Controlling the Monitor with a PC (RS-232C)

You can control this monitor from a PC via RS-232C (COM port) on the PC.
You can also connect multiple monitors via a daisy chain by using a PC. By assigning ID numbers to each monitor (see page 13), you can make input mode selection/adjustment or can check the status of a specific monitor.

! Caution

- To control the monitor via RS-232C, set RS-232C/LAN SELECT to RS-232C.
- You cannot use RS-232C and LAN control simultaneously.

PC connection

■One-to-one connection with a PC

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


RS-232C input terminal

PC

To COM port

RS-232 straight cable
(commercially available)
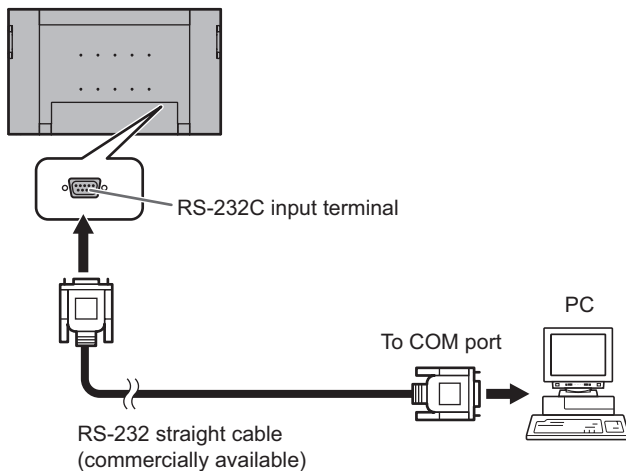
■Daisy chain connection… Advanced operation

Connect with RS-232 straight cable between the PC's COM port (RS-232C connector) and the RS-232C input terminal on the first monitor.
Next, connect RS-232 straight cable to the first monitor's RS-232C output terminal and to the second monitor's RS-232C input terminal. Connect in the same way to the third and subsequent monitors.
Up to 25 monitors can be connected. (Depending on the length of the cable used and the surrounding environment.)

First monitor

Second monitor

RS-232C input terminal

RS-232C output terminal

PC

To COM port

RS-232 straight cables
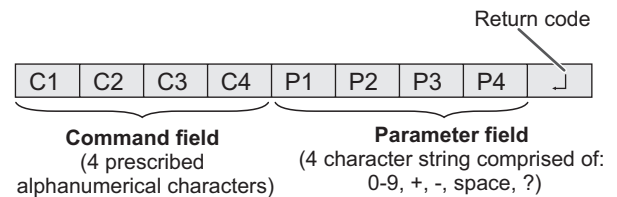(commercially available)
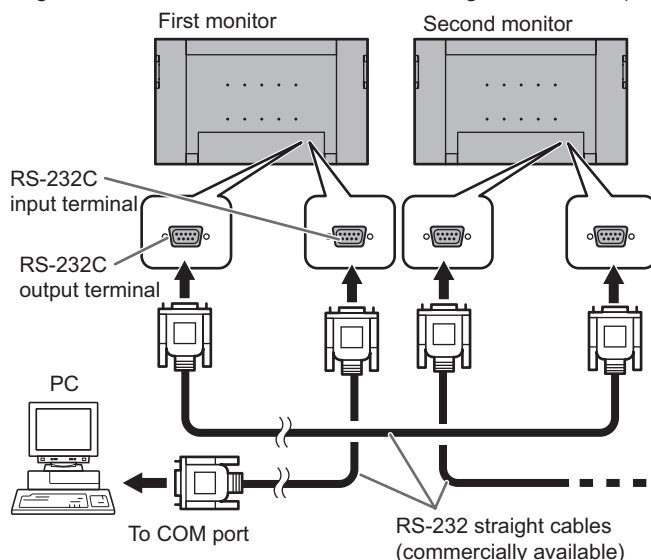
Communication conditions

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

Baud rate	9600 bps		Stop bit	1 bit
Data length	8 bits		Flow control	None
Parity bit	None			

Communication procedure

■Command format

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

Return code

C1	C2	C3	C4	P1	P2	P3	P4	↵

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 (0D$_H$, 0A$_H$ or 0D$_H$))
Wrong : VOLM30↵
Right : VOLM ␣ ␣ 30↵

When inputting a negative value, specify a numerical value in three digits.

Example: AUTR-009

Do not use spaces for MPOS, DATE, and SC01 through SC08. Specify parameters using a specified number of characters.

Example: MPOS010097

If a command has "R" listed for "DIRECTION" in the "RS-232C command table" on page 16, the current value can be returned by using "?" as the parameter.

Example:

VOLM ? ? ? ?   ←   From PC to monitor (How much is current volume setting?).

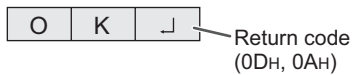30   ←   From monitor to PC (Current volume setting: 30).

* If an ID number (see page 13) has been assigned (For example, ID number = 1).

VOLM ␣␣␣?   ←   From PC to monitor.

30 ␣ 001   ←   From monitor to PC.
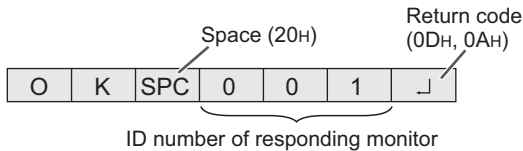
■Response code format

When a command has been executed correctly

O	K	↵

— Return code
(0DH, 0AH)

A response is returned after a command is executed.

* If an ID number has been assigned

Space (20H) Return code (0DH, 0AH)

O	K	SPC	0	0	1	↵

ID number of responding monitor

When a command has not been executed

E	R	R	↵

— Return code
(0DH, 0AH)

* If an ID number has been assigned

Space (20H) Return code (0DH, 0AH)

E	R	R	SPC	0	0	1	↵

ID number
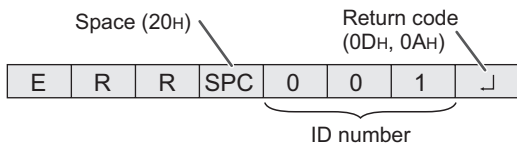
TIPS

• "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 PC and monitor, nothing is returned (not even ERR).
• If no monitor has been assigned the designated ID number (e.g. if the command IDSL0002 ↵ is used, but no monitor with ID number: 2 is found), no response is returned.
• If RS-232C/LAN COMMAND is set to options other than NORMAL, the return code for a response is 0DH only.

If execution of the command is taking some time

| W	A	I	T	↵

— Return code
(0DH, 0AH)

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.
No ID number is attached to WAIT response.
• Commands which return WAIT:
  1. When repeater control is used
  2. When an IDSL or IDLK command is used
  3. When one of the following commands is used: RSET, INPS, ASNC, WIDE, EMAG, EPOS, PXSL, POWR, AGIN, MWIN, MWIP, MWPP, ESTG, EMHV, EPHV, ESHV

When control via RS-232C is locked (to prevent use) using the operation lock function (see page 11)

L	O	C	K	E	D	↵

— Return code
(0DH, 0AH)
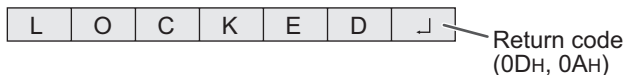
When RS-232C/LAN SELECT is set to LAN

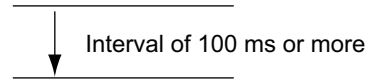| U	N	S	E	L	E	C	T	E	D	↵

— Return code
(0DH, 0AH)
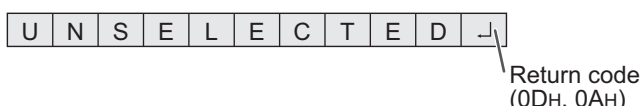
■Communication interval

• 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.

VOLM0020
OK

Interval of 100 ms or more

INPS0001
WAIT
OK

TIPS

• When executing ALL RESET, set the timeout period to 30 seconds or longer.
• When turning the power on while the POWER ON DELAY function is in use, set the timeout period to the POWER ON DELAY period + 10 seconds or longer.

Advanced operation

This section explains commands for daisy chain connection. The basic communication procedure is the same as in the "One-to-one connection with a PC" section.

■ID numbers

You can assign a unique ID number to each monitor (see page 7). This allows you to control a particular monitor in a daisy chain of monitors.
You can assign ID numbers either from the menu screen (using the remote control) or from the PC using RS-232 cable.

[Example]

ID number: 1   ID number: 2   ID number: 3   ID number: 4
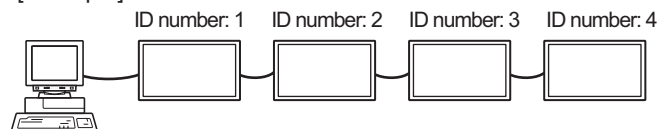
If monitors are connected as shown above, you can execute commands like "Set the volume of the monitor with ID 4 to 20".

When controlling monitors linked in a daisy chain by designating ID numbers, you should basically avoid any duplication of ID numbers.
ID numbers do not have to be assigned in ascending order starting from the PC. They can also be connected as shown below.
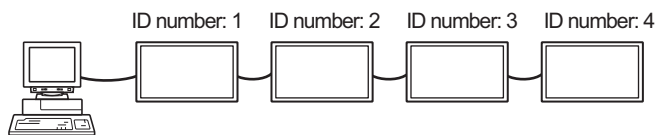
[Example]
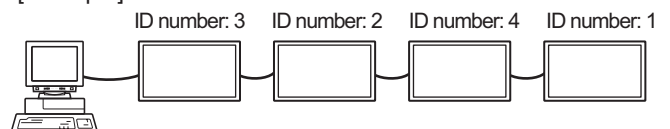
ID number: 3   ID number: 2   ID number: 4   ID number: 1

■Commands for ID control

The command examples shown on this page assume the following connection and ID number set up.

ID number: 1   ID number: 2   ID number: 3   ID number: 4

IDST ....A monitor receiving this command sets its own ID number in the parameter field.
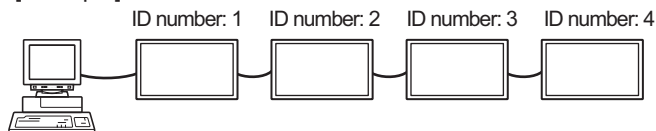
Example:

IDST0001

OK ⎵ 001   ←   The ID number of this monitor is set to 1.

TIPS

You can automatically assign ID numbers by using the IDST command with the Repeater control (see "Repeater control" on page 15).

For example, using the command "IDST001+" automatically sets the ID numbers, as shown below.

[Example]

ID number: 1   ID number: 2   ID number: 3   ID number: 4

IDST001 +   ←   ID setting command with repeater control

WAIT

OK ⎵ 001   ←   "OK" response from ID number: 1

OK ⎵ 002   ←   "OK" response from ID number: 2

OK ⎵ 003   ←   "OK" response from ID number: 3

OK ⎵ 004   ←   "OK" response from ID number: 4 (End)

IDSL ....The parameter of this command sets the ID number of the monitor. The monitor is subject to the next command.

Example:

IDSL0002   ←   The next command is for the monitor with ID number: 2.

WAIT   ←   Searching for monitor with ID number: 2

OK ⎵ 002   ←   Found monitor with ID number: 2

VOLM0030   ←   Sets volume of monitor with ID number: 2 to 30.

WAIT   ←   Processing

OK ⎵ 002   ←   OK response from monitor with ID number: 2

VOLM0020   ←   Sets volume to 20.

OK ⎵ 001   ←   The volume of the monitor with ID number: 1 (the one directly connected to the PC) is set to 20.*

* The IDSL command is effective only once, for the immediately succeeding command.

IDLK ....The parameter of this command sets the ID number of the monitor. The monitor is subject to all subsequent commands.

Example:

IDLK0002   ←   Following commands are for the monitor with ID number: 2.

WAIT   ←   Searching for monitor with ID number: 2

OK ⎵ 002   ←   Found monitor with ID number: 2

VOLM0030   ←   Sets volume of monitor with ID number: 2 to 30.*

WAIT   ←   Processing

OK ⎵ 002

VOLM0020   ←   Sets volume of monitor with ID number: 2 to 20.*

WAIT

OK ⎵ 002

IDLK0000   ←   Canceling fixed ID number setting

WAIT   ←   Canceling IDLK

OK ⎵ 002   ←   Cancelation complete

VOLM0010

OK ⎵ 001   ←   The volume of the monitor with ID number: 1 (the one directly connected to the PC) is set to 10. (IDLK is canceled.)

* The IDLK command remains effective until it is canceled, or power is shut off.

IDCK ....Provides screen display of the ID number currently assigned to a monitor, and the ID number currently set for IDLK (if any).

Example:

(After executing IDLK0002)

IDCK0000   ←   (Parameter has no meaning.)

ID : 001   IDLK : 002   ←   Returned response. The ID number is also displayed on the monitor screen.

IDCK000 +   ←   Repeater control. (If a command is used with repeater control, ID designation using IDSL or IDLK is canceled.)
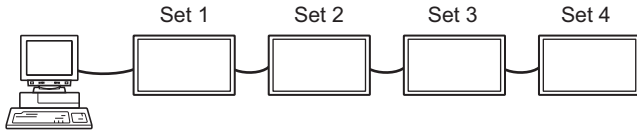
WAIT

ID : 001   IDLK : 000

ID : 002   IDLK : 000

ID : 003   IDLK : 000

ID : 004   IDLK : 000

■Repeater control

This system has a function to allow setting of multiple monitors connected in a daisy chain using a single command. This function is called repeater control. You can use Repeater control function without assigning ID numbers.

[Example]

Set 1   Set 2   Set 3   Set 4

* If monitors are connected as shown above, you can execute a command like "Set all monitors' input settings to PC1 DVI-D".

■Repeater control command

Repeater control is achieved by setting the FOURTH CHARACTER of the parameter to "+".

```
Example:
    VOLM030 +    ←    Sets volume of all monitors to 30.
```

In repeater control, responses are returned by all the connected monitors.
If you want to determine that a value has been returned by a specific set, assign ID numbers to each monitor in advance.
When some monitors do not return their responses, the probable cause is that the monitors could not receive the command or command processing is not complete. Do not send a new command.

```
Example:   (When 4 monitors are connected, and
                assigned ID numbers: 1 through 4)

    VOLM030 +

    WAIT

    OK ⌴ 001

    OK ⌴ 002

    OK ⌴ 003

    OK ⌴ 004    ←    If 4 monitors are connected in
                      a chain, reliable operation can
                      be ensured by sending a new
                      command only after a reply
                      has been returned by 4th (last)
                      monitor.
```

Repeater control can also be used for reading settings.

```
Example:
    VOLM ? ? ? +

    WAIT

    10 ⌴ 001
                      Volume settings for all
    20 ⌴ 002          monitors are returned.

    30 ⌴ 003

    30 ⌴ 004
```

TIPS

• If repeater control is used during ID designation (IDSL, IDLK), the ID designation is canceled.

RS-232C command table

How to read the command table

Command:	Command field (See page 12.)
Direction:	W When the "Parameter" is set in the parameter field (see page 12), the command functions as described under "Control/Response Contents".
	R The returned value indicated under "Reply" can be obtained by setting "????", "␣␣␣?" or "???+" (repeater control) in the parameter field (see page 12).
Parameter:	Parameter field (See page 12.)
Reply:	Response (Returned value)
*:	"A" indicates a command which can be used in power standby mode regardless of the STANDBY MODE setting.
	"B" indicates command which can be used in power standby mode when STANDBY MODE is set to STANDARD. (It cannot be used in the power standby mode when LOW POWER is selected.)
	"–" indicates a command which cannot be used in power standby mode.

Power control/Input mode selection

Function	Command	Direction	Parameter	Reply	Control/Response contents	*
POWER CONTROL	POWR	W	0		Switches to standby mode.	
			1		Returns from standby mode.	
		R		0	Standby mode	A
				1	Normal mode	
				2	Input signal waiting mode	
INPUT MODE SELECTION	INPS	W	0		Toggle change for input mode. Terminals not selected in DVI SELECT/ BNC SELECT/HDMI SELECT cannot be selected.	A
			1		PC1 DVI-D "ERR" when AV1 DVI-D is selected for DVI SELECT.	
			2		PC3 D-SUB	
			3		AV3 COMPONENT "ERR" when PC4 RGB is selected for BNC SELECT.	
			4		AV5 VIDEO	
			6		PC4 RGB "ERR" when AV3 COMPONENT is selected for BNC SELECT.	
			7		AV1 DVI-D "ERR" when PC1 DVI-D is selected for DVI SELECT.	
			8		AV4 S-VIDEO	
			9		AV2 HDMI "ERR" when PC2 HDMI is selected for HDMI SELECT.	
			10		PC2 HDMI "ERR" when AV2 HDMI is selected for HDMI SELECT.	
		R		1	PC1 DVI-D	A
				2	PC3 D-SUB	
				3	AV3 COMPONENT	
				4	AV5 VIDEO	
				6	PC4 RGB	
				7	AV1 DVI-D	
				8	AV4 S-VIDEO	
				9	AV2 HDMI	
				10	PC2 HDMI	

SCREEN menu

Function		Command	Direction	Parameter	Reply	Control/Response contents	*
AUTO		ASNC	W	1		When the input mode is PC3, PC4.	
CLOCK		CLCK	WR	0-1200	0-1200	When the input mode is PC3, PC4. Varies depending on the signal.	
PHASE		PHSE	WR	0-63	0-63	When the input mode is PC3, PC4.	
POSITIONING	POSITION OF THE LONGEST DIRECTION	HPOS	WR	0-100	0-100	0-800 on PC3/PC4. Varies depending on the signal.	
	POSITION OF THE SHORTEST DIRECTION	VPOS	WR	0-100	0-100	0-200 on PC3/PC4. Varies depending on the signal.	
SIZE	POSITION OF THE LONGEST DIRECTION	HSIZ	WR	0-100	0-100		–
	POSITION OF THE SHORTEST DIRECTION	VSIZ	WR	0-100	0-100		
RESOLUTION	L-DIRECTION RES	HRES	WR	300-1920	300-1920	When the input mode is PC3, PC4.	
	S-DIRECTION RES	VRES	WR	200-1200	200-1200	Only even numbers are valid for parameters. Varies depending on the signal.	
RESET		ARST	W	1			

PICTURE menu

Function		Command	Direction	Parameter	Reply	Control/Response contents	*
AUTO		AGIN	W	1		When the input mode is PC3, PC4.	-
CONTRAST		CONT	WR	0-60	0-60	0-127 on PC3/PC4.	B
BLACK LEVEL		BLVL	WR	0-60	0-60	0-127 on PC3/PC4.	
TINT		TINT	WR	0-60	0-60		
COLORS		COLR	WR	0-60	0-60		
SHARPNESS		SHRP	WR	0-24	0-24		
ADVANCED (When the input mode is AV.)	FLESH TONE	FLES	WR	0-2	0-2	0: OFF, 1: LOW, 2: HIGH	B
	3D-NR	TDNR	WR	0-2	0-2	0: OFF, 1: LOW, 2: HIGH	
	MPEG-NR	MPNR	WR	0-1	0-1	0: OFF, 1: ON	
	3D-Y/C	YCSP	WR	0-1	0-1	0: OFF, 1: ON (When the input mode is AV5)	
	C.M.S.-HUE	CMHR	WR	-10-10	-10-10	R	B
		CMHY				Y	
		CMHG				G	
		CMHC				C	
		CMHB				B	
		CMHM				M	
		CRST	W	1		Resets the hue.	
	C.M.S.-SATURATION	CMSR	WR	-10-10	-10-10	R	
		CMSY				Y	
		CMSG				G	
		CMSC				C	
		CMSB				B	
		CMSM				M	
		CRST	W	2		Resets the saturation.	
	C.M.S.-VALUE	CMVR	WR	-10-10	-10-10	R	
		CMVY				Y	
		CMVG				G	
		CMVC				C	
		CMVB				B	
		CMVM				M	
		CRST	W	3		Resets the brightness.	
COLOR MODE		BMOD	WR	0	0	STD	B
				2	2	VIVID	
				3	3	sRGB (When the input mode is PC)	
WHITE BALANCE	THRU	CTMP	WR	0	0	When the input mode is PC1/PC2.	B
	PRESET			1-15	1-15	From 1: approximately 3,000K to 15: approximately 10,000K (500K steps)	
	USER			99	99		
	R-CONTRAST	CRTR	WR	0-512	0-512	"ERR" when CTMP is not set to 99.	
	G-CONTRAST	CRTG	WR	0-512	0-512		
	B-CONTRAST	CRTB	WR	0-512	0-512		
COPY TO USER		CPTU	W	0		Copies a preset value to the user setting.	-
GAMMA		GAMM	WR	0-2	0-2	0: 1.8, 1: 2.2, 2: 2.4	B
RESET		ARST	W	2			-

AUDIO menu

Function	Command	Direction	Parameter	Reply	Control/Response contents	*
TREBLE	AUTR	WR	-10-10	-10-10		B
BASS	AUBS	WR	-10-10	-10-10		
BALANCE	AUBL	WR	-10-10	-10-10		
RESET	ARST	W	3			-

Controlling the Monitor with a PC (RS-232C)

SETUP menu

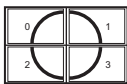| Function		Command	Direction	Parameter	Reply	Control/Response contents	*
OSD H-POSITION		OSDH	WR	0-100	0-100		B
OSD V-POSITION		OSDV	WR	0-100	0-100		
MONITOR		STDR	WR	0-1	0-1	0: LANDSCAPE, 1: PORTRAIT	B
LANGUAGE		LANG	WR	14	14	ENGLISH	B
				1	1	DEUTSCH	
				2	2	FRANÇAIS	
				3	3	ITALIANO	
				4	4	ESPAÑOL	
				5	5	РУССКИЙ	
				6	6	日本語	
HDMI AUTO VIEW		HDAW	WR	0-1	0-1	0: OFF, 1: ON	B
Power On Delay		PWOD	WR	0	0	OFF	B
				1-60	1-60	ON	
STANDBY MODE		STBM	WR	0-1	0-1	0: STANDARD, 1: LOW POWER	B
RS-232C/LAN SELECT		CTLS	WR	0-1	0-1	0 : RS-232C 1 : LAN	B
RS-232C/LAN COMMAND		CMDM	WR	0-2	0-2	0 : NORMAL, 1 : MODE1, 2 : MODE2	B
ID NUMBER	ID NO. SETTING	IDST	W	0-255		Sets the monitor's ID number. ("0" means "no ID number".)	A
			R		0-255	Returns the monitor's ID number.	
	ID NO. SETTING (ONCE)	IDSL	W	1-255		Sets a monitor ID number. This ID number is only effective for the command immediately after this command.	
				0		Clears the ID number if one has been designated.	
	ID NO. SETTING (SUBSEQUENT)	IDLK	W	1-255		Sets a monitor ID number. This ID number is effective for the next and all subsequent commands after this command.	
				0		Clears the ID number if one has been designated.	
	ID CHECK	IDCK	W	0	ID : xxx IDLK : yyy	Displays monitor's own ID number and the selected ID number on the screen.	B

OPTION menu

Function		Command	Direction	Parameter	Reply	Control/Response contents	*
DATE/TIME SETTING		DATE	WR	AABBCCDDEE	AABBCCDDEE	AA: Year, BB: Month, CC: Day, DD: Time, EE: Minute	B
SCHEDULE		SC01-SC08	WR	ABCDEFFGGH	ABCDEFFGGH	Schedule of a specified number A: Schedule 0= Not effective, 1 = Effective B: Power 0 = OFF, 1 = ON C: Day of the week 1 0 = Only once, 1 = Every week, 2 = Every day D: Day of the week 2 0 = Sunday, 1 = Monday through 6 = Saturday, 9 = Not exist E: Day of the week 3 0 = Sunday, 1 = Monday through 6 = Saturday, 9 = Not exist F: Time 00-23 G: Minute 00-59 H: Input 0 = Not specified, 1 = PC1/AV1, 2 = PC3, 3 = PC4/AV3, 4 = AV5, 5 = AV4, 6 = PC2/AV2	B
INPUT SELECT	DVI SELECT	DVSL	WR	0-1	0-1	0: PC1 DVI-D, 1: AV1 DVI-D	B
	BNC SELECT	BNSL	WR	0-1	0-1	0: PC4 RGB, 1: AV3 COMPONENT	B
	HDMI SELECT	HDSL	WR	0-1	0-1	0: PC2 HDMI, 1: AV2 HDMI	B
	HDMI AUDIO SELECT	HMDA	WR	0-1	0-1	0: DIGITAL, 1: ANALOG	B
AUDIO OUTPUT		AOUT	WR	0-1	0-1	0: VARIABLE, 1: FIXED	B
INPUT RESOLUTION (PC)	RESOLUTION CHECK	PXCK	R		-	Returns current resolution in the form of hhh, vvv.	-
	PIXEL SETTING (PC3, PC4)	PXSL	WR	1	1	768) 1360 x 768	
				2	2	768) 1280 x 768	
				3	3	768) 1024 x 768	
				5	5	480) 848 x 480	
				6	6	480) 640 x 480	
				7	7	1050) 1680 x 1050	
				8	8	1050) 1400 x 1050	
				9	9	768) AUTO	
				10	10	480) AUTO	
INPUT RESOLUTION (AV)	RESOLUTION CHECK	RESO	R		-	480i, 480p, 1080i, 720p, 1080p, VGA , etc.	-
SCAN MODE		SCAN	WR	0-2	0-2	0: MODE1, 1: MODE2, 2: MODE3 (When the input mode is AV)	B
SELF ADJUST		AADJ	WR	0-1	0-1	0: OFF, 1: ON	B
POWER MANAGEMENT		PMNG	WR	0-1	0-1	0: OFF, 1: ON	B
AUTO INPUT CHANGE		AINC	WR	0-1	0-1	0: OFF, 1: ON	B
COLOR SYSTEM		CSYS	WR	0-5	0-5	0: AUTO, 1: PAL, 2: PAL-60, 3: SECAM, 4: NTSC3.58, 5: NTSC4.43	B

## ENLARGE menu (When the input mode is PC)

Function		Command	Direction	Parameter	Reply	Control/Response contents	*
ENLARGE MODE		EMAG	WR	0-4	0-4	0: OFF, 1: 2 x 2, 2: 3 x 3, 3: 4 x 4, 4: 5 x 5	
		EMHV	WR	11-55	11-55	1 x 1 (OFF) to 5 x 5 ("m x n" is expressed as "mn", where m and n are the numbers of monitors specified for the longest direction and the shortest direction respectively.)	
BEZEL WIDTH	WIDTH OF THE SHORTER SIDE	BEZH	WR	0-100	0-100		
	WIDTH OF THE LONGER SIDE	BEZV	WR	0-100	0-100		
IMAGE POSITION (M x N)		EPHV	WR	11-55	11-55	Specify values in the order of ENLARGE-POS LD/ENLARGE-POS SD.	
IMAGE POSITION (2 x 2)		EPOS	WR	0-3	0-3	See the description below.	
IMAGE POSITION (3 x 3)		EPOS	WR	0-8	0-8		-
IMAGE POSITION (4 x 4)		EPOS	WR	0-15	0-15		
IMAGE POSITION (5 x 5)		EPOS	WR	0-24	0-24		
ENLARGED SCREEN POSITIONING	THE LONGEST DIRECTION	EPSH	WR	-999-999	-999-999	The setting range depends on the ENLARGE MODE setting and the IMAGE POSITION.	
	THE SHORTEST DIRECTION	EPSV	WR	-999-999	-999-999		
ENLARGE/IMAGE POSITION SETTING		ESTG	WR	XXYY	XXYY	XX: ENLARGE MODE (Same as EMAG), YY: IMAGE POSITION (Same as EPOS)	
		ESHV	WR	XXYY	XXYY	XX: ENLARGE MODE (Same as EMHV), YY: IMAGE POSITION (Same as EPHV)	

- IMAGE POSITION (EPOS) setting
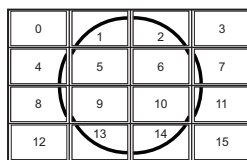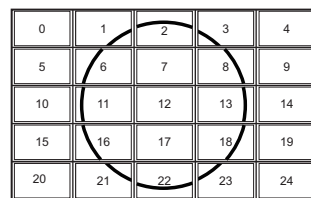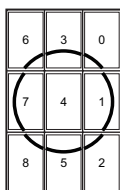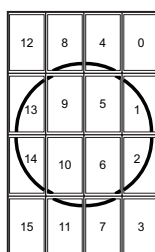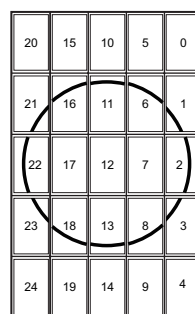 **In horizontal orientation**
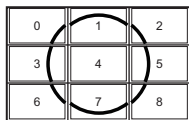
  In vertical orientation

Controlling the Monitor with a PC (RS-232C)

PIP/PbyP menu

Function		Command	Direction	Parameter	Reply	Control/Response contents	*
PIP MODES		MWIN	WR	0-3	0-3	0: OFF, 1: PIP, 2: PbyP, 3: PbyP2	B
PIP SIZE		MPSZ	WR	1-12	1-12		B
PIP POS	THE LONGEST DIRECTION	MHPS	W	0-100			B
			R		0-100		B
	THE SHORTEST DIRECTION	MVPS	W	0-100			B
			R		0-100		B
PIP POS LD+SD BATCH		MPOS	W	0-100,0-100		Specify the position in MPOSxxxyyy format. (xxx: Longer side, yyy: Shorter side position)	B
			R		0-100,0-100	Returns a response in (xxx,yyy) format. (xxx: Longer side, yyy: Shorter side position)	B
PIP BLEND		MWBL	WR	0-15	0-15		B
PIP SOURCE		MWIP	WR	1	1	PC1 DVI-D	B
				2	2	PC3 D-SUB	
				3	3	AV3 COMPONENT	
				4	4	AV5 VIDEO	
				6	6	PC4 RGB	
				7	7	AV1 DVI-D	
				8	8	AV4 S-VIDEO	
				9	9	AV2 HDMI	
				10	10	PC2 HDMI	
SOUND CHANGE		MWAD	WR	1-2	1-2	1: MAIN, 2: SUB	B
MAIN POS (Main screen)		MWPP	WR	0-1	0-1	0: POS1, 1: POS2	B
PbyP2 POS (Sub screen)		MW2P	WR	0-2	0-2	0: POS1, 1: POS2, 2: POS3	B
AUTO OFF		MOFF	WR	0-1	0-1	0: MANUAL, 1: AUTO	B

Initialization/Functional Restriction Setting (FUNCTION) menu

Function	Command	Direction	Parameter	Reply	Control/Response contents	*
ALL RESET	RSET	W	0-1		0: ALL RESET 1, 1: ALL RESET 2	-
ADJUSTMENT LOCK	ALCK	WR	0-2	0-2	0: OFF	B
OSD DISPLAY	LOSD	WR	0-1	0-1	0: ON, 1: OFF	B
LED	OFLD	WR	0-1	0-1	0: ON, 1: OFF	B
TEMPERATURE ALERT	TALT	WR	0-2	0-2	0: OFF, 1: OSD & LED, 2: LED	B
STATUS ALERT	SALT	WR	0-2	0-2	0: OFF, 1: OSD & LED, 2: LED	B

Others

Function		Command	Direction	Parameter	Reply	Control/Response contents	*
SCREEN SIZE (PC)		WIDE	WR	1-5	1-5	1: WIDE, 2: NORMAL, 3: Dot by Dot, 4: ZOOM1, 5: ZOOM2	B
SCREEN SIZE (AV)		WIDE	WR	1-5	1-5	1: WIDE, 2: ZOOM1, 3: ZOOM2, 4: NORMAL, 5: Dot by Dot	B
VOLUME		VOLM	WR	0-31	0-31		B
MUTE		MUTE	WR	0-1	0-1	0: OFF, 1: ON	-
INFORMATION	MODEL	INF1	R		Value		A
	SERIAL NO	SRNO	R		Value		
BRIGHT		VLMP	WR	0-31	0-31	Brightness	B
TEMPERATURE SENSOR		DSTA	R		0	Internal temperature normal	A
					1	Internal temperature abnormal (Standby mode)	
					2	Internal temperature abnormal (Temperature is normal now, but it was abnormal during operation.)	
					3	Internal temperature abnormal (Brightness of the backlight decreases.)	
					4	Temperature sensor abnormal	
TEMPERATURE ACQUISITION		ERRT	R		Value	Temperature at temperature sensors 1 through 3 are returned in the following forms: [Sensor 1], [Sensor 2], [Sensor 3] Indicates a temperature sensor abnormality when "126" is returned.	A
CAUSE OF LAST STANDBY MODE		STCA	W	0		Initialization	A
			R		0	No detectable error has occurred	
					1	Standby mode by POWER button	
					2	Main power "OFF" by the main power switch	
					3	Standby mode by RS-232C or LAN	
					4	Waiting mode by No Signal (Incl: VESA DPMS/DMPM)	
					6	Standby mode by abnormal temperature	
					8	Standby mode by SCHEDULE setting	