

# 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™ 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	
<b>Modbus RTU</b>	Modbus RTU devices	Modbus RTU	
<b>Modbus TCP/IP</b>	Modbus TCP/IP devices	Modbus TCP/IP	
<b>GE</b>	90/30, 90/70, Micro 90, VersaMax Micro	SNPX	
	90/30, Rx3i	SRTP Ethernet	
<b>Mitsubishi</b>	FX Series	FX Direct	
	Q02, Q02H, Q06H, Q12H, Q25H	Q CPU	
	Q, QnA Serial Q, QnA Ethernet	QnA Serial QnA Ethernet	
<b>Omron</b>	C200 Adapter, C500	Host Link	
	CJ1/CS1 Serial, CJ1/CS1 Ethernet	FINS	
<b>Modicon</b>	984 CPU, Quantum 113 CPU, AEG Modicon Micro Series 110 CPU: 311-xx, 411-xx, 512-xx, 612-xx	Modbus RTU	
<b>Siemens</b>	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	
<b>Productivity Series</b>	all	Productivity Serial Productivity Ethernet	
	<b>Do-more</b>	all	Do-more Serial Do-more Ethernet
<b>CLICK</b>		all	Modbus (CLICK addressing) Modbus TCP (CLICK addressing)
	<b>Direct LOGIC</b>	DL05/DL06	all
H0-ECOM/H0-ECOM100			Direct LOGIC Ethernet
DL105			all
DL205		D2-230	K-Sequence
		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)
			DirectNET
DL405		D3-350 using D3-DCM	Modbus (Koyo addressing)
		D4-430	K-Sequence DirectNET
		D4-440	K-Sequence DirectNET
		D4-450/D4-454	K-Sequence DirectNET Modbus (Koyo addressing)
			DirectNET
		All with D4-DCM	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 <b>C-more</b> or <b>C-more</b> Micro panel and AutomationDirect PLCs with RJ12 ports.	<a href="#"><u>EA-2CBL</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 15-pin D-sub HD15 male, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and a DL06, D2-250(-1), D2-260 or D2-262 (bottom port) CPU.	<a href="#"><u>EA-2CBL-1</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 4-pin RJ11, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and a D3-340 CPU top or bottom port.	<a href="#"><u>EA-3CBL</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and a DL405 (top port) CPU.	<a href="#"><u>EA-4CBL-1</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and a D2-DCM, D3-232-DCU, D3-350 (bottom port) or DL405 (bottom port) CPU.	<a href="#"><u>EA-4CBL-2</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and an Allen-Bradley Micrologix CPU.	<a href="#"><u>EA-MLOGIX-CBL</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 9-pin female D-sub, 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 5/03, 5/04 or 5/05 CPU with DF-1 port.	<a href="#"><u>EA-SLC-232-CBL</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and an Allen-Bradley PLC-5 CPU with a DF1 port.	<a href="#"><u>EA-PLC5-232-CBL</u></a>	
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.	<a href="#"><u>EA-DH485-CBL</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 15-pin male D-sub, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro and GE Fanuc Series 90/30 or 90/70 serial port.	<a href="#"><u>EA-90-30-CBL</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and a Mitsubishi FX Series CPU.	<a href="#"><u>EA-MITSU-CBL</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 8-pin male mini DIN, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and a Mitsubishi FX Series CPU.	<a href="#"><u>EA-MITSU-CBL-1</u></a>	
AutomationDirect communication cable, 15-pin male D-sub to 25-pin male D-sub, shielded, 3m/9.8ft cable length. For use with <b>C-more</b> or <b>C-more</b> Micro panel and an Omron C200 or C500 CPU.	<a href="#"><u>EA-OMRON-CBL</u></a>	

## 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](http://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



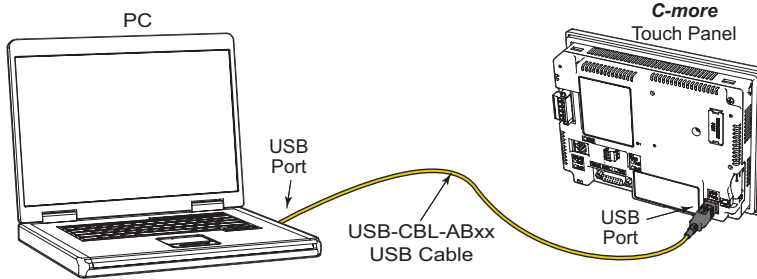
### Part No. USB-CBL-ABxx

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	

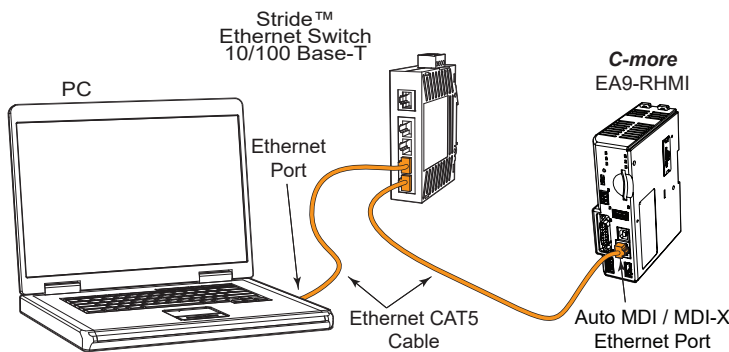
## Stride® Ethernet Switch



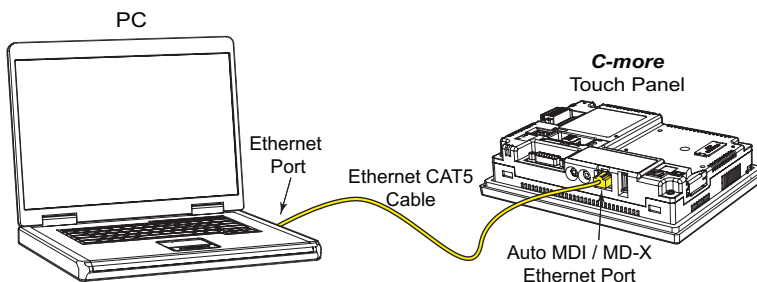
### USB Connectivity



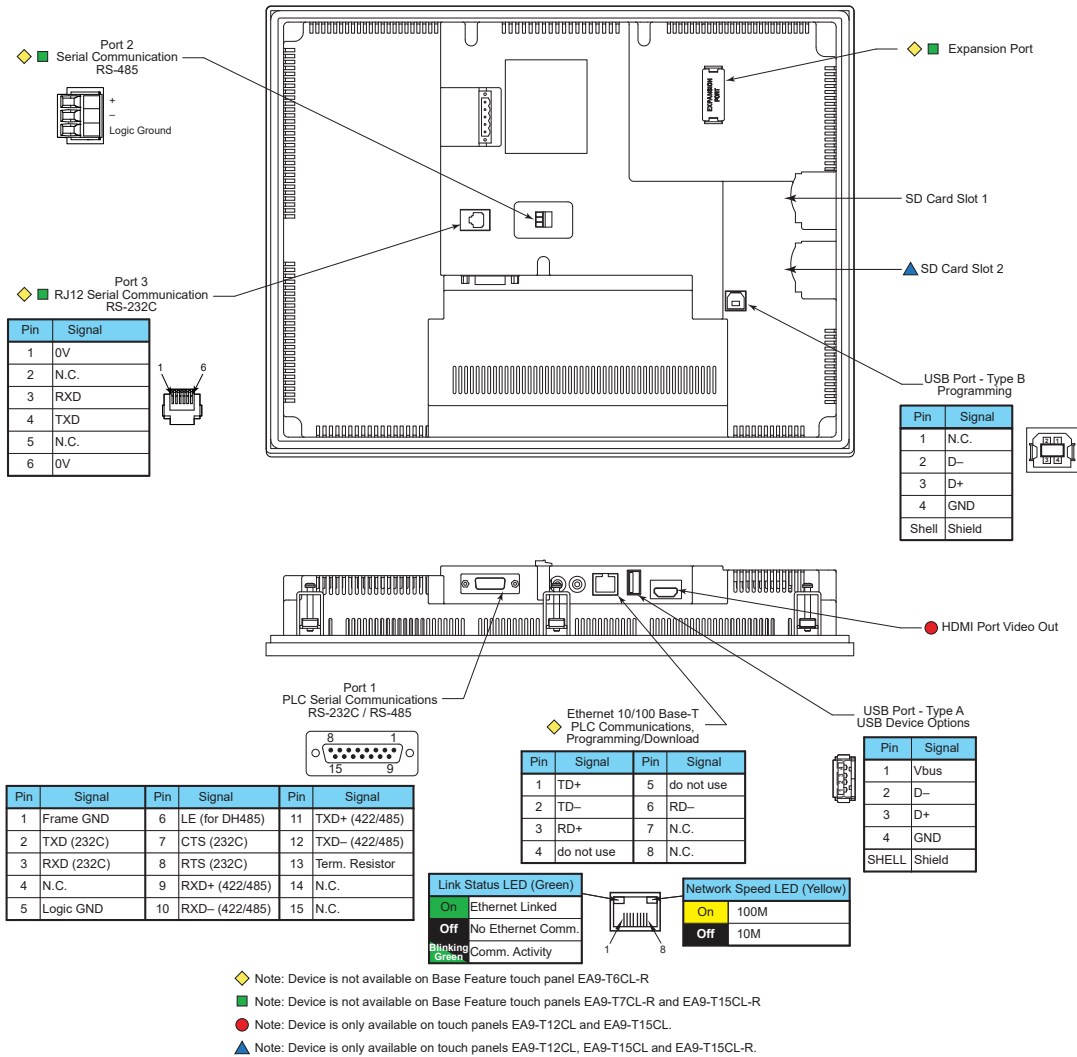
### Ethernet Connectivity via a Hub or Switch



### 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.

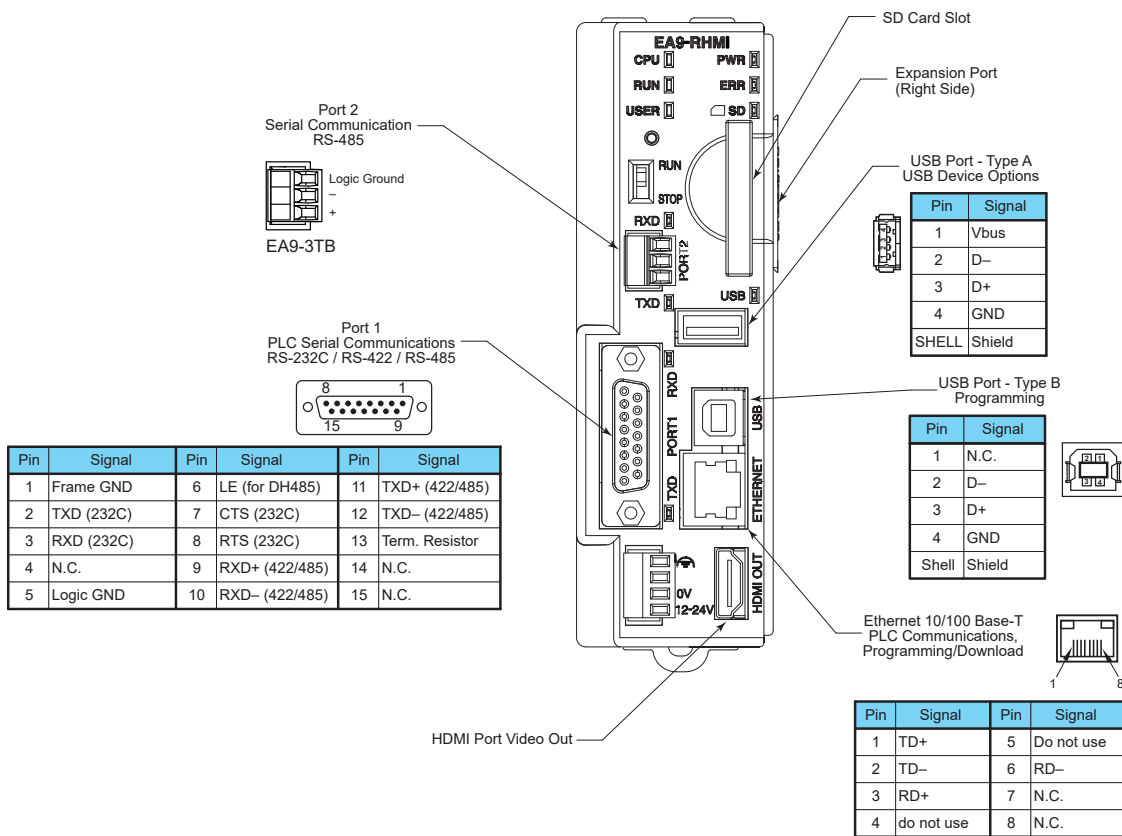
**Port 2** - Connect your RS-485 network via Port 2. Port 2 is provided with a 3-wire removable terminal block.

**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