

MORE ON SPECIFICATIONS

Overview

This file provides additional information about the M202Plus's hardware. It should be used if you cannot find what you need in the M202Plus product manual.

Within this file, you will find information about:

- network connector pinouts - *Network Connectors* on page 2.
- parallel port pinouts - *Parallel Ports (PRN1, PRN2)* on page 2.
- serial port pinouts - *Serial Ports (COM1, COM2)* on page 4.

IMPORTANT PINOUTS

Network Connectors

Table 1: UTP (RJ45) Connector Pinout

| Pin | Signal | Source |
|-----|-----------|----------|
| 1 | Transmit+ | M202Plus |
| 2 | Transmit- | M202Plus |
| 3 | Receive+ | Network |
| 4 | none | none |
| 5 | none | none |
| 6 | Receive- | Network |
| 7 | none | none |
| 8 | none | none |

Parallel Ports (PRN1, PRN2)

Two IBM PC compatible parallel interfaces (Centronics), IEEE 1284-I compliant, female DB25 connectors.

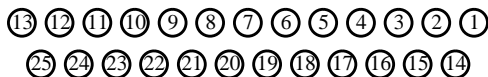


Table 2: PRN1/PRN2 Pinout

| Pin | Signal | Source |
|------------|---------------|---------------|
| 1 | -STROBE | M202Plus |
| 2 | DATA 1 | M202Plus |
| 3 | DATA 2 | M202Plus |
| 4 | DATA 3 | M202Plus |
| 5 | DATA 4 | M202Plus |
| 6 | DATA 5 | M202Plus |
| 7 | DATA 6 | M202Plus |
| 8 | DATA 7 | M202Plus |
| 9 | DATA 8 | M202Plus |
| 10 | -ACK | Printer |
| 11 | BUSY | Printer |
| 12 | PE | Printer |
| 13 | SLCT | Printer |
| 14 | -AUTOFD | M202Plus |
| 15 | -ERROR | Printer |
| 16 | -INIT | M202Plus |
| 17 | -SLCTIN | M202Plus |
| 18-25 | GROUND | - |

Serial Ports (COM1, COM2)

Dual bi-directional IBM AT compatible serial interfaces, male DE09 connectors. Act as DTEs.

**Table 3: COM1/COM2 Pinout**

| P i n | Abbr. | Name | Source |
|----------------------|--------------|---------------------|---------------|
| 1 | DCD | Data Carrier Detect | DCE |
| 2 | RXD | Receive Data | DCE |
| 3 | TXD | Transmit Data | DTE |
| 4 | DTR | Data Terminal Ready | DTE |
| 5 | GND | Signal Ground | - |
| 6 | DSR | Data Set Ready | DCE |
| 7 | RTS | Request to Send | DTE |
| 8 | CTS | Clear to Send | DCE |
| 9 | +12V | 12V Power Supply | DTE |

Most often, printers attached are 25-pin DTEs.

Table 4: 25-Pin Serial Device Pinout

| P i n | Abbr. | Name | Source |
|--------------|--------------|---------------------|---------------|
| 2 | TXD | Transmit Data | DTE |
| 3 | RXD | Receive Data | DCE |
| 4 | RTS | Request to Send | DTE |
| 5 | CTS | Clear to Send | DTE |
| 6 | DSR | Data Set Ready | DCE |
| 7 | GND | Signal Ground | - |
| 8 | DCD | Data Carrier Detect | DCE |
| 20 | DTR | Data Terminal Ready | DTE |
| 22 | RI | Ring Indicator | DCE |

Serial Flow Control Methods

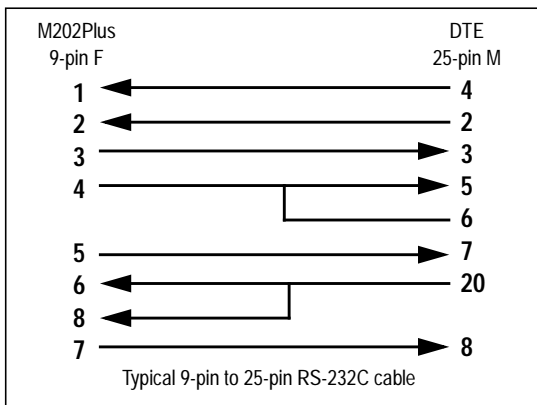
The M202Plus's serial ports support both software and hardware flow control:

Software Default setting. Indicated by "ixon". Uses XON/XOFF.

Hardware Indicated by "ctsflow". Uses RTS/CTS signals.

Minimal cable requirements for software flow control are pins 2, 3, and 7. This may not be as robust as hardware flow control so a fuller cable pinout is recommended allowing for either flow control method down the road.

The following schematic shows the most common 9-pin to 25-pin setup. This setup relies on the DTR signal meaning that the printer must toggle DTR if it can or cannot take more data. If the printer uses another signal to do this, this schematic will not work. Therefore, the key to hardware flow control working properly is to know what signal the printer toggles when it is able to accept more data. Once you know this, you can make this signal go to the CTS pin (i.e. Pin 8) on the M202Plus's serial interface.



Note: Sometimes devices are attached to the M202Plus's serial ports that have 9-pin connectors (e.g. PCs and some terminals). When choosing the correct 9-pin to 9-pin serial cable for this setup, remember to cross over pins 2 and 3 (i.e. Transmit and Receive). Otherwise, you will have Transmit going to Transmit and Receive going to Receive resulting in no data flow between the two devices.