C-more Communication Protocols & Cables

Compatibility Table			
PLC Family	**Model**		**Protocols**
Allen-Bradley	MicroLogix 1000/1100/1200/1400/1500, SLC 5-/01/02/03, PLC5		DH485/AIC/AIC+
	MicroLogix 1000, 1100, 1200 and 1500		DF1 Half Duplex; DF1 Full Duplex
	SLC 5-/03/04/05		
	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 & SLC 5/05, both 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
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	Productivity3000 Serial (P3-550)		AutomationDirect P3000 Serial
	Productivity3000 Ethernet (P3-550)		AutomationDirect P3000 Ethernet
Do-more	all		Do-more Serial
			Do-more Ethernet
CLICK	all		AutomationDirect Modbus (CLICK)
***Direct*LOGIC**	DL05/DL06	all	K-Sequence
			***Direct*NET**
			Modbus (Koyo addressing)
		H0-ECOM/H0-ECOM100	***Direct*LOGIC Ethernet**
	DL105	all	K-Sequence
	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	***Direct*LOGIC 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	***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 Productivity Series, Do-more, CLICK, ***Direct*LOGIC PLC RJ-12 port, DL05, DL06, DL105, DL205, D3-350, D4-450 & H2-WinPLC (RS-232C)	***EA-2CBL***	<--->
***Direct*LOGIC (VGA Style) 15-pin port, DL06, D2-250 (250-1), D2-260 (RS-232C)	***EA-2CBL-1***	<--->
***Direct*LOGIC PLC RJ-11 port, D3-340 (RS-232C)	***EA-3CBL***	<--->
***Direct*LOGIC DL405 PLC 15-pin D-sub port, DL405 (RS-232C)	***EA-4CBL-1***	<--->
***Direct*LOGIC PLC 25-pin D-sub port, DL405, D3-350, DL305 DCU and all DCM's (RS-232C)	***EA-4CBL-2***	<--->
Allen-Bradley MicroLogix 1000, 1100, 1200, 1400 & 1500 (RS-232C)	***EA-MLOGIX-CBL***	<--->
Allen-Bradley SLC 5-03/04/05 ControlLogix, CompactLogix, FlexLogix, DF1 port (RS-232C)	***EA-SLC-232-CBL***	<--->
Allen-Bradley PLC-5 DF1 port (RS-232C)	***EA-PLC5-232-CBL***	<--->
Allen-Bradley SLC 500 DH485 port (RS-485A)	***EA-DH485-CBL***	<--->
GE 90/30, 90/70, Micro 90, VersaMax Micro 15-pin D-sub port (RS-422A)	***EA-90-30-CBL***	<--->
MITSUBISHI FX Series 25-pin port (RS-422A)	***EA-MITSU-CBL***	<--->
MITSUBISHI FX Series 8-pin mini-DIN (RS-422A)	***EA-MITSU-CBL-1***	<--->
OMRON Host Link C200 Adapter, C500 (RS-232C)	***EA-OMRON-CBL***	<--->

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:

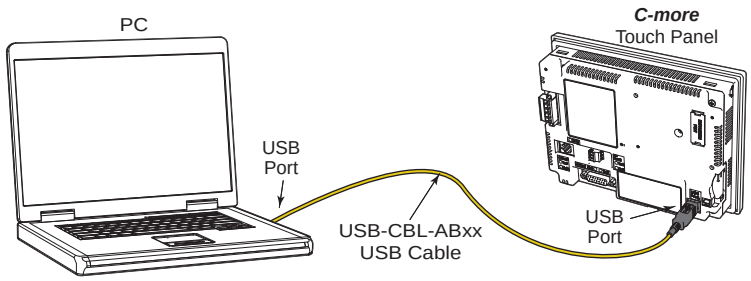
- Keyboard and Mouse or compatible pointing device
- Super VGA color video adapter and monitor with at least 800 x 600 pixels resolution (1024 x 768 pixels recommended) 64K color minimum
- 300 MB free hard-disk space
- CD-ROM or DVD drive for installing software from the CD
- USB port or Ethernet 10/100 Mbps port for project transfer from software to touch panel (Ethernet port not available on -R models)
- Operating System - Windows® XP Professional Edition (32 bit), Windows 7 (32 or 64 bit) or Windows 8 (32 or 64 bit)

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

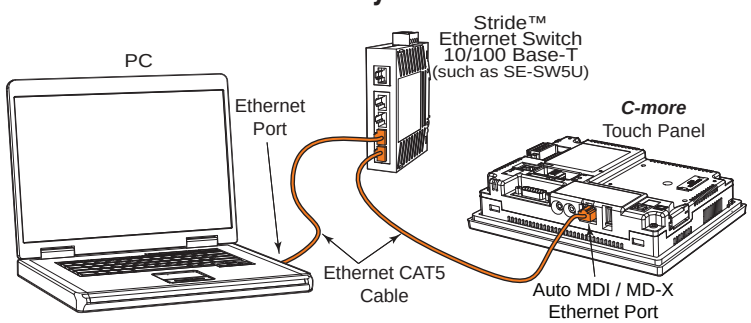
If you intend to take advantage of the methods of remote access to the panel, including the web server, PC remote access, FTP, iPhone or iPad app, you need to consider the security exposure in order to minimize the risks to your process and your C-more panel.

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.

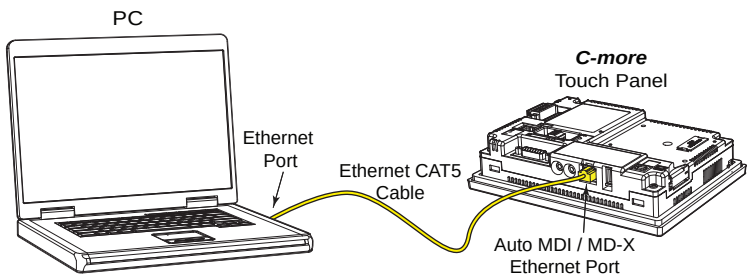
USB Connectivity



Ethernet Connectivity via a Hub or Switch



Ethernet Direct Connection



USB Programming Cable

Part No. USB-CBL-AB15

<--->

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

Stride™ Ethernet Switch

Part No. SE-SW5U

<--->

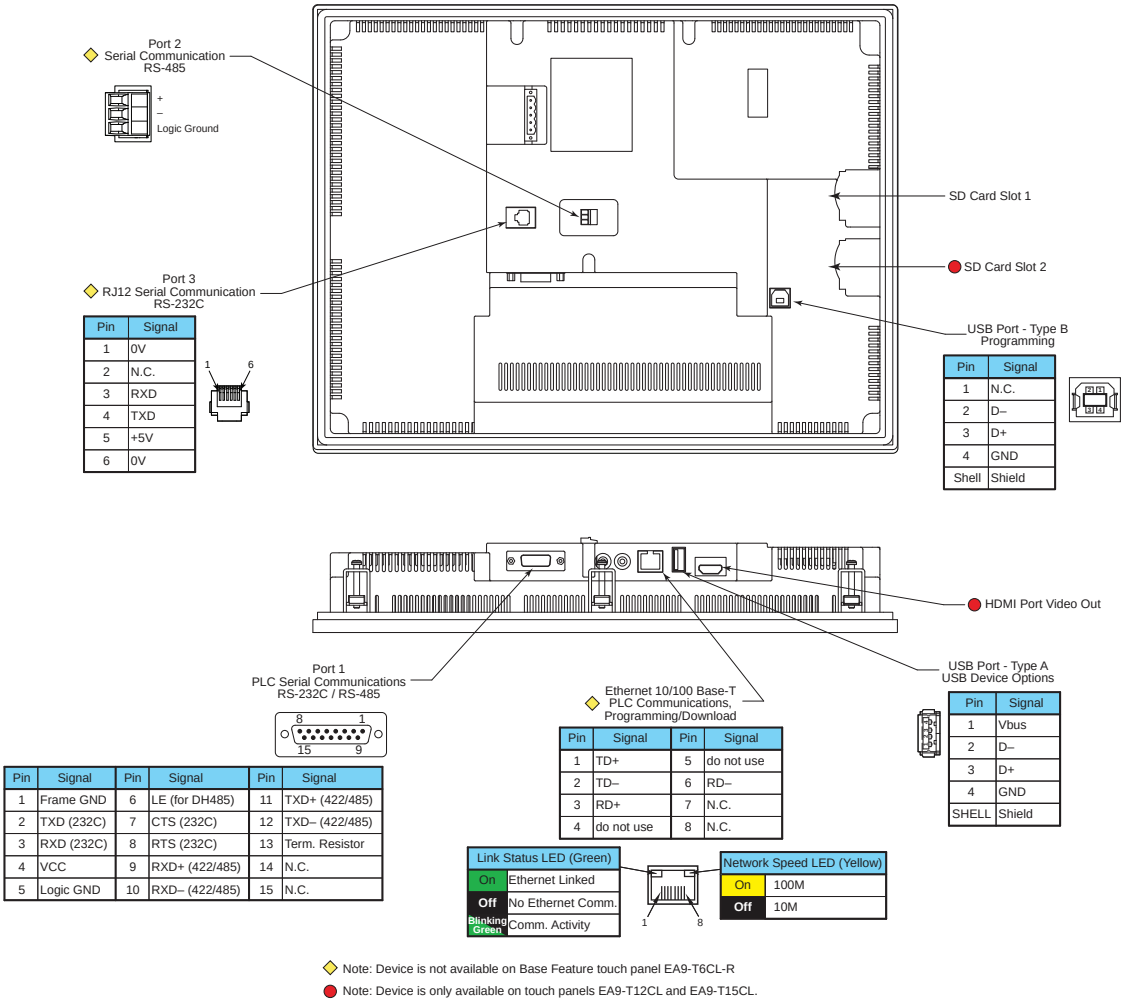
Ethernet Configuration Kit

Part No. RT-CNFGKIT

<--->

The Ethernet Configuration Kit includes a five-port 10/100 Base-T Ethernet switch, four straight-through cables, and one crossover cable. (The cables are at least five feet in length.) The kit provides a great convenience for configuring systems, demonstration systems or basic control projects using Ethernet.

C-more Communication Ports



Pin	Signal
1	0V
2	N.C.
3	RXD
4	TXD
5	+5V
6	0V

Pin	Signal
1	N.C.
2	D–
3	D+
4	GND
Shell	Shield

Pin	Signal	Pin	Signal	Pin	Signal
1	Frame GND	6	LE (for DH485)	11	TXD+ (422/485)
2	TXD (232C)	7	CTS (232C)	12	TXD– (422/485)
3	RXD (232C)	8	RTS (232C)	13	Term. Resistor
4	VCC	9	RXD+ (422/485)	14	N.C.
5	Logic GND	10	RXD– (422/485)	15	N.C.

Pin	Signal	Pin	Signal
1	TD+	5	do not use
2	TD–	6	RD–
3	RD+	7	N.C.
4	do not use	8	N.C.

Pin	Signal
1	Vbus
2	D–
3	D+
4	GND
SHELL	Shield

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 Port

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