Grounding the Programmer

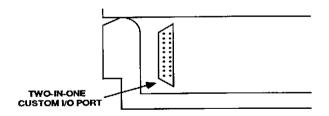
The 212 Multi Programmer is shipped with a three-wire power cable. This cable connects the chassis of the programmer to earth ground when connected to a properly grounded three-wire ac receptacle.

WARNING

Continuity of the grounding circuit is vital for the safe operation of the unit. Never operate this equipment with the grounding conductor disconnected.

I/O PORT CONNECTIONS

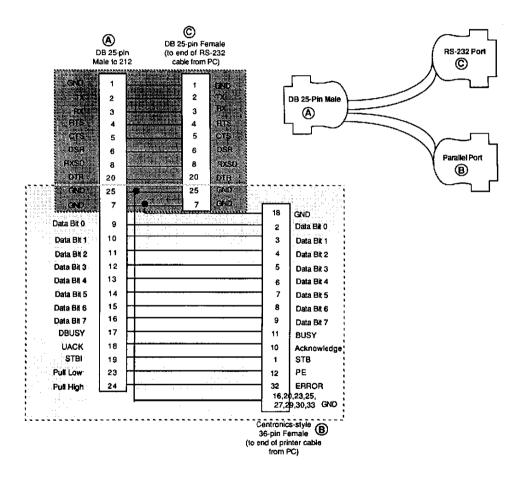
The 212 Multi Programmer is equipped with a two-in-one custom I/O port which is located on the back panel of the programmer (see illustration). The port is a combination RS-232C and parallel port selectable from the front panel menu. The cable connections required for the RS-232 or parallel connector for each mode are shown in the illustration below.



1-6 212 Multi Programmer

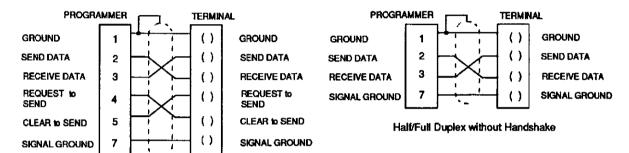
NOTE

An optional "y-style" adapter cable is available from Data I/O for use with a Centronix parallel cable which will allow the user to connect the 212 using a standard parallel cable. Additionally, the "y-style" cable allows the customer the convenience of having the RS-232 and parallel cables connected simultaneously. The pinouts of the adapter cable are shown below:



RS-232 Port Cable Connections

The RS-232 compatible I/O port can be linked to a terminal, computer, or other development systems in either a handshake or non-handshake mode. The cable connections required for the RS-232 for each mode are shown in the following illustrations:



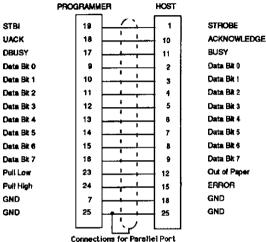
Half/Full Duplex with Handshake

NOTES

- 1. All signals are named with respect to the originating unit.
- 2. All undesignated pins are to be left open.
- For applications that do not require handshaking, the programmer's "clear to send" line is pulled up internally.
- 4. Host system's pin numbers may differ.

Parallel Port Cable Connections

The parallel port can be linked to a system capable of transmitting only or transmitting and receiving data through a parallel port. The cable connections required for each mode are shown in the following illustrations:



PROGRAMMER HOST 18 **UACK/STBO** STROBE **ACKNOWLEDGE** DACK 22 10 11 BUSY STBI/BUSY 19 Data Bh 0 2 Data Bit 0 Data Bit 1 Data Bit 1 10 11 Date Bit 2 Data Bit 2 12 Data Bit 3 Data Bit 3 Data Bit 4 13 Data Bit 4 Oata Bit 5 Data Bt 5 14 Data Bit 6 Data Bit 6 15 Data Bit 7 16 Data Bit 7 7 GND GND 16 25 GND GND

Connections for Parallel Port for Uploading from 212 to Host

for Downloadingto 212 from Host

Notes

- 1. All undesignated pins are to be left open.
- 2. Host system pin numbers may differ.
- 3. Some host systems may not be capable of receiving parallel data.
- 4. Separate cables are required for uploading and downloading parallel data.