

Connecting your Printer to a Computer

The Zebra® GK888 printers support a variety of interface options and configurations. These include: Universal Serial Bus (USB) interface, **RS232 Serial**, and Parallel (IEEE 1284.4).

- USB, Serial and Parallel

The Zebra Setup Utility is designed to assist you with installing these interfaces. The cabling and unique parameters for each of these physical printer communication interfaces is discussed in the following pages to assist you with making configuration setup choices prior to and immediately following applying power. The Zebra Setup Utilities configuration wizards will instruct you to turn the printer's power on at the appropriate time to complete the installation of your printer.



Caution • Keep the power switch in the OFF position when attaching the interface cable. The power cord must be inserted into the power supply and the power receptacle on the back of the printer before connecting or disconnecting the communications cables.

Interface Cable Requirements

Data cables must be of fully shielded construction 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 (6 foot [1.83 m] recommended).
- Do not tightly bundle the data cables with power cords.
- Do not tie the data cables to power wire conduits.



Important • This printer complies with FCC “Rules and Regulations,” Part 15, for Class B Equipment, using fully shielded data cables. Use of un-shielded cables may increase radiated emissions above the Class B limits.

Serial Communications

The printer has a DCE serial communication port for hardware compatibility with legacy 888 printers. The required cable must have a nine-pin “D” type (DB-9P) male connector on one end which plugs into the mating (DB-9S) serial port located on the back of the printer. The other end of this signal interface cable connects to a serial port on the **host computer**. The cable is a **Straight Through** signal connection cable. (corrected wck) Pinout information in Appendix A is incorrect. A Straight Through connection is required. (corrected wck)

The serial port communication settings between the printer and host (typically a PC) must match for reliable communication. The Bits per second (or Baud rate) and Flow control are the most common settings that get changed. The host (typically a Windows PC) needs to have the data Flow control changed to match the printer’s default communication method: Hardware and is noted by the Host Handshake setting **DTR/Xon/Xoff**. This combined hardware (DTR) and software (Xon/Xoff) mode may need to change depending upon use with non-Zebra application software or the serial cable variation in use.

Serial communications between the printer and the host computer can be set by:

- Autobaud synchronization
- ZPL programming **^SC** command
- EPL programming **Y** command
- Resetting the printer to its default printer configuration.

Autobaud

Autobaud synchronization allows the printer to automatically match the communication parameters of the host computer. To autobaud:

1. Press and hold the feed button until the green status LED flashes once, twice, and then three times.
2. While the status LED flashes, send the **^XA^XZ** command sequence to the printer.
3. When the printer and host are synchronized, the LED changes to solid green. (No labels will print during autobaud synchronization.)

ZPL **^SC** Command

Use the Set Communications (**^SC**) command to change the communications settings on the printer.

1. With the host computer set at the same communications settings as the printer, send the **^SC** command to change the printer to the desired settings.
2. Change the host computer settings to match the new printer settings.

Refer to the *ZPL Programming Guide* for more information about this command.

EPL Y Command

Use the serial port setup (**Y**) command to change the communications settings on the printer.

1. With the host computer set at the same communications settings as the printer, send the **Y** command to change the printer to the desired settings. Note: the **Y** command does not support setting the data flow control, use the **Xon/Xoff** setting.
2. Change the host computer settings to match the new printer settings.

Refer to the *EPL Page Mode Programming Guide* for more information about this command.

Resetting the Default Serial Port Parameters

Do the following to reset the communications parameters on the printer to the factory defaults (serial communication settings are: **9600** baud, **8** bit word length, **NO** parity, **1** stop bit, and **DTR/XON/XOFF** data flow control).

1. Press and hold the feed button until the green status LED flashes once, waits a moment and flashes twice, and then waits again before flashing three times (release immediately).
2. While the status LED rapidly flashes amber and green, press the feed button. Serial communications between the printer and the host computer can be set by the ZPL **^SC** command or the EPL **Y** command.

Note • Early models of Zebra® printers running the EPL programming language had **9600** baud, **NO** parity, **8** data bits, **1** stop bit and a **HARDWARE** and **SOFTWARE** (merged) data control (essentially DTR/Xon/Xoff) as the default serial port settings. The Windows operating system flow control setting was Hardware for most applications.

