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

| Part | Description | Price |
|-----------------|--|--|
| Number | | |
| 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. | \$799.00 |
| 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. | \$1,003.00 |
| 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. | \$688.00 |
| <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. | \$794.00 |
| 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. | \$1,524.00 |
| 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. | \$1,718.00 |
| 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. | \$1,096.00 |
| EA9-T12CL | 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. | \$1,479.00 |
| EA9-T15CL-R | 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. | \$1,959.00 |
| EA9-T15CL | 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. | \$2,684.00 |
| 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. | \$560.00 |
| EA9-PGMSW | C-more Windows programming software, USB or free download. For use with C-more EA9 series touch panels. Requires USB or Ethernet connection to touch panel. | \$13.00 on USB, or FREE download |
| USB-CBL-AB3 | 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. | \$12.00 |
| USB-CBL-AB6 | 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. | \$16.00 |
| 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. | \$36.50 |
| 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. | \$42.50 |

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 | \$799.00 | \$1,003.00 | \$688.00 | \$794.00 |
| Display Actual Size and Type | 5.7" TFT color | | 7.0" TFT color | |
| Display Viewing Area | | x 3.40" x 86.4 mm] | | x 3.60" x 91.4 mm] |
| Weight | 1.56 lb [710g] | 1.59 lb [720g] | 1.46 lb [660g] 1.48 lb [670g] | |
| Screen Pixel | 320 x 24 | 0 (QVGA) | 800 x 480 (WVGA) | |
| Display Brightness | 280 nits (typ) | | 350 nits (typ) | |
| LCD Panel Dot Pitch | 0.18 mm x 0.18 mm 0.190 mm x 0.190 mm | | x 0.190 mm | |
| Color Scale | | 65,536 | | |
| Backlight Average Lifetime* | | 50,000 hou | | |
| Touch Panel Type** | 00 | Four-wire analog re | 1 | MD |
| Project Memory | 26 | MB | | MB |
| Number of Screens Realtime Clock | | Up to 999 screens – lim | backed up for 30 days at 25°C | |
| Realtime Clock Calendar – | | | · · · · · · · · · · · · · · · · · · · | |
| Month / Day / Year | | Yes - monthly deviation | on 60sec (Reference) | |
| Serial Port 1 | | 15-pin D-sub female – | RS232C, RS-422/485 | |
| Serial Port 2 | | | 3-wire terminal block – RS-485 | |
| Serial Port 3 | N/A | 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 - Do | ownload/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 | T |
| Ethernet Port - Expansion Module | N/A | <u>EA-ECOM</u> | N/A | <u>EA-ECOM</u> |
| 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 | 4.0 A | | | |
| (non-replaceable) | | | | |
| Altitude | | Up to 2000 | | |
| 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) -20 to +60°C (-4 to +140°F) IEC 60068-2-1 (Test Ab. Cold) | | | (Test Nb, Thermal Shock) |
| Storage Temperature | ı | -20 to +60°C (-4 to +140°F) EC 60068-2-2 (Test Bb, Dry Heat) IEC | (, , | k) |
| Humidity | <u> </u> | 5-95% RH (no | | 1 |
| Environment | | For use in Pollution Degree 2 enviro | ٥, | |
| | (EN61131-2), EN61000-4 | -2 (ESD), EN61000-4-3 (RFI), EN610 | 00-4-4 (FTB), EN61000-4-5 (Serge), I | EN61000-4-6 (Conducted) |
| Noise Immunity | | EN61000-4-8 (Power freque | ncy magnetic field immunity) I Test) | |
| | | RFI, (145MHz, 440Mhz 10W @ 10 | Ocm), 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) NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only IP-65 (not tested by UL) (When mounted correctly) | | | (When mounted correctly) |
| Agency Approvals | UL508, E157382, Class 1, Div 2, Groups A, B, C CE (EN61131-2), RoHS (2011/65/EU) CUL Canadian C22.2 UL61010, E157382 CE (EN61131-2), RoHS (2011/65/EU) CUL Canadian C22.2 CUL Canadian C22.2 | | | |
| | COL Calla | MINITOLE.L | L COL Calla | MIGHT OLL.L |

*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 Specification | 8" TFT color w/ full features | 10" TFT color w/ full features | 10" TFT color Widescreen w/ full features | |
|--|--|--|--|--|
| Part Number | EA9-T8CL | EA9-T10CL | EA9-T10WCL | |
| Price | \$1,524.00 | \$1,718.00 | \$1,096.00 | |
| 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" | |
| . , , | [170.4 mm x127.8mm] | [211.2 mm x 158.4 mm] | [222.7 mm x 125.3 mm] | |
| Weight | 2.93 lb [1330g] | 4.19 lb [1900g] | 2.43 lb [1100g] | |
| Screen Pixel | 800 x 600 (SVGA) 1024 x 600 (WSVGA) | | | |
| Display Brightness | 310 nits (typ) | , , , , , , , , , , , , , , , , , , , | | |
| 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 | | 65,536 colors | | |
| Backlight Average Lifetime* | | 50,000 hours @ 25°C | | |
| Touch Panel Type** | | Four-wire analog resistive, single touch 43MB | | |
| Project Memory | | Up to 999 screens – limited by project memory | | |
| Number of Screens | Doolli | me clock built into panel, backed up for 30 days a | + 2E°C | |
| Realtime Clock | Realti | Yes - monthly deviation 60sec (Reference) | 125 C | |
| Calendar – Month / Day / Year Serial Port 1 | | | | |
| Serial Port 2 | 15-pin D-sub female – RS232C, RS-422/485 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 | EA-ECOM | | | |
| Audio Line Out | 3.5 mm mini jack – requires amplifier and speaker(s) | | | |
| Mic In (Future) | 3.5 mm mini jack | | | |
| SD Card Slot | 1 slot supports max 2GB (SD,) max 32GB (SDHC) | | | |
| HDMI Video Out | N/A | | | |
| 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, EA-AC, to power the touch panel from a 100-240 VAC, 50/60 Hz power source. Reverse Polarity Protected 18.0 W 17.0W | | | |
| Power Consumption | 1.50 A @ | 18.0 W 17.0W 50 A @ 12VDC 1.42A @ 12 VDC 75 A @ 24VDC 0.71A @ 24 VDC | | |
| Internal Fuse (non-replaceable) | | 6.3 A | | |
| Altitude | | Up to 2000m (6562ft) | | |
| Operating Temperature | 0 to 50°C (32 to 122°F) Maximum surr | rounding air temperature rating: 50°C (122°F) IEC | 60068-2-14 (Test Nb, Thermal Shock) | |
| 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 | | |
| | | 161000-4-3 (RFI), EN61000-4-4 (FTB), EN61000-4 | | |
| Noise Immunity | 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 Shock | IEC60068-2-6 (Test Fc) | | | |
| Emission | IEC60068-2-27 (Test Ea) EN55011 Class A (Radiated RF emission) | | | |
| | NEMA 250 type 4/4X indoor use only UL50 type 4X indoor use only | | | |
| Enclosure | 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

| 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 | \$1,479.00 | \$1,959.00 | \$2,684.00 | |
| Display Actual Size and Type | 12.1" TFT color | | FT color | |
| , , | 9.69" x 7.26" | 11.97" | | |
| Display Viewing Area | [246.0 mm x 184.5 mm] | [304.1 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 | 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, 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 | d (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 | 29.0 W 2.40 A @ 12VDC 1.20 A @ 24VDC | | |
| 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 | | Pollution Degree 2 environment, no corrosive gase | | |
| 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 backlight average li | fating is defined as the survey we use | | | |

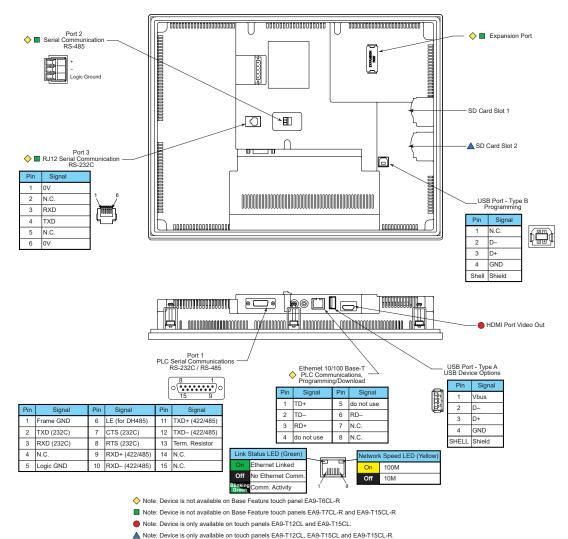
NOTES: *The backlight average lifetime is defined as the average usage time it takes before the brightness becomes 50% of the initial brightness. The lifetime of the backlight depends on the ambient temperature. The lifetime will decrease under low or high

**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.

| Specification | EA9 Headless HMI |
|-------------------------------------|--|
| Part Number | EA9-RHMI |
| Price | \$560.00 |
| | No Display |
| 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 Port – Type B | USB 2.0 High speed (480 Mbps) Type B - Download/Program Max cable length - 15 ft. USB 2.0 High speed (480 Mbps) Type A - for USB device options |
| USB Port – Type A | 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) |
| Operating remperature | 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): 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 |
| Emission | EN55011 Class A (Radiated RF emission) |
| Agency Approvals | UL61010, E157382 CE (EN61131-2), RoHS (2011/65/EU) |
| , , , , | CUL Canadian C22.2 |

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.

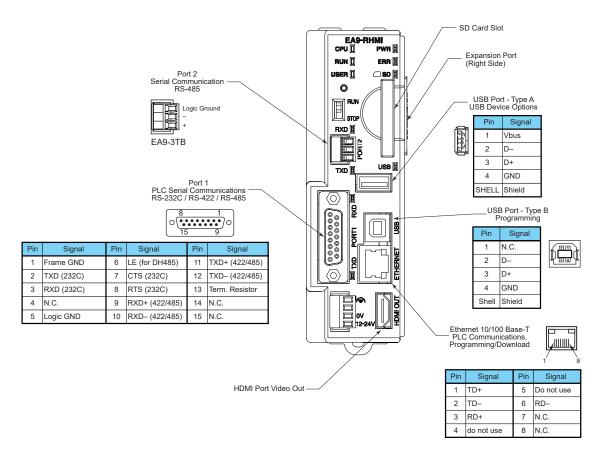
Port 2 - Connect your RS-485 network via Port 2. Port 2 is provided with a 3-wire removable terminal block.

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

| | C | ompatibility Table | |
|----------------|---|--|---|
| PLC Family | Missal sai 4000 44 | Model | Protocols |
| | ISLC 5-/01/02/03 | 00, 1200, 1400, 1500, | DH485/AIC/AIC+ |
| | MicroLogix 1000, 11 | 00, 1200, 1400 and 1500 | DEATH-K Downless DE4 E # E . |
| | SLC 5-/03/04/05 | npactLogix™, FlexLogix™ | DF1 Half Duplex; DF1 Full Duplex |
| | PLC-5 | | DF1 Full Duplex |
| | ControlLogix, CompactLogix, FlexLogix - Tag Based | | DF1 Half Duplex; DF1 Full Duplex |
| Allen-Bradley | ControlLogix, Compa Generic I/O Messag | actLogix, FlexLogix - | EtherNet/IP Server |
| | Generic I/O Messagi | ing actLogix, FlexLogix - Tag | Luicinevii Seivei |
| | Based | | |
| | Micrologix 1100, 140 Ethernet port | 00 & SLC5/05, all via native | EtherNet/IP Client |
| | MicroLogix 1000, 1100, 1200, 1400,1500 & SLC 5-03/04/05, all via ENI Adapter | | |
| | · · | | Modbus RTU |
| | Micro 800 series | | Modbus TCP |
| | Micro 800 series - Ta | an Based | DF1 Full Duplex |
| | Wildro dod deried Te | | EtherNet/IP Client |
| Modbus RTU | Modbus RTU device | S | Modbus RTU |
| Modbus TCP/IF | Modbus TCP/IP devi | | Modbus TCP/IP |
| GE | 90/30, 90/70, Micro 9 | 90, VersaMax Micro | SNPX |
| | 90/30, Rx3i | | SRTP Ethernet |
| | FX Series Q02, Q02H, Q06H, 0 | 012H 025H | PX Direct Q CPU |
| Mitsubishi | Q, QnA Serial | × 1∠11, ₩∠∪∏ | Q CPU QnA Serial |
| | Q, QnA Ethernet | | QnA Ethernet |
| Omron | C200 Adapter, C500 | | Host Link |
| Omron | CJ1/CS1 Serial, CJ1 | | FINS |
| Modicon | 984 CPU, Quantum Series 110 CPU: 311 | 113 CPU, AEG Modicon Micro 1-xx, 411-xx, 512-xx, 612-xx | Modbus RTU |
| | S7-200 CPU, RS-48 | 5 Serial | PPI |
| Siemens | \$7-200 CPU, \$7-300 | 0 CPU, S7-400, S7-1200 CPU, | Ethernet ISO over TCP |
| Productivity | | | Productivity Serial |
| Series | all | | Productivity Ethernet |
| - | | | Do-more Serial |
| Do-more | all | | Do-more Ethernet |
| CLICK | all | | Modbus (CLICK addressing) |
| OLION | CIII | | Modbus TCP (CLICK addressing) |
| | | all | K-Sequence DirectNET |
| | DL05/DL06 | | Modbus (Koyo addressing) |
| | | H0-ECOM/H0-ECOM100 | Direct LOGIC Ethernet |
| | DL105 | all | K-Sequence |
| | | D2-230 | K-Sequence |
| | | D2-240 | K-Sequence |
| | | | DirectNET K Seguence |
| | DL205 | D2-250/D2-250-1/D2-260/ D2-262 | K-Sequence DirectNET |
| | DEZOO | D2-262 | Modbus (Koyo addressing) |
| | | D2-240/D2-250-1/D2-260 | DirectNET |
| | | using D2-DCM H2-ECOM/H2-ECOM100 D3-330/330P (Requires the use of a Data Communications Unit) | Modbus (Koyo addressing) |
| | | | Direct LOGIC Ethernet |
| | | | DirectNET |
| | | | |
| Direct LOGIC | | D3-340 | DirectNET K-Sequence |
| 211 001 20 010 | DL305 | D3-350 | DirectNET |
| | | | Modbus (Koyo addressing) |
| | | D3-350 using D3-DCM | DirectNET |
| | | Do doo doing Do-Dow | Modbus (Koyo addressing) |
| | | D4-430 | K-Sequence |
| | | | DirectNET K-Sequence |
| | DL405 | D4-440 | DirectNET |
| | | D4-450/D4-454 | K-Sequence |
| | | | DirectNET |
| | | | Modbus (Koyo addressing) |
| | | All with D4-DCM | DirectNET |
| | | | Modbus (Koyo addressing) |
| | H2-WinPLC /Think 9 | H4-ECOM/H4-ECOM100 | Direct LOGIC Ethernet Think & Do Modbus RTU |
| | H2-WinPLC (Think & Do) Live V5.2 or later and Studio any version H2-WinPLC (Think & Do) Live V5.5.1 or later and Studio V7.2.1 or later | | |
| | Studio any version | | (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 | \$37.00 |
| AutomationDirect communication cable, 15-pin male D-sub to 15-pin D-sub HD15 male, shielded, 3m/9.8ft cable length. For use with <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> | \$38.00 |
| AutomationDirect communication cable, 15-pin male D-sub to 4-pin RJ11, shielded, 3m/9.6ft 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> | \$37.00 |
| 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, D3-350 (bottom port) or DL405 (bottom port) CPU. | EA-4CBL-2 | \$38.50 |
| 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 | \$57.00 |
| 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 | \$37.00 |
| 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 | \$37.00 |
| AutomationDirect communication cable, 15-pin male D-sub to 6-pin RJ45, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and an Allen-Bradley SLC 5/01, 5/02 or 5/03 CPU with a DH485 port cable. | EA-DH485-CBL | \$36.50 |
| 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 | \$37.00 |
| 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 | \$31.00 |
| AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with <i>C-more</i> or <i>C-more</i> Micro panel and a Mitsubishi FX Series CPU. | EA-MITSU-CBL-1 | \$37.00 |
| 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.CBL | EA-OMRON-CBL | \$37.00 |

Example Cables:

