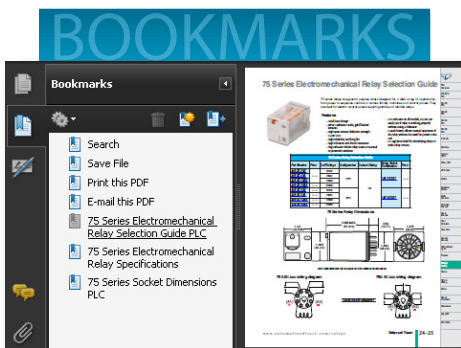


C-more[®] HMI: Operator Interface



In this interactive PDF you can:

- Use bookmarks to navigate by product category
- Use bookmarks to save, search, print or e-mail the catalog section
- Click on part #s to link directly to our online store for current pricing, specs, stocking information and more

Up-to-date price list:
www.automationdirect.com/pricelist

FREE Technical Support:
www.automationdirect.com/support

FREE Videos:
www.automationdirect.com/videos

FREE Documentation:
www.automationdirect.com/documentation

FREE CAD drawings:
www.automationdirect.com/cad



ftp.



C-more Operator Touch Panels

Starting at just \$499.00, **C-more** is designed to give you one of the best costs of ownership, considering initial price, features, ease of use, reliability and free award winning technical support.

We continue to improve hardware and software features. Perhaps this is why more and more people find that **C-more** has what it takes to meet most of their HMI application needs. But don't take our word for it, see for yourself. Visit our Web site (www.automationdirect.com) and read all of the reviews that current **C-more** customers have submitted.

"I have used the C-More touch panels for years. They are reliable and fairly "bullet proof". I have utilized 6", 8", 10", 12" and 15" to control cell doors and escape detction systems in a maximum security prison, along with the Direct Logic Koyo PLC line and DirectSoft Programming software, with great suces. Also you cannot beat the quick shipping, fair pricing and top-notch tech support of all Automation Direct products."
Rick - CONCORD, NH

Customer Reviews

Averages for C-more Touch Panels (all sizes)



"In a single project we utilized 3 of these units. All three hold the same configuration, however with the password entry, they become an independent screen for each area or the overall control. The biggest bonus is the web access and now the C-More app for the smart phones and tabs. Buying someone else's touch screen is just not on our radar."
Greg - SMITHS CREEK, NB



"I have used the EA9 series as well as the EA7 [C-more HMI panels] and both are very good quality and a very good value."
Loney - WILDER, ID

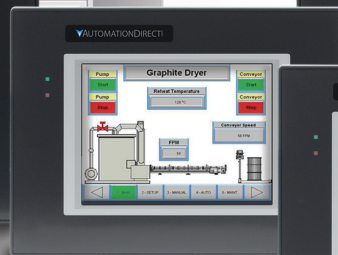
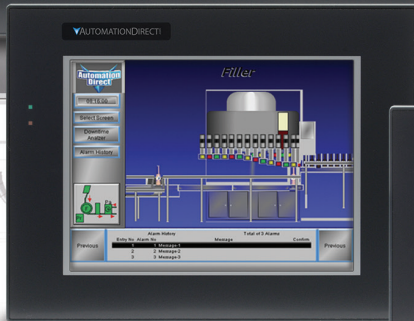
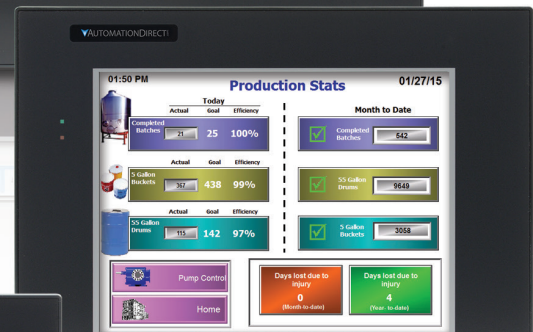
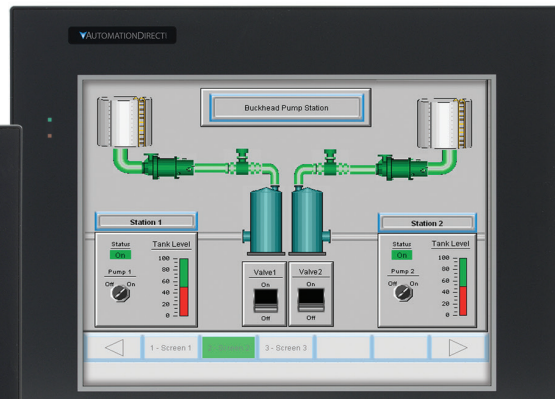
"Have had to use and understand many different HMI's over the years and the C-more series is by far the most user friendly that I have found. It works naturally well with other AutomationDirect products, but in addition works equally well with other makers' devices."
Bob - FENTON, MI

GET more with C-more®

Easy to configure, install and maintain



ftp.



Made by Koyo

Koyo Electronics, our parent company, is part of the multibillion dollar JTEKT group of companies that primarily provides components to automotive manufacturers such as Toyota. With this type of engineering and manufacturing background, we knew Koyo could create a product that would offer the best combination of reliability, ease of use, features and price.

Backed with a 2-year warranty

For over 50 years, Koyo has been a world class manufacturer of reliable and best valued products. *C-more* was designed with quality in mind and engineered by Koyo to meet the most stringent quality requirements. Therefore, Koyo is confident to offer a 2-year limited warranty on all *C-more* panels.

Hundreds of powerful features

We maximized every feature, small and large, to make sure you have a great experience with your touch panel.

- **Proven Reliability**
- **Predefined Objects**
- **Enhanced Productivity Tools**
- **Increased Device Connectivity**
- **Remote Access and Control** from any web browser, or with the new mobile apps

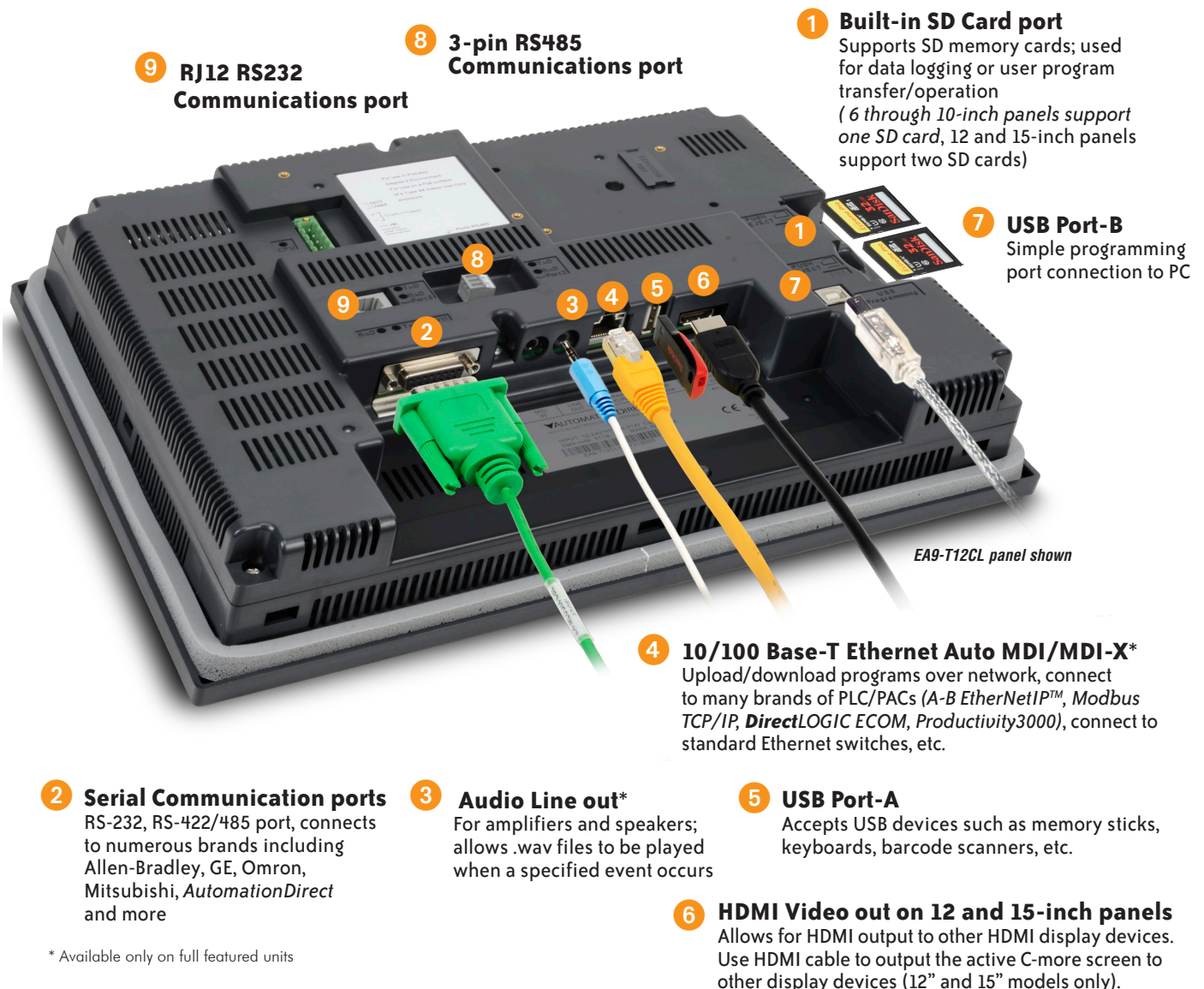
C-more has better value all around!

more Connectivity...

Communicate any way you want

C-more was designed to offer the widest range of connectivity options of any PLC touch panel in its class.

| Part Number | Ethernet | SD Card Slot | Serial Ports | HDMI Video Output | Audio Output | USB Ports |
|-------------------|----------|--------------|--------------|-------------------|--------------|-------------------------|
| EA9-T6CL-R | | 1 Slot | 1 Port | | | USB 2.0 Type A and B |
| EA9-T6CL | Yes | 1 Slot | 3 Ports | | Yes | |
| EA9-T8CL | Yes | 1 Slot | 3 Ports | | Yes | |
| EA9-T10CL | Yes | 1 Slot | 3 Ports | | Yes | |
| EA9-T12CL | Yes | 2 Slots | 3 Ports | Yes | Yes | |
| EA9-T15CL | Yes | 2 Slots | 3 Ports | Yes | Yes | |



EA9-T12CL panel shown

- 1 Built-in SD Card port**
Supports SD memory cards; used for data logging or user program transfer/operation
(6 through 10-inch panels support one SD card, 12 and 15-inch panels support two SD cards)
- 2 Serial Communication ports**
RS-232, RS-422/485 port, connects to numerous brands including Allen-Bradley, GE, Omron, Mitsubishi, AutomationDirect and more
- 3 Audio Line out***
For amplifiers and speakers; allows .wav files to be played when a specified event occurs
- 4 10/100 Base-T Ethernet Auto MDI/MDI-X***
Upload/download programs over network, connect to many brands of PLC/PACs (A-B EtherNet/IP™, Modbus TCP/IP, DirectLOGIC ECOM, Productivity3000), connect to standard Ethernet switches, etc.
- 5 USB Port-A**
Accepts USB devices such as memory sticks, keyboards, barcode scanners, etc.
- 6 HDMI Video out on 12 and 15-inch panels**
Allows for HDMI output to other HDMI display devices. Use HDMI cable to output the active C-more screen to other display devices (12" and 15" models only).
- 7 USB Port-B**
Simple programming port connection to PC
- 8 3-pin RS485 Communications port**
- 9 RJ12 RS232 Communications port**

* Available only on full featured units

more — Reliability...

Smart power supply options allow for improved reliability

C-more can operate with 12 or 24 VDC power supply. This is great for applications that have good clean 12 or 24 VDC power. However, there are many situations where the DC power in a cabinet does not meet required specifications for instrumentation.

C-more offers an optional 100-240 VAC screw-on power adapter (EA-AC) that improves panel reliability. Since it is built specifically for *C-more*, it offers power fault detection

with sequential shut-down, and will set an error flag that can be configured with a time and date stamp to help troubleshoot a problem.

The power fault detection will attempt to “close” data logging files on SD memory cards to prevent file corruption. If data logging is critical to your applications, the EA-AC power adapter is a must.

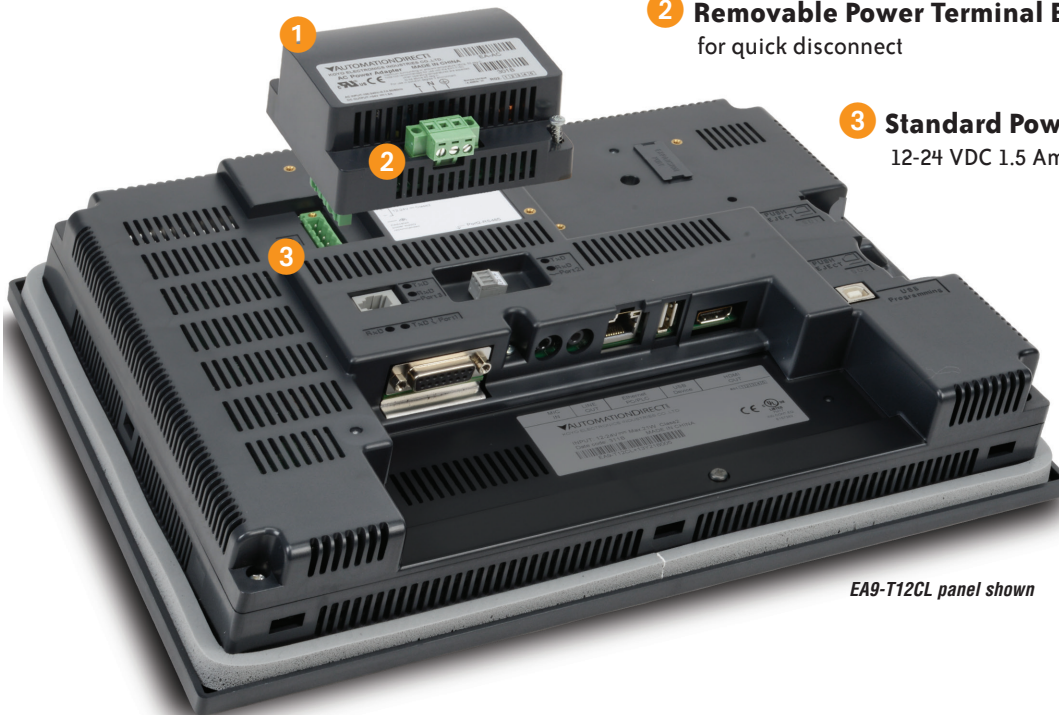
Power Fault Detection Sequential Shut-down Error Flag you can log

1 Optional 110 VAC to 24 VDC Power Supply

- Improves panel reliability
- Power fault protection with sequential shut-down
- Sets error flag; can configure tag with time and date stamp

2 Removable Power Terminal Block for quick disconnect

3 Standard Power Connection 12-24 VDC 1.5 Amp supply required



EA9-T12CL panel shown

Company Information

Control Systems Overview

CLICK PLC

Do-More PLCs Overview

Do-More H2 PLC

Do-More T1H PLC

DirectLOGIC PLCs Overview

DirectLOGIC DL05/06

DirectLOGIC DL105

DirectLOGIC DL205

DirectLOGIC DL305

DirectLOGIC DL405

Productivity Controller Overview

Productivity 3000

Universal Field I/O

Software

C-More HMI

C-More Micro HMI

ViewMarq Industrial Marquees

Other HMI

Communications

Appendix Book 1

Terms and Conditions

more PLC Compatibility...

Tag-based Messaging

C-more software supports direct insertion of ControlLogix, CompactLogix and FlexLogix tags from the PLC into C-more - no mapping or translations required.

Allen-Bradley® PLC Driver Support:

- ControlLogix®
- CompactLogix®
- FlexLogix
- SLC® 5/05 Ethernet™
- MicroLogix™ 1100/1400 Ethernet



including:

- A-B DF1
- A-B DH485
- A-B EtherNet/IP Client
- A-B Ethernet/IP Server Generic IO Messaging

See complete Driver list on page CR-25

Get A-B Ethernet connectivity and 64K colors starting at **\$699.00**

p/n EA9-T6CL: supports serial and Ethernet-based drivers



Fast and Simple Driver Setup

We have many protocols for the Allen-Bradley PLC brand. The A-B Ethernet drivers allow the simple connectivity of multiple panels and/or multiple Allen-Bradley PLCs. We also have ControlLogix EtherNet/IP Tag Messaging support. This feature helps increase productivity by reducing the time often required

to map your PLC tag database into another device. You can import the RSLogix 5000 L5K file directly, or with just a few clicks of the mouse you can directly enter your ControlLogix/ CompactLogix tags from the PLC into *C-more*. No mapping or translation required!

| C-more Allen-Bradley Controller Support | DF1 Full Duplex | DF1 Half Duplex | DH485 | Generic EtherNet/IP Server (IO Messaging) | EtherNet/IP Client | EtherNet/IP Tag-Based Client | Tag-Based DF1 Full Duplex | Tag-Based DF1 Half Duplex |
|--|-----------------|-----------------|-------|---|--------------------|------------------------------|---------------------------|---------------------------|
| SLC 5/01, 5/02 | | | Yes | | | | | |
| SLC 5/03 | Yes | Yes | Yes | | Yes ^{xxx} | | | |
| SLC 5/04 | Yes | Yes | **Yes | | Yes ^{xxx} | | | |
| SLC 5/05 (Series A OS501 FRN5 & Higher) | Yes | Yes | **Yes | | Yes | | | |
| MicroLogix 1000, 1200, 1500 | Yes | Yes | **Yes | | Yes ^{xxx} | | | |
| MicroLogix 1100/1400 | Yes | Yes | **Yes | | Yes | | | |
| PLC5 | Yes | | | | | | | |
| ControlLogix | | | | Yes | | Yes | Yes | Yes |
| CompactLogix | | | | Yes | | Yes | Yes | Yes |
| FlexLogix | | | | Yes | | Yes | Yes | Yes |

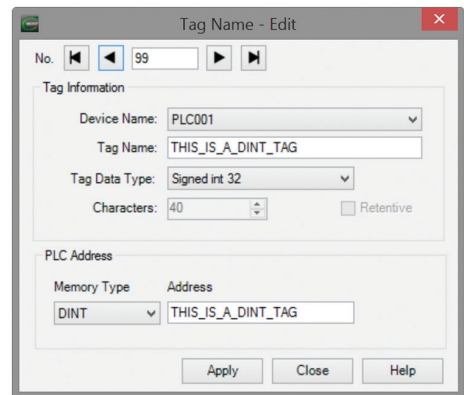
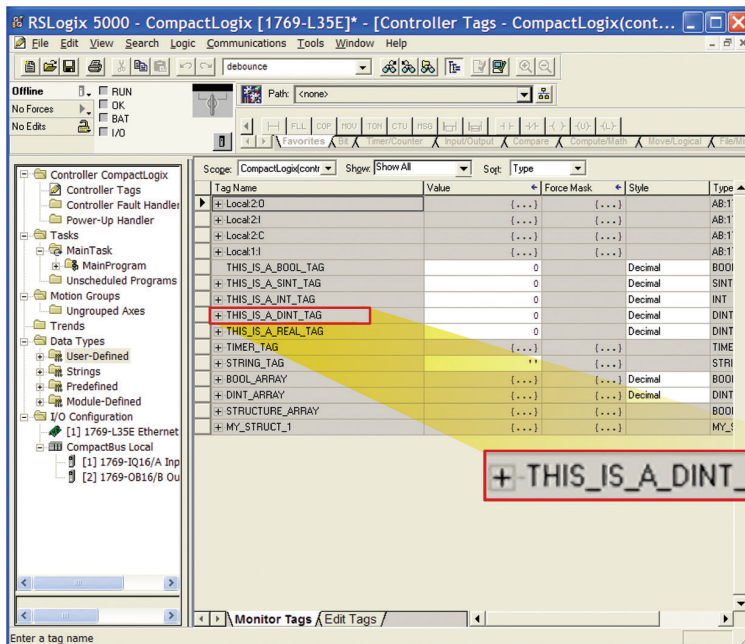
* Ethernet available on full featured C-more panels only. -R units do not support Ethernet

**AIC module from Allen-Bradley required for this connection

***NET - ENI module from Allen-Bradley required for this connection

ControlLogix EtherNet/IP Tag-based Messaging

Configure ControlLogix, CompactLogix and FlexLogix tags from the PLC into *C-more* (no mapping or translations required).



2. Type in the PLC tag names directly. You can use the PLC tag names as your *C-more* tag names or choose a different *C-more* tag name when appropriate.

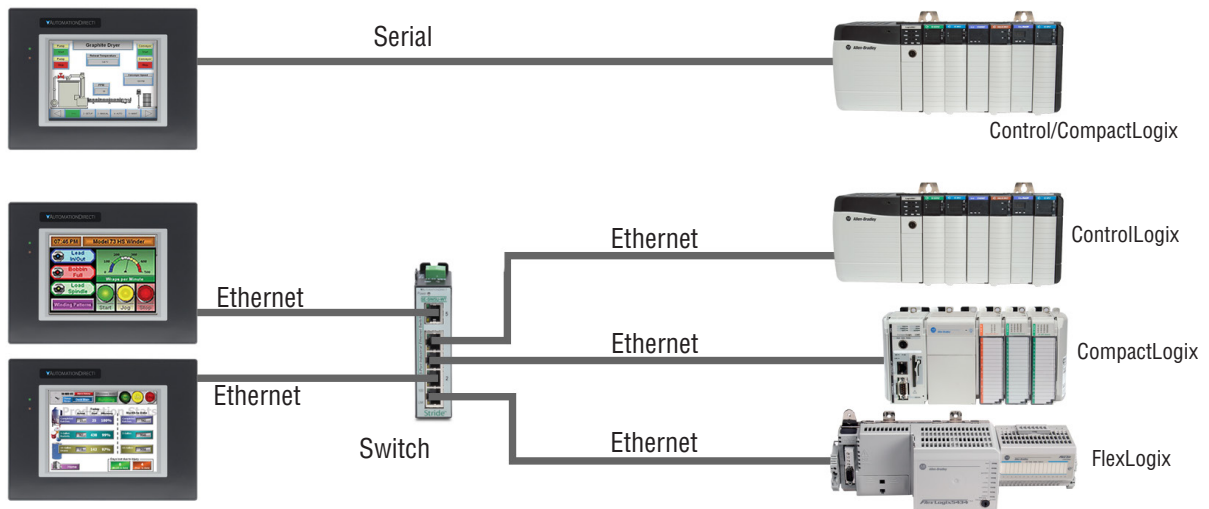
You can configure ControlLogix, CompactLogix and Flexlogic tags in the *C-more* Programming software through two different methods:

1. Import the tags from RSLogix 5000 (.L5K file).

ControlLogix, CompactLogix and FlexLogix

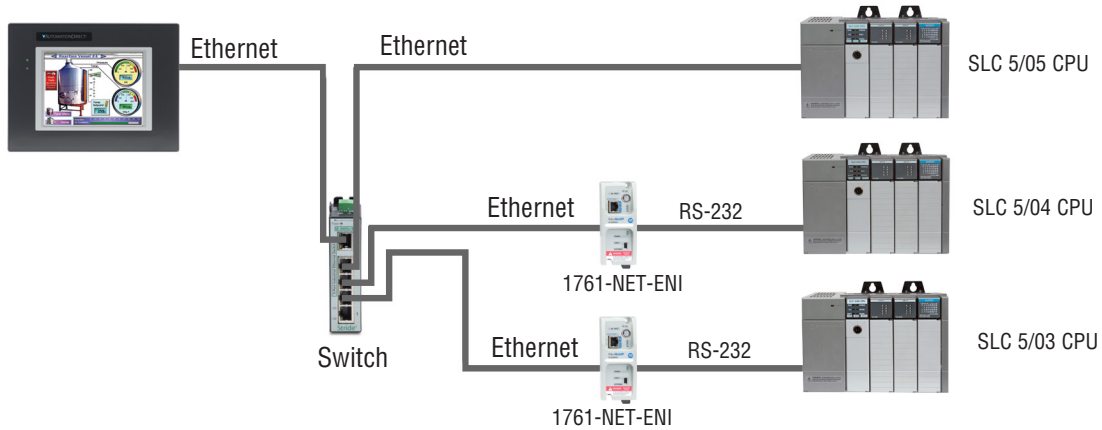
Connect to ControlLogix, CompactLogix and FlexLogix PLCs using either the native serial port or Ethernet port/module. Use direct tag-based messaging or directly enter the

ControlLogix/CompactLogix PLC tags during *C-more* configuration (no mapping or translations required). You can connect multiple *C-more* panels to multiple PLC types on one network.



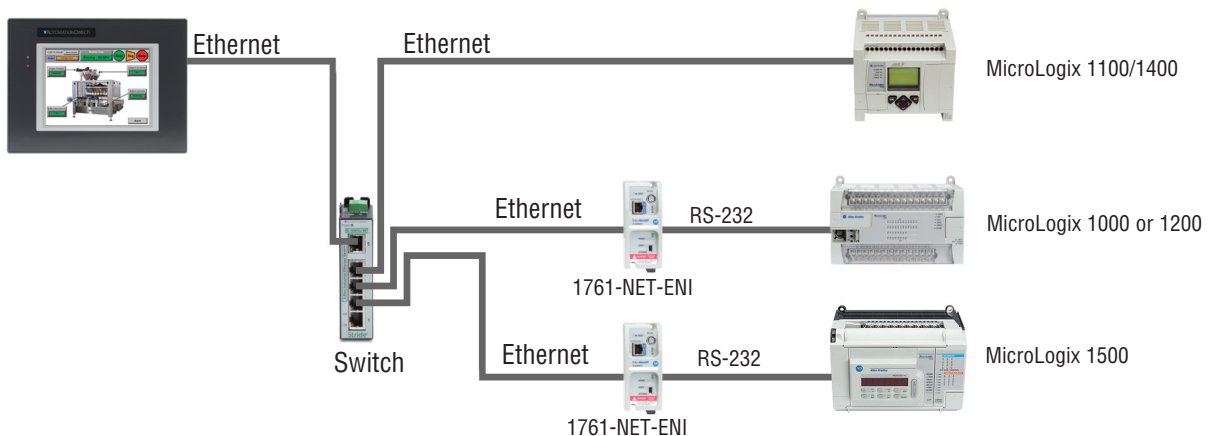
SLC 500 Ethernet and ENI Driver

Connect to the native Ethernet port on SLC 5/05, and to SLC 5/03 and SLC 5/04 through a 1761-NET-ENI DFI serial-to-Ethernet converter.



MicroLogix 1100/1400 Ethernet and ENI Driver

Connect to the native Ethernet port on MicroLogix 1100/1400, and to MicroLogix 1000, 1200 and 1500 through a 1761-NET-ENI DFI serial-to-Ethernet converter.

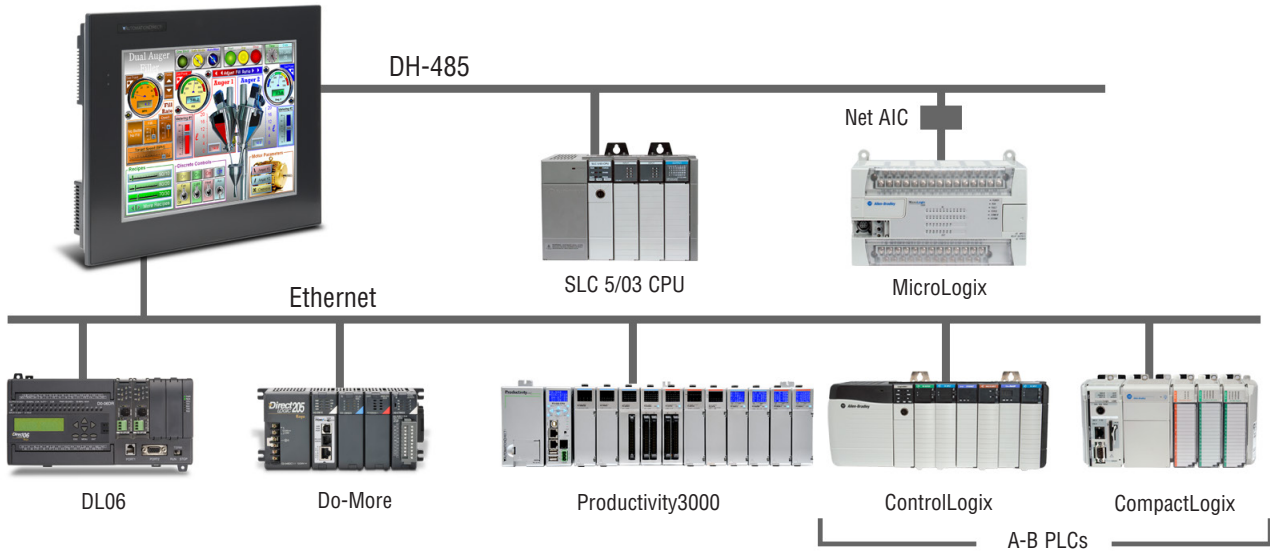


Simultaneous Communications and Panel Pass-through

Connect multiple brands of PLC/PACs

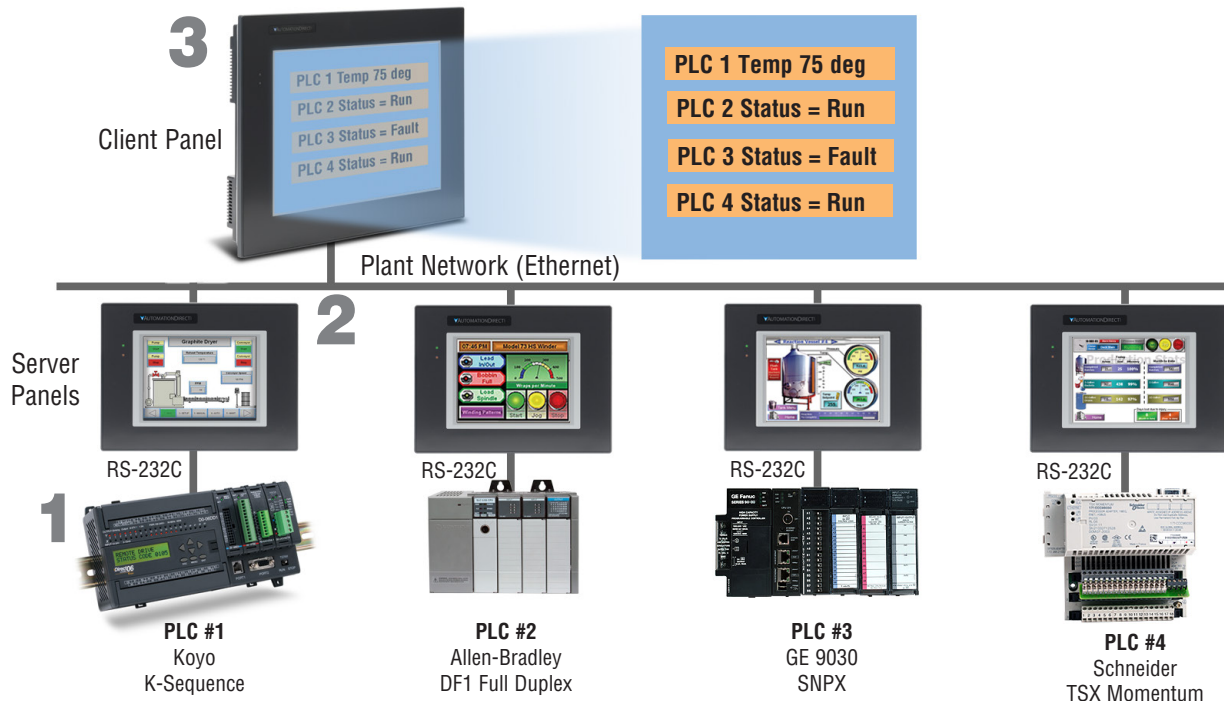
Connect multiple brands of PLC/PACs to *C-more* and communicate with them simultaneously. Use the Event Manager to periodically send tag values from one controller to another or when certain conditions are met.

C-more can even act as a “protocol bridge”, passing values back and forth between PLC/PACs that use different protocols.



Panel pass-through

C-more panels can access data from supported controllers attached to other *C-more* panels via an Ethernet connection.



1 Each PLC is operating a separate application and is connected to a *C-more* panel through a Serial Connection.

2 Each *C-more* is configured as usual. When the client panel is configured, the server panels will pass through data from the PLCs to the client.

3 The *C-more* client panel is configured to display the data collected from each PLC connected through a *C-more* server panel.

Company Information

Control Systems Overview

CLICK PLC

Do-More PLCs Overview

Do-More H2 PLC

Do-More T1H PLC

DirectLOGIC PLCs Overview

DirectLOGIC DL05/06

DirectLOGIC DL105

DirectLOGIC DL205

DirectLOGIC DL305

DirectLOGIC DL405

Productivity Controller Overview

Productivity 3000

Universal Field I/O

Software

C-More HMI

C-More Micro HMI

ViewMarq Industrial Marquees

Other HMI

Communications

Appendix Book 1

Terms and Conditions

more Programming Power...

Powerful configuration software with legendary ease of use

C-more's mission is to make you feel like a touch panel configuration expert. So we put in many tools to make your job go faster and more efficiently. Even simple things, such as object configuration boxes, have improved. We think you'll be able to do more with C-more in even less time!

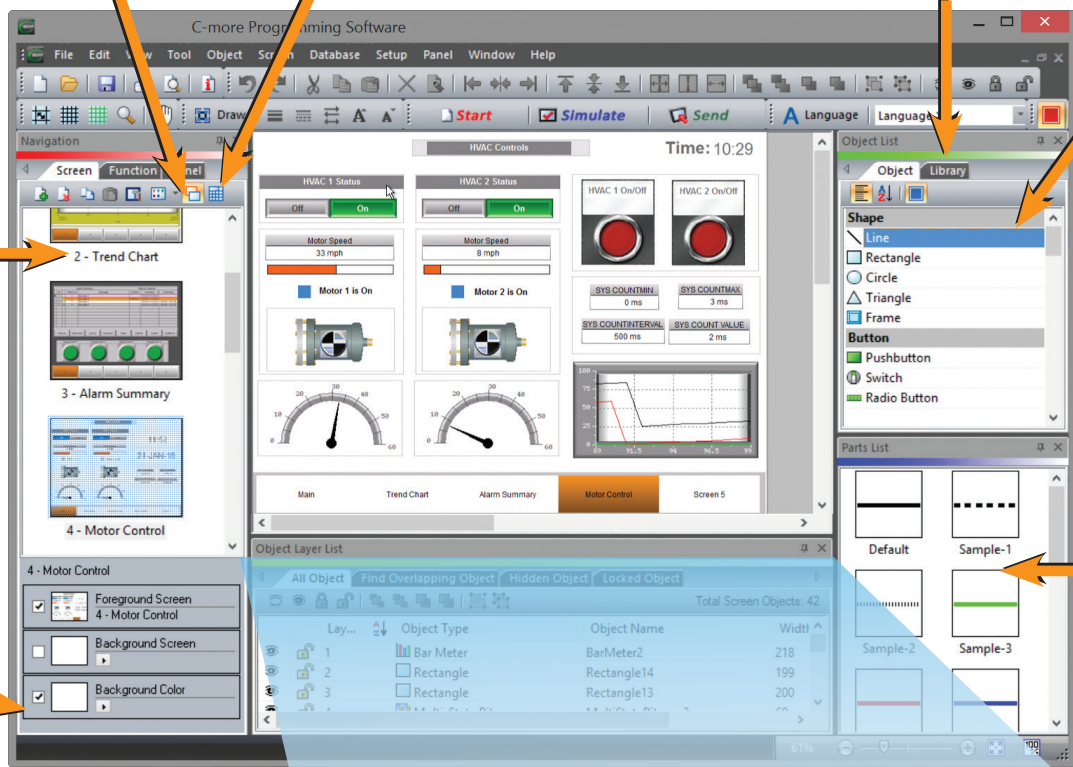
Save your screens in the Screen Library to use with other projects

Build your own keypads to use with numeric and text entry

Click on the Library tab to view libraries of personally stored objects, screens, sound bites, etc. This saves hours of work!

Thumbnail project preview window helps you organize multiscreen projects. And you can rearrange the screens with a drag & drop of your mouse

Select background screen, and background color, with one click!



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

Scrolling parts list shows variations of the objects selected above. Just drag and drop on the screen.

Lock/Unlock Object- This editing tool disables edits to objects that are locked. Once Locked, the object will remain locked and saved within the software. Reduces edit mistakes to objects when multiple users may be accessing or editing a project.



Hide/Unhide Object feature- This editing tool allows hiding objects that may interfere with editing other objects on the screen, such as Pop-up window objects.



Object Layer List Window shows all the objects on the active screen. Quickly select an object from the list to edit or highlight the Object.

| Layer | Object Type | Object Name | Width | Height | Top | Left |
|-------|----------------|-----------------|-------|--------|-----|------|
| 1 | BarMeter | BarMeter1 | 140 | 120 | 370 | 20 |
| 2 | DigitalClock | DigitalClock1 | 290 | 40 | 10 | 490 |
| 3 | Group | Group1 | 140 | 300 | 60 | 20 |
| 3-1 | NumericDisplay | NumericDisplay1 | 120 | 50 | 290 | 30 |
| 3-2 | PushButton | Pushbutton3 | 120 | 50 | 220 | 30 |
| 3-3 | PushButton | Pushbutton2 | 120 | 50 | 150 | 30 |
| 3-4 | PushButton | Pushbutton1 | 120 | 50 | 80 | 30 |
| 3-5 | Frame | Frame1 | 140 | 300 | 60 | 20 |
| 4 | ScreenSelector | ScreenSelector1 | 780 | 80 | 510 | 10 |
| 5 | Slider | Slider1 | 570 | 90 | 250 | 190 |
| 6 | LineTrendGraph | LineTrendGraph1 | 560 | 120 | 370 | 200 |

Grouping Control: expand or collapse Grouped objects. Access individual objects in a group without having to separate the group or move objects on the screen.

Hardware manuals and help files are a few clicks away. Need more? Follow the links to C-more's online library of objects and sound bites, or visit C-more's online forum.

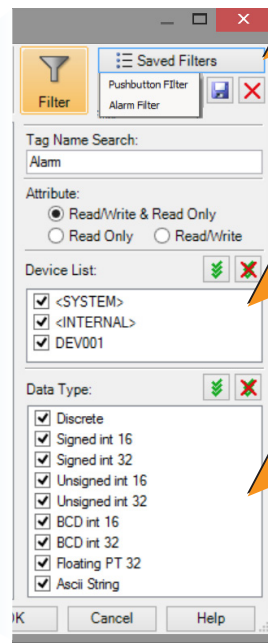
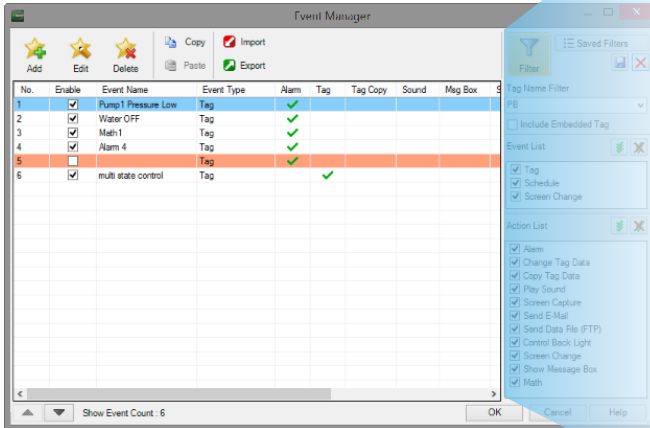
Powerful Database Tools

Customize your searches

Easily edit **C-more's** databases with the latest software tools. Create, import, export and search for tags and other datatypes

with a click of a button. Powerful search filters allow for custom search terms based on various options.

- Tagname Database
- Event Manager Database
- Message Database
- Address Book



Customize and save your own search terms for those most used items.

Device type filters allow you to reduce the view to just the device tags you want to find or edit.

Data type filters allow you to reduce the view to just the specific tag data types you want to find or edit.

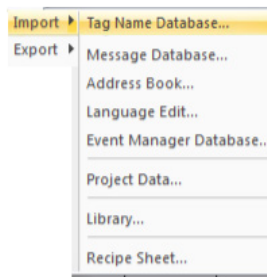
Database Import & Export saves you time

The Import and Export tools allow you to quickly exchange database files between C-more projects, or PLC tagname files. With just a few clicks of the mouse, you can create a .csv or

xls file. This greatly reduces the time needed to create a new database, especially when there are hundreds, or thousands of data points to work with.

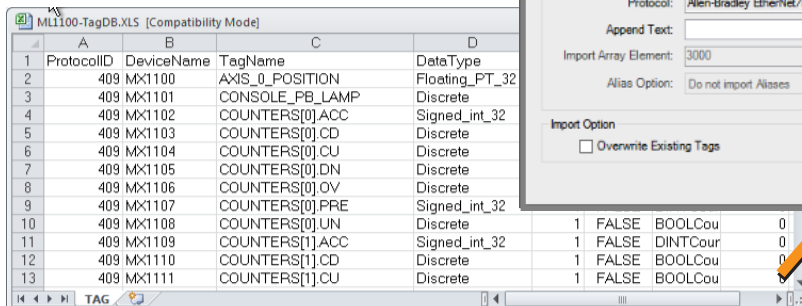
Import or Export

- Tagnames
- Messages
- E-mail Addresses
- Languages
- Events
- Project File
- Screen Library
- Graphics Library
- Object Library
- Sound Library
- Recipe Sheets



Importing PLC tags is easy

With supported PLC databases, simply export the PLC tagnames and use the C-more import tool to select the .csv or xls file.



Productivity Tools: Built-in Simulator

Built-in project simulator pays for the panel in time savings!

The “one click” built-in simulator is one of **C-more’s** most powerful features. You will find yourself using this feature every couple of minutes while developing your project. Using this intuitive simulator will result in a better looking and more effective project completed in less time.

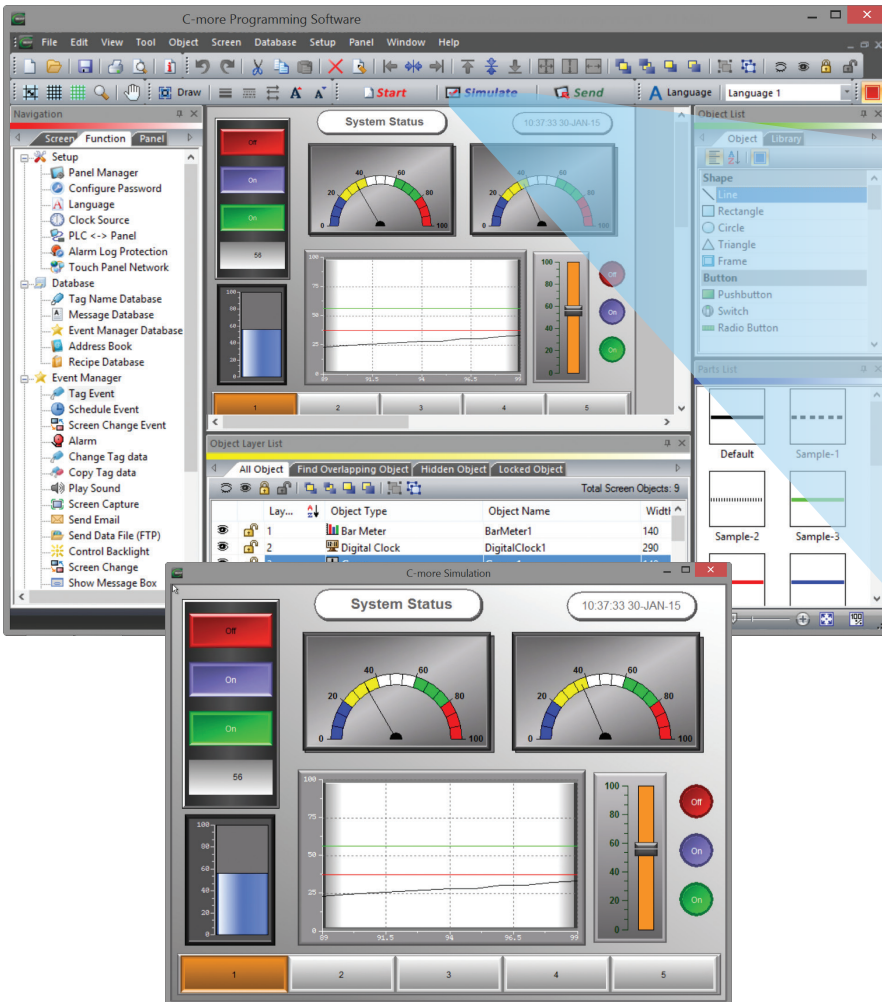
The simulator allows you to fully simulate your entire project (every object, every screen) while it is being developed, without being connected to a touch panel or PLC/PAC. Simply click on the “Simulate Project” button at any stage of project development. A window will appear over your development screen that contains a pixel-for-pixel representation of how your project will appear on your physical **C-more** panel. A simulation control window will also appear.

Now the fun begins. Simply click your mouse on any simulated screen object and it will behave as if your finger is actually touching a **C-more** panel. For example, clicking on a pushbutton object will activate and deactivate it as if an operator were touching it!

The same will be true for thumbwheels, slider switches (simply hold your mouse button down and slide), selector switches, toggle switches and so forth. Want to see how an analog meter moves based on dynamic data from the PLC/PAC? Simply move your mouse to the “Simulation control window” of the simulator, move to the tag and click on the data you wish to change. Now type in the value that you want to simulate, and watch your meter move on the simulated screen.

And here’s the really cool thing - whatever values you modify during simulation, the effect will be propagated throughout your entire project, object by object, screen by screen. That’s because this is a true “project simulator”.

To stop the simulation, just click on your project development screen and you’re back to project configuration. You can go back and forth in a flash. It’s that easy!



The simulation control window shows the list of screens and the tags, with their values, for the highlighted screen in the list.

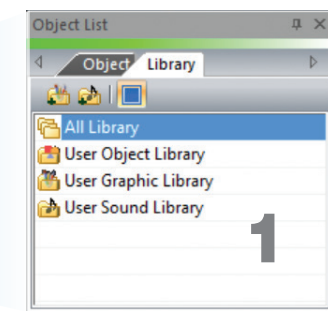
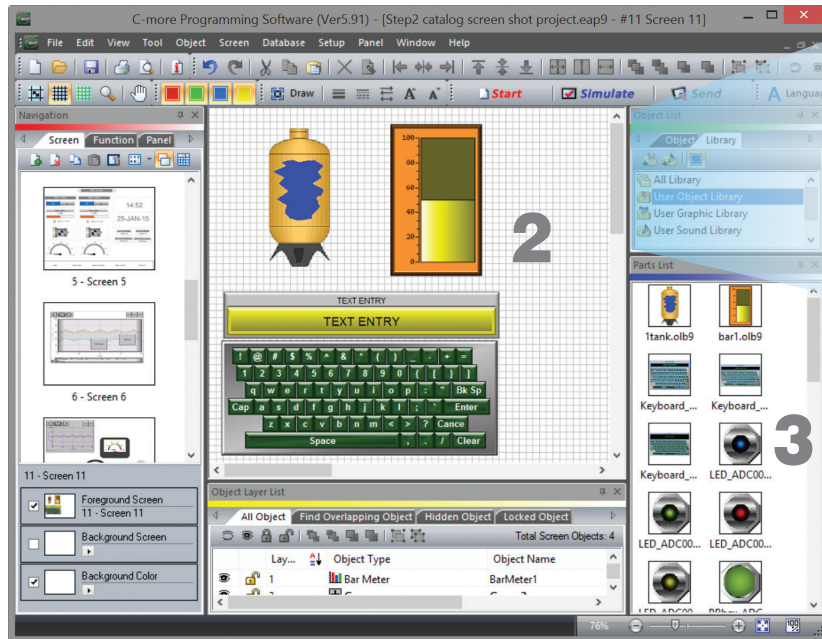
For objects tied to bit or analog data, change actual values here in the tag list, then verify the correct behavior on the screen. You can also change input data on the simulated screen and see the value change in the tag list.

User Libraries, and Project Migration

User libraries allow you to re-use your work again and again

C-more provides three user libraries that allow you to efficiently re-use your work throughout your project or for other projects in the future. You can store a custom object, such as your company logo or a group of objects that compose a custom object (see the tank with cut-away and bar

graph below). You can also store entire screens, graphics and sound bites. You can access your libraries at any time and re-use your work by merely clicking on the saved item and dragging it from the library into your project. You can even import and export library items to share with other designers.



- 1** Object, graphic and sound libraries
- 2** Create, store and retrieve your:
 - Custom objects
 - Entire screens
 - Sound bites
- 3** Re-use your work in this project or future projects

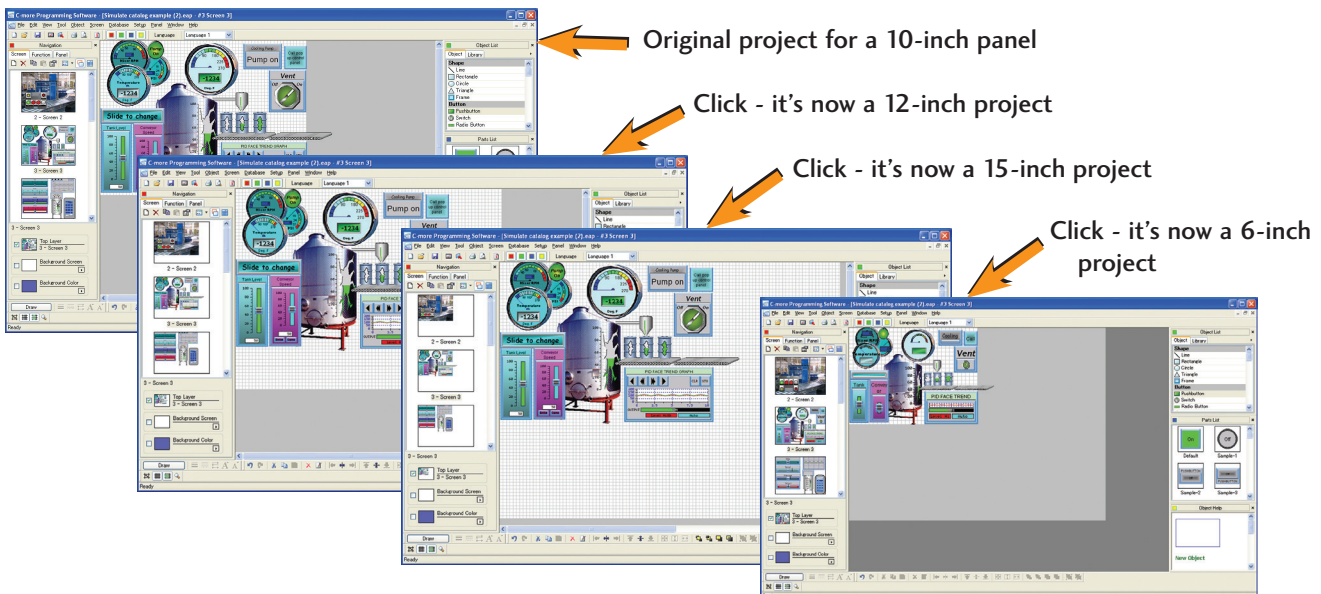
Check out our online library at: c-more.automationdirect.com/support_tools/library.html

Change your project screen size with a click of your mouse

Imagine developing your project on a 10-inch panel and then deciding to change the size to a 15-inch panel or an 8-inch panel. In the past, you most likely had to recreate your entire project and reconfigure every object, tag and screen.

a different size display with a click of the mouse. Of course, you may wish to move things around a little since you have a different screen size. This feature is great for OEMs or integrators that may be installing different configurations of the same machine or process.

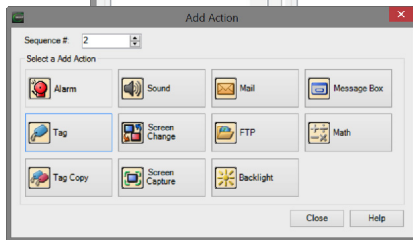
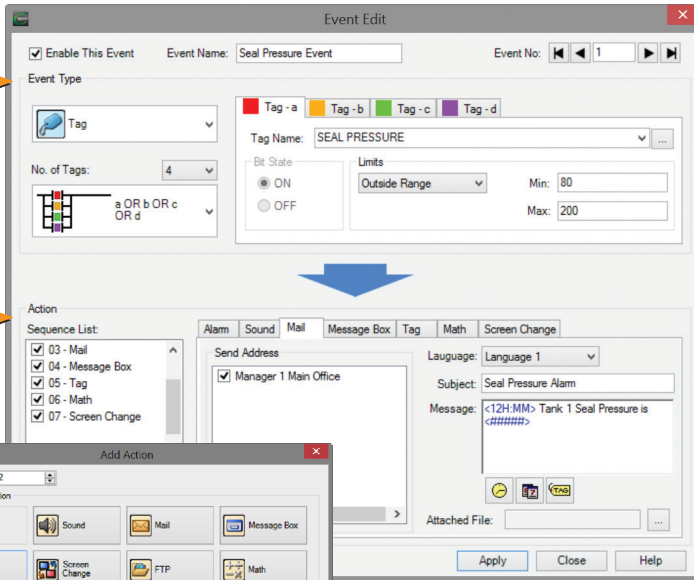
With C-more, your project can be automatically converted for



Powerful Event Manager Triggers Alarms and Actions

Fill-in-the-blank Event Manager saves time, PLC/PAC programming and memory

C-more provides a powerful yet easy-to-use Event Manager which takes exception handling (including alarms) and scheduling to the next level. The simple fill-in-the-blank manager allows events to automatically trigger several actions without the need for hours of PLC/PAC programming.



On the Event Manager screen, create an event, enter the required data, and select multiple actions. It's that easy!

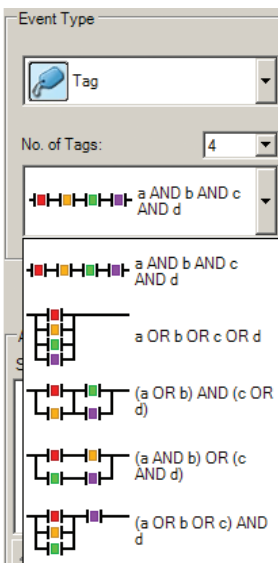
The Event Manager goes beyond simple Alarm and Message functions, and allows C-more to take action based on events such as:

- Tag status or value
- A combination of tag status or values
- Date or time
- A screen change

The Possible Actions include:

- Create an alarm
- Play a sound
- Write values to tags
- Copy tag values
- Send e-mails (with embedded tag data!)
- Force screen changes
- Capture screen image
- Pop-up messages (with embedded tag data!)
- Send files via FTP
- Carry out math formulas

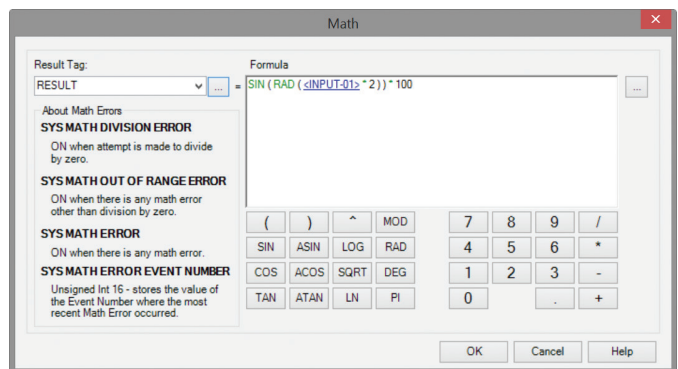
Tag Combinations allow for simple logic with multiple events



Combine up to four different tags into simple logic events that will trigger actions.

Math Actions add more power to your project

Create a custom formula or use the Math Keypad to create formulas with Constants or even Tag Values. The Result is placed into a User Defined Tag.



$$1234 + \text{SIN}(\text{<TAG>} + \text{PI}(123)) + \text{LOG}a$$

- Numbers in Black
- Tags in Blue
- Calculations and Functions in Green
- Errors in Red

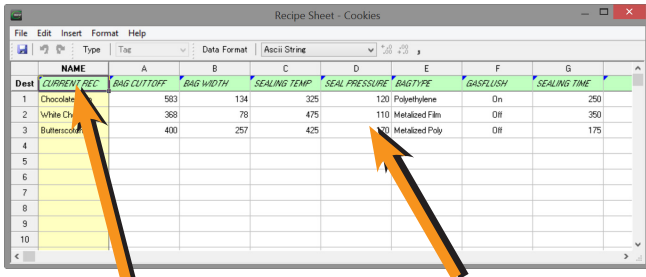
Convenient Recipe & Alarm Functions

More flexible recipes reduces programming effort

Recipes make it easy to make large numbers of tag changes with the push of a single button.

C-more provides tremendous flexibility and capacity to applications that require multiple recipes. It has a simple recipe button that supports 99 recipe sheets, each with 1000 recipes of 256 possible #tags or values. C-more recipe values can be modified and saved on the fly by the operator while the machine is running.

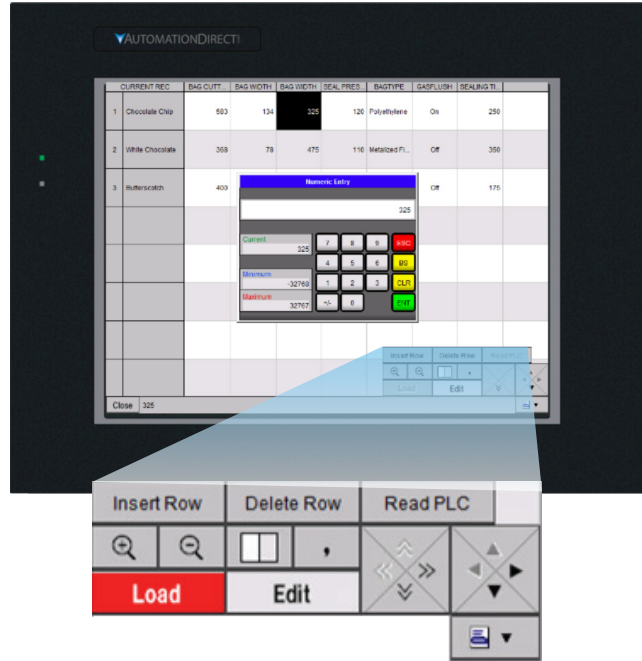
Spreadsheet-based Recipe Creation



Select tags with one click

Insert constant values or select a tag

- New Recipe Database
- 99 recipe sheets
- 1000 recipes per recipe sheet
- 256 possible tags or values
- Load recipe data directly to PLC registers
- Operator editing of recipes while running



Alarm List Object offers detailed alarm management for operators

Alarms are used to notify operators of critical situations that may arise during a process. The Alarm List Object allows operator interaction with alarms that have occurred and allows operators to view, confirm or clear the alarms. Alarms can include specific messages with embedded PLC tag data as well as, date and time information for the alarm status. Alarm status can be color coded to help operators quickly interpret the status for each alarm.

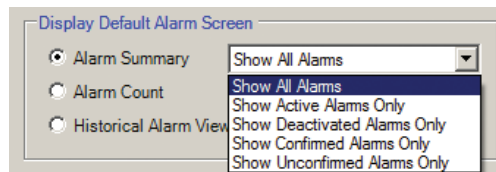
The Alarm List Object allows alarm details to be displayed and logged for future reference

Icons help to see alarm states

Color code the alarm status

| Alarm Summary | | | Total of 4 Alarms | | |
|------------------------|----------|-------------------|-------------------|-------------------|--|
| Message | Confirm | Activated | Confirmed | Deactivated | |
| ⚠ Chocolate Chip Low | Required | 15/02/28 09:35:53 | | 15/02/28 09:36:00 | |
| ⚠ Butterscotch Low | Required | 15/02/28 09:35:53 | | | |
| ✅ Cookie Monster Alert | | 15/02/28 09:35:38 | 15/02/28 09:35:49 | | |
| ✅ Furnace Overtemp | | 15/02/28 09:34:43 | 15/02/28 09:34:57 | | |

The Alarm List Object can be filtered to show alarms based on status.

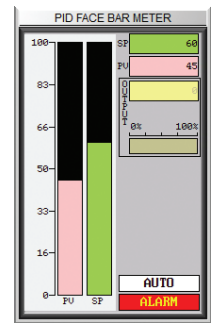
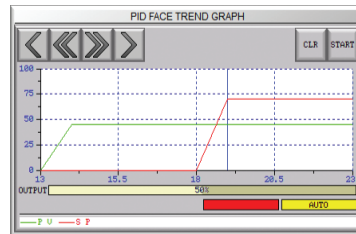
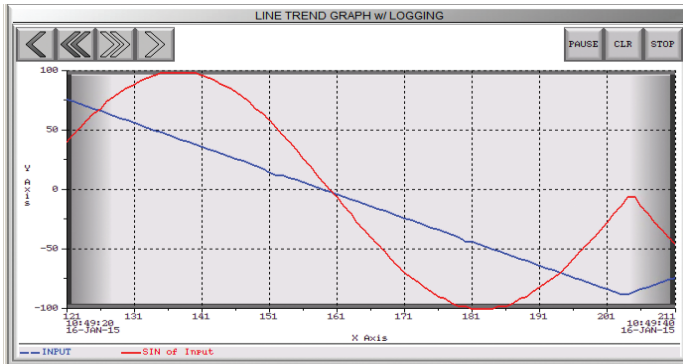


Trends, Logging and Control Options

Trend graphs, PID faceplates, true historical data logging

C-more's trend graph supports 16 pens, selectable to be hidden or shown by the operator. Show only the trends you wish to see, when you wish to see them. In addition, the full featured *C-more* units support data logging to SD cards or USB memory devices. Gigabytes of trend data can be stored,

limited only by you. The information can also be sent from *C-more* to your PC over the Internet, triggered by an event. *C-more* also has the standard PID faceplate and an enhanced version which shows trend data of the setpoint process variable and control variable.



- 16 pen trends
- PID faceplate
- PID with trend faceplate
- Each pen can be turned on/off
- True historical data logging

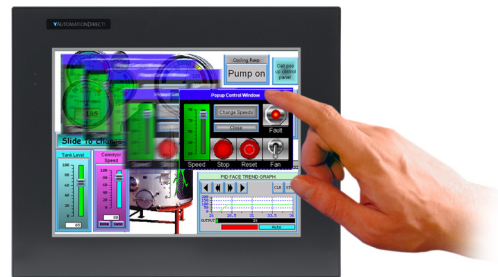


Log to SD card/USB



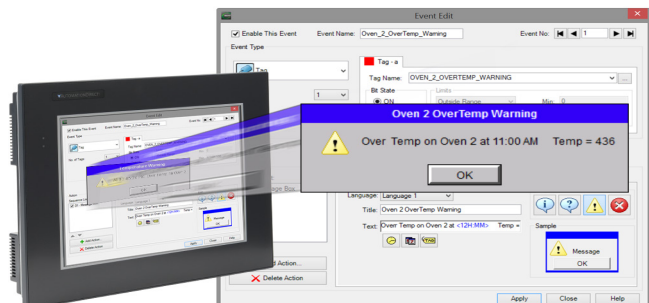
Pop-up windows for information and control

Use Pop-up Window Frames to overlay information or to provide extra controls on top of other screens. Operators can reposition the pop-up anywhere on the screen or close the pop-up when no longer required. Pop-up windows are created just like the other objects in the project, and can include a portion of any *C-more* screen (except other Pop-ups - no cascading available).



Pop-up Message Boxes for critical events

Create Pop-up Message Boxes in the Event Manager. You define the trigger criteria, and then select "Message Box" as the "action". You can type in a short message to appear in the box, and select an icon to display with your message. You can even include tag data, and date/time information in the message. The operator must click the OK button in order to clear the message box. You can also log an alarm at the same time the message box is activated via the event manager (along with many other actions).



Fonts and Animation

Built-in fonts

C-more has 14 different fonts for objects such as pushbuttons, indicators, meters and so on. These fonts are used for object-integrated labels and ON/OFF phrases for each of **C-more's** standard objects. Each font can be bolded, italicized and underlined. Fonts can be scaled to hundreds of sizes, giving you extreme flexibility.



Object Fonts



Bitmap Text Fonts

Built-in animation makes the process come to life

Virtually any bitmap object (from your PC hard drive, the built-in 4,000 symbol library, custom-drawn, etc.) can be animated to follow a straight line or a scribbled path. In addition, the object can change size or orientation (rotation).

Of course, the object can also do any combination of actions as well. Best of all, the animation process is very straightforward. You will be animating your first object in as little as a few minutes!

5 types of animation (any combination)

- Straight line... X or Y
- Scribbled path with up to 64 points
- Rotational
- Change size
- Multi-State Bitmap

Axis Animation:

PLC tag values dictate the actual screen position of an object. Move objects along a single axis or use different tags for simultaneous X-Y position control.

Point Animation:

Define a path with up to 64 points for point-to-point object motion, or use "ratio" mode to move smoothly along a path. Scaling of PLC tag values to the path positions is optional.

Object Rotation:

Control rotation of an object based on the value of a PLC tag. Also allows scaling of tag values to angular values.

Object Size:

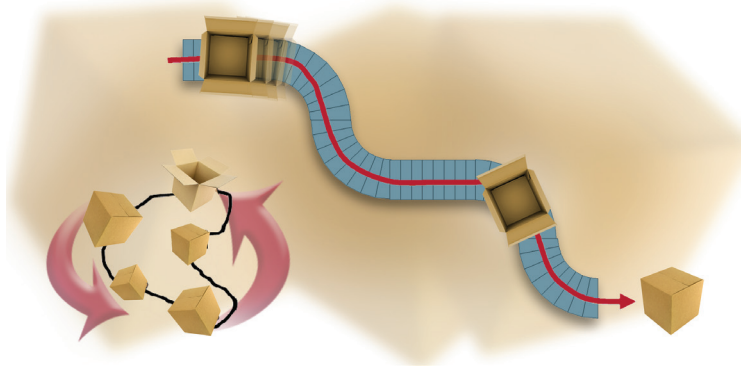
Control the size of an object based on PLC tag values. Independent X and Y-axis scaling of object size is possible, along with scaling of the tag values.

Multi-State Bitmap:

Use up to 16 different bitmap images to animate changes in the appearance of an object.

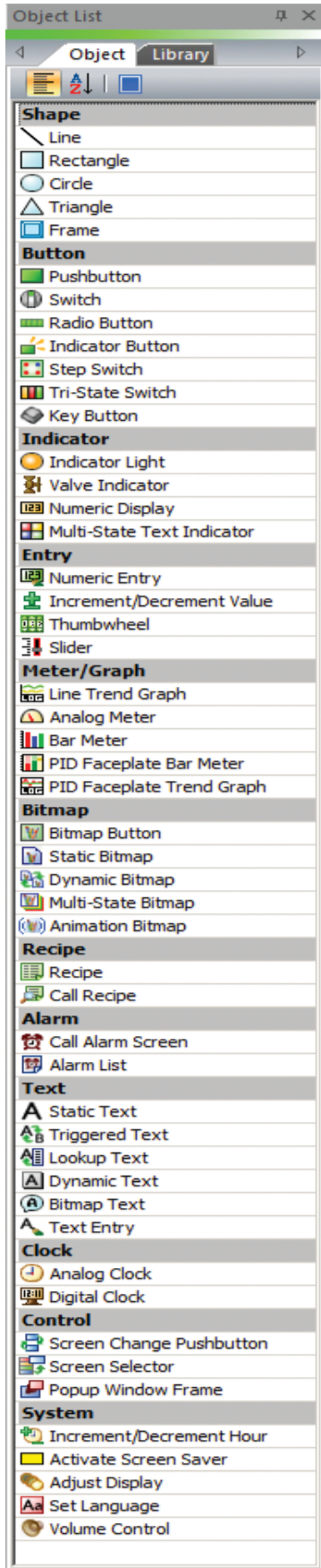
Benefit:

Animations of machine motion and factory processes enhance comprehension, and give operators a visual representation of the desired motion of products, and machinery on screen.



A bitmap object (picture of cardboard box) follows a curving path along a conveyor (the path can be hidden). The box can rotate around the bends in the path and even change sizes. The bitmap changes toward the end to a closed box shape.

Wide Array of Objects and Customized Parts



Here are just a few of the more than 50 types of objects in the standard Object List

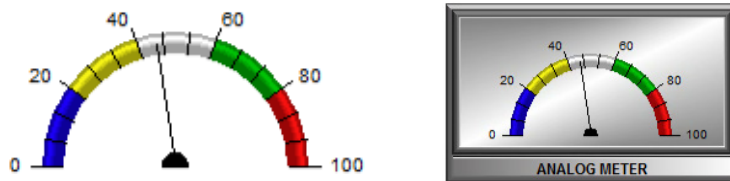
Pushbuttons



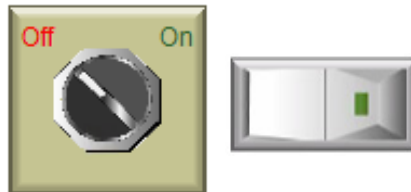
Indicator Lights



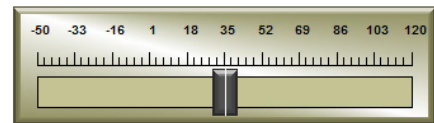
Analog Meters



Switches



Slider Switch

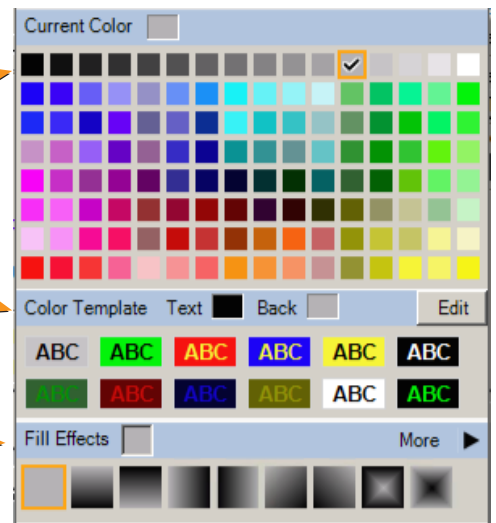


Personalize your screens

Object Format options make personalizing your screen objects simple. Select the colors, frames, and background effects with just a few clicks of the mouse.

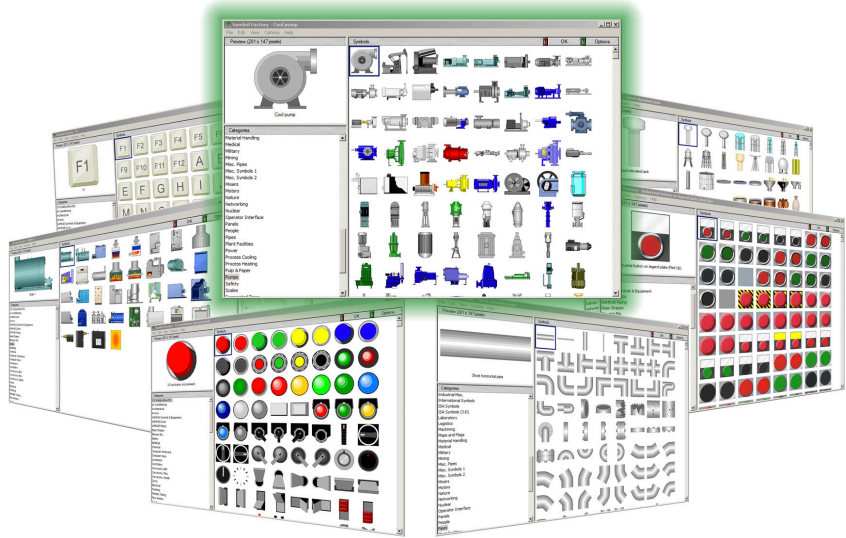
Choose from the default color templates or create and save your own templates to use as often as you like.

Backgrounds for many objects support gradient fill effects that make them stand out.



Over 4000 industrial graphics with Symbol Factory

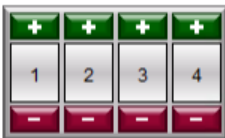
Select from 80 different categories offering vector graphics that can be scaled up and down in size without loss in image quality. Free Cutaway Control is also included for doing tank type fills. If that is not enough, you can always use your own bitmap graphics with the same objects.



Tri-State Switch



Thumbwheel



Dynamic Bitmap



Set Language

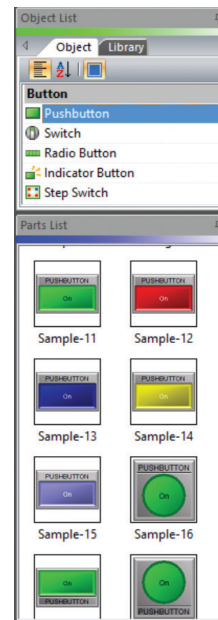


Bitmap Text

Use any Font on Your PC

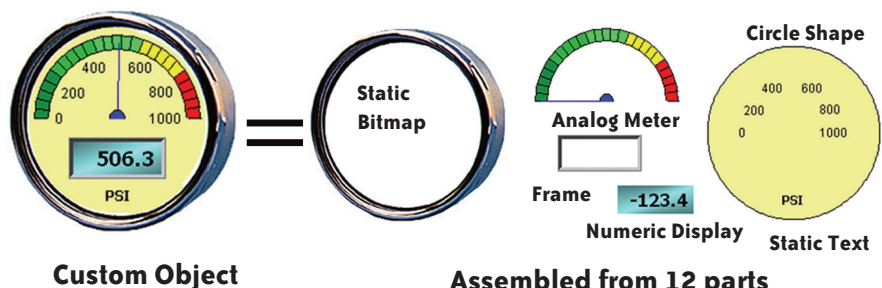
Hundreds of pre-configured parts

C-more also provides ready-made "parts" (versions of each default object) that are available to drag and drop into your project. Select any object to see preconfigured parts in the Parts List. Select the one that most closely matches your needs - and customize it even further, if you like. Then save it in the user library for future use.



Create custom objects

Use a combination of C-more objects and parts to create your own objects, or even entire sections of screens.

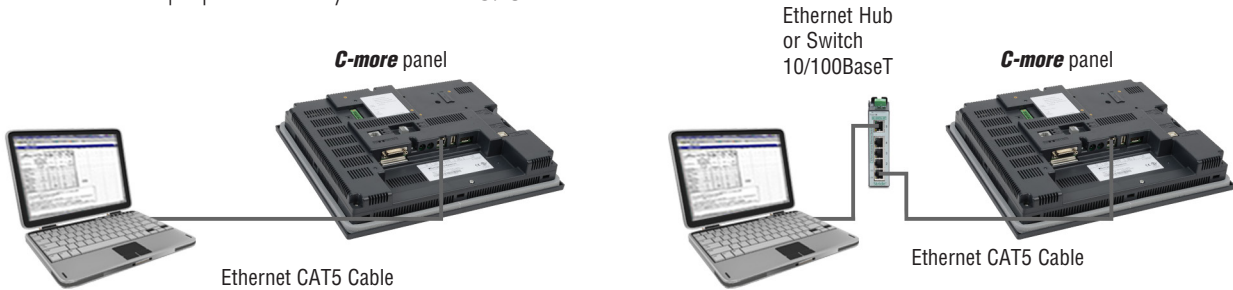


more Built-in Convenience...

Network programming

Full-featured *C-more* panels can be programmed via the built-in Ethernet port (the EA9-T6CL-R model does not support Ethernet). Connect directly from a PC to the *C-more* panel, or connect one or more *C-more* panels to your plant network (via switches and routers). With *C-more* on the plant network, you can download projects from any connected PC. Use the

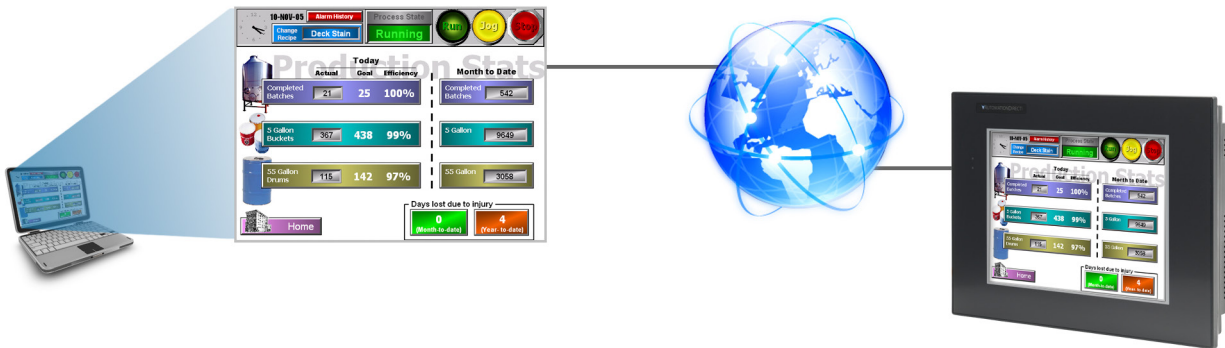
network connection to upload alarm history, PLC/PAC log data or screen captures to a connected PC. *C-more* can send e-mail, based on events or PLC/PAC alarm conditions (if connected to a network and an SMTP (Simple Mail Transport Protocol) server).



C-more programming software with Internet connection

You can program your *C-more* panel remotely via the Internet. All you need is a Public IP address assigned to the

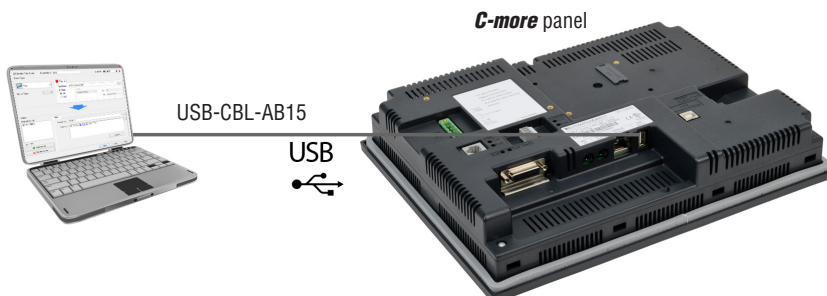
C-more panel and a network that is accessible from the Internet.



USB programming

For convenient programming, use a standard USB cable between your *C-more* panel and your PC. No baud-rate, parity, or stop bit settings to waste your time. USB is fast; most projects download in seconds. Don't pay inflated prices for proprietary

programming cables! USB cables are inexpensive (we sell 'em!) and are readily available so you won't waste time looking for a special cable when your million-dollar operation is down.



Panel Updates using USB or SD Memory Devices

Update your panel without a PC

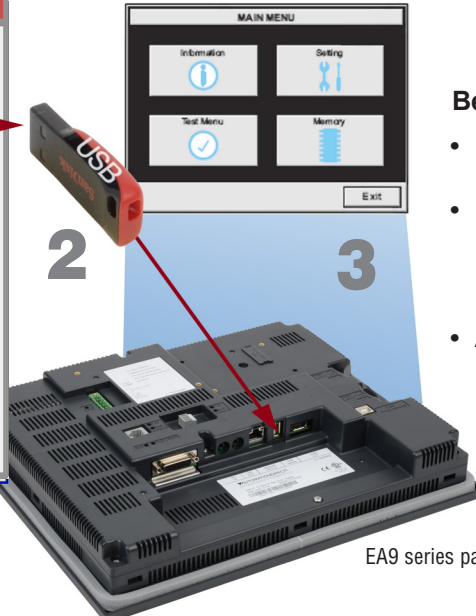
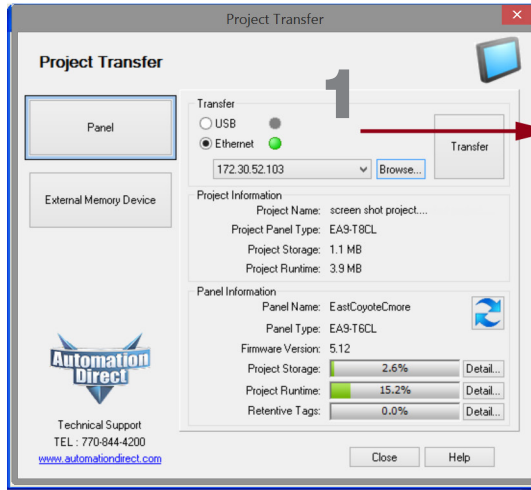
Use SD memory cards or a USB flash drive to transfer projects to your panel without having to connect the panel to a PC. Perfect for updating remote *C-more* EA9 series panels, simply transfer the project to the SD memory card or the Pen Drive, take or send the flash device to the remote location, plug it into the panel and transfer the project into the panel. This is also

a convenient backup of your project, or for when a damaged panel must be replaced. Send project updates to users who might not even have the programming software. Projects can be transferred onto the flash device, and restored to the panel.



Benefits:

- No PC required
- Saves you from traveling to job site, which saves you money
- Allows the end user to safely load the project without the *C-more* programming software



EA9 series panel

1 From the PC, transfer your project to an "External memory device"

2 Take (or send) the memory device to the panel and plug it in

3 Use the *C-more* system screens to restore your project into the panel memory



Lots of memory for your project

C-more EA9 series panels start with a minimum of 26 MB of user project space on the 6-inch through 10-inch units, while the 12-inch and 15-inch units supply 82 MB for project memory.

How about data storage? Many comparably priced touch panels offer no memory options or they support only proprietary memory cards. With *C-more*, all EA9 series models have a USB Port-A connector, and one SD card slot (12 and 15-inch panels include two SD card slots). This allows memory for data logging, screen captures, message logging and alarm logging.



more Visibility Options...

Touch your panel from anywhere with Remote Access and Control!

- No additional hardware required.
- The C-more Remote Access feature resides in all panels with Ethernet support, and requires no option modules.
- Access real-time data or initiate an action on a control system from anywhere, any time.

C-more from your PC

With a Web browser on any PC, remote users can operate and monitor a local C-more HMI system from anywhere on the Internet or on a local network.

C-more from your Mobile Device

Mobile users can download the C-more Remote HMI app from the Apple iTunes store, Google Play, or Amazon App Store, to get remote access and control for Mobile devices for only \$4.99.



Authorized users have the ability to remotely:

- Monitor and control screen operations of the C-more panel as if touching the panel itself
- Test and troubleshoot the C-more project
- View, zoom, print and save screen captures of active screens



Convenient yet secure

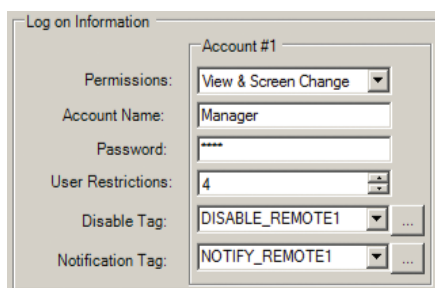
Multilevel Logon Security

Three Remote Access user accounts can be configured and stored in the panel project. Each account allows up to five remote users to be connected simultaneously.

Multilevel Access Control

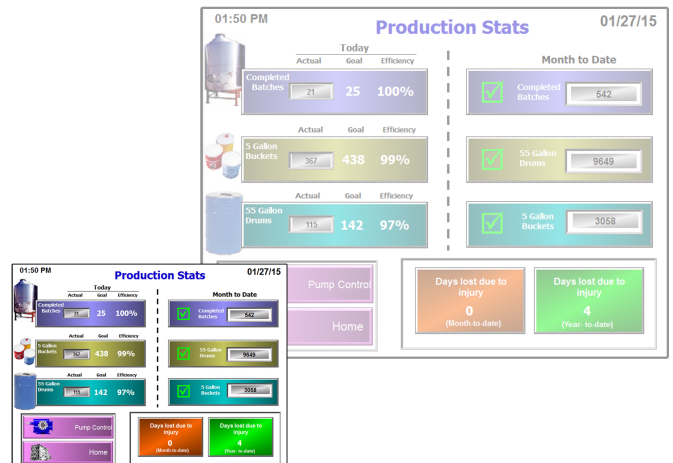
Each account can be configured in one of the following levels of access:

- View Only
- View and allow Screen Change only
- Full Control



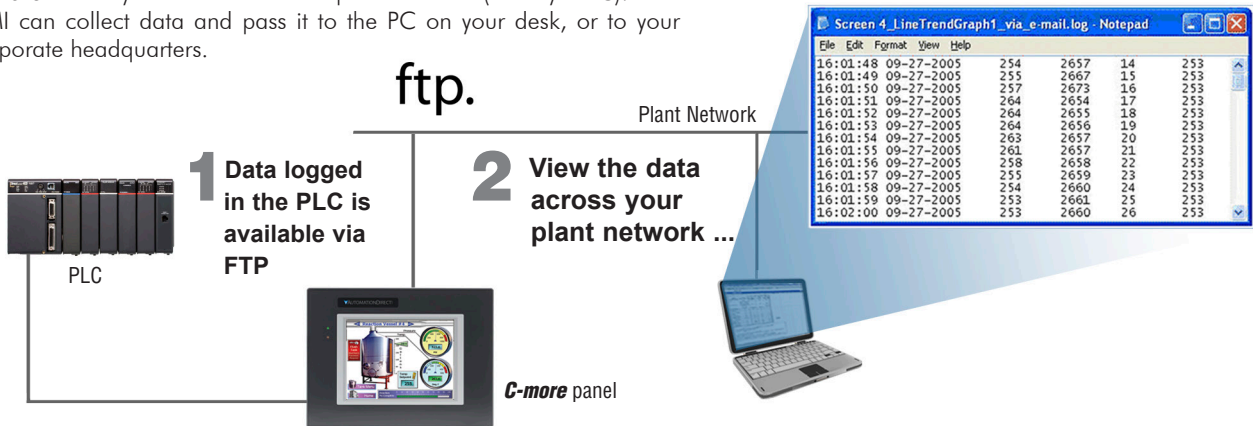
Resizable Window

Unlike many other remote access software brands, the C-more remote viewer is completely resizable. When the user shrinks or expands the browser window, the project objects will rescale accordingly.



FTP Data Transfer

The FTP server (File Transfer Protocol) allows transfer of data files between **C-more** and any connected FTP compatible device (usually a PC). Your HMI can collect data and pass it to the PC on your desk, or to your corporate headquarters.

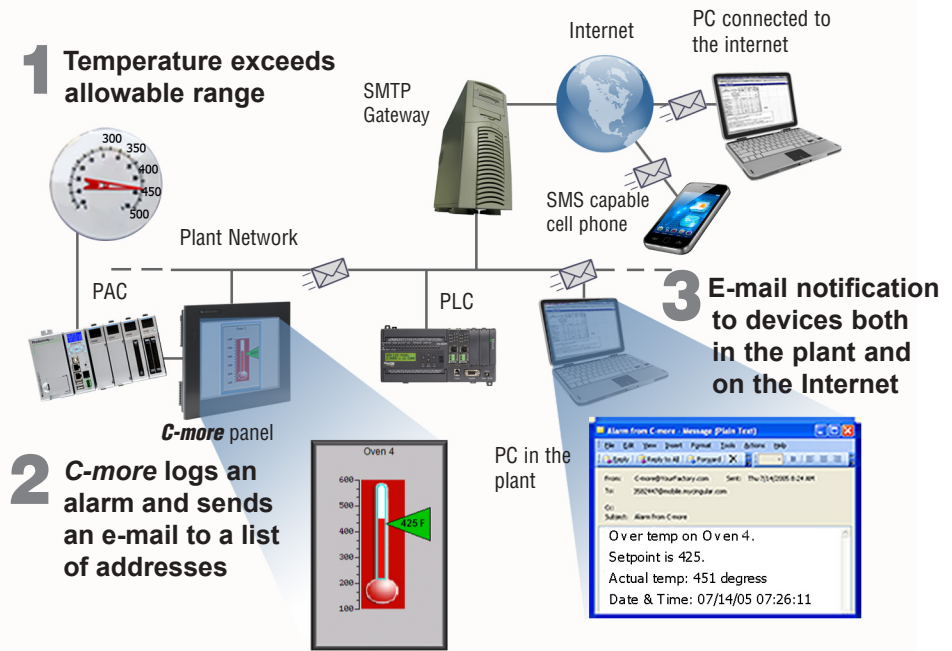


E-mail

Use the Event Manager to send e-mail periodically or when certain Alarms or Events occur. You can even attach log files to the e-mail message.

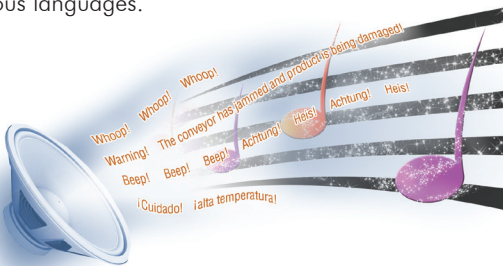
Operators can even key in a message and then press "Send".

C-more supports SSL and Tag based storage of e-mail address so that operators can update e-mail addresses without the programmer's support.



C-more and hear more!

C-more can play warning sounds and other .wav files via an external amplifier and loudspeakers (user supplied). Use sirens, buzzers or beeping sounds to draw attention to alarm conditions. Even pre-recorded verbal messages can be triggered to speak to your operators in various languages.



HDMI Video Output

Connect your HDMI TV or monitor to the **C-more** HDMI video output and allow others to monitor what is being displayed on the **C-more** Touch Panel. Mouse support allows any HDMI compatible device to function as a machine interface. (HDMI support only on the 12-inch and 15-inch **C-more** panels).



more Value for LESS!

Base Model



EA9-T6CL-R - **C-more 6" Base model**

C-more EA9 series touch screen interface panel, 6-inch color TFT (5.7 inch viewable screen), base model, 64k colors, 320 x 240 pixel QVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (1) serial port, USB 2.0 Type A and B ports, supports SD memory card, no Ethernet support. Compatible with EA9-PGMSW programming software version 5.0 or later.

\$499

Full Feature Models



EA9-T6CL **C-more 6"**

C-more EA9 series touch screen interface panel, 6-inch color TFT (5.7 inch viewable screen), 64k colors, 320 x 240 pixel QVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports SD memory card. Compatible with EA9-PGMSW programming software version 5.0 or later.

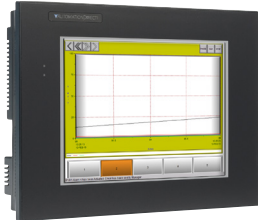
\$699



EA9-T8CL **C-more 8"**

C-more EA9 series touch screen interface panel, 8-inch color TFT (8.4 inch viewable screen), 64k colors, 800 x 600 pixel SVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports SD memory card. Compatible with EA9-PGMSW programming software version 5.0 or later.

\$999



EA9-T10CL **C-more 10"**

C-more EA9 series touch screen interface panel, 10-inch color TFT (10.4 inch viewable screen), 64k colors, 800 x 600 pixel SVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports SD memory card. Compatible with EA9-PGMSW programming software version 5.0 or later.

\$1290

Enhanced Feature Models



EA9-T12CL **C-more 12"**

C-more EA9 series touch screen interface panel, 12-inch color TFT (12.1 inch viewable screen), 64k colors, 800 x 600 pixel SVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports (2) SD memory cards. Includes HDMI video out. Compatible with EA9-PGMSW programming software version 5.0 or later.

\$1790



EA9-T15CL **C-more 15"**

C-more EA9 series touch screen interface panel, 15-inch color TFT (15 inch viewable screen), 64k colors, 1024 x 768 pixel XGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports (2) SD memory cards. Includes HDMI video out. Compatible with EA9-PGMSW programming software version 5.0 or later.

\$1999

See technical specifications for available features in each model

C-more Quick Look

Hardware Selection

| Part Number | Ethernet | SD Card Slot | Serial Ports | HDMI Video Output | Audio Output | USB Ports |
|-------------------|----------|--------------|--------------|-------------------|--------------|-------------------------|
| EA9-T6CL-R | | 1 Slot | 1 Port | | | USB 2.0 Type A and B |
| EA9-T6CL | Yes | 1 Slot | 3 Ports | | Yes* | |
| EA9-T8CL | Yes | 1 Slot | 3 Ports | | Yes* | |
| EA9-T10CL | Yes | 1 Slot | 3 Ports | | Yes | |
| EA9-T12CL | Yes | 2 Slots | 3 Ports | Yes | Yes | |
| EA9-T15CL | Yes | 2 Slots | 3 Ports | Yes | Yes | |

Hardware Features

- **64K colors**
- **LED backlights**
- **800MHz CPU**
- **26MB to 82MB project memory depending on model**
- **12 to 24 VDC powered** (Optional AC module available)
- **Built in Real-time Clock with 30 day backup** (No Battery required)
- **NEMA 4/4X IP65**
- **USB 2.0 Type A for USB HID compliant devices / Storage memory devices**
- **USB 2.0 Type B port for Programming**

Software Features

- **Over 50 objects including 16 pen trends, switches, PID trend faceplate, PID bar graph**
- **Event Manager allows for Logging and Notifications**
- **Language support for objects in German, French, Italian, Spanish, Chinese and Japanese Characters**
- **Project simulator**
- **Bitmap animation**
- **E-mail messaging**
- **Built-in FTP server / Web server**
- **Popup windows**
- **Data logging to USB/SD Flash Drive**
- **USB 2.0 Type B port for Programming**
- **Historical alarms with time and date stamp along with alarm frequency reporting**
- **Supports simultaneous communication to multiple brands of PLC/PACs**
- **Mouse and Keyboard support within the Project**
- **Remote HMI feature with smart phone / tablet / PC**

Support Features

- **Free Top Rated Technical Phone Support**
- **2 year Warranty**
- **30-Day Money Back Policy**

*Please refer to the catalog technical section for details.

Supported drivers

AutomationDirect PLCs

Do-more PLCs
 K-Sequence (*Direct*LOGIC PLCs)
 DirectNET (*Direct*LOGIC PLCs)
 Modbus (Productivity3000 controllers, *Direct*LOGIC PLCs. CLICK PLCs)
 ECOM Ethernet (*Direct*LOGIC PLCs)
 Think & Do (Modbus RTU and Modbus TCP/IP)
 GS Drives
 SOLO Temperature Controllers

Modbus RTU

Modbus TCP/IP

Allen-Bradley

A-B DF1
 A-B DH485
 A-B EtherNet/IP Client
 A-B Ethernet/IP Server Generic IO Messaging

GE SNPX

Omron

Omron Host Link Adapter
 Omron FINS (Serial and Ethernet)

Mitsubishi

FX Series CPU
 FX-1N(C), 2N(C), 3U(C) CPU
 Q Series (QO2,Q02H, Q06H, Q12H, Q25H CPU)
 Q/QnA (Serial and Ethernet)

Siemens

S7-200 (Serial: PPI)
 S7-200 (Ethernet: ISO over TCP/IP)
 S7-300 (Ethernet: ISO over TCP/IP)
 S7-400 (Ethernet: ISO over TCP/IP)
 S7-1200 (Ethernet: ISO over TCP/IP)

Please refer to the Compatibility Table in the following technical section for detailed information about which protocols are available for use with specific controllers.

Company
Information

Control Systems
Overview

CLICK PLC

Do-More
PLCs Overview

Do-More H2
PLC

Do-More T1H
PLC

DirectLOGIC
PLCs Overview

DirectLOGIC
DL05/06

DirectLOGIC
DL105

DirectLOGIC
DL205

DirectLOGIC
DL305

DirectLOGIC
DL405

Productivity
Controller
Overview

Productivity
3000

Universal
Field I/O

Software

C-More
HMI

C-More Micro
HMI

ViewMarq
Industrial
Marquees

Other HMI

Communications

Appendix
Book 1

Terms and
Conditions

Other products you might want to consider

It's time you get more than you paid for in a PLC.



Affordable Innovation

Introducing the NEW Productivity²⁰⁰⁰.....

It's not just the low price, but the incredible built-in features that make our new Productivity2000 a must-have controller.

Why pay thousands elsewhere for features that are standard for our newest PLC, including FREE programming software?

• 5 built-in communications ports right on the CPU –

All the communication you need is built right in! Modbus TCP/IP, Ethernet/IP, and serial devices are supported with no additional modules required!

• OLED real-time data displays –

View accurate process variable data (current, voltage and temperature) as well as system diagnostics on the Productivity2000 hardware OLED displays. *No meter required!*

Plus –

- Effortless PID loops
- Flexible tag name programming
- Auto-discovered I/O
- Hot-swappable modules
- Simple VFD configuration
- Built-in data logging
- Multiple wiring options
- Web server functionality
- Small footprint: 7-slot rack only 10-1/2" wide

And with 50MB of user memory, USB plug-and-play programming functionality and a super low cost of ownership, the new Productivity2000 is the one you need!

| CPU and I/O Comparison | AutomationDirect Productivity2000 | VS. | Allen-Bradley CompactLogix |
|---|--------------------------------------|-----|-------------------------------|
| Base (if required) | \$69.00 P2-04B | | N/A N/A |
| Power Supply | \$69.00 P2-01AC | | \$414.50 1769-PA4 |
| CPU | \$255.00 P2-550 | | \$3,160.00 1769-L3SER |
| 16 AC Inputs | \$105.00 P2-16NA | | \$286.00 1769-IA16 |
| 16 24VDC Inputs | \$69.00 P2-16NE3 | | \$244.00 1769-ID16 |
| 8 Relay Outputs | \$51.00 P2-08TR5 | | \$301.50 1769-OW81 |
| 8 Analog Input Channels (mA) | \$199.00 P2-08AD-1 | | \$713.50 1769-IF8 |
| ASCII Comm Module | \$0.00 Built in to CPU | | \$737.00 1769-ASCI1 |
| Modbus RTU Comm Module | \$0.00 Built in to CPU | | \$701.00 1769-SM2 |
| Total System Price with USB, Ethernet and Serial | \$817.00 | | \$6557.50 |

All prices are U.S. published prices. AutomationDirect prices as of 6/5/2015. Allen-Bradley retail prices taken from www.plcprices.com 5/12/2015.



AUTOMATIONDIRECT.com

Get more than you paid for ...
www.Productivity2000.com

C-more Operator Panels Overview

Getting started

Installing the software and configuring the *C-more* panel is simple. You will need the following to successfully connect, configure and send a project to the panel:

- **C-more** touch panel - 6", 8", 10", 12" or 15" model
- **C-more** Programming Software, p/n EA9-PGMSW
- **C-more** programming cable, USB or Ethernet
- 12-24 VDC switching power supply or the optional **C-more** AC Power Adapter, p/n EA-AC
- Personal Computer - to run **C-more** programming software
- PLC communications cable (serial or Ethernet) to connect the **C-more** Touch Panel to your controller

| Part Number | Description | Price |
|---------------------|---|------------|
| EA9-T6CL-R | <i>C-more</i> EA9 series touch screen interface panel, 6-inch color TFT (5.7 inch viewable screen), base model, 64k colors, 320 x 240 pixel QVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (1) serial port, USB 2.0 Type A and B ports, supports SD memory card, no Ethernet support. Compatible with EA9-PGMSW programming software version 5.0 or later. | \$499.00 |
| EA9-T6CL | <i>C-more</i> EA9 series touch screen interface panel, 6-inch color TFT (5.7 inch viewable screen), 64k colors, 320 x 240 pixel QVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports SD memory card. Compatible with EA9-PGMSW programming software version 5.0 or later. | \$699.00 |
| EA9-T8CL | <i>C-more</i> EA9 series touch screen interface panel, 8-inch color TFT (8.4 inch viewable screen), 64k colors, 800 x 600 pixel SVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports SD memory card. Compatible with EA9-PGMSW programming software version 5.0 or later. | \$999.00 |
| EA9-T10CL | <i>C-more</i> EA9 series touch screen interface panel, 10-inch color TFT (10.4 inch viewable screen), 64k colors, 800 x 600 pixel SVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports SD memory card. Compatible with EA9-PGMSW programming software version 5.0 or later. | \$1,290.00 |
| EA9-T12CL | <i>C-more</i> EA9 series touch screen interface panel, 12-inch color TFT (12.1 inch viewable screen), 64k colors, 800 x 600 pixel SVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports (2) SD memory cards. Includes HDMI video out. Compatible with EA9-PGMSW programming software version 5.0 or later. | \$1,790.00 |
| EA9-T15CL | <i>C-more</i> EA9 series touch screen interface panel, 15-inch color TFT (15 inch viewable screen), 64k colors, 1024 x 768 pixel XGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB CR-272.0 Type A and B ports and Ethernet port; supports (2) SD memory cards. Includes HDMI video out. Compatible with EA9-PGMSW programming software version 5.0 or later. | \$1,999.00 |
| EA9-PGMSW | <i>C-more</i> Windows-based programming software on CD for the <i>C-more</i> EA9 series touch panels. Requires Windows XP Pro 32-bit, Windows 7 (Pro, Ultimate, 32 or 64-bit) or Windows 8 (Pro, Ultimate, 32 or 64-bit). Requires USB or Ethernet connection to touch panel. Cables sold separately. (Does not support <i>C-more</i> EA7 series panels.) | \$99.00 |
| USB-CBL-AB3 | Standard 3-ft. (0.9m) USB 2.0 cable, A-type connector to B-type connector, used to connect personal computer to any <i>C-more</i> touch panel for setup and programming. (Note: Touch panels require a power source for configuration and operation.) | \$7.50 |
| USB-CBL-AB6 | Standard 6-ft. (1.8m) USB 2.0 cable, A-type connector to B-type connector, used to connect personal computer to any <i>C-more</i> touch panel for setup and programming. (Note: Touch panels require a power source for configuration and operation.) | \$9.50 |
| USB-CBL-AB10 | Standard 10-ft (3 meter) USB 2.0 cable, A-type connector to B-type connector, used to connect personal computer to any <i>C-more</i> touch panel for setup and programming. (Note: Touch panels require a power source for configuration and operation.) | \$18.00 |
| USB-CBL-AB15 | Standard 15-ft. (4.6m) USB 2.0 cable, A-type connector to B-type connector, used to connect personal computer to any <i>C-more</i> touch panel for setup and programming. (Note: Touch panels require a power source for configuration and operation.) | \$22.50 |

Company
InformationControl Systems
Overview

CLICK PLC

Do-More
PLCs OverviewDo-More H2
PLCDo-More T1H
PLCDirectLOGIC
PLCs OverviewDirectLOGIC
DL05/06DirectLOGIC
DL105DirectLOGIC
DL205DirectLOGIC
DL305DirectLOGIC
DL405Productivity
Controller
OverviewProductivity
3000Universal
Field I/O

Software

C-More
HMIC-More Micro
HMIViewMarq
Industrial
Marquees

Other HMI

Communications

Appendix
Book 1Terms and
Conditions

C-more Selection Guide & Specifications

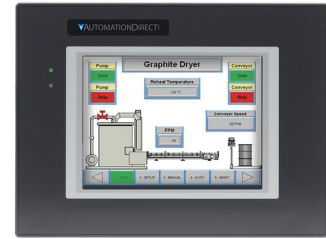
| Specification | Model | 6" TFT color w/ base features | 6" TFT color w/ full features | 8" TFT color w/ full features | 10" TFT color w/ full features | 12" TFT color w/ full features | 15" TFT color w/ full features |
|--|-------|---|-------------------------------|--|--|---|--|
| Part Number | | EA9-T6CL-R | EA9-T6CL | EA9-T8CL | EA9-T10CL | EA9-T12CL | EA9-T15CL |
| Price | | \$499.00 | \$699.00 | \$999.00 | \$1,290.00 | \$1,790.00 | \$1,999.00 |
| Display Actual Size and Type | | 5.7" TFT color | | 8.4" TFT color | 10.4" TFT color | 12.1" TFT color | 15.0" TFT color |
| Display Viewing Area | | 4.54" x 3.40" [115.2 mm x 86.4 mm] | | 6.71" x 5.03" [170.4 mm x 127.8mm] | 8.31" x 6.24" [211.2 mm x 158.4 mm] | 9.69" x 7.26" [246.0 mm x 184.5 mm] | 11.97" x 8.98" [304.1 mm x 228.0 mm] |
| Weight | | 1.56 lb [710g] | 1.59 lb [720g] | 2.93 lb [1330g] | 4.19 lb [1900g] | 4.89 lb [2200g] | 6.50 lb [2950g] |
| Screen Pixels | | 320 x 240 (QVGA) | | 800 x 600 (SVGA) | | 1024 x 768 (XGA) | |
| Display Brightness | | 280 nits (typ) | | 310 nits (typ) | 280 nits (typ) | | |
| LCD Panel Dot Pitch | | 0.18 mm x 0.18 mm | | 0.213 mm x 0.213 mm | 0.264 mm x 0.264 mm | 0.3075 mm x 0.3075 mm | 0.297 mm x 0.297 mm |
| Color Scale | | 65,536 colors | | | | | |
| Backlight Average Lifetime* | | 50,000 hours @ 25°C | | | | | |
| Touch Panel Type | | Four-wire analog resistive | | | | | |
| Project Memory | | 26MB | | | | 82MB | |
| Number of Screens | | Up to 999 screens – limited by project memory | | | | | |
| Realtime Clock | | Realtime Clock Built into panel, backed up for 30 days at 25°C | | | | | |
| Calendar - Month / Day / Year | | Yes - monthly deviation 60 sec (Reference) | | | | | |
| Serial Port 1 | | 15-pin D-sub female - RS232C, RS-422/485 | | | | | |
| Serial Port 2 | N/A | 3-wire terminal block - RS-485 | | | | | |
| Serial Port 3 | N/A | RJ-12 modular jack - RS-232C | | | | | |
| USB Port - Type B | | USB 2.0 High speed (480 Mbps) Type B - Download/Program | | | | | |
| USB Port - Type A | | USB 2.0 High speed (480 Mbps) Type A -for USB device options | | | | | |
| Ethernet Port | N/A | Ethernet Port Ethernet 10/100 Base-T, auto MDI/MDI-X | | | | | |
| Audio Line Out | N/A | 3.5 mm mini jack – requires amplifier and speaker(s) | | | | | |
| Mic In (Future) | N/A | 3.5 mm mini jack | | | | | |
| SD Card Slot | | 1 slot supports max 2 GB (SD), max 32 GB (SDHC) | | | | 2 slots support max 2 GB (SD), max 32 GB (SDHC) | |
| HDMI Video Out | | N/A | | | | Yes | |
| HDMI Supported Resolution | | N/A | | | | 800 x 600 (SVGA) | 1024 x 768 (XGA) |
| Supply Power | | 10.2-26.4 VDC Class 2, or use the AC/DC Power Adapter, EA-AC, to power the touch panel from a 100-240 VAC, 50/60 Hz power source. Reverse Polarity Protected | | | | | |
| Power Consumption | | 16.0 W 1.30 A @ 12VDC 0.66 A @ 24VDC | | 18.0 W 1.50 A @ 12VDC 0.75 A @ 24VDC | 18.0 W 1.50 A @ 12VDC 0.75 A @ 24VDC | 21.0 W 1.75 A @ 12VDC 0.88 A @ 24VDC | 29.0 W 2.40 A @ 12VDC 1.20 A @ 24VDC |
| Internal Fuse (non-replaceable) | | 4.0 A | | 6.3 A | | | |
| 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) | | | | | |
| Environment | | For use in Pollution Degree 2 environment, no corrosive gases permitted | | | | | |
| Noise Immunity | | NEMA ICS3-304 (EN61131-2) RFI (145MHz, 440Mhz 10W @ 10cm) Impulse 1000V @ 1mS pulse 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) | | | | | |
| Withstand Voltage | | 1000 VAC, 1 min. (FG to Power supply) | | | | | |
| Insulation Resistance | | > 10M ohm @ 500VDC (FG to Power supply) | | | | | |
| Vibration | | IEC60068-2-6 (Test Fc) | | | | | |
| Shock | | IEC60068-2-27 (Test Ea) | | | | | |
| Emission | | EN55011 Class A (Radiated RF emission) | | | | | |
| Enclosure | | NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 indoor use only (When mounted correctly) | | | | | |
| Agency Approvals | | UL508, E157382 CE (EN61131-2), RoHS (2011/65/EU) CUL Canadian C22.2 | | | | | |

* NOTE: The backlight average lifetime is defined as the average usage time it takes before the brightness becomes 50% of the initial brightness. The lifetime of the backlight depends on the ambient temperature. The lifetime will decrease under low or high temperature usage.

C-more 6" TFT Color Touch Panel - Base Model

Part No. EA9-T6CL-R

C-more EA9 series touch screen interface panel, 6-inch color TFT (5.7 inch viewable screen), base model, 64k colors, 320 x 240 pixel QVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (1) serial port, USB 2.0 Type A and B ports, supports SD memory card, no Ethernet support. Compatible with EA9-PGMSW programming software version 5.0 or later.



\$499.00



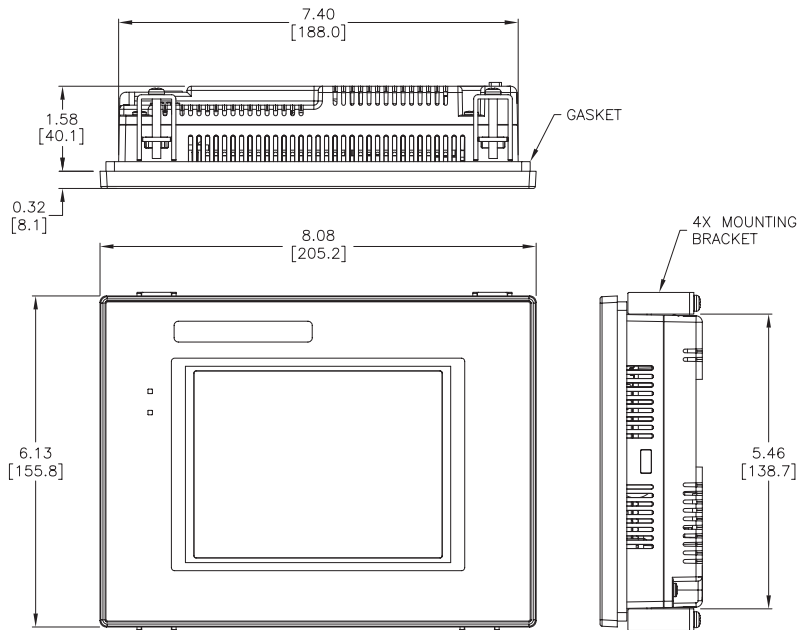
NOTE: EA9-T6CL-R does not support Ethernet.

Features

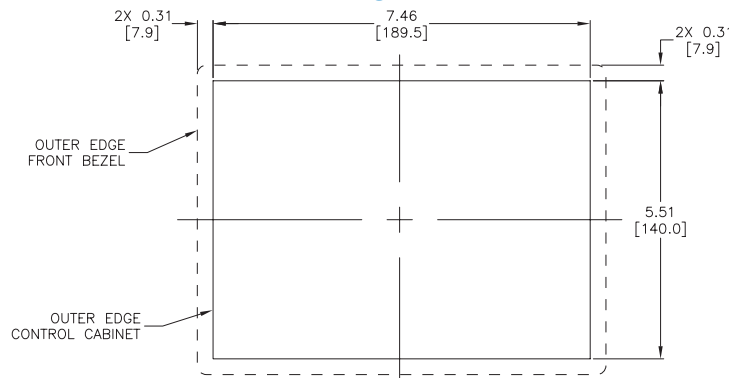
- 5.7" diagonal color TFT (Thin Film Transistor) LCD display with 64K colors
- 640 x 480 pixel resolution
- 280 NITS display brightness
- 50,000 hour average backlight half-life
- Analog resistive (1024 X 1024) touch screen allowing unlimited touch areas
- USB port B (program/download) and USB port A (USB device options)
- Serial PLC interface (RS-232/422/485)
- One built-in SD memory card slot
- 12-24 VDC powered, 110 VAC power adapter (optional)
- 26MB project memory
- 0 to 50°C (32 to 122°F) operating temperature range
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- Slim design saves panel space
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

| Function | Available |
|----------------|-----------|
| Ethernet | No |
| USB | Yes |
| SD Card | Yes |
| Audio Out | No |
| HDMI Video Out | No |

Dimensions inches / [mm]



Mounting Cutout



Company Information

Control Systems Overview

CLICK PLC

Do-More PLCs Overview

Do-More H2 PLC

Do-More T1H PLC

DirectLOGIC PLCs Overview

DirectLOGIC DL05/06

DirectLOGIC DL105

DirectLOGIC DL205

DirectLOGIC DL305

DirectLOGIC DL405

Productivity Controller Overview

Productivity 3000

Universal Field I/O

Software

C-More HMI

C-More Micro HMI

ViewMarq Industrial Marquees

Other HMI

Communications

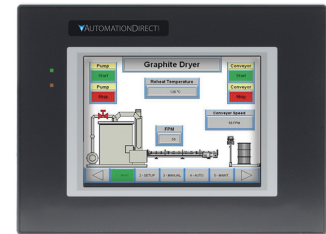
Appendix Book 1

Terms and Conditions

C-more 6" TFT Color Touch Panel - Full Model

Part No. EA9-T6CL

C-more EA9 series touch screen interface panel, 6-inch color TFT (5.7 inch viewable screen), 64k colors, 320 x 240 pixel QVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports SD memory card. Compatible with EA9-PGMSW programming software version 5.0 or later.



\$699.00

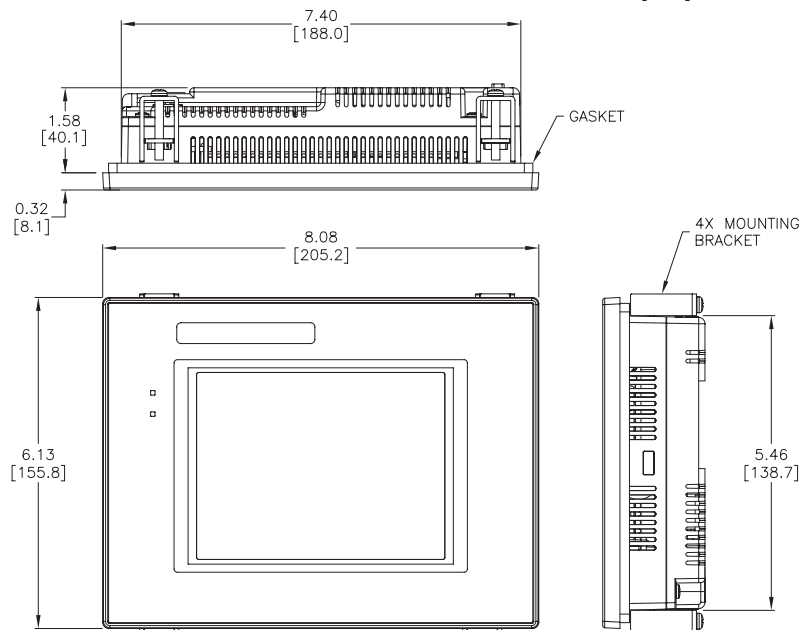
Dimensions
inches / [mm]

Features

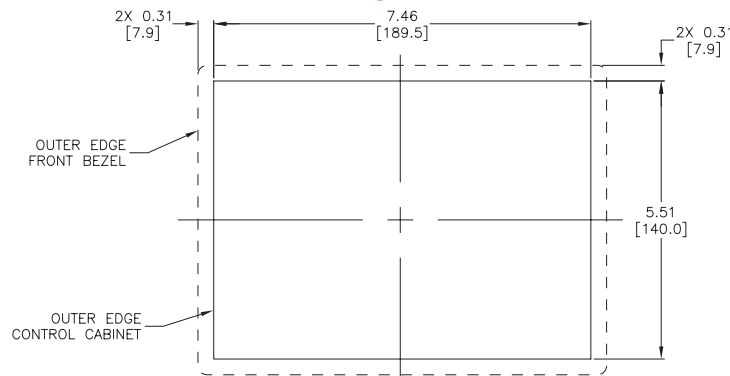
- 5.7" diagonal color TFT (Thin Film Transistor) LCD display with 64K colors
- 320 x 240 pixel resolution
- 280 NITS display brightness
- 50,000 hour average backlight half-life
- Analog resistive (1024 X 1024) touch screen allowing unlimited touch areas
- USB port B (program/download) and USB port A (USB device options)
- Ethernet 10/100 Base-T port (program/download & PLC communication)
- Remote Internet Access
- Serial PLC interface (RS-232/422/485)
- One built-in SD memory card slot
- 12-24 VDC powered, 110VAC power adapter (optional)
- Audio Line Out, stereo - requires amplifier and speaker(s)
- 26MB project memory
- Data logging
- 0 to 50°C [32 to 122°F] operating temperature range
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- Slim design saves panel space
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase



| Function | Available |
|----------------|-----------|
| Ethernet | Yes |
| USB | Yes |
| SD Card | Yes |
| Audio Out | Yes |
| HDMI Video Out | No |

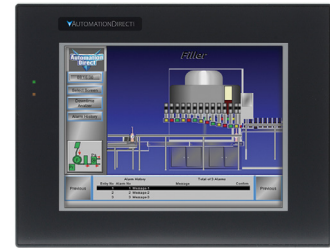


Mounting Cutout



C-more 8" TFT Color Touch Panel - Full Model

Part No. EA9-T8CL



\$999.00

Dimensions
inches / [mm]

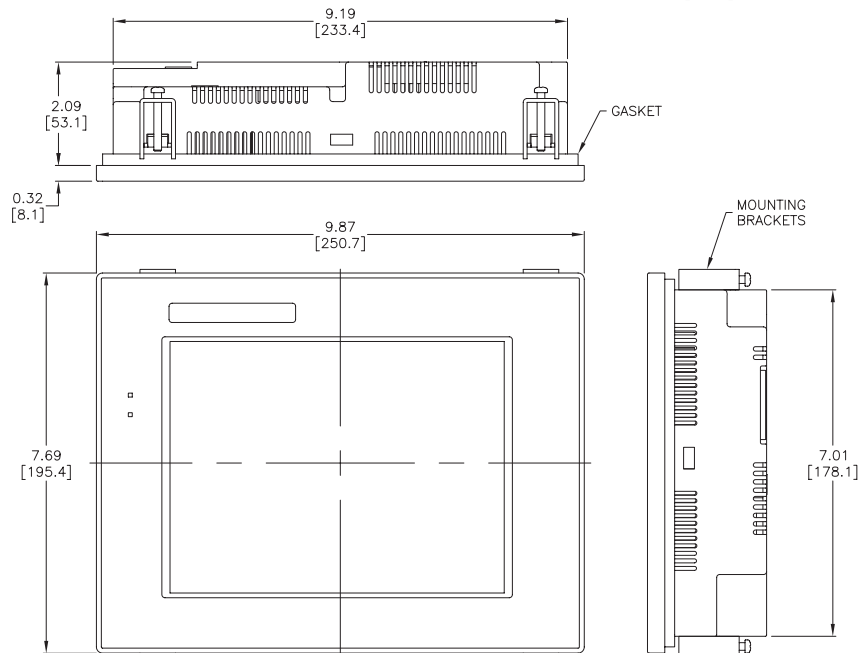
| Function | Available |
|----------------|-----------|
| Ethernet | Yes |
| USB | Yes |
| SD Card | Yes |
| Audio Out | Yes |
| HDMI Video Out | No |



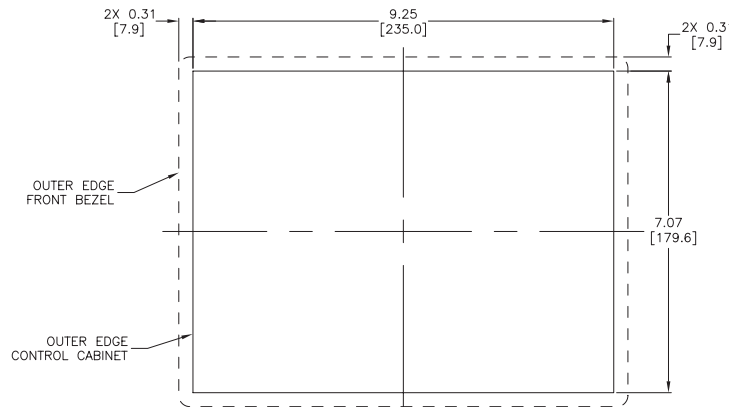
C-more EA9 series touch screen interface panel, 8-inch color TFT (8.4 inch viewable screen), 64k colors, 800 x 600 pixel SVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports SD memory card. Compatible with EA9-PGMSW programming software version 5.0 or later.

Features

- 8.4" diagonal color TFT (Thin Film Transistor) LCD display with 64K colors
- 800 x 600 pixel resolution
- 310 NITS display brightness
- 50,000 hour average backlight half-life
- Analog resistive (1024 X 1024) touch screen allowing unlimited touch areas
- USB port B (program/download) and USB port A (USB device options)
- Ethernet 10/100 Base-T port (program/download & PLC communication)
- Remote Internet Access
- Serial PLC interface (RS-232/422/485)
- One built-in SD memory card slot
- 12-24 VDC powered, 110VAC power adapter (optional)
- Audio Line Out, stereo - requires amplifier and speaker(s)
- 26MB project memory
- Data logging
- 0 to 50°C [32 to 122°F] operating temperature range
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- Slim design saves panel space
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase



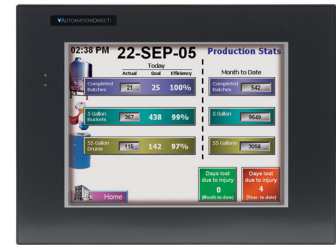
Mounting Cutout



C-more 10" TFT Color Touch Panel - Full Model

Part No. EA9-T10CL

C-more EA9 series touch screen interface panel, 10-inch color TFT (10.4 inch viewable screen), 64k colors, 800 x 600 pixel SVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports SD memory card. Compatible with EA9-PGMSW programming software version 5.0 or later.



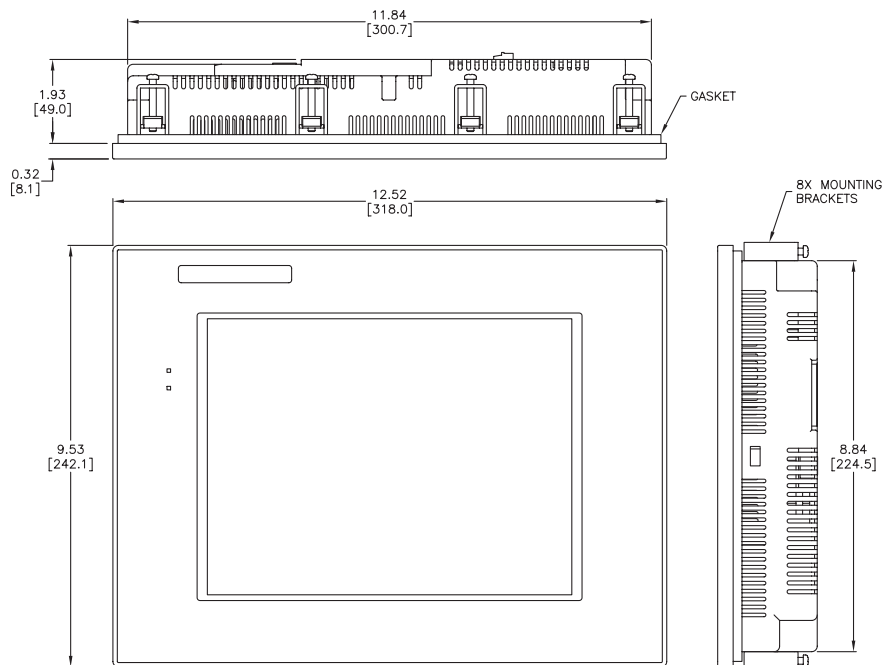
\$1,290.00

Dimensions
inches / [mm]

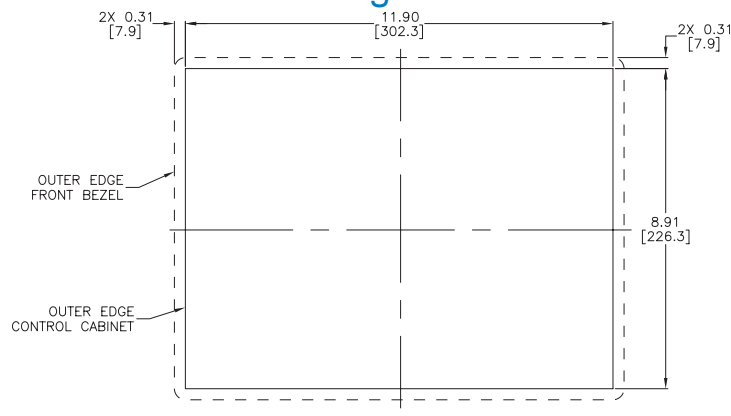
Features

- 10.4" diagonal color TFT (Thin Film Transistor) LCD display with 64K colors
- 800 x 600 pixel resolution
- 280 NITS display brightness
- 50,000 hour average backlight half-life
- Analog resistive (1024 X 1024) touch screen allowing unlimited touch areas
- USB port B (program/download) and USB port A (USB device options)
- Ethernet 10/100 Base-T port (program/download & PLC communication)
- Remote Internet Access
- Serial PLC interface (RS-232/422/485)
- One built-in SD memory card slot
- 12-24 VDC powered, 110VAC power adapter (optional)
- Audio Line Out, stereo - requires amplifier and speaker(s)
- 26MB project memory
- Data logging
- 0 to 50°C [32 to 122°F] operating temperature range
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- Slim design save panel space
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

| Function | Available |
|----------------|-----------|
| Ethernet | Yes |
| USB | Yes |
| SD Card | Yes |
| Audio Out | Yes |
| HDMI Video Out | No |



Mounting Cutout



C-more 12" TFT Color Touch Panel - Full Model

Part No. EA9-T12CL

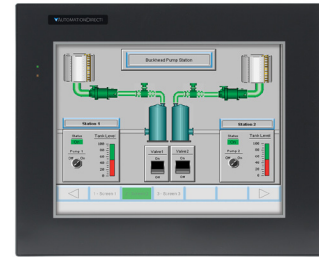
C-more EA9 series touch screen interface panel, 12-inch color TFT (12.1 inch viewable screen), 64k colors, 800 x 600 pixel SVGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports (2) SD memory cards. Includes HDMI video out. Compatible with EA9-PGMSW programming software version 5.0 or later.

Features

- 12.1" diagonal color TFT (Thin Film Transistor) LCD display with 64K colors
- 800 x 600 pixel resolution
- 280 NITS display brightness
- 50,000 hour average backlight half-life
- Analog resistive (1024 X 1024) touch screen allowing unlimited touch areas
- USB port B (program/download) and USB port A (USB device options)
- Ethernet 10/100 Base-T port (program/download & PLC communication)
- Remote Internet Access
- Serial PLC interface (RS-232/422/485)
- Two built-in SD memory card slots
- 12-24 VDC powered, 110VAC power adapter (optional)
- Audio Line Out, stereo - requires amplifier and speaker(s)
- HDMI Video Out
- 82MB project memory
- Data logging
- 0 to 50°C [32 to 122°F] operating temperature range
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- Slim design saves panel space
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

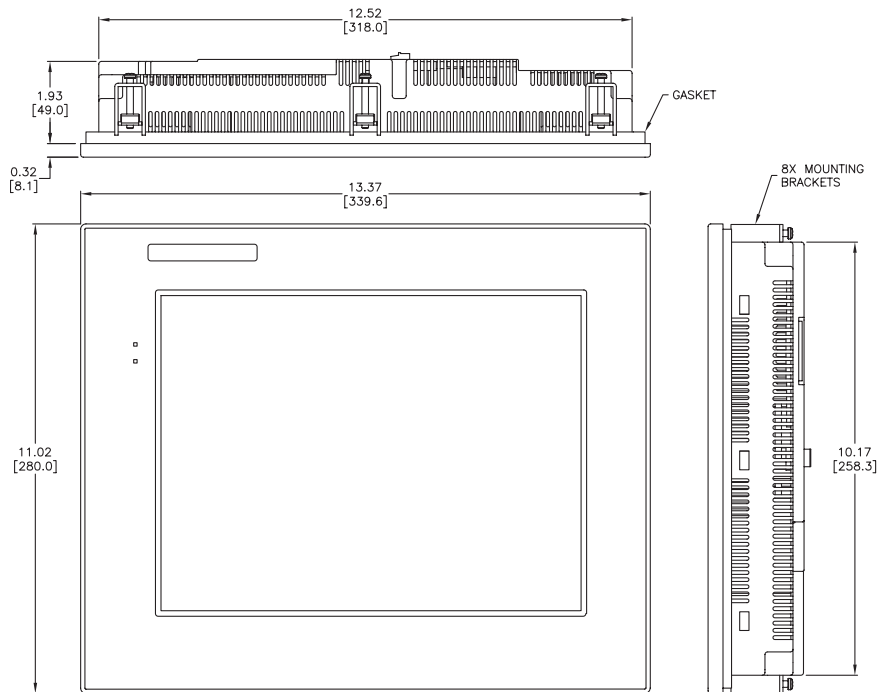


| Function | Available |
|----------------|-----------|
| Ethernet | Yes |
| USB | Yes |
| SD Card | Yes |
| Audio Out | Yes |
| HDMI Video Out | Yes |

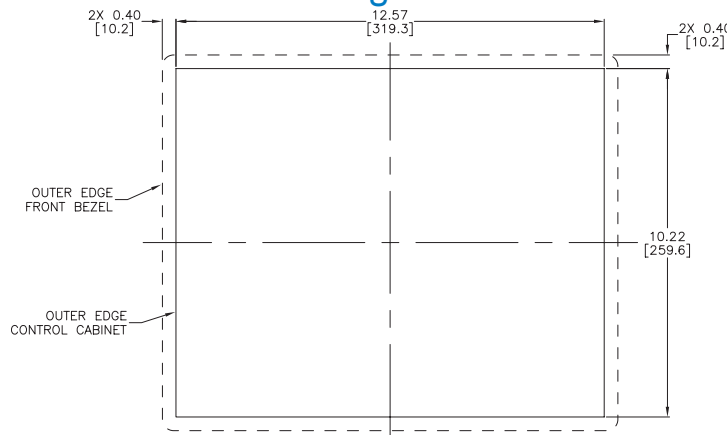


\$1,790.00

Dimensions inches / [mm]



Mounting Cutout



Company Information

Control Systems Overview

CLICK PLC

Do-More PLCs Overview

Do-More H2 PLC

Do-More T1H PLC

DirectLOGIC PLCs Overview

DirectLOGIC DL05/06

DirectLOGIC DL105

DirectLOGIC DL205

DirectLOGIC DL305

DirectLOGIC DL405

Productivity Controller Overview

Productivity 3000

Universal Field I/O

Software

C-More HMI

C-More Micro HMI

ViewMarq Industrial Marquees

Other HMI

Communications

Appendix Book 1

Terms and Conditions

C-more 15" TFT Color Touch Panel - Full Model

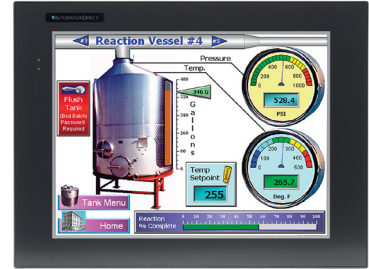
Part No. EA9-T15CL

C-more EA9 series touch screen interface panel, 15-inch color TFT (15 inch viewable screen), 64k colors, 1024 x 768 pixel XGA screen resolution, 800 MHz CPU, 12-24 VDC powered, NEMA 4/4X, IP65 (when mounted correctly; for indoor use only), non-replaceable LED backlight. Includes (3) serial ports, USB 2.0 Type A and B ports and Ethernet port; supports (2) SD memory cards. Includes HDMI video out. Compatible with EA9-PGMSW programming software version 5.0 or later.

Features

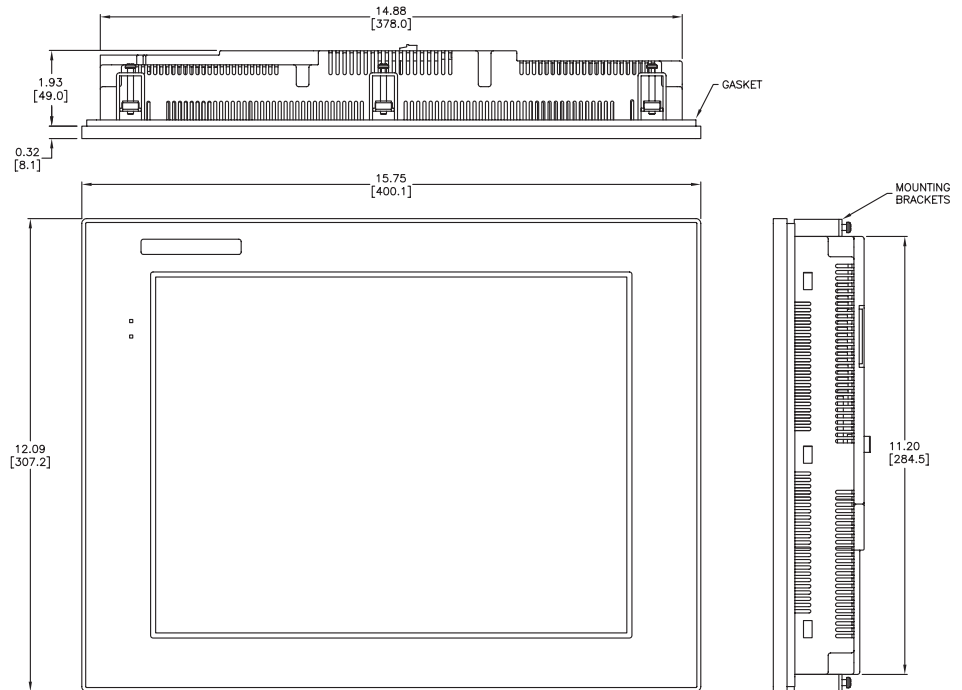
- 15.0" diagonal color TFT (Thin Film Transfer) LCD display with 64K colors
- 1024x 768 pixel resolution
- 280 NITS display brightness
- 50,000 hour average backlight half-life
- Analog resistive (1024 X 1024) touch screen allowing unlimited touch areas
- USB port B (program/download) and USB port A (USB device options)
- Ethernet 10/100 Base-T port (program/download & PLC communication)
- Remote Internet Access
- Serial PLC interface (RS-232/422/485)
- Two built-in SD memory card slots
- 12-24 VDC powered, 110VAC power adapter (optional)
- Audio Line Out, stereo - requires amplifier and speaker(s)
- HDMI Video Out
- 82MB project memory
- Data logging
- 0 to 50°C [32 to 122°F] operating temperature range
- NEMA 4/4X, IP65 compliant when mounted correctly, indoor use only
- Slim design saves panel space
- UL, cUL & CE agency approvals
- 2-year warranty from date of purchase

| Function | Available |
|----------------|-----------|
| Ethernet | Yes |
| USB | Yes |
| SD Card | Yes |
| Audio Out | Yes |
| HDMI Video Out | Yes |

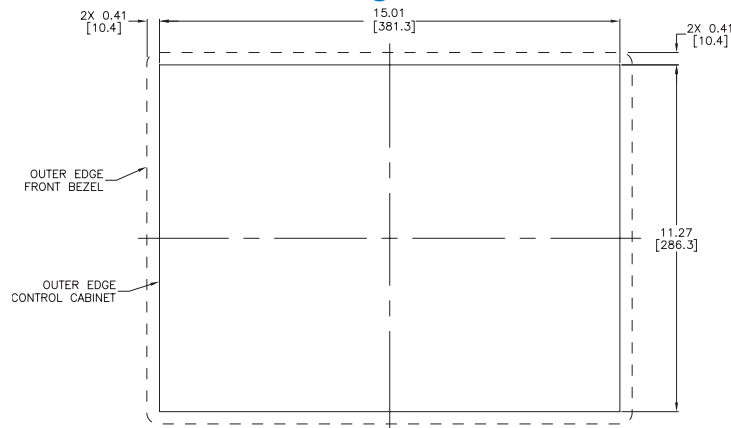


\$1,999.00

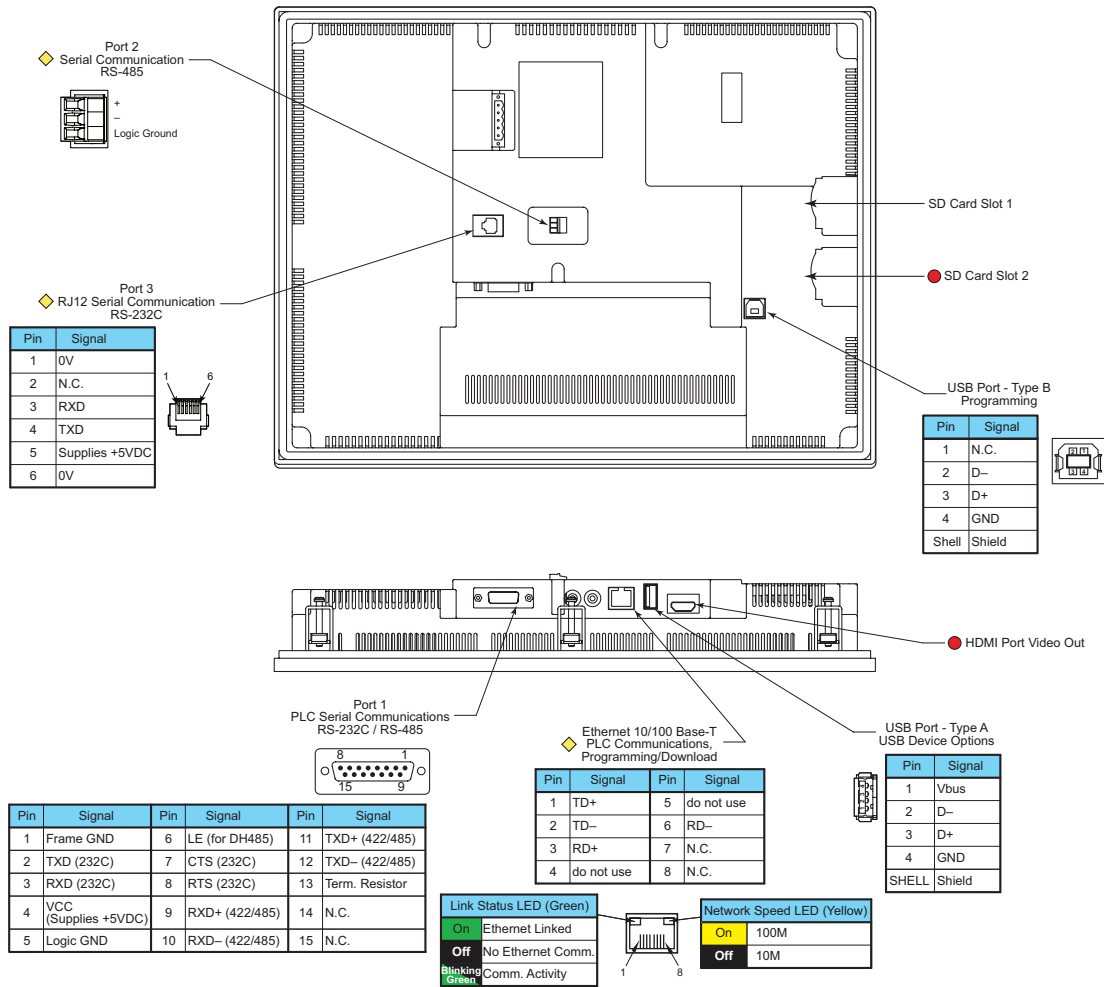
Dimensions
inches / [mm]



Mounting Cutout



C-more Communication Ports



◆ Note: Device is not available on Base Feature touch panel EA9-T6CL-R

● Note: Device is only available on touch panels EA9-T12CL and EA9-T15CL.

Ethernet Port

The Ethernet port has several uses:

- Download program to panel
- Communicate to PLCs/PCs
- Send e-mail
- Access FTP server
- Act as a Web server
- Remote Internet Access

The Ethernet port has an RJ-45 8-wire modular connector with green and yellow LEDs.

- The yellow LED indicates network speed; off for a 10 Mbps connection and illuminated for a 100 Mbps connection.
- The green LED indicates link status and illuminates when a link is established.

Note: The base panels (-R part numbers) do not include an Ethernet port, and do not have these capabilities.

USB Port B

Program *C-more* via the USB programming port. It's fast and easy, with no baud rate settings, parity, or stop bits to worry about. We stock standard USB cables for your convenience. USB Port B can be used to upload or download projects to and from a PC.

USB Port A

The Universal Serial Bus (USB) Port A is a standard feature for all models and can be used to connect various USB HID (Human Input Device) devices to the panel, such as:

- USB pen drives, (USB-FLASH)
- USB keyboards
- USB barcode scanners
- USB card scanners

C-more can log data to the USB pen drive as well as load projects to the panel from the pen drive. You can also back up project files and panel firmware.

Sound Interface (Audio Line Out)

When attached to an amplifier and speaker(s), *C-more* can play warning sounds or pre-recorded messages such as: "conveyor is jammed". *C-more* supports WAV type files. The output is stereo.

Serial Port

Port 1 - Connect to your serial controller network via Port 1. Port 1 is a 15-pin port that supports RS-232 or RS-422/485.

Port 2 - Connect your RS-485 network via Port 2. Port 2 is provided with a 3-wire removable terminal block.

Port 3 - Connect to your RS-232C device via Port 3. Port 3 is an RJ12 connection.

HDMI Video Out

EA9-T12CL and EA9-T15CL include an HDMI Type A port to provide video output to a projector or remote monitor.

C-more Communication Protocols & Cables

| Compatibility Table | | | |
|----------------------------|--|--|--|
| PLC Family | Model | Protocols | |
| Allen-Bradley | MicroLogix 1000, 1100, 1200, 1400, 1500, SLC 5-7/01/02/03 | DH485/AIC/AIC+ | |
| | MicroLogix 1000, 1100, 1200, 1400 and 1500 SLC 5-03/04/05 | DF1 Half Duplex; DF1 Full Duplex | |
| | ControlLogix™, CompactLogix™, FlexLogix™ PLC-5 | DF1 Full Duplex | |
| | ControlLogix, CompactLogix, FlexLogix - Tag Based | DF1 Half Duplex; DF1 Full Duplex | |
| | ControlLogix, CompactLogix, FlexLogix - Generic I/O Messaging | EtherNet/IP Server | |
| | ControlLogix, CompactLogix, FlexLogix - Tag Based | EtherNet/IP Client | |
| | Micrologix 1100, 1400 & SLC5/05, all via native Ethernet port | | |
| | MicroLogix 1000, 1100, 1200, 1400,1500 & SLC 5-03/04/05, all via ENI Adapter | Modbus RTU | |
| Modbus RTU | Modbus RTU devices | Modbus RTU | |
| Modbus TCP/IP | Modbus TCP/IP devices | Modbus TCP/IP | |
| GE | 90/30, 90/70, Micro 90, VersaMax Micro | SNPX | |
| Mitsubishi | FX Series | FX Direct | |
| | Q02, Q02H, Q06H, Q12H, Q25H | Q CPU | |
| | Q, QnA Serial | QnA Serial | |
| | Q, QnA Ethernet | QnA Ethernet | |
| Omron | C200 Adapter, C500 | Host Link | |
| | CJ1/CS1 Serial, CJ1/CS1 Ethernet | FINS | |
| Modicon | 984 CPU, Quantum 113 CPU, AEG Modicon Micro Series 110 CPU: 311-xx, 411-xx, 512-xx, 612-xx | Modbus RTU | |
| Siemens | S7-200 CPU, RS-485 Serial | PPI | |
| | S7-200 CPU, S7-300 CPU, S7-400, S7-1200 CPU; Ethernet | Ethernet ISO over TCP | |
| Productivity Series | all | AutomationDirect P3000 Serial AutomationDirect P3000 Ethernet | |
| Do-more | all | Do-more Serial Do-more Ethernet | |
| CLICK | all | AutomationDirect Modbus (CLICK) | |
| DirectLOGIC | DL05/DL06 | all | K-Sequence Direct NET Modbus (Koyo addressing) |
| | | H0-ECOM/H0-ECOM100 | DirectLOGIC Ethernet |
| | | DL105 | all |
| | DL205 | D2-230 | K-Sequence |
| | | D2-240 | K-Sequence Direct NET |
| | | D2-250/D2-250-1/D2-260 | K-Sequence |
| | | | Direct NET |
| | | | Modbus (Koyo addressing) |
| | | D2-240/D2-250-1/D2-260 using D2-DCM | Direct NET Modbus (Koyo addressing) |
| | | H2-ECOM/H2-ECOM100 | DirectLOGIC Ethernet |
| | DL305 | D3-330/330P (Requires the use of a Data Communications Unit) | Direct NET |
| | | D3-340 | Direct NET |
| | | D3-350 | K-Sequence |
| | | | Direct NET Modbus (Koyo addressing) |
| | | D3-350 using D3-DCM | Direct NET Modbus (Koyo addressing) |
| | DL405 | D4-430 | K-Sequence Direct NET |
| | | D4-440 | K-Sequence Direct NET |
| | | D4-450 | K-Sequence |
| | | | Direct NET Modbus (Koyo addressing) |
| | | All with D4-DCM | Direct NET Modbus (Koyo addressing) |
| | | H4-ECOM/H4-ECOM100 | DirectLOGIC Ethernet |
| | H2-WinPLC (Think & Do) Live V5.2 or later and Studio any version | Think & Do Modbus RTU (serial port) | |
| | H2-WinPLC (Think & Do) Live V5.5.1 or later and Studio V7.2.1 or later | Think & Do Modbus TCP/IP (Ethernet port) | |

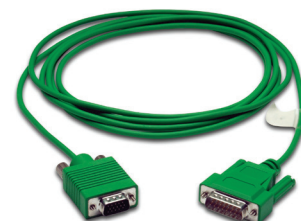
| Cable Description | Cable Part Number | Price |
|--|------------------------|---------|
| AutomationDirect Productivity Series, Do-more, CLICK, DirectLOGIC PLC RJ-12 port, DL05, DL06, DL105, DL205, D3-350, D4-450 & H2-WinPLC (RS-232C) | EA-2CBL | \$20.00 |
| DirectLOGIC (VGA Style) 15-pin port, DL06, D2-250 (250-1), D2-260 (RS-232C) | EA-2CBL-1 | \$20.00 |
| DirectLOGIC PLC RJ-11 port, D3-340 (RS-232C) | EA-3CBL | \$20.00 |
| DirectLOGIC DL405 PLC 15-pin D-sub port, DL405 (RS-232C) | EA-4CBL-1 | \$20.00 |
| DirectLOGIC PLC 25-pin D-sub port, DL405, D3-350, DL305 DCU and all DCM's (RS-232C) | EA-4CBL-2 | \$20.00 |
| Allen-Bradley MicroLogix 1000, 1100, 1200, 1400 & 1500 (RS-232C) | EA-MLOGIX-CBL | \$30.00 |
| Allen-Bradley SLC 5-03/04/05 ControlLogix, CompactLogix, FlexLogix, DF1 port (RS-232C) | EA-SLC-232-CBL | \$20.00 |
| Allen-Bradley PLC-5 DF1 port (RS-232C) | EA-PLC5-232-CBL | \$20.00 |
| Allen-Bradley SLC 500 DH485 port (RS-485A) | EA-DH485-CBL | \$20.00 |
| GE 90/30, 90/70, Micro 90, VersaMax Micro 15-pin D-sub port (RS-422A) | EA-90-30-CBL | \$20.00 |
| MITSUBISHI FX Series 25-pin port (RS-422A) | EA-MITSU-CBL | \$20.00 |
| MITSUBISHI FX Series 8-pin mini-DIN (RS-422A) | EA-MITSU-CBL-1 | \$20.00 |
| OMRON Host Link C200 Adapter, C500 (RS-232C) | EA-OMRON-CBL | \$20.00 |

Example Cables:

EA-2CBL



EA-2CBL-1



C-more Computer Programming Connections

Using the **C-more** Programming Software EA9-PGMSW for project development, the touch panel can be connected to a PC (personal computer) in one of several ways:

- Connect a USB Programming Cable such as (USB-CBL-AB15) from a USB port type A on the PC to the USB type B programming port on the C-more touch panel. The USB connection is for direct connection only and does not support USB hubs.
- Connect the **C-more** touch panel to a PC with a Cat5 Ethernet cable via an Ethernet switch. Multiple panels can be programmed in this configuration.

Following are the minimum system requirements for running **C-more** Programming Software, p/n EA9-PGMSW, on a PC:

- USB or Ethernet connection to touch panel (cables sold separately).
- Operating System - Windows 7 (Pro, Ultimate, 32 or 64-bit) or Windows 8 (Pro, Ultimate, 32 or 64-bit)

USB Programming Cable



Part No. USB-CBL-AB15

\$22.50

Other lengths available see
USB-CBL-AB3, USB-CBL-AB6, USB-CBL-AB10

Stride™ Ethernet Switch



Message is sent out only from the port connected to destination device

Message in from a device

Part No. SE-SW5U

\$99.00

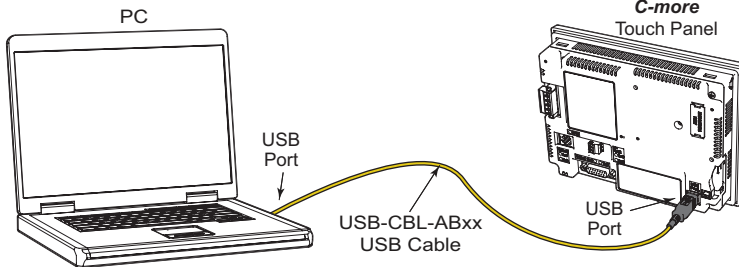


NOTE: Regarding Ethernet access to a C-more panel.

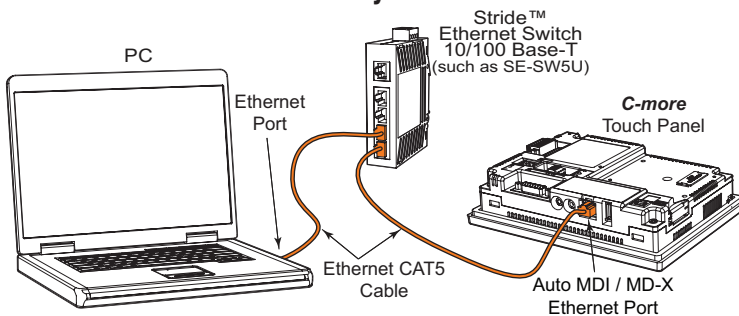
If you intend to take advantage of the methods of remote access to the panel, including the web server, PC remote access, FTP, iPhone or iPad app, you need to consider the security exposure in order to minimize the risks to your process and your C-more panel.

Security measures may include password protection, changing the ports exposed on your network, including a VPN in your network, and other methods. Security should always be carefully evaluated for each installation.

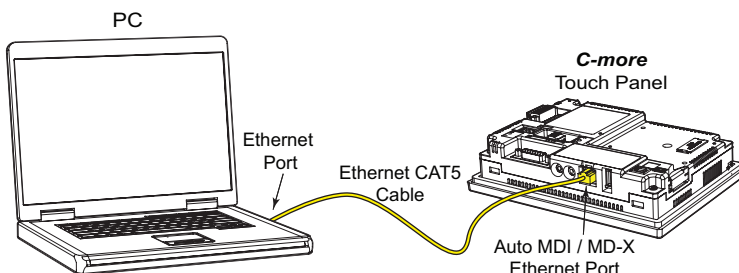
USB Connectivity



Ethernet Connectivity via a Hub or Switch



Ethernet Direct Connection

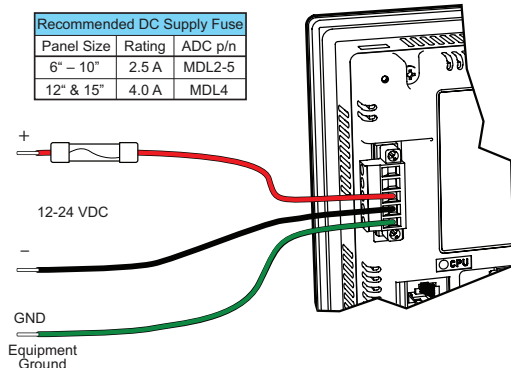


C-more Power Connection Wiring

Providing Power to the Touch Panel

- Connect a dedicated 12–24 VDC Class 2 power supply to the DC connector on the rear of the **C-more** touch panel. Connect the ground terminal to a proper equipment ground.
- or, install a **C-more** AC Power Adapter (EA-AC) to the rear of the touch panel and connect an AC voltage source of 100-240 VAC, 50/60 Hz, to its AC connector.
- then, turn on the power source and check the LED status indicators on the front and rear of the **C-more** touch panel for proper operation.

DC Wiring

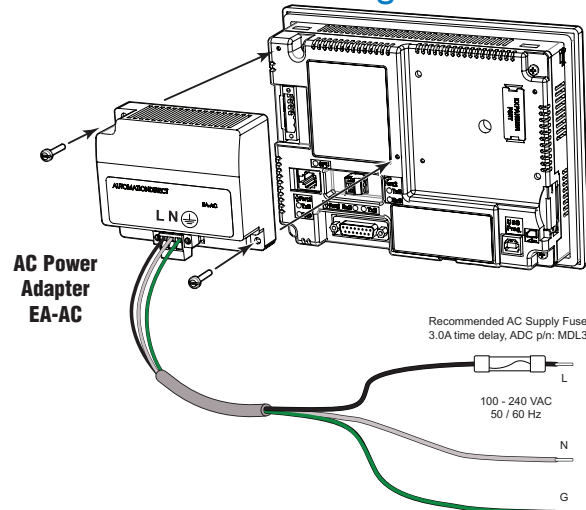


| Panel Size | Rating | ADC p/n |
|------------|--------|---------|
| 6" – 10" | 2.5 A | MDL2-5 |
| 12" & 15" | 4.0 A | MDL4 |

Recommended Power Supply:
AutomationDirect Part No. PSC-24-060

| DC-CON Tightening Torque | |
|---------------------------------|---------------------|
| Power connector screw torque | 70.4 oz-in [0.5 Nm] |
| Power connector mounting torque | 56 oz-in [0.4 Nm] |

AC Wiring

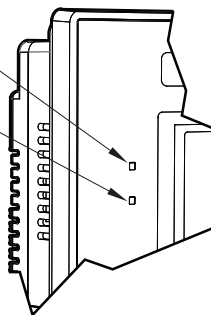


Recommended AC Supply Fuse
3.0A time delay, ADC pin: MDL3

| EA-AC Tightening Torque | |
|---------------------------------|------------------------------|
| Power supply cable torque | 71 - 85 oz-in [0.5 - 0.6 Nm] |
| Power connector mounting torque | 71 - 85 oz-in [0.5 - 0.6 Nm] |
| Mounting flange screw torque | 57 - 71 oz-in [0.4 - 0.5 Nm] |

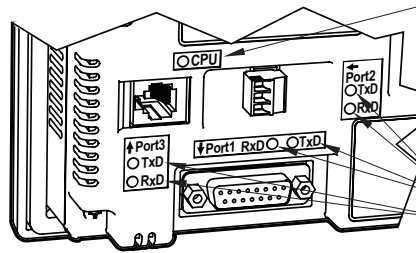
| Power LED (Green) | |
|-------------------|-----------|
| On | Power On |
| Off | Power Off |

| User Defined LED (Green, Orange & Red) | |
|--|---|
| Off | User Defined (Refer to online help file for further details) |
| Green | |
| Red | |
| Orange | |
| Blinking Red | |
| Blinking Orange | |



Front View

| CPU Status LED (Green, Orange & Red) | |
|--------------------------------------|------------------------|
| Off | Power Off |
| Green | Normal – CPU Run State |
| Red | Memory Error |
| Blinking Red | Watchdog Timer Error |
| Blinking Orange | OS Error |
| Blinking Green | Power Loss Detection |



Rear View

| Serial Tx/Rx LED (Green) | |
|--------------------------|------------------|
| On | Comm. is active |
| Off | No communication |



WARNING: To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

Equipment damage or serious injury to

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

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

This publication is based on information that was available at the time it was printed.

At Automationdirect.com® we constantly strive to improve our products and services, so we reserve the right to make changes to the products and/or publications at any time without notice and without obligation. This publication may also discuss features that may not be available in certain revisions of the product.

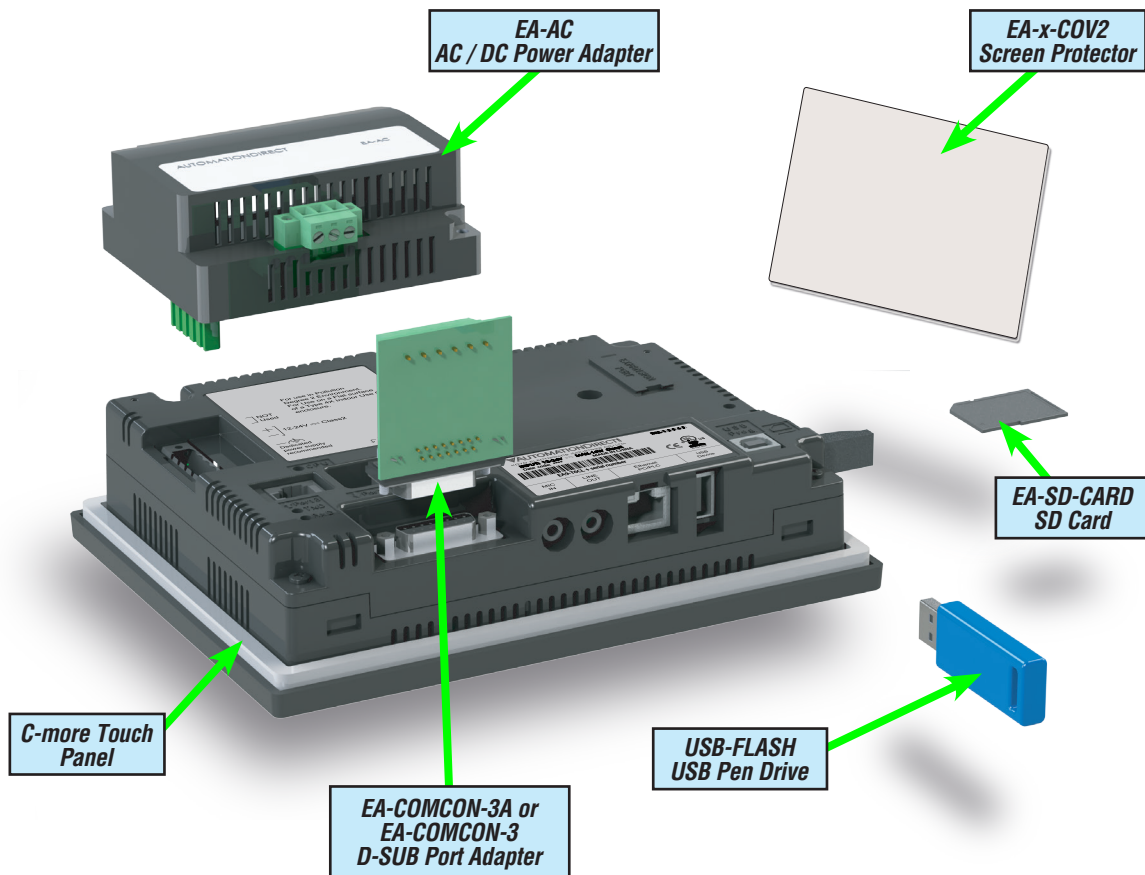
C-more Accessories

Accessories

The *C-more* touch panels can be enhanced with the accessories below:

| Part Number | Description | Price |
|---------------------|---|---------|
| EA-AC | AC/DC Adapter for <i>C-more</i> EA7 and EA9 series touch panels; powered from a 100-240 VAC, 50/60 Hertz power source. Provides 24VDC at 1.5A. Power Fault features help protect data being logged to Compact Flash or SD card during power failures. <i>C-more</i> EA7 series panels must have firmware version 1.21 Build 6.18E or higher for proper operation. | \$74.00 |
| EA-6-COV2 | Non-glare protective overlay, 6-inch, protects <i>C-more</i> touch screen and helps reduce glare from external light sources. Compatible with <i>C-more</i> EA7 and EA9 series and <i>C-more</i> Micro-Graphic 6-inch panels. Package of 3. | \$37.00 |
| EA-8-COV2 | Non-glare protective overlay, 8-inch, protects <i>C-more</i> touch screen and helps reduce glare from external light sources. Compatible with <i>C-more</i> EA7 and EA9 series 8-inch panels. Package of 3. | \$40.00 |
| EA-10-COV2 | Non-glare protective overlay, 10-inch, protects <i>C-more</i> touch screen and helps reduce glare from external light sources. Compatible with <i>C-more</i> EA7 and EA9 series 10-inch panels. Package of 3. | \$45.50 |
| EA-12-COV2 | Non-glare protective overlay, 12-inch, protects <i>C-more</i> touch screen and helps reduce glare from external light sources. Compatible with <i>C-more</i> EA7 and EA9 series 12-inch panels. Package of 3. | \$46.50 |
| EA-15-COV2 | Non-glare protective overlay, 15-inch, protects <i>C-more</i> touch screen and helps reduce glare from external light sources. Compatible with <i>C-more</i> EA7 and EA9 series 15-inch panels. Package of 3. | \$55.00 |
| EA-COMCON-3 | DSUB port adapter, 15-pin to 6-terminal RS-422/485, right angle connector, plugs into the 15-pin serial port on rear of touch panel to allow wire terminal connections for an RS-422/485 communication cable. Compatible with <i>C-more</i> EA7 series, EA9-T6CL(-R), and <i>C-more</i> Micro-Graphic 4 or 6-inch panels. | \$42.00 |
| EA-COMCON-3A | DSUB port adapter, 15-pin to 6-terminal RS-422/485, straight connector, plugs into the 15-pin serial port on rear of touch panel to allow wire terminal connections for an RS-422/485 communication cable. Compatible with <i>C-more</i> EA9 series panels, <i>C-more</i> Micro EA3-T8CL and EA3-T10CL panels and EA1-S3x with EA1-MG-SP1. Not compatible with EA9-T6CL(-R) panels. | \$19.00 |
| EA-SD-CARD | SD memory card for non-volatile storage, 2GB industrial grade. 70 degrees C maximum operating temperature makes it suitable for data logging in industrial applications. Recommended for the <i>C-more</i> EA9 series touch panels. | \$99.00 |
| USB-FLASH | USB Flash drive, SanDisk, 4GB (SanDisk P/N SDCZ50-004G-A46). Recommended for use with the <i>C-more</i> touch panels and Productivity3000 controllers. | \$20.00 |

Accessory Locations



C-more Accessories

AC/DC Power Adapter

The optional *C-more* AC/DC Power Adapter can be used to power the *C-more* touch panels from a 100-240 VAC, 50/60 Hertz, voltage source. The adapter provides 24 VDC @ 1.5 A to the touch panel's DC power connector and can be conveniently secured to the touch panel with two captive screws.

The adapter provides a power loss signal to the touch panel that causes the touch panel to stop writing data to SD memory devices providing a controlled shutdown for increased data logging reliability.

Part No. EA-AC

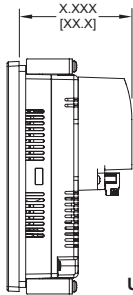
\$74.00

Dimensions

inches / [mm]

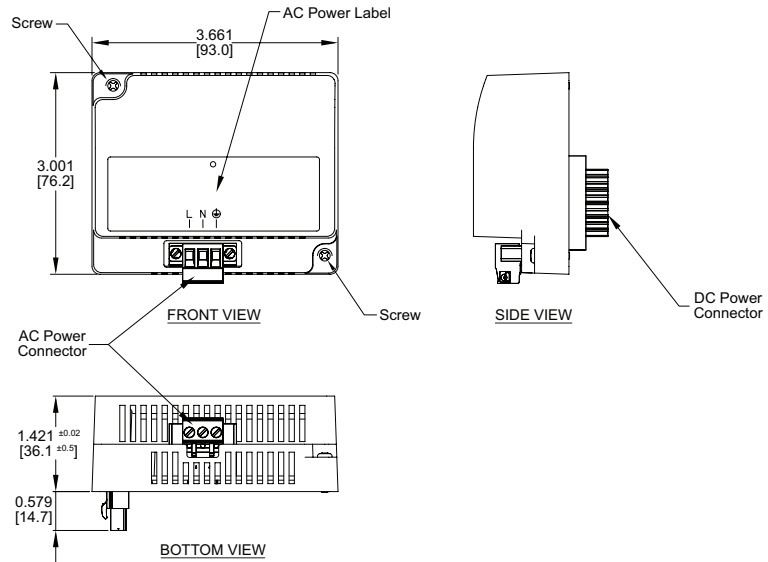


Overall Panel Depth w/ EA-AC Installed



- EA9-T6CL-R = 2.99 [75.9]
- EA9-T6CL = 2.99 [75.9]
- EA9-T8CL = 3.51 [89.2]
- EA9-T10CL = 3.51 [89.2]
- EA9-T12CL = 3.35 [85.1]
- EA9-T15CL = 3.35 [85.1]

Units: inches[mm]



| AC/DC Power Adapter Specifications | | | |
|--|--|--|---|
| Part Number | EA-AC | Short Circuit Protection | 85VAC: 2.6 A, 100VAC: 2.8 A, 264VAC: 3.9 A |
| Input Voltage & Frequency | 100-240 VAC +10% -15%; 50/60 Hertz | Static Electricity Discharge Resistance | Compliant with IEC61000-4-2, Contact: 4 kV, Air: 8 kV |
| Wire | 24-14 AWG, 60 / 75°C Copper. Tighten to 72 oz-in (0.5 Nm) | Agency Approvals | UL508 - UL Recognized for use with C-more panels, cUL, CE, EMC EN61132-2 |
| Permissible Momentary Power Failure | Within 40ms | Environment | For use in pollution degree 2 environment |
| Input Power | 68VA or less | Grounding | Ground resistance: less than 100 ohm |
| Operating Temperature Range | 0°C to 50°C [32 to 122°F] Maximum surrounding temperature rating, 50°C | Dimensions - inches [mm] | 3.00" (H) x 3.66" (W) x 1.42" (D) [76.2 mm x 93.0 mm x 36.1 mm] (Excluding DC Power Connector.) |
| Storage Temperature Range | -20 to 60°C [-4 to 140°F] | Weight | 6.13 oz. [175 g] |
| Operating & Storage Humidity | 10-85% RH (non-condensing) | Cooling Method | Natural convection |
| Noise Immunity | 1000VAC p-p (Pulse width 1 µs, rise time: 1 ns), with proper ground connection on AC terminal block. | Removable AC Power Connector (included) | EA-AC-CON or DECA Switchlab MC101-508-03G Secured with (2) captive M2.5 screws, torque to 70 oz-in [0.5 Nm] |
| Hi-Pot | 1000VAC, 1 minute, with proper ground connection on AC terminal block. | Output Voltage and Ripple | 21.6 - 26.4 VDC, Ripple < 100 mV p-p |
| Insulation Resistance | 500VDC, 10 M ohm or above, with proper ground connection on AC terminal block. | Output Current | Maximum 1.5 A |
| Vibration | Compliant with IEC61131-2 | Inrush Current | For 100VAC: 15A, 3ms or less For 240VAC: 20A, 3ms or less |
| Shock | Pulse shape: Sine half wave, Peak acceleration: 147 m/s ² (15 G), X, Y, Z: 3 directions, 2 times each | Mounting to Touch Panel | Secure with (2) spring loaded captive M3-20 screws, torque to 50 oz-in [0.35 Nm] |
| Thermal Protection | 140°C [284°F], with autorecovery | Recommended External Fuse | 3.0A (ADC p/n: MDL3) |

C-more Accessories

SD Card

**Part No.
EA-SD-CARD**



\$99.00

SD memory card for non-volatile storage, 2GB industrial grade. 70 degrees C maximum operating temperature. Recommended for the C-more EA9 series touch panels. The SD card is the fastest option for writing data. If logged data is saved to external memory, AutomationDirect recommends using an EA-SD-CARD.

| EA-SD-CARD Specifications | |
|------------------------------|---------------------------------------|
| Operating Temperature | 0 to 70°C (32 to 158°F) |
| Humidity | 20 to 85% (Non-condensing) |
| Capacity | 2GB |
| Speed Modes | High-Speed Normal-Speed |
| Interface | SD Memory Card Specification Ver. 3.0 |
| Speed Class | Class 6 |

USB Pen Drive

**Part No.
USB-FLASH**



\$20.00

USB flash drive for non-volatile storage, 4GB. Recommended for the C-more EA9 series touch panels.

Company Information

Control Systems Overview

CLICK PLC

Do-More PLCs Overview

Do-More H2 PLC

Do-More T1H PLC

DirectLOGIC PLCs Overview

DirectLOGIC DL05/06

DirectLOGIC DL105

DirectLOGIC DL205

DirectLOGIC DL305

DirectLOGIC DL405

Productivity Controller Overview

Productivity 3000

Universal Field I/O

Software

C-More HMI

C-More Micro HMI

ViewMarq Industrial Marquees

Other HMI

Communications

Appendix Book 1

Terms and Conditions

C-more Accessories

D-SUB 15-pin to Terminal Block Adapter - Right Angle

The EA-COMCON-3 adapter plugs into the 15-pin serial port on the rear of a panel to allow wire terminal connections for an RS-422/RS-485 communication cable. Compatible with all *C-more* EA7 series panels, EA9-T6CL(-R) panels and *C-more* Micro 4" and 6" panels. UL Recognized

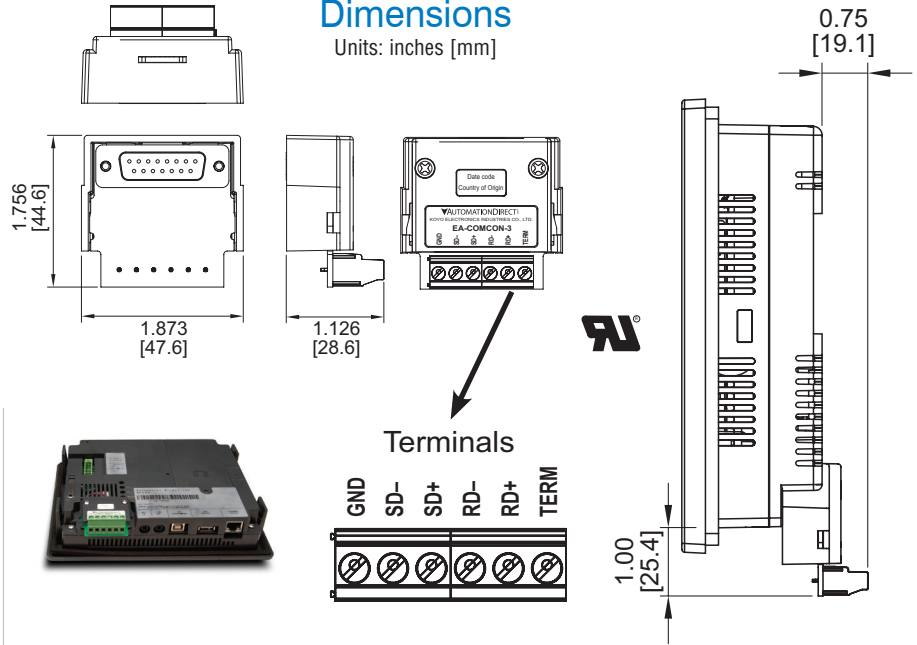
Part No.
EA-COMCON-3



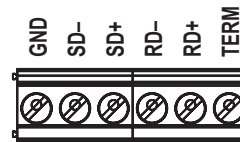
\$42.00

Dimensions

Units: inches [mm]



Terminals



D-SUB 15-pin to Terminal Block Adapter - Straight Through

The EA-COMCON-3A adapter plugs into the 15-pin serial port on the rear of a panel to allow wire terminal connections for an RS-422/RS-485 communication cable. Compatible with *C-more* EA9 series panels, *C-more* Micro EA3-T8CL and EA3-T10CL panels and EA1-S3x with EA1-MG-SP1. Not compatible with EA9-T6CL(-R) panels.

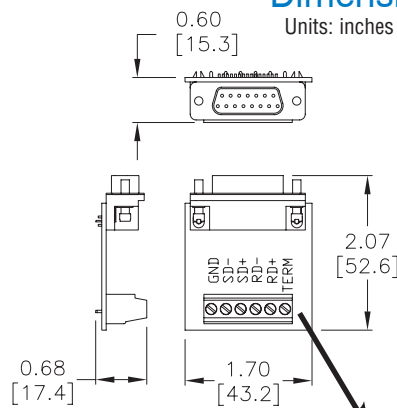
Part No.
EA-COMCON-3A



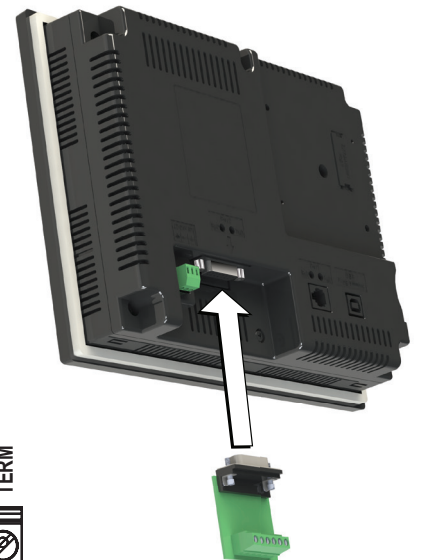
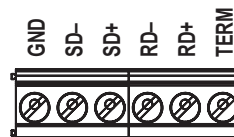
\$19.00

Dimensions

Units: inches [mm]



Terminals



| EA-COMCON-3 Wiring Specs | |
|--------------------------|--------------------|
| Wire Size | Screw Torque |
| 14-24 AWG | 4.4 lb-in [0.5 Nm] |

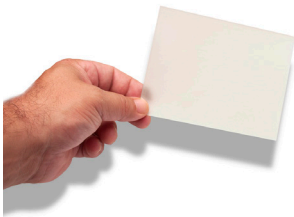
C-more Accessories

Non-glare Screen Covers (in packages of 3)

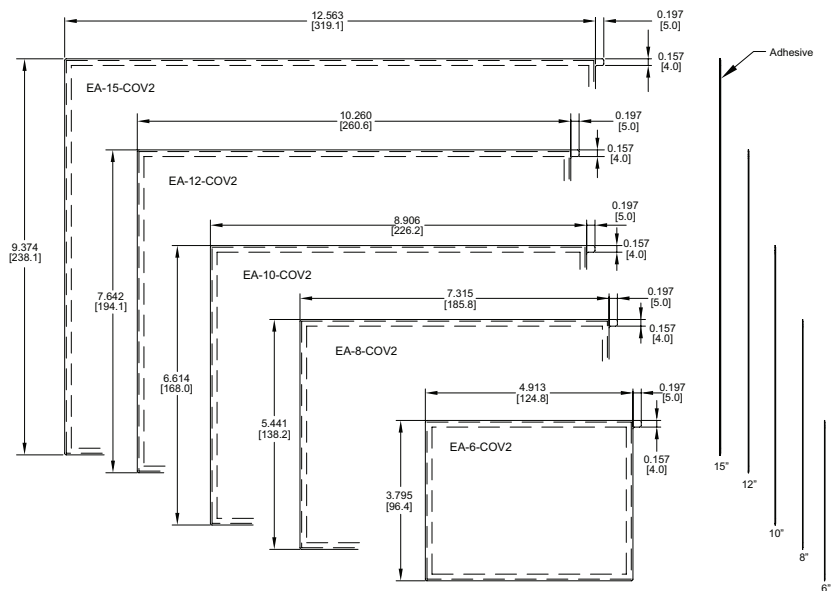
The non-glare screen covers are protective overlays used to protect the touch screen while helping to reduce the glare from external light sources.

Part Nos. EA-6-COV2, EA-8-COV2, EA-10-COV2, EA-12-COV2 and EA-15-COV2

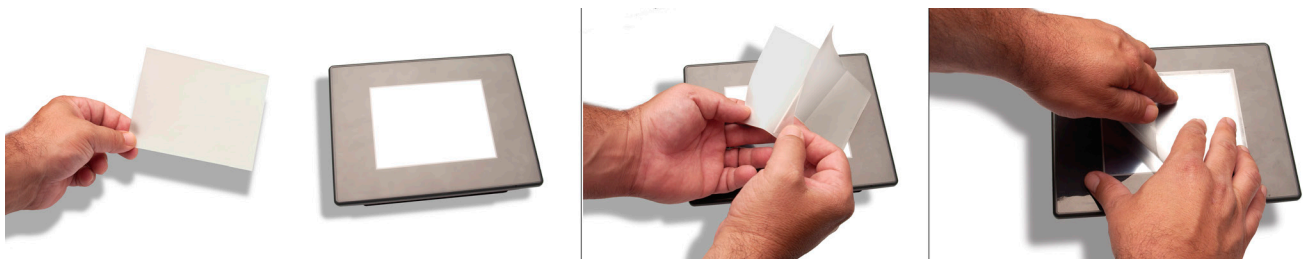
Dimensions inches / [mm]



| | |
|------------|---------|
| EA-6-COV2 | \$37.00 |
| EA-8-COV2 | \$40.00 |
| EA-10-COV2 | \$45.50 |
| EA-12-COV2 | \$46.50 |
| EA-15-COV2 | \$55.00 |



Installation



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.

Company Information

Control Systems Overview

CLICK PLC

Do-More PLCs Overview

Do-More H2 PLC

Do-More T1H PLC

DirectLOGIC PLCs Overview

DirectLOGIC DL05/06

DirectLOGIC DL105

DirectLOGIC DL205

DirectLOGIC DL305

DirectLOGIC DL405

Productivity Controller Overview

Productivity 3000

Universal Field I/O

Software

C-More HMI

C-More Micro HMI

ViewMarq Industrial Marquees

Other HMI

Communications


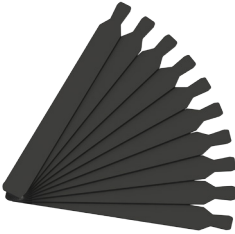



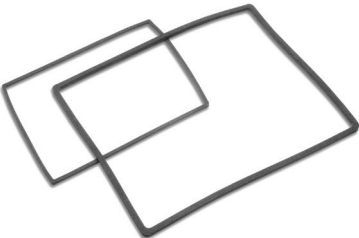
Appendix Book 1

Terms and Conditions

C-more Replacement Parts

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

Replacement parts at a glance:

| Part Number | Price | | Description |
|-------------------|---------|---|---|
| EA9-BRK | \$27.00 |  | Panel mounting brackets, replacement, for C-more EA9 series touch panels. Package of 8 brackets and screws. |
| EA9-LBL | \$24.00 |  | Blank label insert for front bezel, replacement, for C-more EA9 series touch panels. Package of 10. |
| EA9-3TB | \$9.00 |  | 3-pole terminal block, replacement, for 3-wire RS485 communications port on C-more EA9 series panels. Package of 2. |
| EA-DC-CON | \$14.00 |  | 5-terminal DC power connector, replacement, for C-more EA7 and EA9 series touch panels |
| EA-AC-CON | \$7.50 |  | 3-terminal AC power connector, replacement, for C-more EA7 and EA9 series touch panels |
| EA9-15-GSK | \$25.00 |  | Panel mounting gasket, replacement, for C-more EA9-T15CL 15-inch touch panel, NEMA 4/4X |
| EA9-12-GSK | \$20.00 | | Panel mounting gasket, replacement, for C-more EA9-T12CL 12-inch touch panel, NEMA 4/4X |
| EA9-10-GSK | \$19.00 | | Panel mounting gasket, replacement, for C-more EA9-T10CL 10-inch touch panel, NEMA 4/4X |
| EA9-8-GSK | \$17.00 | | Panel mounting gasket, replacement, for C-more EA9-T8CL 8-inch touch panel, NEMA 4/4X |
| EA9-6-GSK | \$15.00 | | Panel mounting gasket, replacement, for C-more EA9-T6CL(-R) 6-inch touch panels, NEMA 4/4X |