

ELITE PLASMA DISPLAY

RS-232C Control

PRO-940HD

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

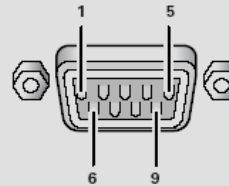
All 2006 plasma display models use a "Straight" or "Pass-Through" Cable

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.

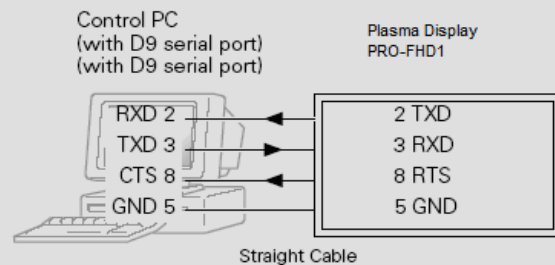
4) Data format

Start: 1 bit

Data: 8 bit

Parity: 0 (no parity)

Stop: 1 bit



Straight Cable

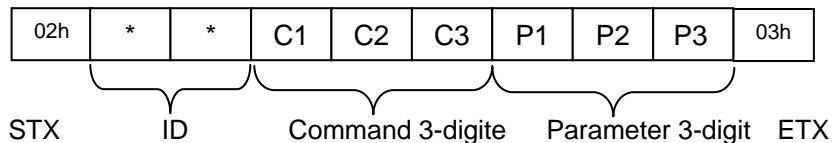
2. Communication procedure

To 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.



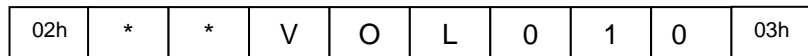
STX	Start condition (fixed value 02h)
ID	Fixed value ** (** is the value for consumer displays)
Command	3byte (ASCII)
Parameter	3byte (ASCII)
ETX	Stop condition (fixed value 03h)

Parameter

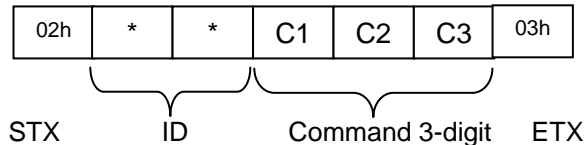
Parameter	Description
000~999	
UPx	Up x step (x = 0-9)
DWx	Down x step (x = 0-9)

Command example

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



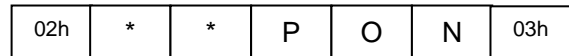
2.2 Command Format without parameter



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-940HD

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)