

# ACCESSORIES

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# CHAPTER 3

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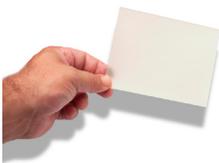
# Accessories

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C-more Micro Programming Software & Programming Cables		
Part Number		Description
EA-MG-PGMSW		<b>C-more</b> Micro Windows-based programming software, USB. For use with <b>C-more</b> Micro panels. Requires USB port connection from PC to <b>C-more</b> Micro panel. Cables sold separately. Downloadable version available from the Web site at no charge.
USB-CBL-AB6		Standard USB 2.0 cable with Standard-A plug to Standard-B plug, suitable for all USB devices. 6 ft. (1.8 m) cable shown as example. Maximum cable length is 15 ft (4.5 m).
USB-CBL-AMICB6		Programming cable, USB A to micro-B USB, 6ft cable length. For use with 3 and 4-inch panels.



**NOTE:** Adding optional EA-ECOM module allows programming via an Ethernet connection via a Cat5e cable.

C-more Micro Panel Accessories		
Part Number		Description
EA-ECOM		<b>C-more</b> Micro communication expansion module, (1) RJ45 10/100 Mbps Ethernet port. For use with EA3 series 6in, 8in and 10in HMIs. For programming and PLC communications.
EA-ADPTR-4		DSUB port adapter, 15-pin male to 15-pin female, right angle cable entry. For use with <b>C-more</b> Micro EA1 series 4in and 6in HMIs, <b>C-more</b> Micro EA3 series 3in, 4in, and 6in HMIs, <b>C-more</b> EA9 6in and 7in HMIs.
EA-COMCON-3		RS-422/485 terminal block, right angle cable entry. For use with <b>C-more</b> Micro EA1 series 4in and 6in HMIs, <b>C-more</b> Micro EA3 series 3in, 4in, and 6in HMIs, <b>C-more</b> EA9 6in and 7in HMIs.
EA-COMCON-3A		DSUB port adapter, 15-pin male to 6-pole RS-422/485 terminal block, straight cable entry. For use with <b>C-more</b> Micro EA1 series 3in with EA1-MG-SP1, <b>C-more</b> Micro EA3 series 8in and 10in HMIs, <b>C-more</b> EA9 8in, 10in, 12in and 15in HMIs.
EA-MG-COV-CL		Optional clear screen overlay used to protect <b>C-more</b> 3-inch Micro displays from minor scratches and wear. Package contains three clear screen overlays.
EA-4-COV3		Optional clear screen overlay used to protect <b>C-more</b> 4-inch Micro displays from minor scratches and wear. Package contains three clear screen overlays.
EA-6-COV2		Optional clear screen overlay used to protect <b>C-more</b> 6-inch Micro displays from minor scratches and wear. Package contains three clear screen overlays.
EA-8-COV2		Optional clear screen overlay used to protect <b>C-more</b> 8-inch Micro displays from minor scratches and wear. Package contains three clear screen overlays.
EA-10-COV2		Optional clear screen overlay used to protect <b>C-more</b> 10-inch Micro displays from minor scratches and wear. Package contains three clear screen overlays.

## C-more Micro Programming Software

*C-more*® Micro Programming Software is a spin-off of its powerful sibling *C-more* Touch Panel programming software. It offers very high end features designed to reduce your configuration time. Simply drag and drop the objects from the object bar (right side of screen) onto the 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!



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### Thumbnail project preview pane

Helps keep track of multi-screen projects.

### Built-in user object/screen libraries

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

### Scrolling object selection window

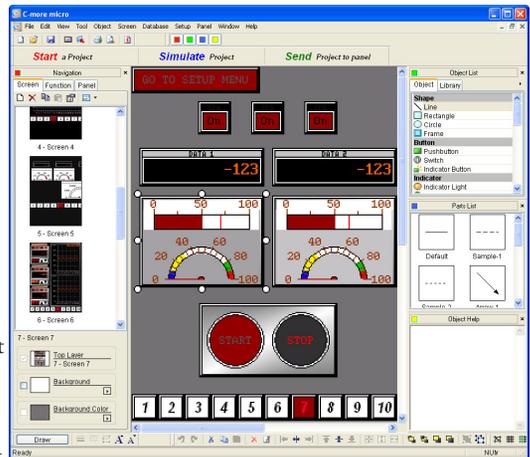
Lets you find the object you want fast. Just drag and drop it on the screen.

### Scrolling help window

Gives you helpful information on each object

### Built-in project simulator

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



### PC Requirements:

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

- Operating System - Windows® 7 (32 and 64 bit), Windows 8 (32 and 64 bit); Windows 8.1 (32 and 64 bit), Windows 10
- 150 MB free hard-disk space
- USB port for installing software from the USB, or internet access to download free programming software
- USB port or Ethernet port if using optional EA-ECOM for project transfer from software to touch panel

# C-more Micro Programming Software (cont'd)

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C-more Micro Panel Objects			
Object	Graphic	Object	Graphic
<p><b>Shape</b> objects, just like with drawing tools, allow the user to insert shapes, such as a straight line, circle, or rectangle drawing into a project. When a Shape is inserted into a project, a window opens to allow the user to setup all available parameters for the Line object. Some of the uses for Shape Objects include but are not limited to adding callouts, pointers, or indicators.</p>		<p>The <b>Numeric Entry</b> object is used to enter a value from your Panel to a PLC Register. This object, when selected, opens a Numeric Keypad that allows the user to enter a new value that will be written to the assigned Tag Name. The Numeric Entry supports numeric Signed Decimal, Unsigned Decimal, BCD, and Floating Point data types with up to 11 digits, including decimal points. User Defined Alpha Numeric Prefix and Suffix values are also supported.</p>	
<p>The <b>Frame</b> object allows the user to insert a Frame to the project that can be used to Frame other objects. Some of the uses for Frame object include but are not limited to graphically separating objects for different operations that may appear on one screen and emphasizing pushbuttons or other objects that may require more attention by the operator.</p>		<p>The <b>Increment/Decrement Value</b> object is used to add or subtract a value by pressing a button on the Panel. Basically the object uses two Tags, one to read a value from and another to write a modified value to. The Increment/Decrement Value supports numeric Signed Decimal, Unsigned Decimal, BCD, and Floating Point data types with up to 11 digits, including decimal points. The Increment and decrement values are also user selectable.</p>	
<p>The <b>Pushbutton</b> object is available from the Button Category of the Object List window. The Pushbutton object is an electronic version of a typical Pushbutton normally found on control panels. The Pushbutton object can be used to activate or deactivate components assigned to a Discrete Tag Name.</p>		<p>The <b>Real Time Graph</b> object displays the value stored in up to eight PLC tags, over a history of up to 24 points each. One point is added at each refresh.</p>	
<p>The <b>Switch</b> object is an electronic version of a typical Switch that normally can be found on control panels. The Switch object can be used to activate or deactivate components assigned to a Discrete Tag Name.</p>		<p>The <b>Line Graph</b> object displays the values of up to 24 PLC address points. Up to eight address arrays can be displayed. The line is drawn in its entirety at each refresh.</p>	
<p>The <b>Radio Button</b> object is an electronic version of a set of buttons that have a similar appearance to the classic radio tuning buttons. The Radio Button allows a minimum of two buttons and a maximum of eight buttons. The operation of Radio Buttons only allows one button to be On at a time.</p>		<p>The <b>Analog Meter</b> object is used to display the current value of a Tag Name.</p>	
<p>The <b>Indicator Button</b> object is available from the Button Category of the Object List window. The Indicator Button object is an electronic version of a typical Indicator Button normally found on control panels. The Indicator Button is a combination of a Pushbutton and an Indicator Light. The Indicator Button can be used to activate or deactivate components assigned to a Discrete Tag Name.</p>		<p>The <b>Bar Graph</b> object is used to monitor up to two assigned Tag Names continuously. This object has various appearances depending upon the relative value of the tags. The Bar Graph can be used to create digital versions of level, current, and flow meters to name a few samples, or gauges that measure speed and other measurable data.</p>	
<p>The <b>Tri-State Switch</b> Object consists of a set of three Pushbuttons that allow to configure the first button to the left as a Reset that turns the other two buttons Off, and configure the other two buttons with individual Discrete Tag Names.</p>		<p>The <b>Bitmap Button</b> object offers the ability to use a Bitmap graphic to perform the functions of a Button. This allows users to create their own graphics and implement them within the software project. The Bitmap Button object can be used to activate or deactivate components assigned to a Discrete Tag Name.</p>	
<p>The <b>Indicator Light</b> object is an electronic version of a typical Indicator Light normally found on industrial control panels. The Indicator Light can be configured to display the status of the assigned Discrete Tag Name.</p>		<p>The <b>Static Bitmap</b> offers the ability to display a Bitmap graphic on any screen. The Static Bitmap does not change state. Refer to the Dynamic Bitmap Object if you require the graphic object to change state based on a Tag Value in your PLC. The dialog box for a "Static Bitmap" object allows you to "read from disk" and select a graphic file for import. Graphics must be in one of the following formats: .BMP .WMF .JPG .JPEG</p>	
<p>The <b>Graphic Indicator Light</b> object is a more enhanced version of the "Indicator Light Object" that allows the user to choose more detailed graphics to display the status of a tag. This object is an electronic version of a typical Indicator Light normally found on industrial control panels. The Indicator Light can be configured to display the status of the assigned Discrete Tag Name.</p>		<p>The <b>Dynamic Bitmap</b> object offers the ability to make an object using two different Bitmap graphics that will display one graphic when the Tag is On and a different graphic when the Tag is Off. Use your own bitmap designs or use some of the bitmaps provided with the software that are located in the User Graphic Library.</p>	
<p>The <b>Numeric Display</b> consists of a frame that displays a real-time numeric value according to the value of data received from an assigned Tag Name. The Numeric Display supports numeric Signed Decimal, Unsigned Decimal, BCD, and Floating Point data types with up to 11 digits, including decimal point. User Defined Alpha Numeric Prefix and Suffix values are also supported.</p>		<p>The <b>Multi-State Bitmap</b> (version 2.50 and later) displays one of up to 16 images based on the status of a tag value assigned to each image. It can be used to create animation.</p>	

C-more Micro Panel Objects continued at top of next page.

# C-more Micro Programming Software (cont'd)

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C-more Micro Panel Objects			
Object	Graphic	Object	Graphic
<p><b>Recipe</b> objects make it easy to make a large number of tag changes with the push of a single button. Create Recipes with up to 99 entries, and multiple sets of values. Then just push a button to load an entire set of values into the group of recipe tags.</p>		<p>The <b>Text Entry</b> object is used to enter an ASCII string. Two entry options allow use of an on-screen keypad or the hardware function keys to enter characters.</p>	
<p>The <b>Static Text</b> object is used to display a Frame with a personalized Message. This Frame and Message can be placed on any screen and any location within the screen.</p>		<p>The <b>Screen Change Pushbutton</b> object is available from the Control Category of the Object List window. The Screen Change Pushbutton object is a pushbutton that can be configured to activate another screen in the project. This object may be edited to various colors and sizes. Users can configure the button to activate the Power-Up screen, Forward Screen, Previous Screen, or any one of the project screens.</p>	
<p>The <b>Lookup Text</b> object is used to display a Frame with a personalized Message. This Frame and Message can be placed on any screen and any location within the screen. The object is always displayed like a sign but is configured to display only the message prompted by an assigned Tag Name. Messages are retrieved from a Message Database which is configured by the user with text defined by the user. The Lookup Text Object will scroll text up to 128 characters.</p>		<p>The <b>Screen Selector</b> object is available from the Control Category of the Object List window. This object is an enhanced version of the Screen Change pushbutton in that it offers many more features and defaults with data from screens in the project. This helps to save time by not having to create Screen change buttons for each screen. This object may be edited to various colors and sizes.</p>	
<p>The <b>Dynamic Text</b> object is used to display text that is retrieved from data stored in a Tag. The Tag Name is assigned to registers in the PLC that contain set character data. The data can be stored in the PLC in ASCII format and may include information such as machine numbers, locations, part numbers, and such. The Message can be configured to be visible (Trigger) when an associated Tag Name is On or Off. This object can be placed on any screen and any location within the screen. The Dynamic Text Object will scroll text up to 40 characters.</p>		<p>The <b>Adjust Contrast</b> object is used to allow the operator to adjust the Panel Display Contrast. The default Display setting often works in most applications, however lighting may vary based on the location of each application. In these cases the operator can use this object to make adjustments. The current display setting value will appear on the top of the button and will change as the arrow keys are pressed. This button can be modified to various sizes.</p>	
<p>The <b>Scroll Text</b> object is available from the Text Category of the Object List window. The Scroll Text object is an electronic version of a marquee. It is similar to the Static Text Object. If the text in the object does not fit in the window, it will scroll from right to left across the window. The Scroll Text object does not require a Tag Name assignment. The Scroll Text Object has a maximum character limit of 128 characters.</p>		<p>The <b>Function</b> object is used to assign the panels function key buttons to a particular action as well as assigning the control of the LED On/Off status. When a button has been assigned as a shift button, the then F1 through F5 will become F6 through F10. The Function Object buttons will activate when the hardware button is pressed or when the object is pressed on the screen. The object size is restricted so that the keys will line up with the hardware function keys on the panel.</p>	

# EA-ECOM Ethernet Communication Module

The EA-ECOM Ethernet Communication module plugs into the expansion port on the rear of the EA3 series 6, 8, and 10-inch **C-more** Micro panels to allow Ethernet communications for programming and PLC communications at a speed of 10/100 Mbps.

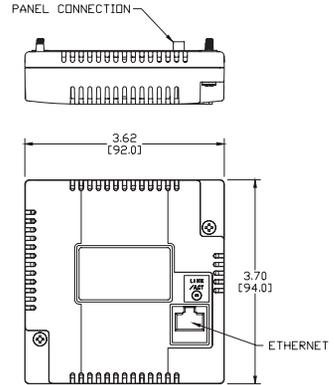
## EA-ECOM

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PLC 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)

Dimensions: Inches [mm]



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

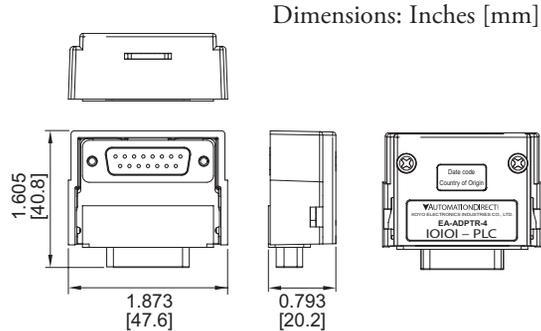


EA-ECOM Specifications	
Part Number	EA-ECOM
Operating Temperature	0 to 50 °C (32 to 122 °F) Maximum surrounding air temperature rating: 50 °C
Storage Temperature	-20 to +60 °C (-4 to +140 °F)
Humidity	5-95% RH (non-condensing)
Environmental Air	For use in pollution degree 2 environment
Vibration	IEC60068-2-6 (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]
Ethernet 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

## 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 the *C-more* Micro panel to allow a PLC communication cable to be plugged in at a 90 degree angle to reduce panel depth requirements. 15-pin straight through pin-out. UL Recognized.

### EA-ADPTR-4



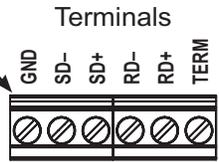
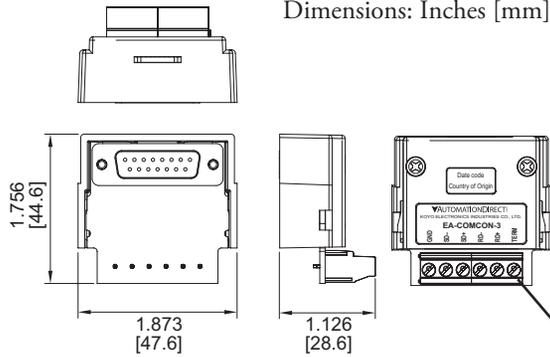
**NOTE:** Due to comm port orientation EA-ADPTR cannot be used with EA3-T8CL and EA3-T10CL.

# D-SUB 15-pin to Terminal Block Adapters

EA-COMCON-3 and EA-COMCON-3A adapters plug into the 15-pin serial port on the rear of the *C-more* Micro panel to allow wire terminal connections for an RS-422/RS-485/DH-485 PLC communication cable.

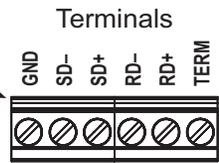
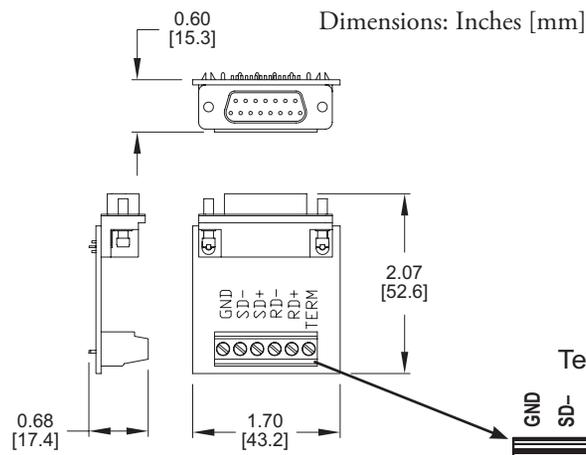
## EA-COMCON-3

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**NOTE:** Due to comm port orientation EA-COMCON-3 cannot be used with EA3-T8CL and EA3-T10CL.

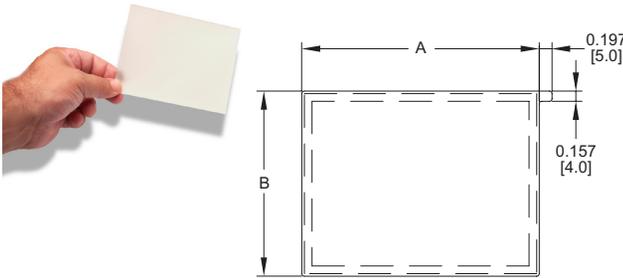
## EA-COMCON-3A



# Clear Screen Overlay

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

Units: Inches [mm]

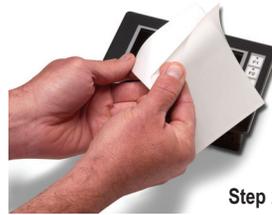


Part Number	Dimensions - inch [mm]	
	A	B
EA-MG-COV-CL	3.13 [79.4]	1.75 [44.4]
EA-4-COV3	4.15 [105.5]	2.52 [64.0]
EA-6-COV2	4.91 [124.8]	3.80 [96.4]
EA-8-COV2	7.32 [185.8]	5.44 [138.2]
EA-10-COV2	8.91 [226.2]	6.61 [168.0]

## Clear Screen Overlay Installation



**Step 1**  
Remove the overlay from the package



**Step 2**  
Remove the paper backing from the overlay



**Step 3**  
Align the overlay with the screen and press the adhesive firmly into place



**Step 4**  
Remove the protective film\*



**\*NOTE:** The protective cover ships with a thin protective sheet on the face of the cover that needs to be carefully removed. If your panel is not clear, the protective sheet may not have been removed.

