

PROTOCOLS AND CABLE DIAGRAMS



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Protocols and Cables

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

| DirectLOGIC 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 | 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-RS232-1.
- 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)

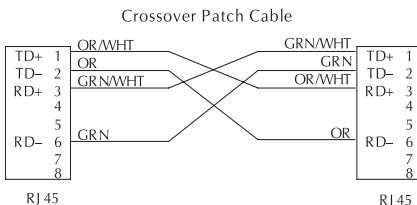
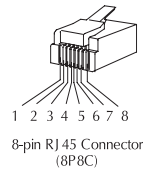
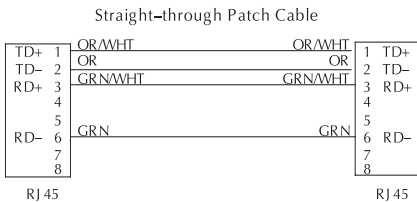
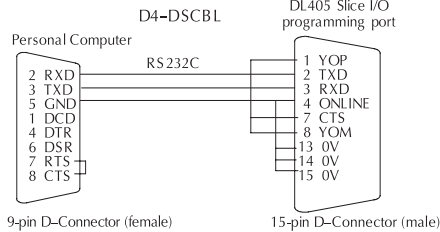
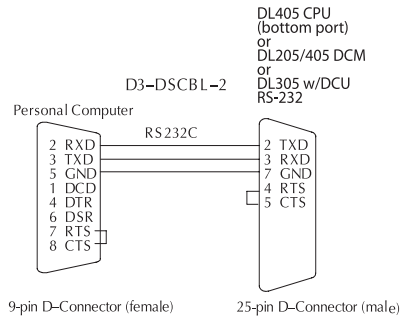
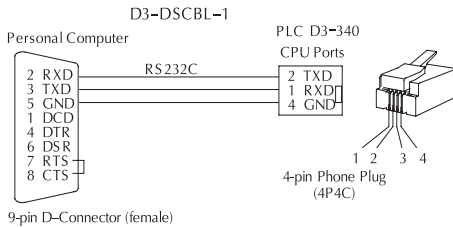
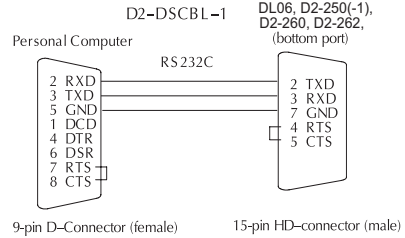
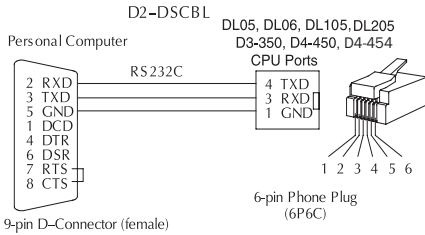
| <i>DirectLOGIC PLC Protocols Supported</i> | | | | | | |
|--|------------|------------------|------------|------------|------------|------------|
| CPU | Port | <i>DirectNET</i> | K-Sequence | MODBUS RTU | ECOM | MODBUS TCP |
| DL05 | Port 1 | • | • | • | | |
| | Port 2 | • | • | • | | |
| | D0-DCM | • | • | • | | |
| | | • | • | • | | |
| | | • | • | • | | |
| 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 | | |
| • | | • | Slave only | | | |

Protocols and Cables (cont'd)

| <i>DirectLOGIC PLC Protocols Supported</i> | | | | | | |
|--|--------|------------------|------------|------------|------------|------------|
| CPU | Port | <i>DirectNET</i> | 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.