

ELITE PLASMA DISPLAY

RS-232C Control

PRO-1110HD & PRO-910HD

March 2005

RS232C Control for Pioneer Plasma Displays

1. Communication conditions

1.1 Communication mode

The default communication mode for many of the 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.

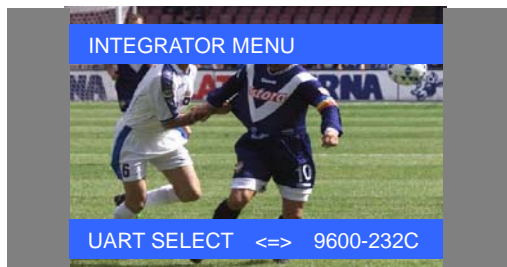
The remote control can be used to change the communication mode.

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

1.2 Communication mode and baud rate selection

1.2.1 Communication mode and baud rate selected by Integrator menu

Push Menu key then push Power key within 3 seconds. The Integrator Menu will appear similar to this picture.



In this menu the user can change the communication mode and baud rate using the Left and Right keys. UART SELECT: 9600bps(SR+)/1200bps/2400bps4800bps/9600bps(232C)/19200bps/38400bps

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

1.3 RS-232C Cable & Communication Settings

All plasma display models EXCEPT the PRO-1410HD use a Straight or Pass-Through Cable

1) Connector
D-sub 9 pins

2) Pin layout
(NOTE) Plasma is a DCE device.

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

3) Baud Rate
4800 bps (standard)
(switch-able to 1200, 2400, 9600, 19200 bps)
(NOTE) Set the baud rate to match that of the computer presently in use. Moreover, in the case that the RS-232C cable is very long, we recommend that you make the baud rate lower.

4) Data Format
Start: 1-bit
Data: 8-bit
Parity: 0 (no parity)
Stop: 1-bit

5) Connection

Control PC
(with D25 serial port)

RXD 3
TXD 2
CTS 5
GND 7

PLASMA DISPLAY
(PDP-502MX)

2 TXD
3 RXD
8 RTS
5 GND

Control PC
(with D9 serial port)

RXD 2
TXD 3
CTS 8
GND 5

PLASMA DISPLAY
(PDP-502MX)

2 TXD
3 RXD
8 RTS
5 GND

Straight Cable

* D-sub 9-pin/D-sub 25-pin conversion tables are now available on the market.

(NOTE) As computer manufactures may not use the same pin assignments. In case of communication difficulties, please check pin functions not just pin numbers.

2. Communication procedure

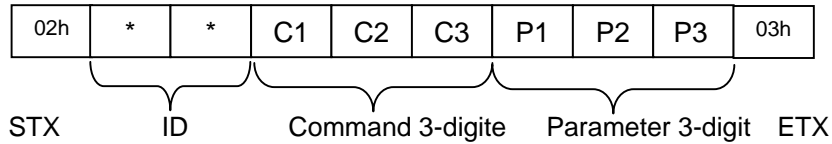
Send control commands from a compute via the RS-232C connection.

The display operates according to the received command and sends a response message to the computer.

Do not send multiple commands at the same time. Wait until the computer receives the OK response before sending 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 charts that follow.



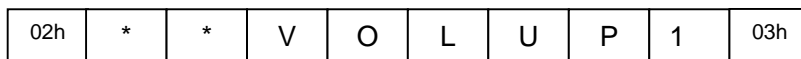
STX	Start condition (fixed value 02h)
ID	Fixed value **
Command	3byte (ASCII)
Parameter	3byte (ASCII)
ETX	Stop condition (fixed value 03h)

Parameter

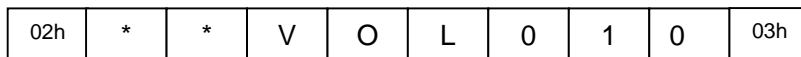
Parameter	Description
000~999	
Upn	Up n step
DWn	Down n step

Command example

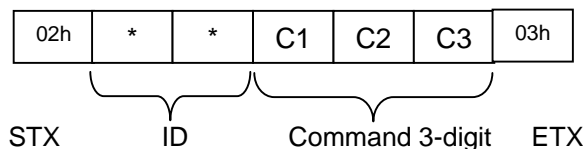
Up volume 1 step: 02, **, VOL, UP1, 03



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



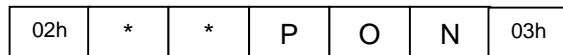
2.2 Command Format without parameter



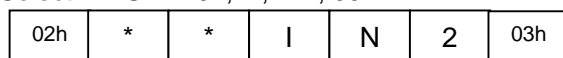
STX	Start condition (fixed value 02h)
ID	Fixed value **
Command	3byte (ASCII)
ETX	Stop condition (fixed value 03h)

Command example

Power On: 02, **, PON, 03



Select INPUT 2: 02, **, IN2, 03



2.5 Restriction

1. GUI is not displayed about the operation when using RS232C.
2. Last memory is not carried out about the operation by RS232C.
3. When input selection is performed by RS232C command (IN1...IN5/INA) PIP is canceled and the single screen display of the input that was chosen appears..

3. Commands for PRO-1110/910HD

Command	Parameter	Description
PON		Power On
POF		Power Off
IN1		Select INPUT 1
IN2		Select INPUT 2
IN3		Select INPUT 3
IN4		Select INPUT 4
IN5		Select PC
INA	001~125	Select Analog TV
INB	001~125	Select Analog TV
INC	001~125 001~999	Select Digital TV (Parameters are Major channel and Minor channel.)
ING		Select i Link input
VOL	000~060 UPn/DWn	Adjust audio volume
AMN		Mute Off
AMY		Mute On
CHN	UP1/DW1	Change TV channel (Up and Down by 1step only)
SM0		Screen mode: DOTbyDOT (PC only)
SM1		Screen mode: 4:3
SM2		Screen mode: FULL
SM3		Screen mode: ZOOM (Except PC and HD)
SM4		Screen mode: CINEMA (Except PC and HD)
SM5		Screen mode: WIDE (Except PC and HD)
SM8		Screen mode: FULL2(PC and HD only)
BR0		Set baud rate at 9600bps and communication mode at SR+ mode
BR1		Set baud rate at 1200bps (RS232C mode)
BR2		Set baud rate at 2400bps (RS232C mode)
BR3		Set baud rate at 4800bps (RS232C mode)
BR4		Set baud rate at 9600bps (RS232C mode)
BR5		Set baud rate at 19200bps (RS232C mode)
BR6		Set baud rate at 38400bps (RS232C mode)