

Select a Communication Interface

The way that you connect your printer to a data source depends on the communication options installed in the printer. You may use any available connection to send commands and label formats from a host computer to the printer.

Caution • Connecting a data communications cable while the power is ON may damage the printer.

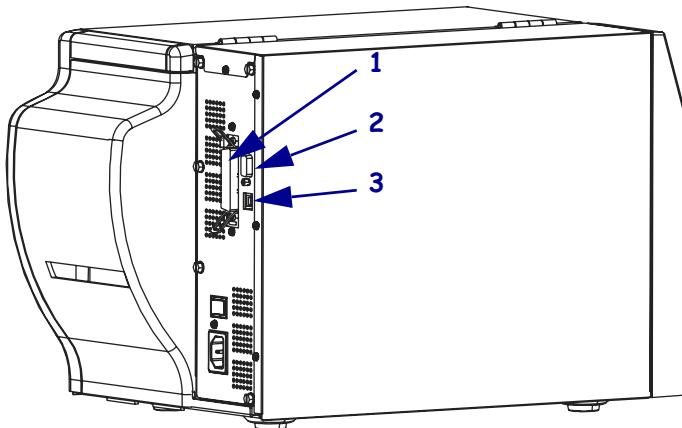


Note • You must supply all interface cables for your application. Refer to *Data Cable Requirements* on page 24 for specific cable requirements.

Connector Locations

Refer to [Figure 9](#). The printer comes standard with an Electronics Industries Association (EIA) RS-232 serial interface (DB-9 connector), an IEEE 1284 bidirectional parallel interface (unless replaced with an optional print server port), and a USB 1.1 port. You may use any of these interface methods to send commands and label formats from a host to the printer.

Figure 9 • Cable Connections



1	Parallel interface connector (not available on units that have an optional print server port)
2	DB-9 serial interface connector
3	USB 1.1 connector

Types of Connections

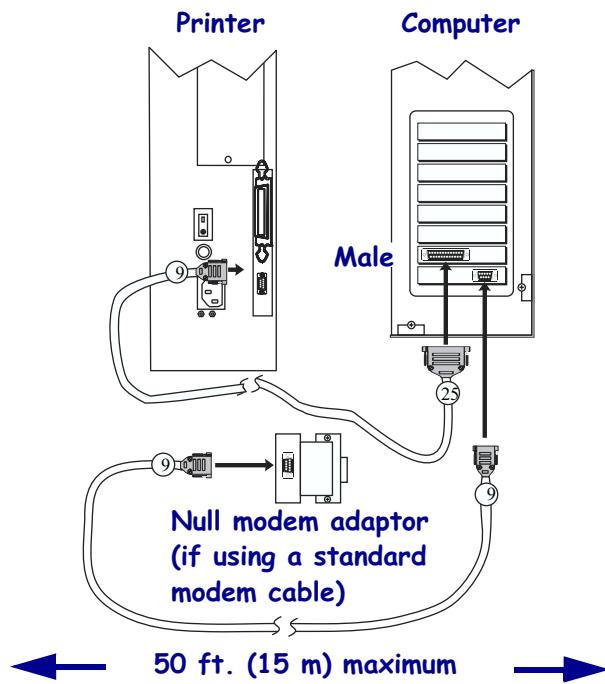
The method of connecting the printer to a data source depends on the communication options installed in the printer and the host. This section provides basic information about common interfaces.

When communicating via the serial data port (RS-232), the baud rate, number of data and stop bits, the parity, and the XON/XOFF or DTR control should be set to match those of the host computer. See *Password Level 3 Parameters* on page 65 to configure these parameters. When communicating via the parallel port or the USB port, the previously mentioned parameters do not apply.

RS-232 Serial A serial communication method consisting of data and control signals; available as a standard feature on most PCs and other hosts.

- *Advantages:* Cables and connectors are readily available from computer equipment stores and suppliers; easy to connect; two-way communication between the host and the printer.
- *Disadvantages:* Slower than the parallel connection; limited to 50 feet (15.24 m) of cable.

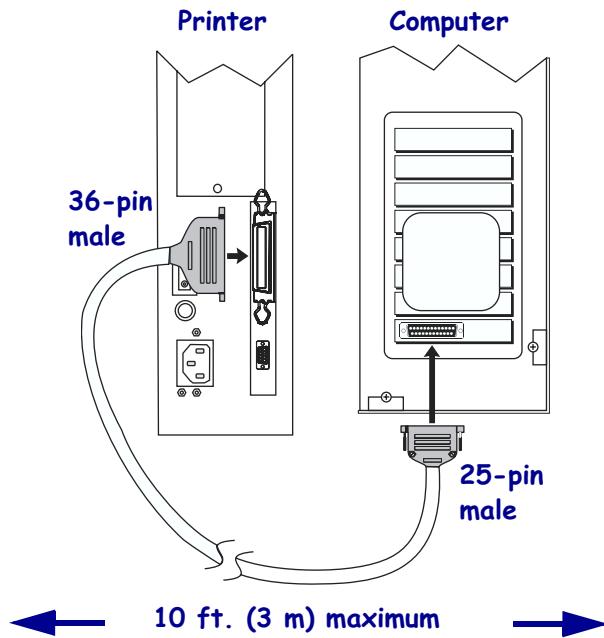
Figure 10 • Communicating Using a Serial Data Port



IEEE 1284 Bidirectional Parallel A common communication method available on most PCs and other hosts.

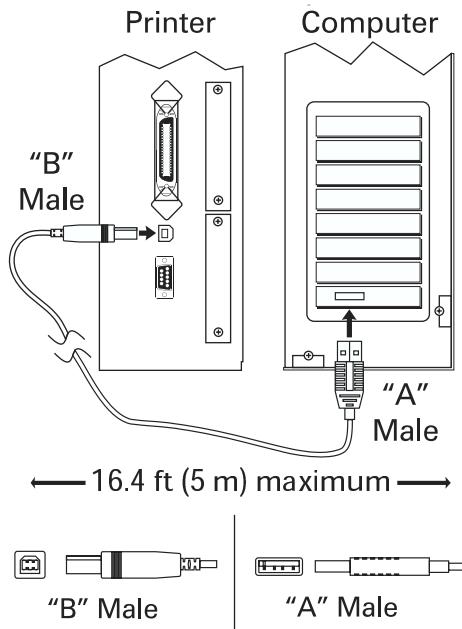
- *Advantages:* Fastest of the communication interfaces; cables and connectors are readily available from computer equipment stores and suppliers; two-way communication between the host and the printer; easy to connect.
- *Disadvantages:* Shorter recommended cable length of 6 feet (1.83 m) with a maximum of length 10 ft (3 m); many computers are equipped with only one parallel port, allowing only one IEEE 1284 bidirectional device to be connected at a time.

Figure 11 • Communicating Using a Parallel Port



USB 1.1 Port Communicating using the USB port (see [Figure 12](#)) does not require special settings.

- *Advantages:* Many computers are equipped with more than one USB port, allowing multiple USB devices to be connected at one time; cables and connectors are readily available from computer equipment stores and suppliers; two-way communication between the host and the printer; easy to connect.
- *Disadvantages:* Cable length limited to 16.4 ft (5 m).

Figure 12 • Communicating Using a USB Port

Optional Print Servers Ethernet-based print servers also are available to connect your printer to a data source. Both wired and wireless options are available.

- With the ZebraNet Wireless Print Server board installed, a wireless PCMCIA card can be used to communicate with a network. For more information on this option, see the *ZebraNet Wireless Print Server User Guide*.
- ZebraNet 10/100 Print Server (10/100 PS). For more information on 10/100 PS, see the *ZebraNet 10/100 Print Server User and Reference Guide*.

Data Cable Requirements

Data cables must be fully shielded and fitted with metal or metallized connector shells. Shielded cables and connectors are required to prevent radiation and reception of electrical noise.

To minimize electrical noise pickup in the cable:

- Keep data cables as short as possible.
- Do not bundle the data cables tightly with the power cords.
- Do not tie the data cables to power wire conduits.



Note • Zebra printers comply with FCC Rules and Regulations, Part 15 for Class B Equipment using fully shielded, 6.5 ft (2 m) data cables. Use of unshielded cables may increase radiation above the Class B limits.