

Remote Port Communication

Hardware

The RS232 port runs at 9600 baud, 8 bits, no parity, and 1 stop bit. The pins required are:

- 2 RxD (into the SS1),
- 3 TxD (out to the Host), and
- 5 Ground.

When attaching to an IBM PC compatible computer a null modem is required (pin 2 to pin 3, pin 3 to pin 2, pin 5 to pin 5).

No flow control is used.

Software

This section is for programmers to write the software to remotely control the SS1.

The commands available are as follows:

1. Select a segment to be connected to the common segment,
2. Lock the Front Panel;
3. Unlock the Front Panel;
4. Find out which segment is connected to the segment; and
5. Get a report of the software version number and the activity status of all the segments.

All commands have `<cr> // |` as a header (0x0d, 0x2f, 0x2f,0x7c) and are terminated with another `<cr>`.

To select a segment, send: `<cr> // | AnK <cr>`

The n in that string represents the segment that should be attached to the common segment.

Example:

`<cr> // | A3K <cr>` selects segment 3 to be connected to the common segment (A). This protocol is designed to be expandable to more than 1 common segment. If it is used in a 3 by 5 segment switch side would range from 1 to 5.

Note: The SS1 has 1 common segment, so the letter would always be an "A".

To lock the front panel, send: `<cr> // | L <cr>`

To unlock the front panel, send: `<cr> // | U <cr>`

To find out which segment is connected to the common segment, send `<cr> // | S <cr>`

The response is: `<cr> // | Ank <cr>`, where n is the segment that is connected to the common segment.

To get a report, send: `<cr> // | R <cr>` or `<cr> // | ? <cr>`

The response is:

<cr> // | A Paralan SS1 Vx.xx Raaa <cr>, where x.xx is the software version number, R is a flag for whether the Front Panel is L(locked) or U(nlocked), and aaa is a hexadecimal representation of Activity on all of the segments. Note that the SS1 can handle 9 segments (plus the common segment). If you have less than 9 segments, the unused segments will show as if Activity is on.

Example response in a 6 segment SS1:

<cr> // | A Paralan SS1 V1.00 R1c4 <cr>.

This shows that; the software is version 1.00, the Front Panel is unlocked, and that Activity is true on segment 3 (0x1c4=0x 1100 0100). Since there are only 6 segments, the unused ones show up as if Activity is true.