### **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* HMI 6in, 7in wide, 8in, 10in, 10in wide, 12in, 15in or <u>EA9-RHMI</u>
- **C-more** Programming Software, p/n <u>EA9-PGMSW</u>
- **C-more** programming cable, USB or Ethernet
- 12-24 VDC switching power supply or the optional *C-more* AC Power Adapter, p/n <u>EA-AC</u>
- Personal Computer to run **C-more** programming software
- PLC communications cable (serial or Ethernet) to connect the **C-more** HMI to your controller

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Part Number	Description	Price
EA9-T6CL-R	C-more EA9 series touch screen HMI, 6in color TFT LCD, analog resistive, 320 x 240 pixel, QVGA, LED backlight, (1) serial, (2) USB ports and (1) memory card slot.	\$00bxb:
EA9-T6CL	C-more EA9 series touch screen HMI, 6in color TFT LCD, analog resistive, 320 x 240 pixel, QVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	\$;000bxa:
EA9-T7CL-R	C-more EA9 series touch screen HMI, 7in color TFT LCD, analog resistive, widescreen, 800 x 480 pixel, WVGA, LED backlight, (1) serial, (1) Ethernet, (2) USB ports and (1) memory card slot.	\$01h3a:
<u>EA9-T7CL</u>	C-more EA9 series touch screen HMI, 7in color TFT LCD, analog resistive, widescreen, 800 x 480 pixel, WVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	\$01h39:
EA9-T8CL	C-more EA9 series touch screen HMI, 8in color TFT LCD, analog resistive, 800 x 600 pixel, SVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	\$;000bxc:
EA9-T10CL	C-more EA9 series touch screen HMI, 10in color TFT LCD, analog resistive, 800 x 600 pixel, SVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	\$;000bx7:
EA9-T10WCL	C-more EA9 series touch screen HMI, 10in color TFT LCD, analog resistive, widescreen, 1024 x 600 pixel, WSVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (1) memory card slot and (1) audio line out.	\$;;001o4]:
<u>EA9-T12CL</u>	C-more EA9 series touch screen HMI, 12in color TFT LCD, analog resistive, 800 x 600 pixel, SVGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (2) memory card slots, (1) HDMI video out and (1) audio line out.	\$;000bx8:
<u>EA9-T15CL-R</u>	C-more EA9 series touch screen HMI, 15in color TFT LCD, analog resistive, 1024 x 768 pixel, XGA, LED backlight, (1) serial, (1) Ethernet, (2) USB ports and (2) memory card slots.	\$;001o4z:
<u>EA9-T15CL</u>	C-more EA9 series touch screen HMI, 15in color TFT LCD, analog resistive, 1024 x 768 pixel, XGA, LED backlight, (3) serial, (1) Ethernet, (2) USB ports, (2) memory card slots, (1) HDMI video out and (1) audio line out.	\$;000bx9:
EA9-RHMI	C-more EA9 series headless HMI, (2) serial, (1) Ethernet and (2) USB ports, (1) HDMI audio/video out and (1) memory card slot.	\$;03!sd:
EA9-PGMSW	<b>C-more</b> Windows programming software, USB or free download. For use with <b>C-more</b> EA9 series touch panels. Requires USB or Ethernet connection to touch panel.	\$-05lg: on USB, or FREE download
<u>USB-CBL-AB3</u>	AutomationDirect programming cable, USB A to USB B, 3ft cable length. For use with <i>C-more</i> HMIs, Do-more and Productivity series CPUs and most USB devices.	\$04kd:
<u>USB-CBL-AB6</u>	AutomationDirect programming cable, USB A to USB B, 6ft cable length. For use with <i>C-more</i> HMIs, Do-more and Productivity series CPUs and most USB devices.	\$04ke:
USB-CBL-AB10	AutomationDirect programming cable, USB A to USB B, 10ft cable length. For use with <i>C-more</i> HMIs, Do-more and Productivity series CPUs and most USB devices.	\$04kb:
USB-CBL-AB15	AutomationDirect programming cable, USB A to USB B, 15ft cable length. For use with <i>C-more</i> HMIs, Do-more and Productivity series CPUs and most USB devices.	\$04kc:

www.automationdirect.com Operator Interface tCME-1

Model	6" TFT color	6" TFT color	7" TFT color	7" TFT color
Specification	w/ base features	w/ full features	w/ base features	w/ full features
Part Number	EA9-T6CL-R	EA9-T6CL	EA9-T7CL-R	EA9-T7CL
Price	\$00bxb:	\$;000bxa:	\$01h3a:	\$01h39:
Display Actual Size and Type	5.7" TFT color		7.0" TFT color	
Display Viewing Area	1	x 3.40" x 86.4 mm]	6.00" x 3.60"	
Weight	1.56 lb [710g]	1.59 lb [720g]	[152.4 mm x 91.4 mm] 1.46 lb [660g] 1.48 lb [670g]	
Screen Pixel	320 x 24	0 (QVGA)	800 x 480 (WVGA)	
Display Brightness	280 ni	its (typ)	350 nits (typ)	
LCD Panel Dot Pitch	0.18 mm	x 0.18 mm	0.190 mm x 0.190 mm	
Color Scale		65,536	colors	
Backlight Average Lifetime*		50,000 hou	ırs @ 25°C	
Touch Panel Type**		Four-wire analog re	sistive, single touch	
Project Memory	26	MB	43	MB
Number of Screens		Up to 999 screens – lin	nited by project memory	
Realtime Clock		Realtime clock built into panel,	backed up for 30 days at 25°C	
Calendar –		Yes - monthly deviati	on 60sec (Reference)	
Month / Day / Year		<b>.</b>		
Serial Port 1			RS232C, RS-422/485	
Serial Port 2	N/A	3-wire terminal block – RS-485	N/A	3-wire terminal block – RS-485
Serial Port 3	N/A RJ-12 modular jack – RS-232C N/A RJ-12 modular jack – RS-			
USB Port – Type B	USB 2.0 High speed (480 Mbps) Type B - Download/Program - Max. cable length 15-feet			
USB Port – Type A	USB 2.0 High speed (480 Mbps) Type A – for USB device options – Max. cable length 15-feet – Bus Power – Less than 200mA at 5VDC			
Ethernet Port	N/A 10/100 Base-T, auto MDI/MDI-X			
Ethernet Port - Expansion Module	N/A	EA-ECOM	N/A	EA-ECOM
Audio Line Out	N/A	3.5 mm mini jack – requires amplifier and speaker(s)	N/A	3.5 mm mini jack – requires amplifier and speaker(s)
Mic In (Future)	N/A	3.5 mm mini jack	N/A	3.5 mm mini jack
SD Card Slot		1 slot supports max 2GB	(SD,) max 32GB (SDHC)	-
HDMI Video Out		N	/A	
HDMI Supported Resolution		N	/A	
Supply Power	10.2-26.4 VDC Class 2 or SELV (Safety Extra-Low Voltage) Circuit or Limited Energy Circuit (LEC), 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			
Internal Fuse (non-replaceable)	4.0 A			
Altitude		Up to 2000	Om (6562ft)	
Operating Temperature	0 to 50°C (32 to 122°E) N	Maximum surrounding air temperature		(Test Nh. Thermal Shock)
· · · · · · · · · · · · · · · · · · ·	0 10 00 0 (02 10 122 1)		IEC 60068-2-1 (Test Ab, Cold)	(
Storage Temperature		EC 60068-2-2 (Test Bb, Dry Heat) IEC		k)
Humidity		5-95% RH (no	٥,	
Environment		For use in Pollution Degree 2 enviro	nment, no corrosive gases permitted	
	(EN61131-2), EN61000-4	-2 (ESD), EN61000-4-3 (RFI), EN610		EN61000-4-6 (Conducted)
Noise Immunity		EN61000-4-8 (Power freque		
_			l Test) Ocm), Impulse 1000V @ 1µs pulse	
Withstand Voltage		1000VAC, 1min. (F	, , , , , , , , , , , , , , , , , , ,	
Insulation Resistance		> 10M ohm @ 500VDC		
Vibration			2-6 (Test Fc)	
Shock	IEC60068-2-27 (Test Fd)			
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)  NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 (not tested by UL) (When mounted correctly)			
Agency Approvals	UL508, E157382, Class 1, Div 2, Groups A, B, C UL61010, E157382			, E157382
Agency Approvais	CE (EN61131-2), RoHS (2011/65/EU) CE (EN61131-2), RoHS (2011/65/EU) CUL Canadian C22.2 CUL Canadian C22.2			

NOTES:  $^*$ 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.
\*\*The touchscreen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected

object may be activated.

www.automationdirect.com **Operator Interface** tCME-2

Model	8" TFT color	10" TFT color	10" TFT color Widescreen	
Specification	w/ full features	w/ full features	w/ full features	
Part Number	EA9-T8CL	EA9-T10CL	EA9-T10WCL	
Price	\$;000bxc:	\$;000bx7:	\$;;001o4]:	
Display Actual Size and Type	8.4" TFT color	10.4" TFT color	10.1" TFT color	
Display Viewing Area	6.71" x 5.03"	8.31" x 6.24"	8.77" x 4.93" [222.7 mm x 125.3 mm]	
Weight	[170.4 mm x127.8mm] 2.93 lb [1330g]	[211.2 mm x 158.4 mm] 4.19 lb [1900g]	2.43 lb [1100g]	
Screen Pixel			1024 x 600 (WSVGA)	
	800 x 600 (SVGA) 1024 x 600 (WSVGA) 310 nits (typ) 280 nits (typ) 240 nits (typ)			
Display Brightness  LCD Panel Dot Pitch	0.213 mm x 0.213 mm	0.264 mm x 0.264 mm	0.218 mm x 0.209 mm	
Color Scale	0.213 Hill X 0.213 Hill	65,536 colors	0.2 10 Hilli X 0.203 Hilli	
Backlight Average Lifetime*		50,000 hours @ 25°C		
Touch Panel Type**		Four-wire analog resistive, single touch		
Project Memory		43MB		
Number of Screens		Up to 999 screens – limited by project memory		
Realtime Clock	Realtin	ne clock built into panel, backed up for 30 days a	+ 25°C	
Calendar – Month / Day / Year	rtodiai	Yes - monthly deviation 60sec (Reference)	120 0	
Serial Port 1		15-pin D-sub female – RS232C, RS-422/485		
Serial Port 2		3-wire terminal block – RS-485		
Serial Port 3	S-Wire terminal block – RS-465  RJ-12 modular jack – RS-232C			
USB Port – Type B	USB 2.0 High speed (480 Mbps) Type B – Download/Program – Max. cable length 15-feet			
USB Port – Type A	USB 2.0 High speed (480 Mbps) Type A – for USB device options – Max. cable length 15-feet – Bus Power – Less than 200mA at 5VDC			
Ethernet Port	10/100 Base-T. auto MDI/MDI-X			
Ethernet Port -				
Expansion Module	<u>EA-ECOM</u>			
Audio Line Out	3.5 mm mini jack – requires amplifier and speaker(s)			
Mic In (Future)	3.5 mm mini jack			
SD Card Slot		slot supports max 2GB (SD,) max 32GB (SDHC	)	
HDMI Video Out		N/A		
Supply Power	or use the AC/DC Power Adapter, EA-AC, to p	s2 and SELV (Safety Extra-Low Voltage) Circuit a lower the touch panel from a 100-240 VAC, 50/60		
Power Consumption	1.50 A @	18.0 W 17.0W 1.50 A @ 12VDC 1.42A @ 12 VDC 0.75 A @ 24VDC 0.71A @ 24 VDC		
Internal Fuse (non-replaceable)		6.3 A		
Altitude		Up to 2000m (6562ft)		
Operating Temperature	The state of the s	ounding air temperature rating: 50°C (122°F) IEC		
Storage Temperature		o +60°C (-4 to +140°F) IEC 60068-2-1 (Test Ab, 2 (Test Bb, Dry Heat) IEC 60068-2-14 (Test Na, T		
Humidity	5-95% RH (non-condensing)			
Environment		Pollution Degree 2 environment, no corrosive gase	<u> </u>	
Noise Immunity	(EN61131-2), EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4-5 (Serge), EN61000-4-6 (Conducted) EN61000-4-8 (Power f0requency magnetic field immunity) (Local Test) RFI, (145MHz, 440Mhz 10W @ 10cm), Impulse 1000V @ 1µs pulse			
Withstand Voltage	1000VAC, 1min. (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			

NOTES: \*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.

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

www.automationdirect.com Operator Interface tCME-3

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Model Specification	12" TFT color w/ full features	15" TFT color w/ base features	15" TFT color w/ full features	
Part Number	EA9-T12CL	EA9-T15CL-R	EA9-T15CL	
Price	\$:000bx8:	\$:001o4z:	\$:000bx9:	
Display Actual Size and Type	12.1" TFT color	1,7	FT color	
	9.69" x 7.26"	11.97" x 8.98"		
Display Viewing Area	[246.0 mm x 184.5 mm]	-	x 228.0 mm]	
Weight	4.89 lb [2200g]	6.46 lb (2930g)	6.50 lb [2950g]	
Screen Pixel	800 x 600 (SVGA)	1024 x 70	68 (XGA)	
Display Brightness		280 nits (typ)		
LCD Panel Dot Pitch	0.3075 mm x 0.3075 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, single touch		
Project Memory		43MB		
Number of Screens		Up to 999 screens – limited by project memory		
Realtime Clock	Realt	ime clock built into panel, backed up for 30 days at	25°C	
Calendar – Month / Day / Year		Yes - monthly deviation 60sec (Reference)		
Serial Port 1		15-pin D-sub female – RS232C, RS-422/485		
Serial Port 2	3-wire terminal block – RS-485	N/A	3-wire terminal block – RS-485	
Serial Port 3	RJ-12 modular jack – RS-232C	N/A	RJ-12 modular jack – RS-232C	
USB Port – Type B	USB 2.0 High speed (480 Mbps) Type B – Download/Program – Max. cable length 15-feet			
USB Port – Type A	USB 2.0 High speed (480 Mbps) Type A – for USB device options – Max. cable length 15-feet – Bus Power – Less than 200mA at 5VDC			
Ethernet Port	10/100 Base-T, auto MDI/MDI-X			
Ethernet Port - Expansion Module	EA-ECOM	N/A	EA-ECOM	
Audio Line Out	3.5 mm mini jack – requires amplifier and speaker(s)	N/A	3.5 mm mini jack – requires amplifier and speaker(s)	
Mic In (Future)	3.5 mm mini jack	N/A	3.5 mm mini jack	
SD Card Slot		2 slots support max 2GB (SD), max 32GB (SDHC)		
HDMI Video Out	HDMI Type A Port	N/A	HDMI Type A Port	
HDMI Supported Resolution	800 x 600 (SVGA)	N/A	1024 x 768 (XGA)	
Supply Power	10.2-26.4 VDC Class 2, Use Class2 and SELV (Safety Extra-Low Voltage) Circuit and Limited Energy Circuit (LEC), or use the AC/DC Power Adapter, <u>EA-AC</u> , to power the touch panel from a 100-240 VAC, 50/60 Hz power source. Reverse Polarity Protected			
Power Consumption	21.0 W 1.75 A @ 12VDC 0.88 A @ 24VDC	29.1 2.40 A @ 1.20 A @		
Internal Fuse (non-replaceable)		6.3 A		
Altitude		Up to 2000m (6562ft)		
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	(EN61131-2), EN61000-4-2 (ESD), EN61000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4-5 (Serge), EN61000-4-6 (Conducted) EN61000-4-8 (Power frequency magnetic field immunity) (Local Test) RFI, (145MHz, 440Mhz 10W @ 10cm), Impulse 1000V @ 1µs pulse			
Withstand Voltage	1000VAC, 1min. (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			
NOTES: *The hacklight average li	fatima is defined as the sucress was		a bassance FOO/ of the initial	

NOTES: \*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.

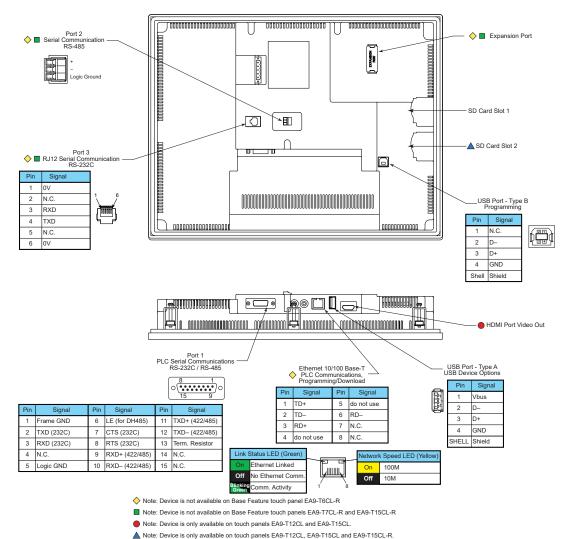
\*\*The touchscreen is designed to respond to a single touch. If it is touched at multiple points at the same time, an unexpected object may be activated.

www.automationdirect.com Operator Interface tCME-4

<u> </u>	rection datae & specimentions	
Specification	EA9 Headless HMI	
Part Number	<u>EA9-RHMI</u>	
Price	\$;03!sd:	
Display	No Display	
Weight	0.59 lb [269g]	
Project Memory	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 60sec (Reference)	
Serial Port 1	15-pin D-sub female – RS232C, RS-422/485	
Serial Port 2	3-wire terminal block – RS-485	
	USB 2.0 High speed (480 Mbps) Type B - Download/Program	
USB Port – Type B	Max cable length - 15 ft.	
USB Port – Type A	USB 2.0 High speed (480 Mbps) Type A - for USB device options Max cable length - 15ft Bus Power – Less than 500mA at 5VDC	
Supported Touch Screen	ELO™ Single Touch Resistive/SAW, EETI eGalax Single Touch Resistive and pCap  Compatible with AutomationDirect Atlas Monitors. See the EA-RHMI user manual for more compatible touchscreen monitors	
Ethernet Port	10/100 Base-T, auto MDI/MDI-X	
Ethernet Port -		
Expansion Module	<u>EA-ECOM</u>	
Audio Line Out	Audio supported through HDMI connection	
Mic In (Future)	N/A	
SD Card Slot	1 slot support max 2GB (SD), max 32GB (SDHC)	
HDMI Video Out	HDMI Type A Port	
HDMI Supported Resolutions	640 x 480 (VGA) 60Hz 720 x 480 (SD) 60Hz 1024 x 768 (XGA) 60Hz 1280 x 720 (HD) 60Hz With automatic negotiation function for HDMI displays	
Supply Power	10.2-26.4 VDC Class 2, Use Class2 and SELV (Safety Extra-Low Voltage) Circuit and Limited Energy Circuit (LEC), Reverse Polarity Protected	
Power Consumption	12.0 W 1.00 A @ 12VDC 0.50 A @ 24VDC	
Internal Fuse (non-replaceable)	4.0 A	
Altitude	Up to 2000m (6562ft)	
Operating Temperature	0 to 50°C (32 to 122 °F); Maximum surrounding air temperature rating: 50°C (122°F)	
Storage Temperature	IEC 60068-2-14 (Test Nb, Thermal Shock)  -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	(EN61131-2) EN61000-4-2 (ESD): 4kV (Contact Discharge) 2kV/4kV/8kV (Air Discharge) EN61000-4-3 (RFI): 10V/m (80MHz-1GHz), 3V/m (1.4GHz-2.0GHz) 1V/m (2.0GHz-2.7GHz) EN61000-4-4 (FTB): 2kV ,positive/negative, 5kHz(DC Power Port) EN61000-4-5 (Serge): 0.5kV line to line 0.5kV line to earth EN61000-4-6 (Conducted): 10V, 0.15MHz - 80MHz EN61000-4-8 (Power frequency magnetic field immunity): 30A/m (Local test) RFI, (145MHz, 440MHz 10W @10cm) Impulse 1000V @ 1µs pulse	
Withstand Voltage	1000VAC, 1min. (FG to Power supply )	
Insulation Resistance	> 10M ohm @ 500VDC (FG to Power supply )	
Vibration	IEC60068-2-6 (Test Fc) 5-9Hz: 3.5mm amplitude, 9-150Hz 1.0G 10 sweep cycles per axis on each of 3 mutually perpendicular axes	
Shock	IEC60068-2-27 (Test Ea) 15G peak, 11ms duration, 3 shocks in each direction per axis, on 3 mutually perpendicular axes	
Shock Emission	IEC60068-2-27 (Test Ea)	

www.automationdirect.com Operator Interface

### **C-more Communication Ports**



#### **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 Webserver (Secure HTTPs)
- 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: EA6-T6CL-R does not include an Ethernet port, and does not have these capabilities.

#### **Expansion Port**

The expansion port supports the EA-ECOM module to provide a second Ethernet Port for all full featured models.

#### **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 on all models and can be used to connect various USB HID (Human Input Device) devices to the panel, such as the following:

- USB flash drives (USB-FLASH)
- USB keyboards
- USB barcode scanners
- USB card scanners

**C-more** can log data to the USB flash 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.

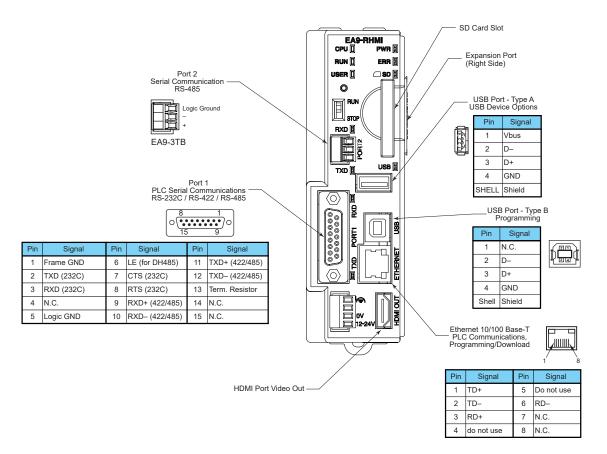
**Port 2** - Connect your RS-485 network via Port 2. Port 2 is provided with a 3-wire removable terminal block.

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

#### **HDMI Video Out**

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

### **C-more EA9-RHMI Communication Ports**



#### **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 Webserver (Secure HTTPs)
- 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.

#### **Expansion Port**

The expansion port supports the EA-ECOM module to provide a second Ethernet Port.

#### **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 can be used to connect various USB HID (Human Input Device) devices to the panel, such as the following:

- USB touchscreen (ELO™ Single Touch Resistive/SAW, EETI eGalax Single Touch Resistive and pCap touchscreens)
- USB mouse
- USB keyboard
- USB flash drives (USB-FLASH)
- USB barcode scanner
- USB card scanner

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

\* 500mA maximum current available. Powered USB hub may be required for some devices

#### **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.

#### **HDMI Out Port**

<u>EA9-RHMI</u> includes an HDMI Type A port to provide video / audio output to a projector or remote monitor. Supported resolutions are...

- 640 x 480 (VGA) 60Hz
- 720 x 480 (SD) 60Hz
- 1024 x 768 (XGA) 60Hz
- 1280 x 720 (HD) 60Hz

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# 1-800-633-0405 C-more Communication Protocols & Cables

DI C Esmily	· ·	ompatibility Table	Drotocolo	
PLC Family	Microl ogiv 1000 111	<b>Model</b> 00, 1200, 1400, 1500,	Protocols	
	ISLC 5-/01/02/03		DH485/AIC/AIC+	
	MicroLogix 1000, 110 SLC 5-/03/04/05	00, 1200, 1400 and 1500	]  DF1 Half Duplex; DF1 Full Duple	
	ControlLogix™, CompactLogix™, FlexLogix™		Di Triali Duplex, Di Triuli Duple	
	PLC-5		DF1 Full Duplex	
	ControlLogix, CompactLogix, FlexLogix - Tag Based		DF1 Half Duplex; DF1 Full Duple	
Allen-Bradley	ControlLogix, Compa Generic I/O Messagi	actLogix, FlexLogix -	EtherNet/IP Server	
	ControlLogix, Compa	ng actLogix, FlexLogix - Tag		
	Based	0 & SLC5/05, all via native	_	
	Ethernet port	•	EtherNet/IP Client	
	MicroLogix 1000, 110 SLC 5-03/04/05, all v	00, 1200, 1400,1500 &		
		ла Етт лаартег	Modbus RTU	
	Micro 800 series		Modbus TCP	
	Micro 800 series - Ta	ng Based	DF1 Full Duplex	
			EtherNet/IP Client	
Modbus RTU	Modbus RTU device	S	Modbus RTU	
Modbus TCP/II	Modbus TCP/IP devi	ces	Modbus TCP/IP	
GE	90/30, 90/70, Micro 9	90, VersaMax Micro	SNPX	
J	90/30, Rx3i		SRTP Ethernet	
	FX Series	21211 02511	FX Direct	
Mitsubishi	Q02, Q02H, Q06H, 0 Q, QnA Serial	д IZП, QZ5H	Q CPU QnA Serial	
	Q, QnA Senai		QnA Ethernet	
	C200 Adapter, C500		Host Link	
Omron	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	
	S7-200 CPU, RS-48		PPI	
Siemens	S7-200 CPU, S7-300	CPU, S7-400, S7-1200 CPU,		
<b>5</b> 1	\$7-1500; Ethernet		Productivity Serial	
Productivity Series	all		,	
Series			Productivity Ethernet Do-more Serial	
Do-more	all		Do-more Ethernet	
	all		Modbus (CLICK addressing)	
CLICK			Modbus TCP (CLICK addressing	
		all	K-Sequence	
	DL05/DL06		DirectNET	
		110 F00M/110 F00M400	Modbus (Koyo addressing)	
	DL105	H0-ECOM/H0-ECOM100	Direct LOGIC Ethernet K-Sequence	
	DL103	D2-230	K-Sequence	
			K-Sequence	
		D2-240	DirectNET	
		D2 250/D2 250 4/D2 260/	K-Sequence	
	DL205	D2-250/D2-250-1/D2-260/ D2-262 D2-240/D2-250-1/D2-260 using D2-DCM	DirectNET	
			Modbus (Koyo addressing)	
			DirectNET  Modbus (Koyo addressing)	
		H2-ECOM/H2-ECOM100	Modbus (Koyo addressing)  Direct LOGIC Ethernet	
		D3-330/330P		
		(Requires the use of a Data Communications Unit)	DirectNET	
		D3-340	DirectNET	
Direct LOGIC	DL305		K-Sequence	
	DESUS	D3-350	DirectNET	
			Modbus (Koyo addressing)	
		D3-350 using D3-DCM	DirectNET	
			Modbus (Koyo addressing)	
		D4-430	K-Sequence DirectNET	
			K-Sequence	
		D4-440	DirectNET	
	DI 405		K-Sequence	
	DL405	D4-450/D4-454	DirectNET	
			Modbus (Koyo addressing)	
		All with D4-DCM	DirectNET	
			Modbus (Koyo addressing)	
	H2-WinPLC (Think 8	H4-ECOM/H4-ECOM100 Do) Live V5.2 or later and	Direct LOGIC Ethernet Think & Do Modbus RTU	
	Studio any version	Do) Live V5.5.1 or later and	(serial port) Think & Do Modbus TCP/IP	

Cable Description	Cable Part Number	Price
AutomationDirect communication cable, 15-pin male D-sub to 6-pin RJ12, shielded, 9.8ft/3m cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and AutomationDirect PLCs with RJ12 ports.	EA-2CBL	\$-04jn:
AutomationDirect communication cable, 15-pin male D-sub to 15-pin D-sub HD15 male, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and a DL06, D2-250(-1), D2-260 or D2-262 (bottom port) CPU.	<u>EA-2CBL-1</u>	\$-04jo:
AutomationDirect communication cable, 15-pin male D-sub to 4-pin RJ11, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and a D3-340 CPU top or bottom port.	EA-3CBL	Retired
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and a DL405 (top port) CPU.	<u>EA-4CBL-1</u>	\$-04jq:
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and a D2-DCM, D3-232-DCU, D3-3350 (bottom port) or DL405 (bottom port) CPU.	EA-4CBL-2	\$-04js:
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and an Allen-Bradley Micrologix CPU.	EA-MLOGIX-CBL	\$-04jy:
AutomationDirect communication cable, 15-pin male D-sub to 9-pin female D-sub, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and an Allen-Bradley SLC 5/03, 5/04 or 5/05 CPU with DF-1 port.	EA-SLC-232-CBL	\$;-04j[:
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and an Allen-Bradley PLC-5 CPU with a DF1 port.	EA-PLC5-232-CBL	Retired
AutomationDirect communication cable, 15-pin male D-sub to 6-pin RJ45, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and an Allen-Bradley SLC 5/01, 5/02 or 5/03 CPU with a DH485 port cable.	EA-DH485-CBL	\$-04ju:
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro and GE Fanuc Series 90/30 or 90/70 serial port.	EA-90-30-CBL	\$;-04jt:
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and a Mitsubishi FX Series CPU.	EA-MITSU-CBL	\$-04jv:
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and a Mitsubishi FX Series CPU.	EA-MITSU-CBL-1	\$-04jx:
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and an Omron C200 or C500 CPU.	EA-OMRON-CBL	\$-04jz:

## Example Cables:

