USER MANUAL

MODEL 80 and 80C
MagiConnector™ & Micro MagiCable™

PATTON
Electronics Co.

1.0 WARRANTY INFORMATION

Patton Electronics warrants all Model 80/ 80C components to be free from defects, and will—at our option—repair or replace the product should it fail within one year from the first date of shipment.

This warranty is limited to defects in workmanship or materials, and does not cover customer damage, abuse or unauthorized modification. If this product fails or does not perform as warranted, your sole recourse shall be repair or replacement as described above. Under no condition shall **Patton Electronics** be liable for any damages incurred by the use of this product. These damages include, but are not limited to, the following: lost profits, lost savings and incidental or consequential damages arising from the use of or inability to use this product. **Patton Electronics** specifically disclaims all other warranties, expressed or implied, and the installation or use of this product shall be deemed an acceptance of these terms by the user.

1.1 SERVICE

All warranty and non-warranty repairs must be returned freight prepaid and insured to Patton Electronics. All returns must have a Return Materials Authorization number on the outside of the shipping container. This number may be obtained from Patton Electronics Technical Service at **(301) 975-1007**. *Packages received without an RMA number will not be accepted.*

Patton Electronics' technical staff is also available to answer any questions that might arise concerning the installation or use of your Model 80/ 80C. Technical Service hours: **8AM to 5PM EST, Monday through Friday.**

2.0 GENERAL INFORMATION

Thank you for your purchase of this Patton Electronics product. This product has been thoroughly inspected and tested and is warranted for One Year parts and labor. If any questions or problems arise during installation or use of this product, please do not hesitate to contact Patton Electronics Technical Support at (301) 975-1007.

2.1 FEATURES

• Semi-automatic, universal computer/peripheral matching
• Reduces the time and cost of making special cables
• Automatically matches data, handshake and control lines
• Data rates to 19.2 Kbps
• Transparent to protocol, word length or character format
• Requires no AC power or batteries
• Male and female connectors on both ends
• Ideal for demonstration and field service
• Miniature size

2.2 DESCRIPTION

The Model 80 and 80C are semi-automatic RS-232 interface adapters designed to solve problems normally associated with the use of the RS-232 interface standard. They contain logic circuitry which automatically reconciles RS-232 data and handshake lines, dramatically reducing the time spent in designing and troubleshooting a connection between a computer and a peripheral.

The Model 80 series is well suited for use in micro, mini or mainframe computer environments, wherever the RS-232 interface is used and there is a need for a temporary or permanent connection. The device is ideal for computer salesmen, technicians, businessmen, or anyone else who needs quick and reliable connections for a variety of products. In addition, the versatility and low cost make the Model 80 & 80C a vital product for computer end users. This Intelligent RS232 Interface can replace a costly custom-made cable and eliminate hours of troubleshooting of a malfunctioning RS-232 channel. An added bonus is a truly flexible connection, always ready to immediately accommodate a new peripheral.

3.0 OPERATION

The Patton Model 80/ 80C requires no configuration and is easy to use. The following steps demonstrate the operation of your unit.

1. Plug the female connector of the Model 80/ 80C into the computer's serial port male connector. Plug the peripheral cable's female connector into the Model 80/ 80C.

2. Power up the equipment. **NOTE:** As you face the computer, up is towards the computer.

3. Set SW1 (on left) down. If LED2 (lower left) glows, slide SW1 up.

4. If both data indicators: LED3 & LED4 (on right) glow, the Model 80/ 80C is configured for communications.

5. If only one LED glows, then change SW2 (on right) to see if data can be transmitted in either position. Both data indicators must be on for full duplex operation.

6. If still no transmission is possible, check LED1 (upper left). If it glows permanently, then your equipment requires non-standard connection.

    NOTE: Sometimes only LED 3 or 4 will glow in either position of switch S2. This is usually the case with receive-only peripherals, such as some printers. In such cases the correct position of switch S2 has to be determined experimentally by trying to send data with switch S2 in both positions.

    LED 1 is the handshake indicator. It usually flickers during data transmission, indicating active handshake operation of the RS-232 interface. If the light stays on, it signals that the transmission is disabled on either the peripheral or computer side.

4.0 OPERATION

Most application problems associated with the use of this Intelligent RS-232 Interface arise from mismatched data rates or character formats. Software problems, such as data being sent to a wrong port or not being sent at all, mismatched transmission modes (e.g. full duplex and half duplex), etc., are also responsible for many difficulties.

In case transmission is disabled either by software or by the peripheral being off-line (LED 1 is permanently lit indicating such a condition), it is possible to use the diagnostic capabilities of the Model 80/ 80C to determine the source of the problem: Disconnect the cable from one piece of equipment and check LED 1. If the light is on, then the device which remains connected is causing the problem. If the light is off, then the device which is now disconnected was probably causing the problem.

Interface Standard: RS-232

Transmission Format: Asynchronous

Transmission Speed: Up to 19.2 Kbps

Handshake: X-On/X-Off, RTS/CTS, DTR/DSR and other RS-232 signal combinations

Connectors: Female on computer side and male on peripheral side (Model 80); female and male connector on both sides (Model 80C)

Enclosure: High impact ABS DM plastic

Dimensions: 2.25"l x 2"w x .63"h

These four versatile pin configurations will reconcile 90% of all asynchronous connections. Once you've found the switch setting which works for your application, you can order the proper cable or cable adapter from us by specifying the switch positions on your MagiConnector. Now you can put your MagiConnector to work on another application.

When you are ordering these cables or adapters or making your own, note that none of the following pin diagrams are symmetrical. (You will need to associate the gender of each side of the cable with the computer or peripheral side of the Model 80/ 80C).

Model 80/80CPin Out Diagram with Associated Switch Settings
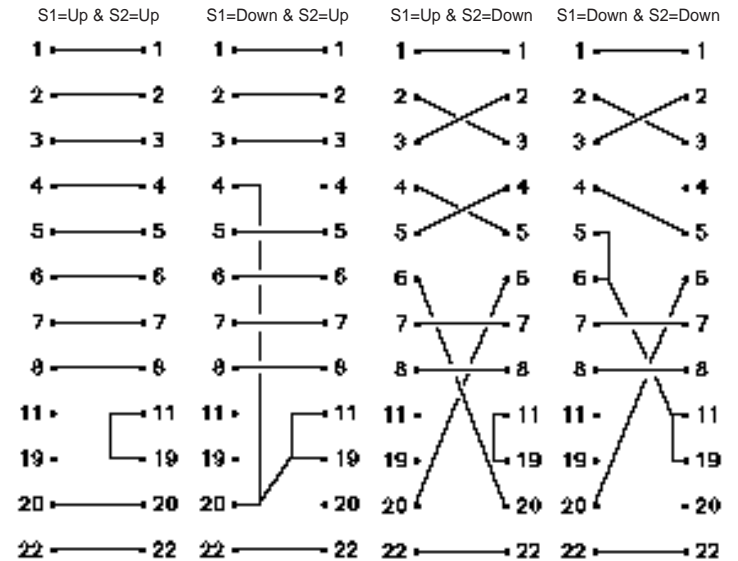
NOTE: In these diagrams, the left side is the computer side or female connector on the Model 80/ 80C. The right side is the peripheral side or male connector on the Model 80/ 80C.