

C-more Communication Protocols & Cables

Compatibility Table				
PLC Family	Model	Protocols		
Allen-Bradley	MicroLogix 1000, 1100, 1200, 1400, 1500, SLC 5-01/02/03	DH485/AIC/AIC+		
	MicroLogix 1000, 1100, 1200, 1400 and 1500 SLC 5-03/04/05	DF1 Half Duplex; DF1 Full Duplex		
	ControlLogix™, CompactLogix™, FlexLogix™	DF1 Full Duplex		
	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			
	Micro 800 series	Modbus RTU Modbus TCP		
Micro 800 series - Tag Based	DF1 Full Duplex EtherNet/IP Client			
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		
	90/30, Rx3i	SRTP Ethernet		
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, S7-1500; Ethernet	Ethernet ISO over TCP		
Productivity Series	all	Productivity Serial		
		Productivity Ethernet		
Do-more	all	Do-more Serial Do-more Ethernet		
CLICK	all	Modbus (CLICK addressing)		
		Modbus TCP (CLICK addressing)		
Direct LOGIC	DL05/DL06	all	K-Sequence	
			DirectNET	
		Modbus (Koyo addressing)		
	H0-ECOM/H0-ECOM100	Direct LOGIC Ethernet		
		DL105	all	K-Sequence
	DL205			D2-230
		D2-240	K-Sequence DirectNET	
		D2-250/D2-250-1/D2-260/ D2-262	K-Sequence DirectNET Modbus (Koyo addressing)	
			D2-240/D2-250-1/D2-260 using D2-DCM	DirectNET Modbus (Koyo addressing)
				H2-ECOM/H2-ECOM100
		DL305	D3-330/330P (Requires the use of a Data Communications Unit)	DirectNET
			D3-340	DirectNET
			D3-350	K-Sequence DirectNET Modbus (Koyo addressing)
	D3-350 using D3-DCM			DirectNET Modbus (Koyo addressing)
	DL405		D4-430	K-Sequence DirectNET
		D4-440	K-Sequence DirectNET	
		D4-450/D4-454	K-Sequence DirectNET Modbus (Koyo addressing)	
			All with D4-DCM	DirectNET Modbus (Koyo addressing)
		H4-ECOM/H4-ECOM100	Direct LOGIC 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 communication cable, 15-pin male D-sub to 6-pin RJ12, shielded, 9.8ft/3m cable length. For use with C-more or C-more Micro panel and AutomationDirect PLCs with RJ12 ports.	<u>EA-2CBL</u>	
AutomationDirect communication cable, 15-pin male D-sub to 15-pin D-sub HD15 male, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and a DL06, D2-250(-1), D2-260 or D2-262 (bottom port) CPU.	<u>EA-2CBL-1</u>	
AutomationDirect communication cable, 15-pin male D-sub to 4-pin RJ11, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and a D3-340 CPU top or bottom port.	<u>EA-3CBL</u>	
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and a DL405 (top port) CPU.	<u>EA-4CBL-1</u>	
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and a D2-DCM, D3-232-DCU, D3-350 (bottom port) or DL405 (bottom port) CPU.	<u>EA-4CBL-2</u>	
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and an Allen-Bradley Micrologix CPU.	<u>EA-MLOGIX-CBL</u>	
AutomationDirect communication cable, 15-pin male D-sub to 9-pin female D-sub, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and an Allen-Bradley SLC 5/03, 5/04 or 5/05 CPU with DF-1 port.	<u>EA-SLC-232-CBL</u>	
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and an Allen-Bradley PLC-5 CPU with a DF1 port.	<u>EA-PLC5-232-CBL</u>	
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.	<u>EA-DH485-CBL</u>	
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro and GE Fanuc Series 90/30 or 90/70 serial port.	<u>EA-90-30-CBL</u>	
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and a Mitsubishi FX Series CPU.	<u>EA-MITSU-CBL</u>	
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and a Mitsubishi FX Series CPU.	<u>EA-MITSU-CBL-1</u>	
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with C-more or C-more Micro panel and an Omron C200 or C500 CPU.	<u>EA-OMRON-CBL</u>	

Example Cables:



C-more Computer Programming Connections

Using the **C-more** Programming Software [EA9-PGMSW](#) for project development, the HMI 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** HMI. The USB connection is for direct connection only and does not support USB hubs.
- Connect the **C-more** HMI to a PC with a Cat5 Ethernet cable via an Ethernet switch. Multiple **C-more** HMIs 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 HMI (cables sold separately).
- Windows operating system - see automationdirect.com for specific operating system requirements.



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

If you intend to take advantage of the methods of remote access to the HMI, including the Webserver (Secure HTTPs), 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 HMI.

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 Programming Cable



Part No. USB-CBL-ABxx

USB Programming Cables		
Part Number	Length	Price
USB-CBL-AB3	3 feet	
USB-CBL-AB6	6 feet	
USB-CBL-AB10	10 feet	
USB-CBL-AB15	15 feet	

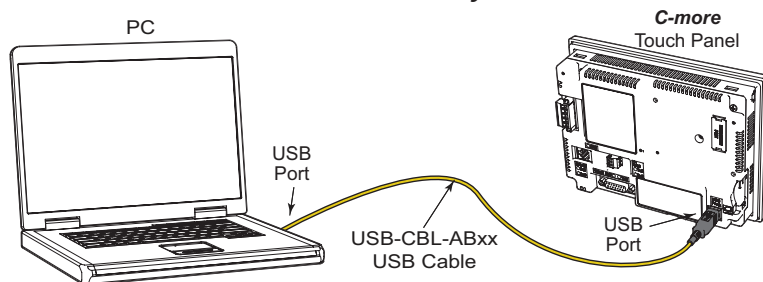
Stride® Ethernet Switch



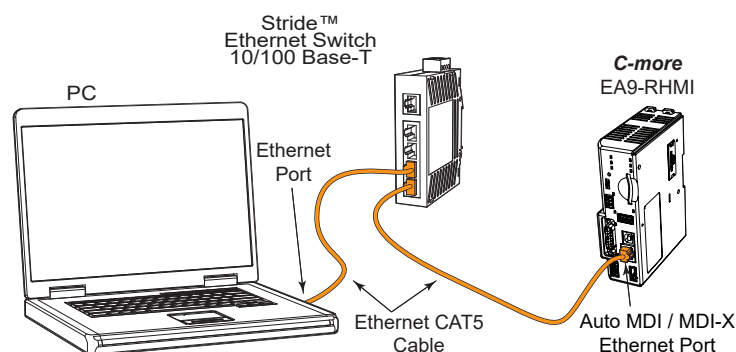
Message is sent out only from the port connected to destination device

Message in from a device

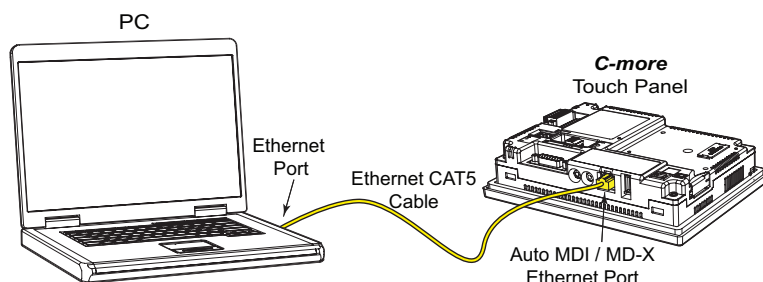
USB Connectivity



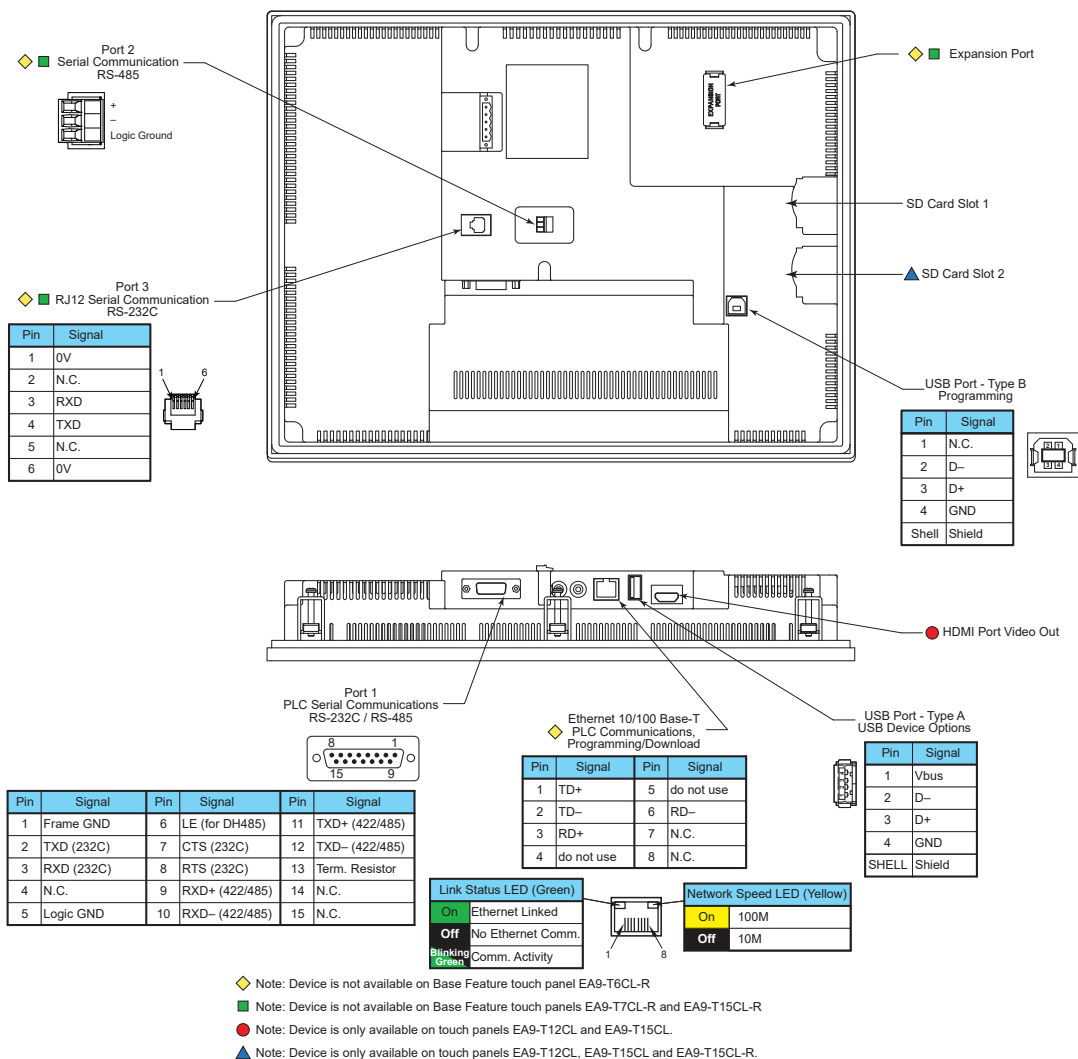
Ethernet Connectivity via a Hub or Switch



Ethernet Direct Connection



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.

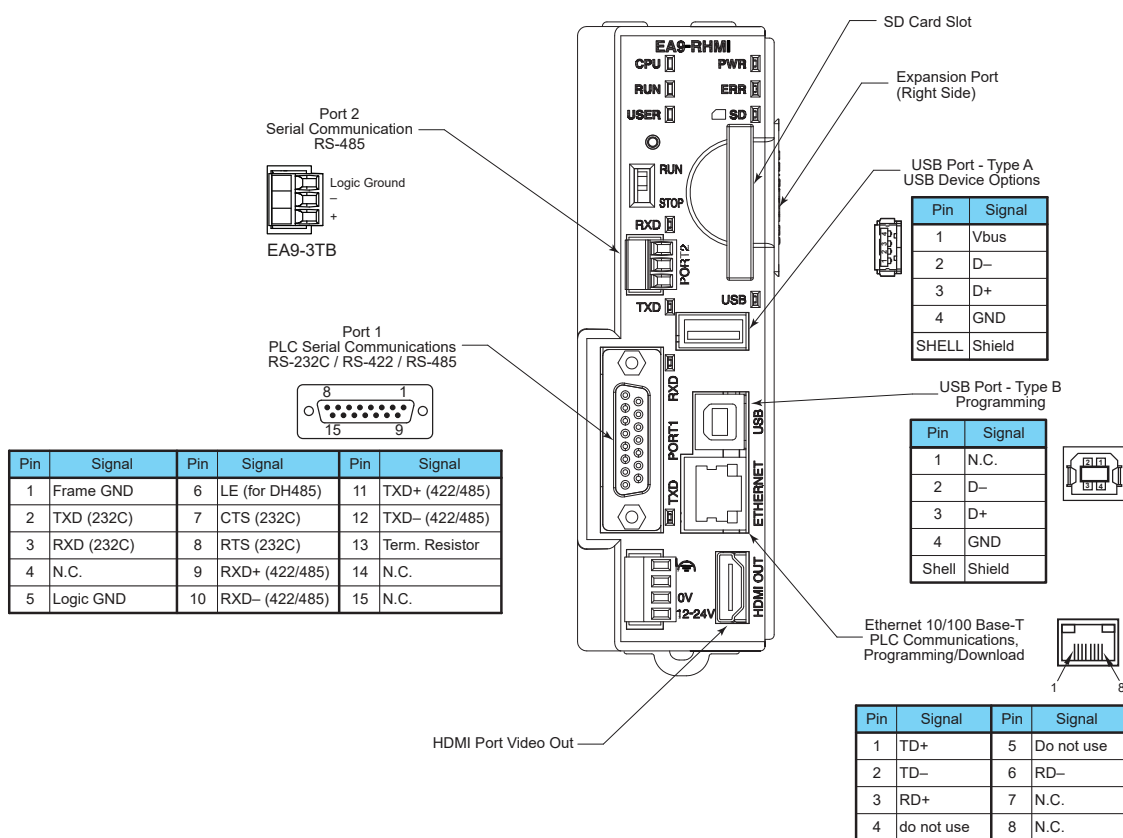
Port 2 - Connect your RS-485 network via Port 2. Port 2 is provided with a 3-wire removable terminal block.

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

HDMI Video Out

EA9-T12CL and EA9-T15CL 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

EA9-RHMI 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