

# C-more Communication Protocols & Cables

For new applications choose EA9 series C-more panels, part numbers EA9-TxCL(-R).

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 and 1500		DF1 Half Duplex; DF1 Full Duplex		
	SLC 5-/03/04/05				
	ControlLogix™, CompactLogix™, FlexLogix™		DF1 Full Duplex		
	PLC-5				
	ControlLogix, CompactLogix, FlexLogix - Tag Based		DF1 Half Duplex; DF1 Full Duplex		
	ControlLogix, CompactLogix, FlexLogix - Generic I/O Messaging				
	ControlLogix, CompactLogix, FlexLogix - Tag Based		EtherNet/IP Server		
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					
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		
Productivity3000	Productivity3000 Serial (P3-550)		AutomationDirect P3000 Serial		
	Productivity3000 Ethernet (P3-550)		AutomationDirect P3000 Ethernet		
CLICK	all		AutomationDirect Modbus (CLICK)		
DirectLOGIC	DL05/DL06	all	K-Sequence		
			DirectNET		
		Modbus (Koyo addressing)			
	DL105	H0-ECOM/H0-ECOM100	DirectLOGIC Ethernet		
			all	K-Sequence	
		DL205	D2-230	K-Sequence	
	D2-240			K-Sequence	
	D2-250/D2-250-1/D2-260		DirectNET		
			K-Sequence		
			DirectNET		
			Modbus (Koyo addressing)		
			D2-240/D2-250-1/D2-260 Using DCM	DirectNET	
			Modbus (Koyo addressing)		
	DL305		H2-ECOM/H2-ECOM100	DirectLOGIC Ethernet	
				D3-330/330P (Requires the use of a Data Communications Unit)	DirectNET
		D3-340	DirectNET		
			D3-350	K-Sequence	
				DirectNET	
		D3-350 DCM		Modbus (Koyo addressing)	
			DL405	D4-430	K-Sequence
					DirectNET
	D4-440	K-Sequence			
		DirectNET			
	D4-450	K-Sequence			
		DirectNET			
		Modbus (Koyo addressing)			
	All with DCM	DirectNET			
		Modbus (Koyo addressing)			
		H4-ECOM/H4-ECOM100		DirectLOGIC 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
Productivity3000 AutomationDirect CLICK, DirectLOGIC PLC RJ-12 port, DL05, DL06, DL105, DL205, D3-350, D4-450 & H2-WinPLC (RS-232C)	EA-2CBL	<--->
DirectLOGIC (VGA Style) 15-pin port, DL06, D2-250 (250-1), D2-260 (RS-232C)	EA-2CBL-1	<--->
DirectLOGIC PLC RJ-11 port, D3-340 (RS-232C)	EA-3CBL	<--->
DirectLOGIC DL405 PLC 15-pin D-sub port, DL405 (RS-232C)	EA-4CBL-1	<--->
DirectLOGIC PLC 25-pin D-sub port, DL405, D3-350, DL305 DCU and all DCMs (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	<--->



**NOTE: EZTouch serial PLC communication cables are compatible with C-more touch panels.**

EA-2CBL



EA-2CBL-1



# C-more Computer Programming Connections

**For new applications choose EA9 series C-more panels, part numbers EA9-TxCL(-R).**

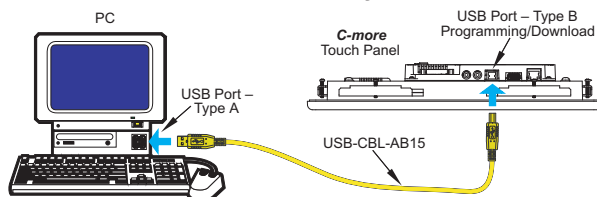
Using the **C-more** Programming Software for project development, the touch panel can be connected to a PC (personal computer) in one of several ways:

- 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 via an Ethernet hub or switch, and CAT5 Ethernet cables (full feature panels only). Multiple panels can be programmed in this configuration.
- Use an Ethernet crossover cable directly between the **C-more** touch panel's Ethernet port and the PC Ethernet port (full feature panels only).

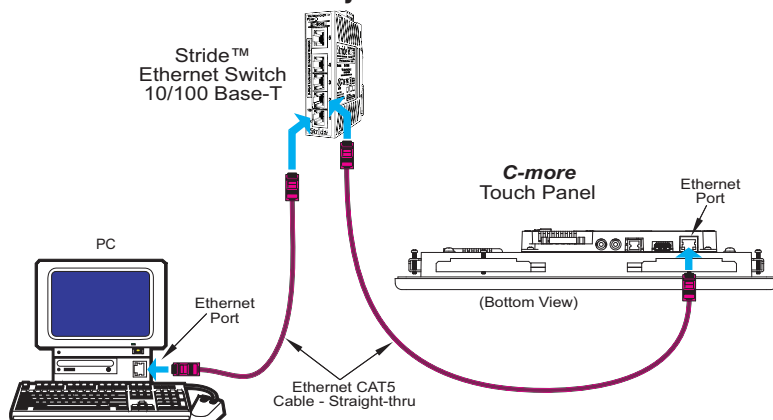
Following are the minimum system requirements for running **C-more** Programming Software (p/n EA-PGMSW) on a PC:

- Personal Computer with a 333 MHz or higher processor (CPU) clock speed recommended; Intel® Pentium/Celeron family, or AMD® K6/Athlon/Duron family, or compatible processor recommended
- 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
- 128 MB free RAM (512 MB recommended); 512 MB free RAM (1 GB recommended) for Vista
- 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 Home / Professional Edition with Service Pack 2, Windows® 2000 with Service Pack 4, Windows® Vista, Windows® 7 or Windows® 8.

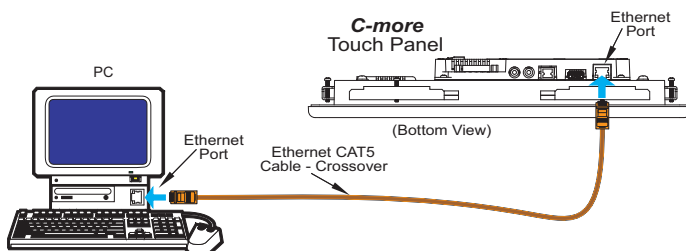
## USB Connectivity



## Ethernet Connectivity via a Hub or Switch



## Ethernet Direct Connection



## USB Programming Cable



**Part No. USB-CBL-AB15**

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Other lengths available see USB-CBL-AB3, USB-CBL-AB6, USB-CBL-AB10 on page 9-27

## Stride™ Ethernet Switch



**Part No. SE-SW5U**

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## Ethernet Configuration Kit



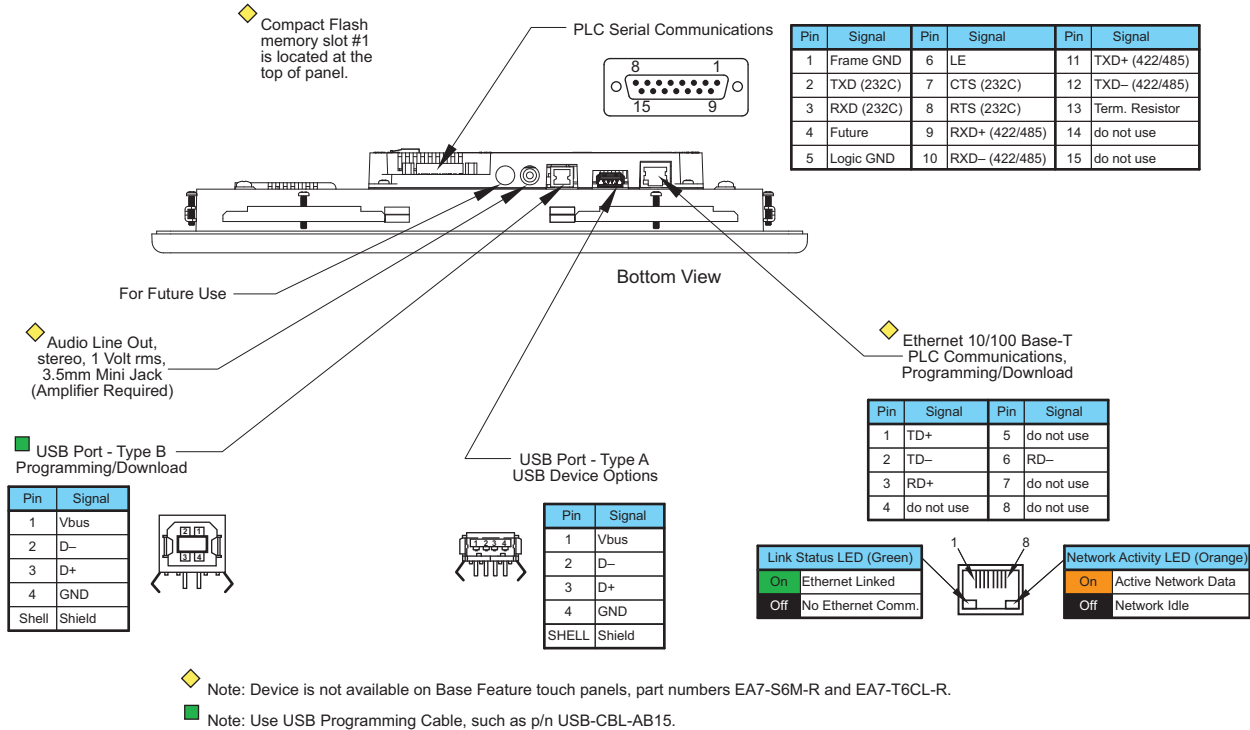
**Part No. RT-CNFGKIT**

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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

For new applications choose EA9 series C-more panels, part numbers EA9-TxCL(-R).



## 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 orange LEDs.

- The orange LED indicates the Ethernet communication status. It illuminates when there is data activity on the network.
- The green LED indicates link status and illuminates when a link is established.

Ethernet connections:

- Productivity3000
- **Direct**LOGIC Ethernet
- Modbus TCP/IP
- Allen-Bradley EtherNet/IP™ Server - Generic I/O Messaging (ControlLogix™, CompactLogix™, and FlexLogix™)
- Allen-Bradley EtherNet/IP Client - Tag Based (ControlLogix, CompactLogix, and FlexLogix™)
- Allen-Bradley EtherNet/IP Client - MicroLogix 1100 & SLC 5/05, both via native Ethernet port
- Allen-Bradley MicroLogix 1000, 1100, 1200, 1500, SLC 5-03/04/05, all via ENI Adapter
- Entivity Modbus TCP/IP
- Omron Ethernet FINS
- Siemens Ethernet ISO over TCP

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, (SDCZ4-2048-A10)
- 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

The serial port is an RS-232, RS-422 or RS-485 female 15-pin D-sub connector. Use this port for serial connections to PLCs. The port supports the following PLC protocols:

All AutomationDirect.com PLCs:  
Productivity3000  
**Direct**LOGIC K-sequence  
**Direct**NET  
Modbus (Koyo Addressing)  
CLICK

Allen Bradley:  
DF1 Full & Half Duplex  
DF1 Full & Half Duplex - Tag Based  
PLC5 DF1  
DH485

Modbus RTU  
Entivity Modbus RTU  
GE SNPX (90/30, 90/70, Micro 90, VersaMax Micro)

Omron:  
Host Link (C200 Adapter, C500)  
FINS (CJ1, CS1)

Mitsubishi:  
Melsec FX  
Q/QnA  
Siemens PPI (S7-200 CPU)