

9. RS-232C SPECIFICATIONS

The Presenter can be controlled by a PC connected to the Presenter through the RS-232C terminal **[RS-232C]**.

○ Setting up

- (1) Open the OSD menu, select the <PC> setting by opening <MENU> → <OPTION> → <REMOTE> in this order, and close the Menu screen.

Note: Upon selection, the mouse is no longer operable.

- (2) Connect the Presenter to a PC with an RS-232C connection cable.

Note: When using an RS-232C cable available in the market, make sure of the connection shown the next page.

Note: To protect the Presenter and the PC, be sure to turn OFF all the power switches of all equipment before connecting.

- (3) Start the PC, and set the communication mode of the RS-232C to the communication mode of the Presenter.

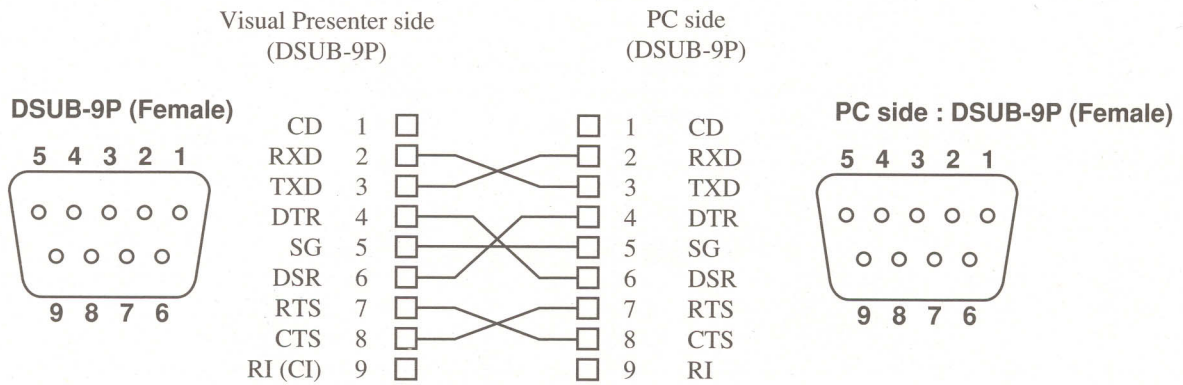
Note: For the information how to set the communication mode of the RS-232C, refer to the instruction manual of the PC.

- (4) Start the PC program to operate the Presenter.

- (5) Control through the RS-232C will start.

Note: For communication control, be sure to take the above steps for setting.

○ Cable connection



○ RS-232C connector specifications (DSUB-9P)

Pin No.	Code	Name	Direction of data		Comments
			Visual Presenter	PC	
1	CD	Carrier Detect	—		CD : Carrier Detect
2	RXD	Received Data	←		RXD : Received Data
3	TXD	Transmitted Data	→		TXD : Transmitted Data
4	DTR	Data Terminal Ready	→		DTR : Data Terminal Ready
5	SG	Signal Ground	—		SG : Signal Ground
6	DSR	Data Set Ready	←		DSR : Data Set Ready
7	RTS	Request To Send	→		RTS : Request To Send
8	CTS	Clear To Send	←		CTS : Clear To Send

○ Table of the communication commands

Function	Command	Parameter	Data	Comments
Auto Focus	AF	0	■ ■	Command to execute the one-step Auto Focus.
Focus adjustment	FO	+ (NEAR) - (FAR) 0 (STOP)	■ ■	Command to adjust the Focus.
Zoom adjustment	ZO	+ (TELE) - (WIDE) 0 (STOP)	■ ■	Command to adjust the Zoom.
Iris adjustment	IR	+ (OPEN) - (CLOSE) 0 (STOP) 1 (NORMAL)	■ ■	Command to adjust the Iris.
Lighting selection	PL	0 (OFF) 1 (BASE) 2 (UPPER)	■ ■	Command to select the Lighting.
Input selection	AV	0 (MAIN) 1 (AV1) 2 (AV2)	■ ■	Command to select the Input.
Posi/Nega conversion	NP	0 (POSI) 1 (NEGA)	■ ■	Command to convert Posi/Nega.
Color/B&W selection	CB	0 (COLOR) 1 (B&W)	■ ■	Command to select Color/B&W.
Mouse Pointer display	PO	0 (OFF) 1 (ON)	■ ■	Command to turn ON/OFF the Mouse pointer display.
Mouse pointer movement	PM	0 (STOP) 1 (→) 2 (←) 3 (↑) 4 (↓) 5 (↗) 6 (↘) 7 (↙) 8 (↘)	■ ■	<ul style="list-style-type: none"> · When the mouse pointer is ON The mouse pointer moves. · When the image enlargement is ON The enlarged image moves. <ol style="list-style-type: none"> 1: To the right side. 2: To the left side. 3: To the upper side. 4: To the lower side. 5: To the upper right. 6: To the upper left. 7: To the lower right. 8: To the lower left.
Image enlargement	MA	0 (OFF) 1 (ON)	■ ■	Command to enlarge the image to double the area around the mouse pointer position.

Function	Command	Parameter	Data	Comments
Local lockout	LL	0 (OFF) 1 (ON)	■ ■	Command to invalidate the switches on the front panel, operation panel and wireless remote control.
Default	DF	0	■ ■	Command to reset to the initialized mode.
Status request	QS	0	■ ■	Command to inquire the status of the equipment.
ROM version	QR	0	■ ■	Command to refer to the ROM version.
Acknowledge check	SA	0 (OFF) 1 (ON)	■ ■	Command to select the command acknowledge for each operation command. Default is ON.
Add CR command	SC	0 (OFF) 1 (ON)	■ ■	Command to add CR [0Dh] to the end of the acknowledge data. Default is OFF.

Note: "■ ■" in the data column means that SPACE [20H] should be transmitted twice.

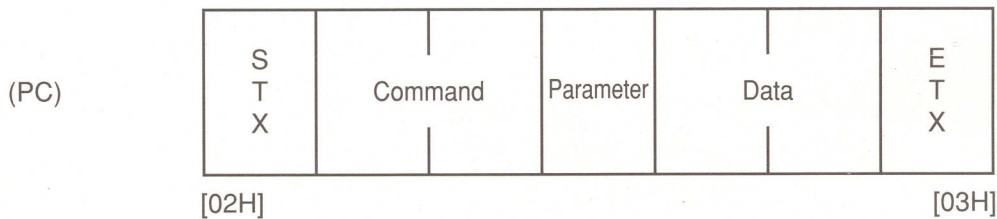
○ Data format specifications

This command is executed in the form of 1-command/1 packet. The next command is not accepted until the previous processing is completed.

- The communication command always starts with STX (Start of Text) [02H], and ends with ETX (END of Text) [03H].
- If the communication format or command name is wrong, NAK (Negative Acknowledgement) [15H] will be sent from the Presenter as a result of failing to receive correctly.
- When the communication format is correctly received, the Presenter sends ACK (Normal Acknowledgement) [06H].

● Transmission Command (PC → Visual Presenter)

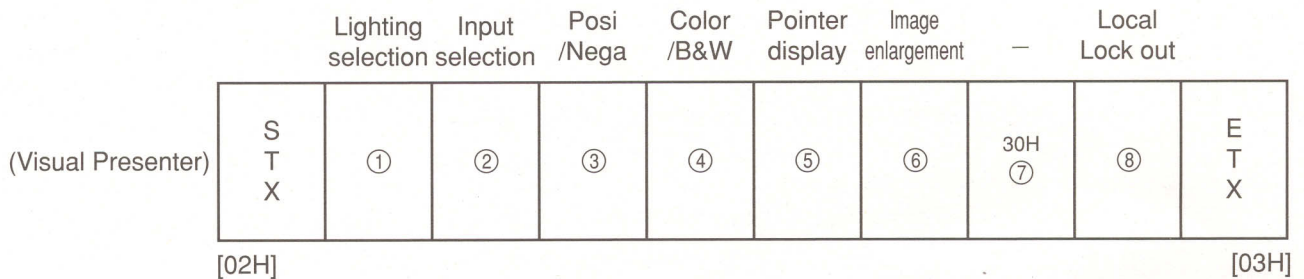
Each operation command is executed in ASCII code, and transmitted in a set of 7 bytes as follows:



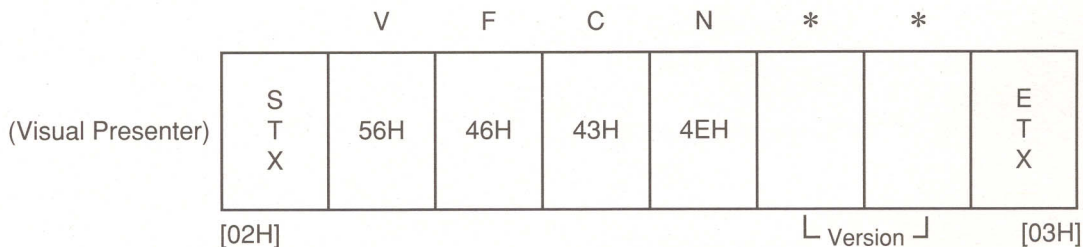
(Visual Presenter) → ACK
[06H]

● Response data format (Visual Presenter → PC)

- Status request format (Parameter 0)



- ROM version



○ **Transmission specifications**

- Full duplex start-stop sync. mode
- Start bit : 1 bit
- Data bit : 8 bits
- Stop bit : 1 bit
- Parity bit : None
- X parameter : None
- Baud rate (Communication speed) : 9600bps

○ **Connection**

If the RS-232C cable is not correctly connected between the Presenter and the PC, no acknowledgement is transmitted.
Connect the RS-232C cable correctly, and fix it firmly with the connector set screws before the operation.