationDirect communication cable, 15-pin male D-sub to 6-pin RJ45, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Allen-Bradley SLC 5/01, 5/02 or 5/03 CPU with a DH485 port cable.	EA-DH485-CBL	$30.50
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro and GE Fanuc Series 90/30 or 90/70 serial port.	EA-90-30-CBL	$31.00
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a Mitsubishi FX Series CPU.	EA-MITSU-CBL	$31.00
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and a Mitsubishi FX Series CPU.	EA-MITSU-CBL-1	$31.00
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with *C-more* or *C-more* Micro panel and an Omron C200 or C500 CPU.	EA-OMRON-CBL	$31.00

Note: Adding the optional EA-ECOM module allows communication via an Ethernet connection (EA3 series only).
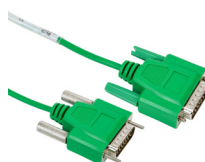
D0-CBL

FA-15HD

FA-CABKIT

EA-2CBL-1 **EA-2CBL**

EA-4CBL-1 **EA-3CBL**

EA-MLOGIX-CBL **EA-4CBL-2**

EA-PLC5-232-CBL **EA-SLC-232-CBL**

EA-DH485-CBL **EA-90-30-CBL** **EA-MITSU-CBL** **EA-MITSU-CBL-1** **EA-OMRON-CBL**

C-more Micro Programming Software

FREE software!

C-more Micro Programming Software can be downloaded at no charge or a USB version may be purchased by ordering EA-MG-PGMSW. 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.

Note: The Ethernet port is built in to EA3-S3ML and EA3-T4CL and EA3-T6CL requires the optional EA-ECOM 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

C-more Micro Programming Software is a spin-off of its powerful sibling *C-more* Touch Panel. It offers very high end features designed to reduce your configuration time. Simply drag and 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 free version.
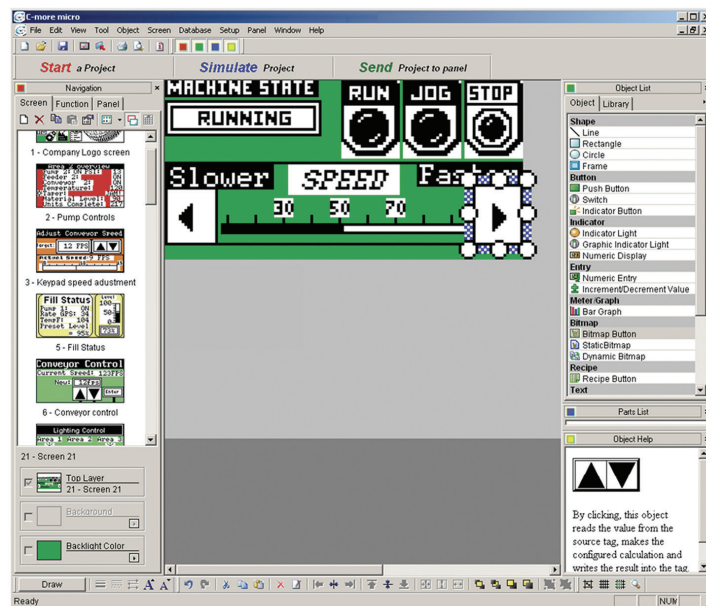
Built-in project simulator
• Runs your project on your PC
• Test all of your screens before downloading
• Time savings pays for the panel
• Simulate function keys and keypad bezel

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.

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

PC requirements
Following are the minimum system requirements for running *C-more* Micro Programming Software, EA-MG-PGMSW, on a PC:
• Windows® Operating System (See automationdirect.com for specific operating system requirements.)
• 150 MB free hard-disk space
• USB port for installing software from the USB, 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

FA-CABKIT Universal Cable Kit

The table lists various devices that can be connected quickly with the universal cable kit. To determine which parts you need to use, simply use the table to find the connection you wish to make. Then match each device required for that connection with its part number. Snap the pieces together and you're ready to communicate. The following seven parts are included in the Universal Cable Kit. These parts are not sold separately, except for the FA-15HD high density 15-pin connector.

1. Standard phone-style connectors (RJ12), non-shielded

2. Standard phone and handset style connectors (RJ12, RJ11), non-shielded

3. Universal 9-pin female D-sub connector

Standard RJ12 phone jack
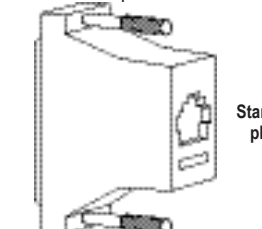
4. Universal 9-pin male D-sub connector

Standard RJ12 phone jack

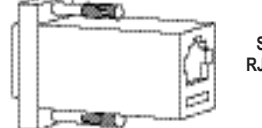5. Universal 15-pin male D-sub connector

Standard RJ12 phone jack

6. Universal 25-pin male D-sub connector

Standard RJ12 phone jack

7. Universal 15-pin HD male D-sub connector (FA-15HD)

Standard RJ12 phone jack

Universal cable kit

Items included in the universal cable kit

Device Description

1. 7 ft. standard cable, 6P6C to 6P6C phone type
2. 6 ft. adapter cable, 6P6C to 4P4C phone type
3. AT connector 9-pin female to 6P6C connector
4. (ASCII BASIC module) 9-pin male connector to 6P6C connector
5. DL405 15-pin male connector to 6P6C connector
6. DL405 CPU and DCM 25-pin male connector to 6P6C connector
7. DL06, D2-250(-1) and D2-260 CPUs 15-pin HD male connector to 6P6C connector

Common connection examples

DL05, DL06, DL105, DL205, D3-350 and (D4-450 port 2) CPU connections

Connection desired	Devices required
1. DL05/06/105/205/DL350/D4-450 to AT type computer 9-pin	1,3
2. CPU to DV-1000	1
3. CPU to DL205 or DL405 DCM	1,6
4. CPU to DL340 CPU	2
5. CPU to ABM (DL205 only)	1,4

DL06, D2-250(-1), D2-260 CPU port 2 connections

Connection desired	Devices required
1. DL06/250(-1)/260 port 2 to AT type computer 9-pin	1,3,7
2. DL06/250(-1)/260 port 2 to DV-1000	1,3,7

DL305 D3-232-DCU connections

Connection desired	Devices required
1. DCU to AT type computer 9-pin	1,6,3
2. DCU to DL405 series DCM (requires 2 kits)	1,6,6
3. DCU to DL340 CPU	2,6
4. DCU to ABM	1,6,4

DL305 CPU connections

Connection desired	Devices required
1. DL340 CPU to AT type computer 9-pin	2,3
2. DL340 CPU to DL405 series CPU/DCM	2,6
3. DL340 CPU to DL240 CPU	2
4. DL340 to ABM	2,4
5. DL340 CPU to DCU CPU	2,6

DL405 CPU (15-pin) top port connections

Connection desired	Devices required
1. DL405 CPU to AT type computer 9-pin	1,5,3
2. DL405 CPU to DV-1000	1,5

DL405 CPU (25-pin) bottom port connections

Connection desired	Devices required
1. DL405 CPU to AT type computer 9-pin	1,6,3
2. DL405 CPU to DL405 series DCM (requires 2 kits)	1,6,6
3. DL405 CPU to DL340 CPU	2,6
4. DL405 CPU to ABM	1,6,4