# SHARP

PN-ME552 PN-ME502 PN-ME432

**LCD MONITOR** 

**OPERATION MANUAL for S-Format command** 

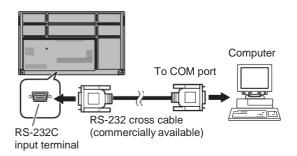
## Controlling the Monitor with a computer (RS-232C)

You can control this monitor from a computer via RS-232C (COM port) on the computer.

This is the description when "Control Terminal" is set to "RS-232C" and "Command Format" is set to "S-Format".

## **Computer connection**

Connect with RS-232 cross cable between the computer's COM port (RS-232C connector) and the RS-232C input terminal on the monitor.



## **Communication conditions**

Set the RS-232C communication settings on the computer to match the monitor's communication settings as follows:

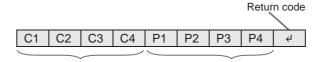
Baud rate	9600 bps
Data length	8 bits
Parity bit	None

Stop bit	1 bit
Flow control	None

## **Communication procedure**

#### **■**Command format

When a command is sent from the computer to the monitor, the monitor operates according to the received command and sends a response message to the computer.



Command field

(4 prescribed alphanumerical characters)

Parameter field

(4 character string comprised of: 0-9, +, -, space, ?)

Example: VOLM0030 VOLM \_\_ \_ \_ 30

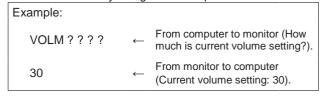
\* Be sure to input 4 characters for the parameter. Pad with spaces ("\_\_") if necessary.

("☐" is a return code (0DH, 0AH or 0DH))

Wrong: VOLM30□

Right: VOLM\_\_\_30\_\_

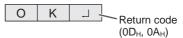
If a command has "R" listed for "Direction" in the "RS-232C command table" on page 4, the current value can be returned by using "?" as the parameter.



## Controlling the Monitor with a computer (RS-232C)

#### **■**Response code format

#### When a command has been executed correctly



A response is returned after a command is executed.

#### When a command has not been executed



#### TIPS

- "ERR" is returned when there is no relevant command or when the command cannot be used in the current state of the monitor.
- If communication has not been established for reasons such as a bad connection between the computer and monitor, nothing is returned (not even ERR).
- "ERR" may be returned when a command cannot be received correctly due to interference from the surrounding environment. Please ensure that the system or software resends the command if this occurs.

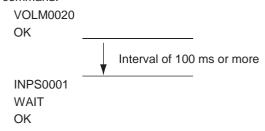
#### If execution of the command is taking some time



Some commands return "WAIT". In this case, a value will be returned if you wait a while. Do not send any command during this period.

#### **■**Communication interval

- After "OK" or "ERR" is returned, you can send the following commands.
  - To set a timeout for the command response, specify 10 seconds or longer.
- Provide an interval of 100 ms or more between the command response and the transmission of the next command.



## TIPS

- When "ALL RESET" is executed, this monitor will restart.
   Wait at least 1 minute before sending the next command.
- Before sending a power "On" or "Off" command, it is recommended that you perform buffer clear at the sending application side.
- After executing a power "On" or "Off" command, wait at least 1 minute before sending the next command.

## Controlling the Monitor with a computer (RS-232C)

## **RS-232C** command table

#### How to read the command table

Command: Command field (See page 2.)

Direction: W When the "Parameter" is set in the parameter field (see page 2), the command functions as described

under "Control/Response Contents".

R The returned value indicated under "Reply" can be obtained by setting "????" in the parameter

field. (See page 2.)

Parameter: Parameter field (See page 2.)
Reply: Response (Returned value)

"△" :İt cannot be used in standby state or input signal waiting state when "Control Terminal" is set to

"RS-232C" or "Power Save Settings – Mode" is set to "Low Power".

"-": Indicates a command which can be used when the power is on.

## Power control/Input mode selection

Function	Command	Direction	Parameter	Reply	Control/Response contents	*										
Power control POWR	W	0		Switches to standby state.												
			1		Returns from standby state.											
		R		0	Standby state											
				1	Normal mode											
				2	Input signal waiting state											
Input mode selection INPS	INPS	W	0		Toggle change for input mode.											
		WR		10	HDMI1	1										
															13	HDMI2
													18	HDMI3		
					24	HOME										
				27	USB-C											
												51	APPLICATION 1			
			52	APPLICATION 2												
				53	APPLICATION 3											
			54	APPLICATION 4												
				55	APPLICATION 5											
				56	APPLICATION 6											

## **Common Settings menu**

Function	Command	Direction	Parameter	Reply	Control/Response contents	*
Volume	VOLM	WR	0-100	0-100		
Mute	MUTE	WR	0-1	0-1	0: Off, 1: On	
Size (Screen size selection)	WIDE	WR	1-3, 11, 12	1-3, 11, 12	1: Wide, 2: Normal, 3: 1:1. 11: Full, 12: Zoom	

## **Administrator Settings menu**

Function	Command	Direction	Parameter	Reply	Control/Response contents	*
Model	INF1	R		Value		
Serial no.	SRNO	R		Value		

## **Function menu**

Function	Command	Direction	Parameter	Reply	Control/Response contents	*
All Reset	RSET	W	0		0: All Reset	Δ

#### **Others**

Function	Command	Direction	Parameter	Reply	Control/Response contents	*
Bright	VLMP	WR	0-100	0-100		Δ
Check the resolution	PXCK	R		-	Returns current resolution in the form of hhh, vvv.	-

## Controlling the Monitor with a computer (LAN)

Your monitor can be connected to a LAN allowing you to control it from a computer on the LAN.

This is the description when "Control Terminal" is set to "LAN" and "Command Format" is set to "S-Format".

#### TIPS

- This monitor must be connected to a network.
   Set "Monitor Control via Network" to on in "Monitor Control" on the Network menu.
- When "Power Save Settings Mode" is set to "Low Power", the control is disabled in the standby state or input signal waiting state.

#### Command-based control

You can control the monitor using RS-232C commands (see page 4) via terminal software and other appropriate applications.

Read the manual for the terminal software for detailed instructions.

#### (1) Connect the computer to the monitor.

 Specify the IP address and data port number (Default setting: 10008) and connect the computer to the monitor.

When connection has been established successfully, [Login: ] is returned as response.

- 2. Send the user name.
  - Send [user name] + [□].
  - If the user name is not set, send [□].
  - When the transmission is successful, [Password: ☐ ] is returned as response.
- 3. Send the password.
  - Send [password] + [□].
  - If the password is not set, send [□].
  - When the transmission is successful, [OK ] is returned as response.

#### (2) Send commands to control the monitor.

- The commands used are the same as those for RS-232C. Refer to the communication procedure (see page 2) for operation.
- Usable commands are provided in the RS-232C command table (see page 4).

## (3) Disconnect the connection with the monitor and quit the function.

Send [BYE □].

When the transmission is successful, [Goodbye  $\square$ ] is returned and the connection is disconnected.

#### TIPS

 Connection is automatically disconnected when the time specified in "Auto Logout Time" elapses over a no-communication period.