

# 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		
<b>Allen-Bradley</b>	MicroLogix 1000/1100/1200/1400/1500, SLC 5-701/02/03	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	DF1 Half Duplex; DF1 Full Duplex		
	ControlLogix, CompactLogix, FlexLogix - Tag Based	EtherNet/IP Server		
	ControlLogix, CompactLogix, FlexLogix - Generic I/O Messaging	EtherNet/IP Client		
	ControlLogix, CompactLogix, FlexLogix - Tag Based			
<b>Modbus TCP/IP</b>	Modbus TCP/IP devices	Modbus TCP/IP		
<b>GE</b>	90/30, 90/70, Micro 90, VersaMax Micro	SNPX		
<b>Mitsubishi</b>	FX Series	FX Direct		
	Q02, Q02H, Q06H, Q12H, Q25H	Q CPU		
	Q, QnA Serial	QnA Serial		
	Q, Qna Ethernet	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; Ethernet	Ethernet ISO over TCP		
<b>Productivity3000</b>	Productivity3000 Serial (P3-550)	AutomationDirect P3000 Serial		
	Productivity3000 Ethernet (P3-550)	AutomationDirect P3000 Ethernet		
<b>CLICK</b>	all	AutomationDirect Modbus (CLICK)		
<b>DirectLOGIC</b>	DL05/DL06	all	K-Sequence <b>DirectNET</b> Modbus (Koyo addressing)	
		H0-ECOM/H0-ECOM100	<b>DirectLOGIC</b> Ethernet	
		DL105	all	K-Sequence
	DL205	D2-230	K-Sequence	
		D2-240	K-Sequence <b>DirectNET</b>	
		D2-250/D2-250-1/D2-260	K-Sequence	
			<b>DirectNET</b>	
			Modbus (Koyo addressing)	
		D2-240/D2-250-1/D2-260 Using DCM	<b>DirectNET</b>	
	Modbus (Koyo addressing)			
	<b>DirectLOGIC</b> Ethernet			
	DL305	D3-330/330P (Requires the use of a Data Communications Unit)	<b>DirectNET</b>	
		D3-340	<b>DirectNET</b>	
		D3-350	K-Sequence	
			<b>DirectNET</b>	
		D3-350 DCM	Modbus (Koyo addressing) <b>DirectNET</b>	
		DL405	D4-430	K-Sequence <b>DirectNET</b>
			D4-440	K-Sequence <b>DirectNET</b>
	D4-450		K-Sequence	
			<b>DirectNET</b>	
	All with DCM		Modbus (Koyo addressing) <b>DirectNET</b>	
	H4-ECOM/H4-ECOM100	<b>DirectLOGIC</b> 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, <b>DirectLOGIC</b> PLC RJ-12 port, DL05, DL06, DL105, DL205, D3-350, D4-450 & H2-WinPLC (RS-232C)	<b>EA-2CBL</b>	<--->
<b>DirectLOGIC</b> (VGA Style) 15-pin port, DL06, D2-250 (250-1), D2-260 (RS-232C)	<b>EA-2CBL-1</b>	<--->
<b>DirectLOGIC</b> PLC RJ-11 port, D3-340 (RS-232C)	<b>EA-3CBL</b>	<--->
<b>DirectLOGIC</b> DL405 PLC 15-pin D-sub port, DL405 (RS-232C)	<b>EA-4CBL-1</b>	<--->
<b>DirectLOGIC</b> PLC 25-pin D-sub port, DL405, D3-350, DL305 DCU and all DCMs (RS-232C)	<b>EA-4CBL-2</b>	<--->
Allen-Bradley MicroLogix 1000, 1100, 1200, 1400 & 1500 (RS-232C)	<b>EA-MLOGIX-CBL</b>	<--->
Allen-Bradley SLC 5-03/04/05 ControlLogix, CompactLogix, FlexLogix, DF1 port (RS-232C)	<b>EA-SLC-232-CBL</b>	<--->
Allen-Bradley PLC-5 DF1 port (RS-232C)	<b>EA-PLC5-232-CBL</b>	<--->
Allen-Bradley SLC 500 DH485 port (RS-485A)	<b>EA-DH485-CBL</b>	<--->
GE 90/30, 90/70, Micro 90, VersaMax Micro 15-pin D-sub port (RS-422A)	<b>EA-90-30-CBL</b>	<--->
MITSUBISHI FX Series 25-pin port (RS-422A)	<b>EA-MITSU-CBL</b>	<--->
MITSUBISHI FX Series 8-pin mini-DIN (RS-422A)	<b>EA-MITSU-CBL-1</b>	<--->
OMRON Host Link C200 Adapter, C500 (RS-232C)	<b>EA-OMRON-CBL</b>	<--->



**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).

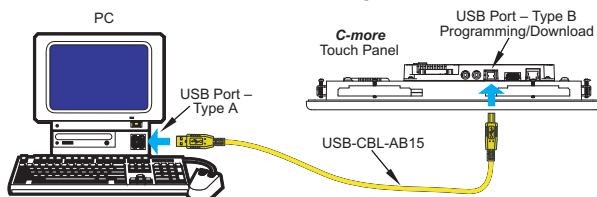
Using the C-more Programming Software for project development, the touch panel can be connected to a PC (personal computer) in one of several ways:

- 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).

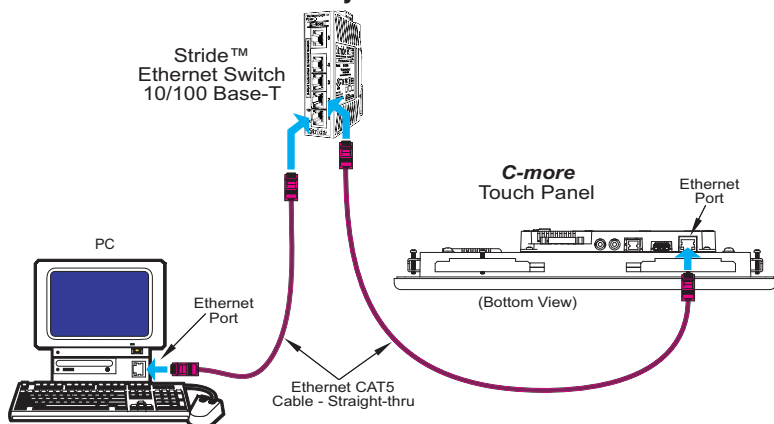
Following are the minimum system requirements for running C-more Programming Software (p/n EA-PGMSW) on a PC:

- 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.

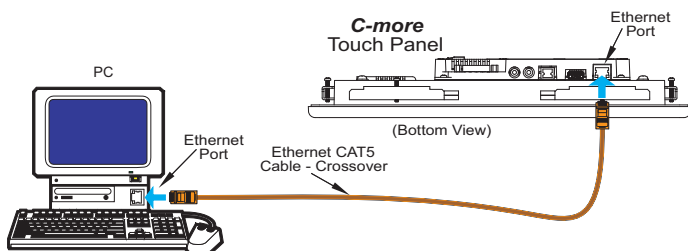
## USB Connectivity



## Ethernet Connectivity via a Hub or Switch



## Ethernet Direct Connection



## USB Programming Cable



Part No. USB-CBL-AB15



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

## Stride™ Ethernet Switch



Part No. SE-SW5U



## Ethernet Configuration Kit



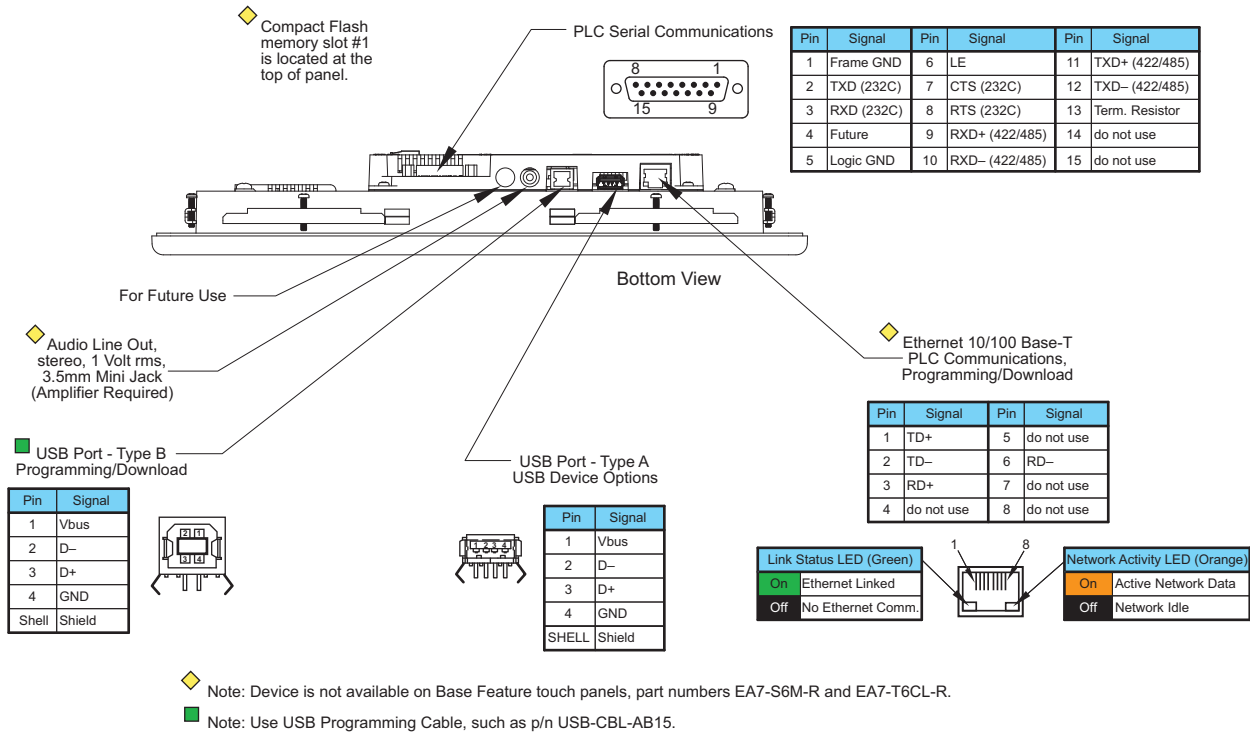
Part No. RT-CNFGKIT



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

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)