SHARP

PN-LC862
PN-LC752
PN-LC652

LCD MONITOR

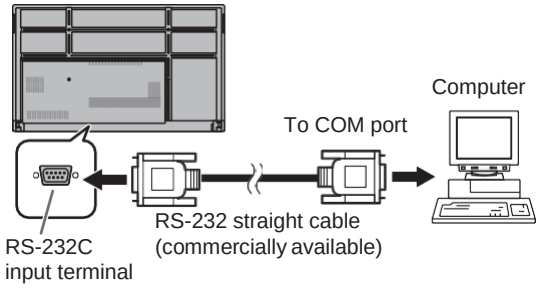
OPERATION MANUAL for S-Format command

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 “Command Format” is set to “S-Format”.

Computer connection

Connect with RS-232 straight cable between the computer’s COM port (RS-232C connector) and the RS-232C input terminal on the monitor.The terminal on the monitor is a female-type connector.



Communication conditions

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

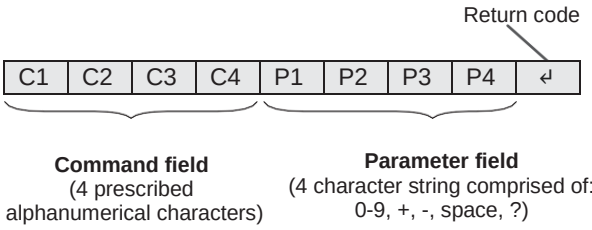
Baud rate	9600 bps
Data length	8 bits
Parity bit	None

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.



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↵

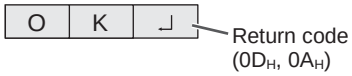
If a command has “R” listed for “Direction” in the “RS-232C command table” on page 4, the current value can be returned by using “?” as the parameter.

Example:

VOLM ? ? ? ?	←	From computer to monitor (How much is current volume setting?).
30	←	From monitor to computer (Current volume setting: 30).

■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.

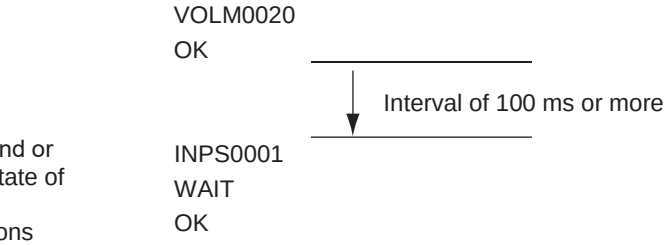
If execution o f the command is taking some time

When the following commands are used, “WAIT” is returned. In this case, a value will be returned if you wait a while. Do not send any command during this period.

- Commands which return “WAIT”:
  RSET, POWR, INPS, BOMD, WIDE

■Communication interval

- After “OK” or “ERR” is returned, you must 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.

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 “????” or “␣␣␣?” in the parameter field. (See page 2.)

Parameter: Parameter field (See page 2.)

Reply: Response (Returned value)

* : “●” : Indicates a command which can be used in standby state, input signal waiting state or when the power is on.
“○” : Indicates a command which can be used in input signal waiting state or when the power is on.
“△” : Indicates a command which can be used in standby state(“Power save mode”:off) or when power is on.
“–” : 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	W	0		Toggle change for input mode.	○
		WR		2	D-SUB	
				10	HDMI1	
				13	HDMI2	
				14	DisplayPort	
				18	HDMI3	
				21	OPS	
				24	APPLICATION	
				27	USB-C	

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	1-3	1: Wide, 2: 4:3, 3: Dot by Dot	

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	-

Others

Function	Command	Direction	Parameter	Reply	Control/Response contents	*
Bright	VLMP	WR	0-100	0-100		-
Check the resolution	PXCK	R		-	Returns current resolution in the form of hhh, vvv.	
Sleep (Backlight off)	BOMD	W	0		Move to Sleep (Backlight off) state	
			1		Returns from Sleep (Backlight off) state	
		R		0	Sleep (Backlight off) state	
				1	Normal operation (Backlight on) state	

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 “Command Format” is set to “S-Format”.

TIPS

- This monitor must be connected to a network.
  Set “Monitor Control via Network” to on in “Communication Setting” of “Network” on the System Settings menu.
- When “Power Save Mode” is set to on, the control is disabled in the standby 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.

1. 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.

1. Send [BYE↵].
   When the transmission is successful, [Goodbye ↵] 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.