## IB-RS232 Interface Instructions



Warning: Do not apply power while module is being connected or disconnected. Doing so may damage the display and void warranty.

Interface Connector J2

| Pin \# | Signal | Description |
| :--- | :--- | :--- |
| 1 | Boot M | Boot Mode Float $=$ Program Mode, GND $=$ Normal Mode |
| 2 | TXD | T10UT from RS232 Transceiver |
| 3 | RXD | R1IN from RS232 Transceiver |
| 4 | RESET | RESET Use open collector device to ground $\quad$ SW1 |
| 5 | GND | Ground |
| 6 | 5V | Voltage $\ln \mathbf{5 V}+/ \mathbf{- 1 0 \%}$ @ 250mA |

RS-232 DB9 J3

| Pin \# | Description |
| :--- | :--- |
| 1 | N/C |
| 2 | TX (Amulet GUI module transmits data on Pin 2 while the PC receives data on Pin 2) |
| 3 | RX (Amulet GUI module receives data on Pin 3 while the PC transmits data on Pin 3) |
| 4 | Pin 4 to 6 - Jumpered |
| 5 | Ground |
| 6 | Pin 4 to 6 - Jumpered |
| 7 | Pin 7 to 8 - Jumpered |
| 8 | Pin 7 to 8 - Jumpered |
| 9 | N/C |

The serial parameters for communications between the Amulet client and the server are, as follows:

Baud Rate: 9600, 19200, 57600, or 115200bps
Parity: None
Data Bits: 8
Stop Bits: 1
See Communications Protocol for more information.

## DIP Switch Settings

The Easy GUI controller board can be powered up in different modes via the settings of the DIP switch (SW2). Some of the power up modes include: programming mode, run mode, RAM test mode, and touch panel mode.


Figure 5. DIP Switch Settings
Boot Mode (Switch 1) -- This switch is monitored during a reboot to determine the operational mode of the controller board; ON is the normal mode and OFF is the FLASH program mode. The only time you should have to set Switch 1 to OFF (program mode) is when the project you compiled locks up the Amulet OS to the point where it won't accept the wake up message or if the Amulet OS has been corrupted and you need to reload the OS.

Flash Mode Baud Rate (Switch 2) -- This switch sets the baud rate used during a Flash Reprogram. The ON position sets the hardware to 19,200 baud; OFF sets the hardware to 115,200 baud. This setting must match the baud rate selected in the Amulet Compiler software.

Touch panel Mode (Switch 4) -- This switch should remain ON during normal operation. Turn this switch OFF and then reboot the controller board to begin a touch panel calibration. The controller will display a series of three calibration targets. Use a stylus to touch the center of each target. If necessary, the controller will repeat the calibration. When calibration is complete, the controller will return to normal operation. The switch must be returned to the normal mode (ON) before the next reboot to continue normal operation.

