

PROTOCOLS AND CABLE DIAGRAMS



In This Appendix...

Protocols and Cables	A-2
Programming Cable Diagrams.....	A-6

Protocols and Cables

*Direct*LOGIC CPUs provide many communication port possibilities. It is helpful to know which programming cable and protocol to use.

<i>Direct</i>LOGIC PLC Programming Cable and Wiring Standard Reference					
CPU	Port	Cable	Standard	Jack Style	
DL05	Port 1	D2-DSCBL	RS-232	RJ12 6P6C	
	Port 2	D2-DSCBL	RS-232	RJ12 6P6C	
	D0-DCM	D2-DSCBL-1	D2-DSCBL	RS-232	RJ12 6P6C
			RS-232	HD15	
			RS-422		
		RS-485			
	H0-ECOM(100)		10/100 BASET	RJ45 CAT 5E	
DL06	Port 1	D2-DSCBL	RS-232	RJ12 6P6C	
	Port 2	D2-DSCBL-1	RS-232	HD15	
			RS-422		
			RS-485		
	D0-DCM	D2-DSCBL-1	D2-DSCBL	RS-232	RJ12 6P6C
			RS-232	HD15	
			RS-422		
		RS-485			
	H0-ECOM(100)		10/100 BASET	RJ45 CAT 5E	
D2-230	Port 1	D2-DSCBL	RS-232	RJ12 6P6C	
	D2-DCM	D3-DSCBL-2	RS-232	DB-25	
			RS-422		
D2-240	Port 1	D2-DSCBL	RS-232	RJ12 6P6C	
	Port 2	D2-DSCBL	RS-232	RJ12 6P6C	
	D2-DCM	D3-DSCBL-2	RS-232	DB-25	
			RS-422		
		H2-ECOM(100)		10/100 BASET	RJ45 CAT 5E
D2-250(-1) D2-260 D2-262	Port 1	D2-DSCBL	RS-232	RJ12 6P6C	
	Port 2	D2-DSCBL-1	RS-232	HD15	
			RS-422		
			RS-485		
	D2-DCM	D3-DSCBL-2	RS-232	DB-25	
			RS-422		
	H2-ECOM(100)		10/100 BASET	RJ45 CAT 5E	
D3-330	D3-232-DCU	D3-DSCBL-2	RS-232	DB-25	
D3-340	Port 1	D3-DSCBL-1	RS-232	RJ14 4P4C	
	Port 2	D3-DSCBL-1	RS-232	RJ14 4P4C	
D3-350	Port 1	D2-DSCBL	RS-232	RJ12 6P6C	
	Port 2	D3-DSCBL-2	RS-232	DB-25	
			RS-422		
			RS-485		
	D3-DCM	D3-DSCBL-2	RS-232		
			RS-422		

DirectLOGIC PLC Programming Cable and Wiring Standard Reference				
CPU	Port	Cable	Standard	Jack Style
D4-430 D4-440	Port 0	D4-DSCBL	RS-232	DB-15
	Port 1	D3-DSCBL-2	RS-232	DB-25
	D4-DCM	D3-DSCBL-2	RS-232	
			RS-422	
H4-ECOM(100)		10/100 BASET	RJ45 CAT 5E	
D4-450 D4-454	Port 0	D4-DSCBL	RS-232	DB-15
	Port 1	D3-DSCBL-2	RS-232	DB-25
	Port 2	D2-DSCBL	RS-232	RJ11 6P6C
	Port 3		RS-422	DB-25
	D4-DCM	D3-DSCBL-2	RS-232	
			RS-422	
H4-ECOM(100)		10/100 BASET	RJ45 CAT 5E	

Notes:

- To convert an RS-232 cable to USB, purchase part number USB-RS232.
- To connect to RS-485 with USB, purchase part number USB-485M.
- EA-MG-PGM-CBL is a USB alternative for the D2-DSCBL.
- Do not use EA-MG-PGM-CBL with SureStep stepper drives.
- For RS-232/RS-422 use cable part number L19772-100.
- For RS-485 use cable part number L19827-100.
- For Ethernet, Category 5E cable is recommended as a minimum.

Protocols and Cables (cont'd)

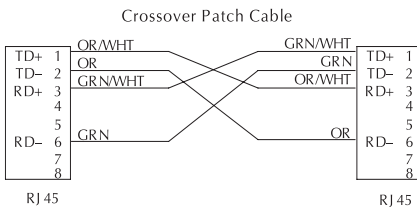
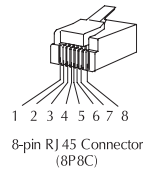
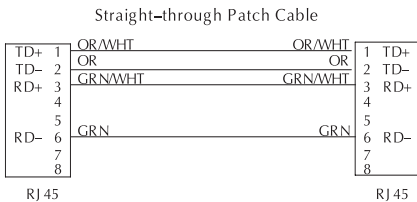
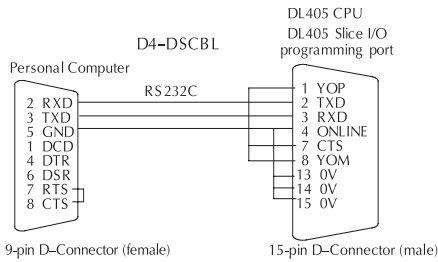
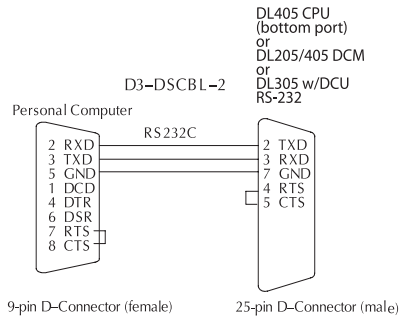
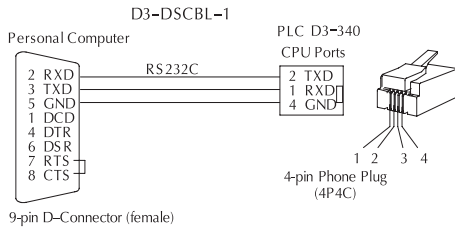
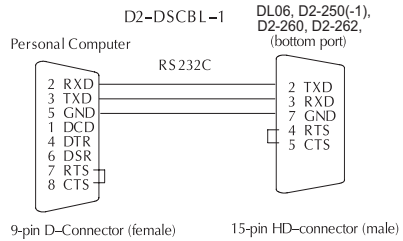
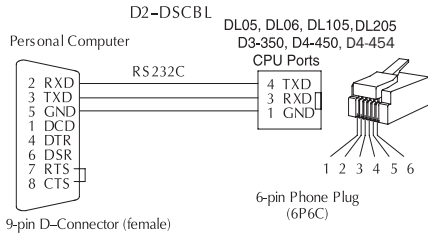
<i>DirectLOGIC PLC Protocols Supported</i>						
CPU	Port	<i>DirectNET</i>	K-Sequence	MODBUS RTU	ECOM	MODBUS TCP
DL05	Port 1	•	•	•		
	Port 2	•	•	•		
	D0-DCM	•	•	•		
		•	•	•		
		•	•	•		
H0-ECOM(100)				•	H0-ECOM100	
DL06	Port 1	•	•	•		
	Port 2	•	•	•		
		•	•	•		
		•	•	•		
	D0-DCM	•	•	•		
		•	•	•		
•		•	•			
H0-ECOM(100)				•	H0-ECOM100	
D2-230	Port 1	•	•	•		
	D2-DCM	•	•	Slave only		
D2-240	Port 1	•	•	•		
	Port 2	•	•	•		
	D2-DCM	•	•	Slave only		
		•	•	Slave only		
H2-ECOM(100)				•	H2-ECOM100	
D2-250(-1) D2-260 D2-262	Port 1	•	•	•		
	Port 2	•	•	•		
		•	•	•		
		•	•	•		
	D2-DCM	•	•	Slave only		
•		•	Slave only			
H2-ECOM(100)	•			•	H2-ECOM100	
D3-330	D3-232-DCU	•				
D3-340	Port 1	•				
	Port 2	•		•		
D3-350	Port 1	•	•	•		
		•	•	•		
		•	•	•		
	Port 2	•	•	•		
		•	•	•		
D3-DCM	•	•	Slave only			
		•	•			

Protocols and Cables (cont'd)

<i>Direct</i> LOGIC PLC Protocols Supported						
CPU	Port	<i>Direct</i> NET	K-Sequence	MODBUS RTU	ECOM	MODBUS TCP
D4-430 D4-440	Port 0	•	•	•		
	Port 1	•	•	•		
	D4-DCM	•	•	slave only		
		•	•			
H4-ECOM(100)				•	H4-ECOM100	
D4-450 D4-454	Port 0	•	•	•		
	Port 1	•	•	•		
	Port 2	•	•	•		
	Port 3	•	•	•		
	D4-DCM	•	•	slave only		
		•	•			
H4-ECOM(100)				•	H4-ECOM100	

Programming Cable Diagrams

Pin labeling conforms to IBM DTE and DCE standards



All Ethernet and ECOM patch cables should be Category 5, UTP Cable. The diagram illustrates the appropriate wire position in the RJ45 connector.