



# LG Digital Signage (MONITOR SIGNAGE)

Please read this manual carefully before operating the your set and retain it for future reference.

32SM5B	32SM5KB	43SM3B
43SM5B	43SM5KB	49SM3B
49SM5B	49SM5KB	55SM3B
55SM5B	55SM5KB	
65SM5B	65SM5KB	

# **IR CODES**

All models do not support the HDMI/USB function. Some key codes may not be supported depending on the model.

Code (Hex)	Function	Remarks
08	<b>O</b> POWER	Remote control button
C4	MONITOR ON	Remote control button
C5	MONITOR OFF	Remote control button
95	Energy Saving	Remote control button
ОВ	INPUT	Remote control button
10	Number Key 0	Remote control button
11	Number Key 1	Remote control button
12	Number Key 2	Remote control button
13	Number Key 3	Remote control button
14	Number Key 4	Remote control button
15	Number Key 5	Remote control button
16	Number Key 6	Remote control button
17	Number Key 7	Remote control button
18	Number Key 8	Remote control button
19	Number Key 9	Remote control button
02	Volume (+)	Remote control button
03	Volume <b>∠</b> ( - )	Remote control button
EO	BRIGHTNESS ^ (Page Up)	Remote control button
E1	BRIGHTNESS (Page Down)	Remote control button
DC	3D	Remote control button
32	1/a/A	Remote control button
2F	CLEAR	Remote control button
7E	SIMPLINK	Remote control button
79	ARC(MARK) (Aspect Ratio)	Remote control button
4D	PSM (Picture Mode)	Remote control button
09	MUTE	Remote control button
43	SETTINGS (Menu)	Remote control button
99	Auto Config.	Remote control button
40	Up▲	Remote control button
41	Down ▼	Remote control button
06	Right►	Remote control button
07	Left <b>◄</b>	Remote control button
44	ОК	Remote control button
28	BACK	Remote control button

Code (Hex)	Function	Remarks
7B	TILE	Remote control button
5B	EXIT	Remote control button
72	ID ON (RED)	Remote control button
71	ID OFF (GREEN)	Remote control button
63	YELLOW	Remote control Button
61	BLUE	Remote control button
B1		Remote control button
В0	<b>&gt;</b>	Remote control button
BA	II	Remote control button
8F	₩	Remote control button
8E	₩	Remote control button
5F	W.BAL	Remote control button
3F	S.MENU	Remote control button
7C	HOME	Remote control button

<sup>\*</sup> Some key codes are not supported depending on the model.

# TO CONTROL MULTIPLE PRODUCTS

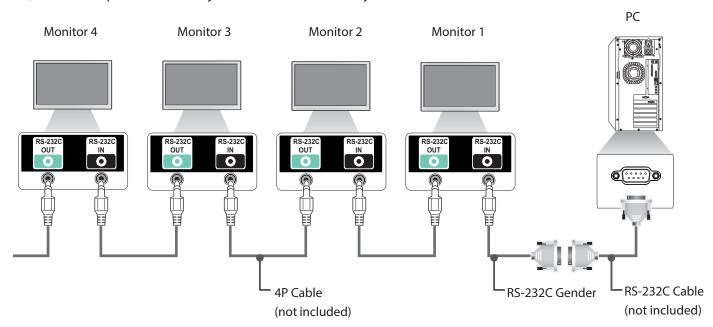
Use this method to connect several products to a single PC. You can control several products at a time by connecting them to a single PC.

In the Option menu, the Set ID must be between 1 and 1000 without being duplicated.

# **Connecting the Cable**

Connect the RS-232C cable as shown in the picture.

The RS-232C protocol is used for communication between the PC and product. You can turn the product on or off, select an input source or adjust the OSD menu from your PC.



# **Communication Parameter**

Baud Rate: 9600 BPS Data Length: 8 bit Parity Bit: None Stop Bit: 1 bit

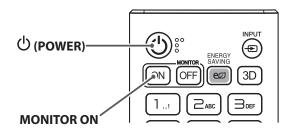
Flow Control: None

Communication Code: ASCII code



# **NOTE**

- When using three-wire connections (nonstandard), an IR daisy chain cannot be used.
- Be sure to only use the provided gender to connect properly.
- When monitors connected via Daisy Chain (that controls multiple monitors) are turned off and on successively, some monitors may not turn on. In this case, you can turn those monitors on by pressing the MONITOR ON button, not the POWER button.



# **Command Reference List**

		COMMAND		DATA
		1	2	(Hexadecimal)
01	Power	k	a	00 to 01
02	Select input	х	b	See Select Input
03	Aspect Ratio	k	С	See Aspect Ratio
04	Energy Saving	j	q	See Energy Saving
05	Picture Mode	d	Х	See Picture Mode
06	Contrast	k	g	00 to 64
07	Brightness	k	h	00 to 64
08	Sharpness	k	k	00 to 32
09	Color	k	i	00 to 64
10	Tint	k	j	00 to 64
11	Color temperature	х	u	00 to 64
12	Balance	k	t	00 to 64
13	Sound Mode	d	у	See Sound Mode
14	Mute	k	е	00 to 01
15	Volume Control	k	f	00 to 64
16	Time 1 (year/month/day)	f	a	See Time 1
17	Time 2 (hour/minute/second)	f	х	See Time 2
18	Off time schedule	f	С	00 to 01
19	On Time Schedule	f	b	00 to 01
20	Off Timer (Repeat/Time)	f	е	See Off Timer
21	On Timer (Repeat/Time)	f	d	See On Timer
22	On Timer Input	f	u	Refer to On Timer Input.
23	No Signal Power Off (15Min)	f	g	00 to 01
24	Auto Power Off (4 Hours)	m	n	00 to 01
25	Language	f	i	See Language
26	Reset	f	k	00, 02
27	Current Temperature	d	n	FF
28	Key	m	С	See Key
29	Time Elapsed	d	ı	FF
30	Product Serial Number	f	у	FF
31	Software Version	f	Z	FF
32	White Balance Red Gain	j	m	00 to FE
33	White Balance Green Gain	j	n	00 to FE
34	White Balance Blue Gain	j	0	00 to FE

		COMMAND		DATA
		1	2	(Hexadecimal)
35	White Balance Red Offset	S	х	00 to 7F
36	White Balance Green Offset	S	у	00 to 7F
37	White Balance Blue Offset	S	z	00 to 7F
38	Backlight	m	g	00 to 64
39	Screen off	k	d	00 to 01
40	Tile Mode	d	d	00 to FF
41	Check Tile Mode	d	Z	FF
42	Tile ID	d	i	See Tile ID
43	Natural Mode	d	j	00 to 01
44	DPM Select	f	j	00 to 07
45	Remote Control/Local Key Lock	k	m	00 to 01
46	Power On Delay	f	h	00 to FA
47	Fail Over Select	m	i	00 to 02
48	Fail Over Input Select	m	j	See Fail Over Input Select
49	IR Operation	t	р	00 to 02
50	Local Key Operation	t	0	00 to 02
51	Check the status	S	V	See Check the status
52	Check Screen	t	z	00 to 01
53	Speakers	d	V	00 to 01
54	Daylight Saving Time	S	d	Refer to 'Daylight Saving Time'
55	PM Mode	S	n, 0c	00 to 03
56	ISM Method	j	р	See ISM Method
57	Network Settings	S	n, 80(81)(82)	See Network Settings
58	Auto-adjustment	j	u	01
59	H Position	f	q	00 to 64
60	V Position	f	r	00 to 64
61	H Size	f	S	00 to 64
62	Power On Status	t	r	00 to 02
63	Wake On LAN	f	W	00 to 01
64	Intelligent Auto	t	i	00 to 01
65	OSD Portrait Mode	t	h	00 to 02
66	Reset to Initial Settings	t	n	00 to 01
67	Time Sync	S	n, 16	00 to 01
68	Contents Sync	t	g	00 to 01

<sup>\*</sup> Note: While playing media files from a USB device or external/internal memory, all commands except for the Power (k a), Volume (k f), Mute (k e), and Key (m c) commands do not work and are processed as NG. Some commands may not be supported depending on the model.

# **Transmission/Reception Protocol**

## **Transmission**

[Command1][Command2][][Set ID][][Data][Cr]

- \* [Command1]: identifies between the factory setting and the user setting modes.
- \* [Command2]: controls monitor sets.
- \* [Set ID]: Used for selecting a set you want to control. A unique Set ID can be assigned to each set ranging from 1 to  $1000(01H\sim3E8H)$  under Settings in the OSD menu.
  - Selecting '00H' for Set ID allows the simultaneous control of all connected monitors.
  - (The maximum value may differ depending on the model.)
- \* [Data]: Transmits command data.
  - Data count may increase depending on the command.
- \* [Cr]: Carriage Return. Corresponds to '0x0D' in ASCII code.
- \* []: White Space. Corresponds to '0x20' in ASCII code.

# Acknowledgement

[Command2][][Set ID][][OK/NG][Data][x]

- \* The Product transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is FF, it indicates the present status data. If the data is in data write mode, it returns the data of the PC computer.
- \* If a command is sent with Set ID '00' (=0x00), the data is reflected to all monitor sets and each monitor set does not send an acknowledgement (ACK).
- \* If the data value 'FF' is sent in control mode via RS-232C, the current setting value of a function can be checked (only for some functions).
- \*Some commands are not supported depending on the model.

#### 01. Power (Command: k a)

Controls the power on/off of the set.

Transmission

# [k][a][][Set ID][][Data][Cr]

Data 00: Off 01: On

Acknowledgement

#### [a][][Set ID][][OK/NG][Data][x]

- \*The acknowledgement signal is returned properly only when the monitor is fully powered on.
- \*There may be a delay between the transmission and acknowledgement signals.

#### 04. Energy Saving (Command: j q)

Sets the Energy Saving.

Transmission

# [j][q][][Set ID][][Data][Cr]

Data 00: Off

01: Minimum
02: Medium
03: Maximum
04: Automatic
05: Screen off
Acknowledgement

[q][][Set ID][][OK/NG][Data][x]

# 02. Select Input (Command: x b)

Selects an input signal.

Transmission

#### [x][b][][Set ID][][Data][Cr]

Data 40: COMPONENT

60: RGB
70: DVI-D (PC)
80: DVI-D (DTV)
90: HDMI1 (DTV)
A0: HDMI1 (PC)
91: HDMI2/OPS (DTV)
A1: HDMI2/OPS (PC)
C0: DISPLAYPORT (DTV)
D0: DISPLAYPORT (PC)

#### Acknowledgement

#### [b][][Set ID][][OK/NG][Data][x]

## 05. Picture Mode (Command: d x)

Selects a picture mode.

Transmission

#### [d][x][][Set ID][][Data][Cr]

Data 00: Vivid 01: Standard 02: Cinema 03: Sports 04: Game 05: Expert 1 06: Expert 2 08: APS 09: Photos 11: Calibration

Acknowledgement

[x][][Set ID][][OK/NG][Data][x]

#### 03. Aspect Ratio (Command: k c)

Adjusts the aspect ratio.

Transmission

# [k][c][][Set ID][][Data][Cr]

Data 01: 4:3

02: 16:9 04: Zoom

06: Set by Program

09: Just Scan (720p or higher)

10 to 1F: Cinema Zoom 1 to 16

- \* Available data types differ depending on the input signal. For more information, see the aspect ratio section of the owner's manual.
- \*The aspect ratio may differ depending on the model's input configuration.

Acknowledgement

[c][][Set ID][][OK/NG][Data][x]

#### 06. Contrast (Command: kg)

Adjusts the screen contrast.

Transmission

[k][g][][Set ID][][Data][Cr]

Data 00 to 64: Contrast 0 to 100

Acknowledgement

[g][][Set ID][][OK/NG][Data][x]

<sup>\*\*</sup> This may not be supported depending on the model.

<sup>\*</sup> Some input signals may not be supported depending on the model.

#### 07. Brightness (Command: k h)

Adjusts the screen brightness.

Transmission

[k][h][][Set ID][][Data][Cr]

Data 00 to 64: Brightness 0 to 100

Acknowledgement

[h][][Set ID][][OK/NG][Data][x]

#### 10. Tint (Command: k j)

Adjusts the screen tint.

Transmission

[k][j][][Set ID][][Data][Cr]

Data 00 to 64: Tint red 50 to green 50

Acknowledgement

[j][][Set ID][][OK/NG][Data][x]

# 08. Sharpness (Command: k k)

Adjusts the screen sharpness.

Transmission

[k][k][ ][Set ID][ ][Data][Cr]

Data 00 to 32: Sharpness 0 to 50

Acknowledgement

[k][][Set ID][][OK/NG][Data][x]

#### 11. Color Temperature (Command: x u)

Adjusts the screen color temperature.

Transmission

[x][u][ ][Set ID][ ][Data][Cr]

Data 00 to 64: warm 50 to cool 50

Acknowledgement

[u][][Set ID][][OK/NG][Data][x]

#### 09. Color (Command: ki)

Adjusts the screen color.

Transmission

[k][i][][Set ID][][Data][Cr]

Data 00 to 64: Color 0 to 100

Acknowledgement

[i][][Set ID][][OK/NG][Data][x]

#### 12. Balance (Command: kt)

Adjusts the sound balance.

Transmission

[k][t][][Set ID][][Data][Cr]

Data 00 to 64: left 50 to right 50

Acknowledgement

[t][][Set ID][][OK/NG][Data][x]

#### 13. Sound mode (Command: d y)

Selects a sound mode.

Transmission

[d][y][][Set ID][][Data][Cr]

Data 01: Standard

02: Music 03: Cinema 04: Sports 05. Game 07: News

Acknowledgement

[y][][Set ID][][OK/NG][Data][x]

#### 14. Mute (Command: k e)

Mutes/unmutes the sound.

Transmission

[k][e][][Set ID][][Data][Cr]

Data 00: Mute

01: Unmute Acknowledgement

[e][ ][Set ID][ ][OK/NG][Data][x]

#### 15. Volume Control (Command: kf)

Adjusts the playback volume.

Transmission

[k][f][][Set ID][][Data][Cr]

Data 00 to 64: Volume 0 to 100

Acknowledgement

[f][][Set ID][][OK/NG][Data][x]

#### 2. Setting the Auto time

Data1 00: Auto

01: Manual

\* To view the set value of the Auto time, enter "fa [Set ID] 00 ff".

Acknowledgement

1. [a][][Set ID][][OK/NG][Data1][Data2][Data3][x]

2. [a][ ][Set ID][ ][OK/NG][0][0][Data1][x]

#### 17. Time 2 (hour/minute/second) (Command: f x)

Adjusts the Time 2 (hour/minute/second) value.

Transmission

[f][x][][Set ID][][Data1][][Data2][][Data3][Cr]

Data1 00 to 17: 00 to 23 hours
Data2 00 to 3B: 00 to 59 minutes
Data3 00 to 3B: 00 to 59 seconds

\* Enter "fx [Set ID] ff" to view the Time 2 (hour/minute/second) settings.

\*\* This function is only available when Time 1 (year/month/day) is set.

Acknowledgement

[x][][Set ID][][OK/NG][Data1][Data2][Data3][x]

## 18. Off Time Schedule (Command: f c)

Enables/disables the Off Time Schedule.

Transmission

[f][c][][Set ID][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[c][][Set ID][][OK/NG][Data][x]

# 16. Time 1 (year/month/day) (Command: f a)

Sets the values of the Time 1 (year/month/day), or sets the Auto time.

Transmission

1. [f][a][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]

2. [f][a][][Set ID][][0][0][][Data1][][Cr]

1. Setting the Time 1 (year/month/day)
Data1 04~1B: year 2014 to 2037

Data2 01 to 0C: January to December

Data3 01 to 1F: 1st to 31st

\* Enter "fa [Set ID] ff" to view the Time 1 (year/month/day) settings.

#### 19. On Time Schedule (Command: f b)

Enables/disables the On Time schedule.

Transmission

[f][b][][Set ID][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[b][][Set ID][][OK/NG][Data][x]

#### 20. Off Timer (Repeat/Time) (Command: f e)

Configures Off Timer (Repeat/Time) settings.

#### Transmission

#### [f][e][][Set ID][][Data1][][Data2][][Data3][Cr]

1. f1h to f7h (reading data)

F1: reads the 1st Off Timer data

F2: reads the 2nd Off Timer data

F3: reads the 3rd Off Timer data

F4: reads the 4th Off Timer data

F5: reads the 5th Off Timer data

F6: reads the 6th Off Timer data

F7: reads the 7th Off Timer data

2. e1h-e7h (delete one index), e0h (delete all indexes)

E0: erases all Off Timer settings

E1: erases the 1st Off Timer setting

E2: erases the 2nd Off Timer setting

E3: erases the 3rd Off Timer setting

E4: erases the 4th Off Timer setting

E5: erases the 5th Off Timer setting

E6: erases the 6th Off Timer setting

E7: erases the 7th Off Timer setting

3.01h to 0Ch (sets the day of the week for the Off Timer)

01: Once

02. Daily

03: Mon - Fri

04: Mon - Sat

05: Sat - Sun

06. Every Sunday

07. Every Monday

08. Every Tuesday

09. Every Wednesday

0A. Every Thursday

0B. Every Friday

OC. Every Saturday

Data2 00 to 17: 00 to 23 hours Data3 00 to 3B: 00 to 59 minutes

\* To read or delete the Off Time Schedule list, [Data2][Data3] must be set to FFH.

Example 1: fe 01 f1 ff ff – reads the first index data in Off Timer. Example 2: fe 01 e1 ff ff - deletes the first index data from Off Timer.

Example 3: fe 01 04 02 03 - sets Off Timer to 02:03 from Monday to Saturday.

\* This function is only available when Time 1 (year/month/day) and Time 2 (hour/minute/second) are set.

#### Acknowledgement

#### [e][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

#### 21. On timer (Repeat/Time) (Command: f d)

Configures On Timer (Repeat/Time) settings.

#### Transmission

#### [f][d][][Set ID][][Data1][][Data2][][Data3][Cr]

1. f1h to f7h (reading data)

F1: reads the 1st On Timer data

F2: reads the 2nd On Timer data

F3: reads the 3rd On Timer data

F4: reads the 4th On Timer data

F5: reads the 5th On Timer data

F6: reads the 6th On Timer data

F7: reads the 7th On Timer data

2. e1h-e7h (delete one index), e0h (delete all indexes)

E0: erases all On Timer settings

E1: erases the 1st On Timer setting

E2: erases the 2nd On Timer setting

E3: erases the 3rd On Timer setting

E4: erases the 4th On Timer setting

E5: erases the 5th On Timer setting

E6: erases the 6th On Timer setting

E7: erases the 7th On Timer setting

3. 01h to 0Ch (sets the day of the week for the On Timer)

01: Once

02. Daily

03: Mon - Fri

04: Mon - Sat

05: Sat - Sun

06. Every Sunday

07. Every Monday

08. Every Tuesday 09. Every Wednesday

0A. Every Thursday

0B. Every Friday

OC. Every Saturday

Data2 00 to 17:00 to 23 hours Data3 00 to 3B: 00 to 59 minutes

\* To read or delete an On Time schedule list, [Data2][Data3] must be set to FF.

Example 1: fd 01 f1 ff ff - reads the first index data from On Timer.

Example 2: fd 01 e1 ff ff - deletes the first index data from On Timer.

Example 3: fd 01 04 02 03 - sets On Timer to 02:03 from Monday to Saturday.

\* This function is only available when Time 1 (year/month/day) and Time 2 (hour/minute/second) are set.

#### Acknowledgement

#### [d][][Set ID][][OK/NG][Data1][Data2][Data3][x]

#### 22. On Timer Input (Command: fu)

Select an external input for the current On Time setting and add a new schedule.

Transmission

[f][u][][Set ID][][Data1][Cr]

[f][u][][Set ID][][Data1][][Data2][Cr]

Data (Add schedule)

**40: COMPONENT** 

60: RGB

70: DVI-D(PC)

A0: HDMI1(PC)

A1: HDMI2/OPS(PC)

D0: DISPLAYPORT(PC)

Data1 (Read schedule)

1. f1h to f7h (Read data)

F1: Select the 1st schedule input

F2: Select the 2nd schedule input

F3: Select the 3rd schedule input

F4: Select the 4th schedule input

F5: Select the 5th schedule input

F6: Select the 6th schedule input

F7: Select the 7th schedule input

Data2 (Read schedule)

FF

\* To read the schedule input, enter FF for [Data2]. If no schedule is available for [Data1] when attempting to read the schedule data, the text 'NG' will be displayed and the operation will fail.

(Example 1: fu 01 90 - Move each schedule input down one row and save the 1st schedule input in HDMI mode.)

(Example 2: fu 01 f1 ff - Read the 1st schedule input.)

\* This function is supported only when 1 (Year/Month/Day), 2 (Hour/Minute/Second), On Time (Repeat Mode/Time) are set.

\*\* It may not be supported depending on the model.

Acknowledgement

[u][][Set ID][][OK/NG][Data][x]

[u][][Set ID][][OK/NG][Data1][Data2][x]

#### 23. No Signal Power Off (15Min) (Command: f g)

Sets the monitor to enter Automatic Standby mode if there is no signal for 15 minutes.

Transmission

[f][g][][Set ID][][Data][Cr]

Data

00: Off 01: On

Acknowledgement

[g][][Set ID][][OK/NG][Data][x]

# 24. Auto Power Off (4 Hours) (Command: m n)

Sets the monitor to enter Auto Power Off after 4 hours.

Transmission

[m][n][][Set ID][][Data][Cr]

Data 00: Off

01: 4 hours Acknowledgement

[n][][Set ID][][OK/NG][Data][x]

#### 25. Language (Command: fi)

Sets the OSD language.

Transmission

[f][i][][Set ID][][Data][Cr]

Data 00: Czech

01: Danish 02: German 03: English

04: Spanish (Europe)

05: Greek 06: French 07: Italian 08: Dutch 09: Norwegian 0A: Portuguese 0B: Portuguese (Brazil)

OC: Russian
OD: Finnish
OE: Swedish
OF: Korean

10: Chinese (Mandarin)

11: Japanese

12: Chinese (Cantonese)

Acknowledgement

[i][ ][Set ID][ ][OK/NG][Data][x]

#### 26. Reset (Command: fk)

Performs the Picture and Factory Reset functions.

Transmission

[f][k][][Set ID][][Data][Cr]

Data

00: Picture Reset

02: Initial Settings (factory reset)

Acknowledgement

[k][][Set ID][][OK/NG][Data][x]

#### 29. Time Elapsed (Command: d I)

Checks the elapsed time.

Transmission

[d][l][][Set ID][][Data][Cr]

Data FF: Read status

Acknowledgement

[l][][Set ID][][OK/NG][Data][x]

#### 27. Current temperature (Command: d n)

Checks the inside temperature.

Transmission

[d][n][][Set ID][][Data][Cr]

Data FF: Check the status

Acknowledgement

[n][][Set ID][][OK/NG][Data][x]

#### 30. Product serial number (Command: f y)

Checks the serial number of the product.

Transmission

[f][y][][Set ID][][Data][Cr]

Data FF: Check product serial number

Acknowledgement

[y][][Set ID][][OK/NG][Data][x]

#### 28. Key (Command: m c)

Sends a key code for the IR remote control.

Transmission

[m][c][][Set ID][][Data][Cr]

Data

IR\_KEY\_CODE

Acknowledgement

[c][][Set ID][][OK/NG][Data][x]

For key codes, see IR Codes.

#### 31. Software Version (Command: f z)

Checks the software version of the product.

Transmission

[f][z][][Set ID][][Data][Cr]

Data FF: Check software version

Acknowledgement

[z][][Set ID][][OK/NG][Data][x]

<sup>\*</sup> The data received is shown as a hexadecimal value.

<sup>\*</sup> Temperature is displayed as a hexadecimal value.

<sup>\*</sup> Data is in ASCII code.

<sup>\*</sup> Some key codes are not supported depending on the model.

#### 32. White balance red gain (Command: j m)

Adjusts the white balance red gain value.

Transmission

[j][m][][Set ID][][Data][Cr]

Data

00 to FE: Red Gain 0 to 254 FF: checks the red gain value

Acknowledgement

[m][][Set ID][][OK/NG][Data][x]

#### 35. White Balance Red Offset (Command: s x)

Adjusts the white balance red offset value.

Transmission

[s][x][][Set ID][][Data][Cr]

Data

00 to 7F: Red Offset 0 to 127 FF: checks the red offset value

Acknowledgement

[x][][Set ID][][OK/NG][Data][x]

#### 33. White Balance Green Gain (Command: j n)

Adjusts the white balance green gain value.

Transmission

[j][n][][Set ID][][Data][Cr]

Data

00 to FE: Green Gain 0 to 254 FF: checks the green gain value

Acknowledgement

[n][][Set ID][][OK/NG][Data][x]

# 36. White Balance Green Offset (Command: s y)

Adjusts the white balance green offset value.

Transmission

[s][y][][Set ID][][Data][Cr]

Data 00 to 7F: Green Offset 0 to 127

FF: checks the green offset value

Acknowledgement

[y][][Set ID][][OK/NG][Data][x]

#### 34. White Balance Blue Gain (Command: j o)

Adjusts the white balance blue gain value.

Transmission

[j][o][][Set ID][][Data][Cr]

Data

00 to FE: Blue Gain 0 to 254 FF: checks the blue gain value

Acknowledgement

[o][][Set ID][][OK/NG][Data][x]

#### 37. White Balance Blue Offset (Command: s z)

Adjusts the white balance blue offset value.

Transmission

[s][z][][Set ID][][Data][Cr]

Data 00 to 7F: Blue Offset 0 to 127

FF: checks the blue offset value

Acknowledgement

[z][][Set ID][][OK/NG][Data][x]

#### 38. Backlight (Command: mg)

Adjusts the backlight brightness.

Transmission

[m][g][][Set ID][][Data][Cr]

Data 00 to 64: Backlight 0 to 100

Acknowledgement

[g][][set ID][][OK/NG][Data][x]

# 39. Screen Off (Command: k d)

Turns the screen on or off.

Transmission

[k][d][][Set ID][][Data][Cr]

Data 00: turns the screen on

01: turns the screen off

Acknowledgement

[d][][Set ID][][OK/NG][Data][x]

# 40. Tile Mode (Command: d d)

Sets the Tile Mode and sets values for the tile rows and columns.

Transmission

[d][d][][Set ID][][Data][Cr]

Data 00 to FF: The first byte - tile column
The second byte - tile row

\* 00, 01, 10, and 11 mean that the tile mode is off

\*\* The maximum value may differ depending on the model.

Acknowledgement

[d][][Set ID][][OK/NG][Data][x]

#### 41. Check Tile Mode (Command: d z)

Checks the tile mode.

Transmission

[d][z][][Set ID][][Data][Cr]

Data FF: checks the tile mode

#### Acknowledgement

#### [z][][Set ID][][OK/NG][Data1][Data2][Data3][x]

Data1 00: tile mode off

01: tile mode on

Data2 00 to 0F: tile column
Data3 00 to 0F: tile row

#### 42. Tile ID (Command: di)

Sets the tile ID value of the product.

Transmission

[d][i][][Set ID][][Data][Cr]

Data 01 to E1: Tile ID 1 to 225\*\*

FF: checks the tile ID

\*\* The data value cannot exceed the value of row x column.

Acknowledgement

[i][][Set ID][][OK/NG][Data][x]

\* When a data value that exceeds the value of row x column is entered (except 0xFF),

ACK becomes NG.

#### 43. Natural Mode (in Tile mode) (Command: d j)

When displaying the image naturally, the part of the image that would normally be displayed in the gap between the monitors is omitted.

Transmission

#### [d][j][][Set ID][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[j][][Set ID][][OK/NG][Data][x]

#### 44. DPM Select (Command: fj)

To set the DPM (Display Power Management) function.

#### Transmission

#### [f][j][][Set ID][][Data][Cr]

Data 00: Off

01: 5 seconds 02: 10 seconds 03: 15 seconds 04: 1 minutes 05: 3 minutes 06: 5 minutes

07: 10 minutes Acknowledgement

[j][][Set ID][][OK/NG][Data][x]

#### 47. Fail Over Select (Command: mi)

Selects an input mode for auto switch.

Transmission

[m][i][ ][Set ID][ ][Data][Cr]

Data 00: Off

01: Auto 02: Manual

Acknowledgement

[i][][Set ID][][OK/NG][Data][x]

#### 45. Remote Control/Local Key Lock (Command: k m)

Adjusts the remote control/local key (front) lock.

Transmission

# [k][m][][Set ID][][Data][Cr]

Data 00: Off (Lock Off)

01: On (Lock On)

\* When the monitor is turned off, the power key works even in On (01) mode.

Acknowledgement

[m][][Set ID][][OK/NG][Data][x]

#### 46. Power On Delay (Command: fh)

Sets the schedule delay when the power turns on. (unit: seconds).

Transmission

#### [f][h][][Set ID][][Data][Cr]

Data 00 to FA: min. 0 to maximum 250 (seconds)

\*The maximum value may differ depending on the model.

Acknowledgement

[h][][Set ID][][OK/NG][Data][x

#### 48. Fail Over Input Select (Command: m j)

Selects an input source for auto switch.

\* This command is only available when the Fail Over (auto) mode is set to Custom.

Transmission

#### [m][i][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][ ]

[Data4]...[][DataN][Cr]

Data 1 to N-1 (Input priority: 1 to N-1)

40: COMPONENT

60: RGB

70: DVI-D

90: HDMI1

91: HDMI2/OPS

C0: DISPLAYPORT

Data N: E0: INTERNAL USB

E1: USB

E2: SD CARD

# Acknowledgement

#### [j][][SetID][][OK/NG][Data1][Data2][Data3][Data4]

## ...[DataN] [x]

Data 1 to N-1 (Input priority: 1 to N-1)

40: COMPONENT

60: RGB

70: DVI-D

90: HDMI1

91: HDMI2/OPS

C0: DISPLAYPORT

Data N: E0: INTERNAL USB

E1: USB

E2: SD CARD

<sup>\*</sup> Some input signals may not be available with certain models.

<sup>\*\*</sup> The data number (N) may vary depending on the model. (The data number depends on the number of supported input signals.)

<sup>\*\*\*</sup> Only the value of E0, E1, or E2 is acceptable for the last data.

#### 49. IR Operation (Command: t p)

Configures the IR operation settings of the product.

#### Transmission

## [t][p][][Set ID][][Data][Cr]

Data 00: locks off all of the keys

01: locks on all of the keys except the Power key

02: locks on all of the keys

#### Acknowledgement

#### [x][][Set ID][][OK/NG][Data][x]

\* When the monitor is turned off, the power key works even in the locks on all of the keys (02) mode.

#### 50. Local Key Operation (Command: t o)

Configures the local key operation settings of the product.

#### Transmission

#### [t][o][][Set ID][][Data][Cr]

Data 00: locks off all of the keys

01: locks on all of the keys except the Power key

02: locks on all of the keys

# Acknowledgement

#### [o][][Set ID][][OK/NG][Data][x]

\* When the monitor is turned off, the power key works even in the locks on all of the keys (02) mode.

#### 52. Check Screen (Command: t z)

Sets Check Screen.

#### Transmission

#### [t][z][][Set ID][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[z][][Set ID][][OK/NG][Data][x]

\*\* It may not be supported depending on the model.

#### 53. Speaker (Command: d v)

Sets the speaker function.

Transmission

[d][v][][Set ID][][Data][Cr]

Data 00: Off 01: On Acknowledgement

[v][][Set ID][][OK/NG][Data][x]

#### 51. Status (Command: s v)

Checks the current signal status of the product.

#### Transmission

#### [s][v][][Set ID][][Data][][FF][Cr]

Data 02: checks whether there is a signal or not

03: check the PM mode.

10: RGB sensing OK/NG (Check Screen)

#### Acknowledgement

#### [v][][Set ID][][OK/NG][Data][Data1][x]

Data: 02 (when a signal is found)

Data1 00: no signal

01: there is a signal

Data: 03 (when checking the PM mode)

Data1 00: The PM mode is set to Screen On
01: The PM mode is set to Screen Off
02: The PM mode is set to Screen Off Always

Data: 10 (Check Screen)

Data1 00: Check Screen result NG

07: Check Screen result OK

#### 54. Daylight Saving Time (Command: s d)

To set the Daylight Saving Time function.

Transmission

[s][d][][Set ID][][Data1][][Data2][][Data3][][Data4]

[ ][Data5][Cr]

Data 00: Off (Data2~5: FFH)

01: Start Time 02: End Time

Data2 01~0C: January to December

Data3 01~06: 1 ~ 6th week

\* The maximum number of [Data3] differs depending on

Date.

Data4 00~06 ( Sun. ~ Sat. ) Data5 00~17: 00 ~ 23 hours

\* To read the Start Time/End Time, enter FFH for

[Data2]~[Data5].

(ex1: sd 01 01 ff ff ff ff - To check the Start Time ex2: sd 01 02 ff ff ff ff - To check the End Time)

\* This function is supported only when 1 (Year/Month/ Day)

and 2 (Hour/Minute/Second) are set.

Acknowledgement

[d][][Set ID][][OK/NG][Data1][Data2][Data3][Data4]

[Data5][x]

<sup>\*</sup> Sets to NG when Check Screen is set to Off or not supported.

<sup>\*\*</sup> It may not be supported depending on the model.

#### 55. PM Mode (Command: s n, 0c)

Selects the desired PM mode option.

#### Transmission

#### [s][n][][Set ID][][0c][][Data][Cr]

Data 00: Sets the Power Off mode.

01: Sets the Sustain Aspect Ratio mode.

02: Sets the Screen Off mode.

03: Sets the Screen Off Always mode.

#### Acknowledgement

#### [n][][Set ID][][OK/NG][0c][Data][x]

\* It may not be supported depending on the model.

#### 56. ISM Method (Command: j p)

Selects the ISM Method option.

#### Transmission

#### [j][p][][Set ID][][Data][Cr]

Data 04: White Wash 08: Normal 20: Color Wash 90: User Image

\*\* The jp command works when Timer is set to Immediately.

#### Acknowledgement

#### [p][][Set ID][][OK/NG][Data][x]

\* It may not be supported depending on the model.

## 57. Network Settings (Command: s n, 80 or 81 or 82)

Configures network and DNS settings.

#### Transmission

# [s][n][][Set ID][][Data1][][Data2][][Data3][][Data4][]

#### [Data5][Cr]

Data1 80: Configures/views the temporary IP mode (Auto/Manual), subnet mask, and gateway.

81: Configures/views the temporary DNS address.

82: Saves temporary settings and views information about the current network.

\* If Data1 is 80,

Data2 00: Auto 01: Manual

FF: Views the temporary IP mode (Auto/Manual), subnet mask, and gateway.

\*\* If Data2 is 01 (Manual).

Data3 : Manual IP address
Data4 : Subnet mask address
Data5 : Gateway address

\* If Data1 is 81,

Data2 : DNS address

FF: Views the temporary DNS address.

\* If Data1 is 82,

Data2 80: Applies the temporarily saved IP mode (Auto/

Manual), subnet mask, and gateway. 81: Applies the temporary DNS address

FF: Information on the current network (IP, subnet

gateway, DNS)

\*\*\* Examples of settings

1. Auto: sn 01 80 00

2. Manual: sn 01 80 01 010177223241 255255254000

010177222001 (IP: 10.177.223.241, subnet:

255.255.254.0,

gateway: 10.177.222.1)

3. Network read: sn 01 80 ff

4. DNS setting: sn 01 81 156147035018

(DNS: 156.147.35.18)

\*\*\*\* Each IP address contains 12 decimal digits .

Acknowledgement

#### [n][][Set ID][][OK/NG][Data1][Data][x]

- \* It may not be supported depending on the model.
- \*\* This feature is available only for wired networks.

#### 58. Auto-adjustment (Command: j u)

Automatically corrects the position and shaking of the picture. (Works only in RGB-PC input mode.)

Transmission

[j][u][ ][Set ID][ ][Data][Cr]

Data 01: Execution

Acknowledgement

[u][][Set ID][][OK/NG][Data][x]

## 59. H Position (Command: f q)

Adjusts the horizontal position of the screen. This feature only works when the Tile Mode is set to Off.

\* The operational range varies depending on the RGB input resolution. (Works only in RGB-PC input mode.)

Transmission

[f][q][][Set ID][][Data][Cr]

Data 00-64: Min -50 (Left) to Max 50 (Right)

Acknowledgement

[q][][Set ID][][OK/NG][Data][x]

\* It may not be supported depending on the model.

<sup>\*</sup> It may not be supported depending on the model.

#### 60. V Position (Command: fr)

Adjusts the vertical position of the screen. This feature only works when the Tile Mode is set to Off.

\* The operational range varies depending on the RGB input resolution. (Works only in RGB-PC input mode.)

Transmission

[f][r][][Set ID][][Data][Cr]

Data 00-64: Min -50 (Down) to Max 50 (Up)

Acknowledgement

[r][][Set ID][][OK/NG][Data][x]

\* It may not be supported depending on the model.

#### 61. H Size (Command: fs)

Adjusts the horizontal size of the screen. This feature only works when the Tile Mode is set to Off.

\* The operational range varies depending on the RGB input resolution. (Works only in RGB-PC input mode.)

Transmission

[f][s][][Set ID][][Data][Cr]

Data 00-64: Min -50 (Small) to Max 50 (Large)

Acknowledgement

[s][][Set ID][][OK/NG][Data][x]

\* It may not be supported depending on the model.

#### 62. Power On Status (Command: tr)

Selects the desired Power On status option.

Transmission

[t][r][][Set ID][][Data][Cr]

Data 00: LST (Stays in the previous status)

01: STD (Stays powered off)02: PWR (Stays powered on)

Acknowledgement

[r][][Set ID][][OK/NG][Data][x]

#### 63. Wake On LAN (Command: f w)

Selects the desired Wake On LAN option.

Transmission

[f][w][][Set ID][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[w][][Set ID][][OK/NG][Data][x]

#### 64. Intelligent Auto (Command: ti)

Selects the desired Intelligent Auto option.

Transmission

[t][i][][Set ID][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[i][][Set ID][][OK/NG][Data][x]

# 65. OSD Portrait Mode (Command: t h)

Selects the desired Portrait mode option.

Transmission

[t][h][][Set ID][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[h][][Set ID][][OK/NG][Data][x]

<sup>\*</sup> It may not be supported depending on the model.

<sup>\*</sup> It may not be supported depending on the model.

#### 66. Reset to Initial Settings (Command: t n)

Enables/disables the Reset to Initial settings.

Transmission

[t][n][][Set ID][][Data][Cr]

Data 00: Disables the settings.

01: Enables the settings.

Acknowledgement

[n][][Set ID][][OK/NG][Data][x]

# 67. Time Sync (Command: s n, 16)

Configures the Time Sync.

Transmission

[s][n][][Set ID][][1][6][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[n][][Set ID][][OK/NG][][1][6][][Data][x]

# 68. Contents Sync (Command: t g)

Configures the Contents Sync.

Transmission

[t][g][][Set ID][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[g][][Set ID][][OK/NG][Data][x]

<sup>\*</sup> It may not be supported depending on the model.

<sup>\*</sup> This feature works in the Master mode.

<sup>\*\*</sup> This feature does not work if the current time is not set.

<sup>\*</sup> It may not be supported depending on the model.

<sup>\*</sup> It may not be supported depending on the model.