

ELITE PLASMA DISPLAY

RS-232C Control

PRO-1540HD

AUGUST 2006

RS232C Control for Pioneer Plasma Displays

1.0 Communication mode

The default communication mode for many of our newer displays is SR+ mode. In this mode the display will not receive RS232C commands.

Before using RS232C control you must set the communication mode.

The remote control can be used to change the communication mode.

(Note) RS232C control and SR+ function cannot be used simultaneously.

1.1 Communication mode - From SR+ to RS-232C

Communication mode and baud rate selected by Integrator menu

With the plasma display in "Standby", press and release the Home Menu key then press and release the Power key within 3 seconds. The Integrator Menu will appear.



A. Default is SR+ ON.



B. Left (<) key turns SR+ OFF.



C. Down (V) key then Left or Right keys to set the desired Baud Rate.

In this menu the user can change the communication mode and baud rate using the Left and Right keys. UART SELECT: 1200bps/2400bps/4800bps/9600bps (232C default)/19200bps/38400bps

Push the Home Menu key to close the Integrator Menu and return to normal operation.

1.2 RS-232C Cable & Communication Settings

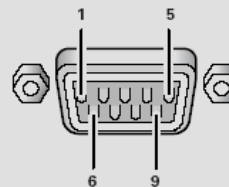
All 2006 plasma display models use a "Straight" or "Pass-Through" Cable

1) Connector

D-sub 9 pins (male)

2) Pin layout

| Pin No. | Signal | Pin No. | Signal |
|---------|---------------------|---------|-----------------------|
| 1 | NC (not connected) | 6 | NC (not connected) |
| 2 | TxD (Transmit Data) | 7 | NC (not connected) |
| 3 | RxD (Receive Data) | 8 | RTS (Request To Send) |
| 4 | NC (not connected) | 9 | NC (not connected) |
| 5 | GND | | |



3) Baud Rate

9600 bps (standard)

(switch-able to 1200, 2400, 4800, 19200, 38400 bps)

Note

The panel's baud rate should be set to match the computer's baud rate.

Also, when extending the RS-232C cable over a long distance, lower the baud rate.

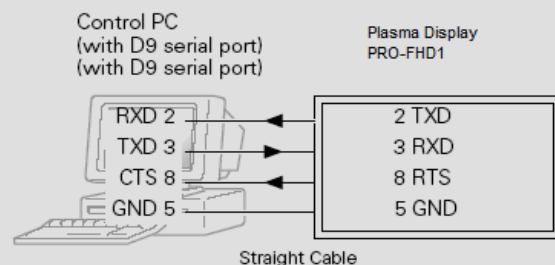
4) Data format

Start: 1 bit

Data: 8 bit

Parity: 0 (no parity)

Stop: 1 bit



Straight Cable

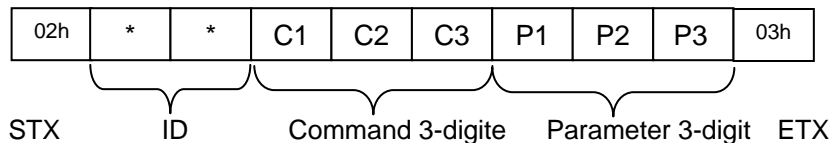
2. Communication procedure

UTo send control commands from a computer/controller via a RS-232C connection.

Pioneer plasma displays do not support hardware hand-shaking. Enter a command then wait for a response or an appropriate amount of time before entering the next command.

2.1 Command Format with parameter

These are examples and may not apply specifically to the model that you are controlling: please check the model specific control chart that follows.



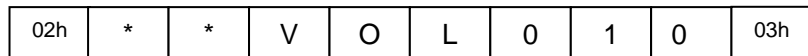
| | |
|-----------|--|
| STX | Start condition (fixed value 02h) |
| ID | Fixed value ** (** is the value for consumer displays) |
| Command | 3byte (ASCII) |
| Parameter | 3byte (ASCII) |
| ETX | Stop condition (fixed value 03h) |

Parameter

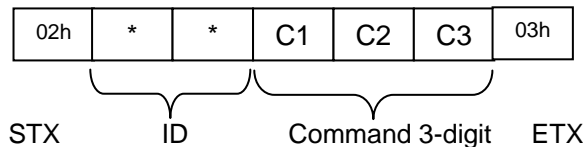
| Parameter | Description |
|-----------|-----------------------|
| 000~999 | |
| UPx | Up x step (x = 0-9) |
| DWx | Down x step (x = 0-9) |

Command example

Set volume at 10: 02, **, VOL, 010, 03



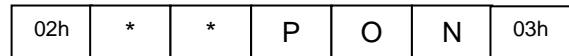
2.2 Command Format without parameter



| | |
|---------|--|
| STX | Start condition (fixed value 02h) |
| ID | Fixed value ** (** is the value for consumer displays) |
| Command | 3byte (ASCII) |
| ETX | Stop condition (fixed value 03h) |

Command example

Power On: 02, **, PON, 03



Programming Examples

Input 1 Command when using a Crestron brand controller: \x02**inps01\x03.

Input 1 Command when using an AMX brand controller SEND_STRING dvPLASMA, "\$02,**INPS01',\$03".

2.5 Restriction

1. The GUI is not displayed about the operation when using RS232C.
2. Last memory is not carried out about the performed operation by RS232C.
3. When an input selection is performed by a RS232C command (INPSP01...INPS06) PIP is canceled and the single screen display of the input that was chosen appears.

3. Commands for the Elite PRO-1540HD

| COMMAND | PARAMETER | FUNCTION |
|------------|------------|--|
| POF | | Power OFF |
| PON | | Power ON |
| VOL | xxx | VOLxxx Level Value (example: VOL015) |
| VOL | UPx | (x = 1-9) Increase value 1 – 9 |
| VOL | UP0 | Increase 10 value |
| VOL | UPF | Set To MAX value |
| VOL | DWx | (x = 1-9) Decrease value 1 – 9 |
| VOL | DW0 | Decrease 10 value |
| VOL | DWF | Set To MIN value |
| AMT | S00 | AUDIO Mute OFF |
| AMT | S01 | AUDIO Mute ON |
| INP | S01 | INPUT1 (Main Screen) |
| INP | S02 | INPUT2 (Main Screen) |
| INP | S03 | INPUT3 (Main Screen) |
| INP | S04 | INPUT4 (Main Screen) |
| INP | S05 | INPUT5 (Main Screen), HDMI |
| INP | S06 | INPUT6 (Main Screen), HDMI |
| INP | S07 | PC (VGA) |
| AVS | S01 | AV Selection : STANDARD |
| AVS | S02 | AV Selection : DYNAMIC |
| AVS | S03 | AV Selection : MOVIE |
| AVS | S04 | AV Selection : GAME |
| AVS | S06 | AV Selection : PURE |
| AVS | S07 | AV Selection : USER |
| AVS | S08 | AV Selection : ISF-DAY (after calibration) |
| AVS | S09 | AV Selection : ISF NIGHT (after calibration) |
| SZM | S00 | Screen Size : Dot by Dot/Partial (PC Only) |
| SZM | S01 | Screen Size : 4:3 |
| SZM | S02 | Screen Size : FULL/FULL1080i |
| SZM | S03 | Screen Size : ZOOM |
| SZM | S05 | Screen Size : WIDE |
| MST | S00 | Single-Window Display |
| MST | S01 | Multi-Window : 2-screen(Main Screen Size : Normal) |
| MST | S08 | SWAP (Replace Sub-screen for Picture-in-Picture) |
| OSD | S00 | OSD Display OFF |
| OSD | S01 | OSD Display ON |
| SRS | S00 | SRS OFF |
| SRS | S01 | SRS ON |
| TBS | S00 | TRUBASS OFF |
| TBS | S01 | TRUBASS ON |
| FCS | S00 | FOCUS OFF |
| FCS | S01 | FOCUS ON |
| INA | xxx | Antenna A analog xxx channel (example: channel 35 = INA035) |
| INA | xxxxxx xxx | Antenna A digital xxxxxx xxx channel (example: channel 5.001 = INA000005001) |
| INB | xxx | Antenna B analog xxx channel (example: channel 81 = INB081) |
| INA or INB | FWD | Preset channel 1 step forward (example: INBFWD) |
| INA or INB | REV | Preset channel 1 step back (example: INAREV) |