SAMSUNG

USER MANUAL

OH46FIOH55F

The color and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.

The contents of this manual are subject to change without notice to improve quality.

© Samsung Electronics

Samsung Electronics owns the copyright for this manual.

Use or reproduction of this manual in parts or entirety without the authorization of Samsung Electronics is prohibited.

Trademarks other than that of Samsung Electronics are owned by their respective owners.

Before Using the Product

Safety Precautions	8
Cleaning	8
Storage	8
Electricity and Safety	9
Installation	10
Operation	11

Preparations

13
13
14
14
15
16
18
18
18
20
20
20
21
21
24
25

Connecting and Using a Source Device

Before Connecting	33
Pre-connection Checkpoints	33
Before connecting cables	34
Connecting to a PC	35
Connection Using an HDMI-DVI Cable	35
Connection Using an HDMI Cable	35
Connecting to a Video Device	36
Using an HDMI cable or HDMI to DVI Cable	
(up to 1080p)	36
Connection Using an HDMI-DVI Cable	36
Connection Using an HDMI Cable	36
Connecting the HDBase-T	37
Connecting to an Audio System	38
Connecting the LAN Cable	38
Changing the Input source	
(except the LH55OHFPSBC model)	39
Source	39
Web Browser	
(except the LH55OHFPSBC model)	40
Settings	40
Refresh Options	42
Changing the Input source (applies to the	
LH55OHFPSBC model only)	43
Source	43
Web Browser	44

Using MDC

MDC Program Installation/Uninstallation	46
Installation	46
Uninstallation	46
Connecting to MDC	47
Using MDC via RS-232C (serial data communications standards)	47
,	47
Using MDC via Ethernet	47

Player feature (except the LH55OHFPSBC model)

Player	49
Viewing content	49
When content is running	50
Available menu	50
File Formats Compatible with Player	51
Schedule	56
Clone Product	57
D Settings	58
Device ID	58
Device ID Auto Set	58
PC Connection Cable	58
Video Wall	59
Video Wall	59
Horizontal x Vertical	59
Screen Position	59
Format	60

Network Status	61
Picture Mode	62
On/Off Timer	63
On Timer	63
Off Timer	64
Holiday Management	64
Ticker	65
URL Launcher	66
URL Launcher Settings	67
Approving a connected device from the server	68
Setting the current time	69

Screen Adjustment (except the LH55OHFPSBC model)

Picture Mode	70
Backlight / Contrast / Brightness / Sharpness /	
Color / Tint (G/R)	71
Color Temperature	72
White Balance	72
2 Point	72
10 Point	72
Gamma	73
Calibrated Value	73
Advanced Settings	74

Dynamic Contrast	74
Black Tone	74
Flesh Tone	74
RGB Only Mode	74
Color Space	74
HDMI UHD Color	75
Motion Lighting	75
Picture Options	76
Color Tone	76
Digital Clean View	76
HDMI Black Level	77
Film Mode	77
Dynamic Backlight	77
Picture Size	78
Picture Size	78
Fit to Screen	78
Zoom/Position	78
Picture Off	79
Reset Picture	79

OnScreen Display (except the LH55OHFPSBC model)

Display Orientation	80
Onscreen Menu Orientation	80
Source Content Orientation	80
Aspect Ratio	80
Screen Protection	81
Auto Protection Time	81
Screen Burn Protection	81
Message Display	84
Source Info	84
No Signal Message	84
MDC Message	84
Download Status Message	84
Language	85
Reset OnScreen Display	85

Network (except the LH55OHFPSBC model)

Network Status	86
Open Network Settings	86
Network type	86
Network Settings (Wired)	87
Network Setting (Wireless)	89
WPS(PBC)	91
Server Network Settings	92
Connect to Server	92
MagicInfo Mode	92
Server Access	92
FTP Mode	92
Proxy Server	92
Wi-Fi Direct	93
Mobile Device Manager	94
Access Notification	94
Mobile Device List	94
Device Name	94

System (except the LH55OHFPSBC model)

Accessibility	95
Voice Guide	95
Menu Transparency	95
High Contrast	95
Enlarge	95

Start Setup	96
Time	97
Clock Set	97
NTP Settings	97
DST	97
Sleep Timer	97
Power On Delay	97
Auto Source Switching	98
Auto Source Switching	98
Primary Source Recovery	98
Primary Source	98
Secondary Source	98
Power Control	99
Auto Power On	99
Max. Power Saving	99
Standby Control	99
Network Standby	100
Power Button	100
Eco Solution	101
Energy Saving Mode	101
Eco Sensor	101
Screen Lamp Schedule	102
No Signal Power Off	102
Auto Power Off	102
Fan & Temperature	103
Fan Control	103
Fan Speed Setting	103
Outdoor Mode	103
Temperature Control	103
Input Device Manager	104

eyboard Language	104
eyboard Type	104
nput Language Shortcut	104
lay via	104
hange PIN	105
ecurity	106
afety Lock On	106
ISB Auto Play Lock	106
1obile Connection Lock	106
emote Management	106
eneral	107
mart Security	107
nynet+ (HDMI-CEC)	108
IDMI Hot Plug	110
ustom Logo	110
ame Mode	111
mpty Storage	111
eset System	111

Support (except the LH55OHFPSBC model)

Software Update	112
Update now	112
Auto Update	112
Contact Samsung	112
Reset All	112

Player feature (applies to the LH55OHFPSBC model only)

Player	113
Viewing content	113
When content is running	114
Available menu	114
File Formats Compatible with Player	115
Schedule	119
Clone Product	120
ID Settings	121
Device ID	121
Device ID Auto Set	121
PC Connection Cable	121
Video Wall	122
Video Wall	122
Horizontal x Vertical	122
Screen Position	123
Format	123

Network Status	123
On/Off Timer	124
On Timer	124
Off Timer	125
Holiday Management	125
Ticker	125
URL Launcher	126
URL Launcher Settings	126

Screen Adjustment (applies to the LH55OHFPSBC model only)

Backlight / Brightness / Contrast / Sharpness	127
Color Temperature	128
Advanced Settings	129
Picture Enhancer	129
HDR+ Mode	129
Color	129
Tint (G/R)	129
White Balance	130
Gamma	130
Contrast Enhancer	130
Black Tone	130
Flesh Tone	131
RGB Only Mode	131
Color Space Settings	131
Input Signal Plus	131
Motion Lighting	131

Picture Options	132
Color Tone	132
Digital Clean View	132
HDMI Black Level	132
Film Mode	132
Dynamic Backlight	132
Apply Picture Settings	133
Picture Size Settings	134
Picture Size	134
Fit to Screen	134
Zoom and Position	134
Reset Picture	135

OnScreen Display (applies to the LH55OHFPSBC model only)

136
136
136
136
137
137
137
138
138
138
138
138
138 139

Network (applies to the LH55OHFPSBC model only)

Network Status	140
Open Network Settings	140
Network Settings (Wired)	141
IPv6	143
IPv6 Status	143
Server Network Settings	143

Device Name	144
Proxy Server	144
FTP Mode	144
Server Access	143
MagicInfo Mode	143
Connect to Server	143

System (applies to the LH550HFPSBC model only)

145
145
146
146
146
147
147
147
147
147
148
148
148
148
148
148
149
149
149

Standby Control	149
Network Standby	150
Power Button	150
Eco Solution	151
Power Saving Mode	151
Eco Sensor	151
Screen Lamp Schedule	152
No Signal Power Off	152
Auto Power Off	152
Fan & Temperature	153
Fan Control	153
Fan Speed Setting	153
Outdoor Mode	153
Play via	154
Change PIN	154
Security	155
Safety Lock On	155
USB Auto Play Lock	156
Remote Management	156
Secured Protocol	156
Network Lock	156
USB Lock	156
General	157
Smart Security	157
Anynet+ (HDMI-CEC)	157
HDMI Hot Plug	159
Custom Logo	159
Game Mode	160
Empty Storage	160
Reset System	160

Support (applies to the LH55OHFPSBC model only)

Software Update	161
Update Now	161
Contact Samsung	161
Terms & Conditions	161
Reset All	161

Troubleshooting Guide

Requirements Before Contacting Samsung	
Customer Service Center	162
Testing the Product	162
Checking the Resolution and Frequency	162
Check the followings.	163
Q & A	167

Specifications

General	169
Preset Timing Modes	170

Appendix

Responsibility for the Pay Service (Cost to	
Customers)	172
Not a product defect	172
A Product damage caused by customer's fault	172
Others	172
Optimum Picture Quality and Afterimage	
Burn-in Prevention	173
Optimum Picture Quality	173
Prevention of Afterimage Burn-in	173
License	175
Terminology	176

Chapter 01

Before Using the Product

Safety Precautions

Warning

A serious or fatal injury may result if instructions are not followed.



Personal injury or damage to properties may result if instructions are not followed.



Activities marked by this symbol are prohibited.



Instructions marked by this symbol must be followed.

Cleaning

- Exercise care when cleaning as the panel and exterior of advanced LCDs are easily scratched.
- Take the following steps when cleaning.
- 1 Power off the product and computer.
- 2 Disconnect the power cord from the product.
 - Hold the power cable by the plug and do not touch the cable with wet hands. Otherwise, an electric shock may result.
- 3 Use water and a dry cloth to clean the protection glass.
 - Wipe with a clean wet cloth.
 - To remove tough stains, wipe using a cloth with a small amount of ethanol based cleaner.

Use a brush to remove any debris from the inlet and outlet opening.

- To remove tough stains, wipe using a cloth with a small amount of ethanol based cleaner.
- If washing with water, keep the pressure below 0.5 bar.
- 4 Connect the power cord to the product when cleaning is finished.
- 5 Power on the product and computer.

Storage

Due to the characteristics of high-glossy products, using a UV humidifier nearby may create white-colored stains on the product.

Contact Customer Service Center if the inside of the product needs cleaning (service fee will be charged).

Electricity and Safety

Warning

Do not use a damaged power cord or plug, or a loose power socket.

• An electric shock or fire may result.

Do not use multiple products with a single power socket.

• Overheated power sockets may cause a fire.

Do not touch the power plug with wet hands. Otherwise, an electric shock may result.

Insert the power plug all the way in so it is not loose.

• An unsecure connection may cause a fire.

Connect the power plug to a grounded power socket (type 1 insulated devices only).

• An electric shock or injury may result.

Do not bend or pull the power cord with force. Be careful not to leave the power cord under a heavy object.

• Damage to the cord may result in a fire or electric shock.

Do not place the power cord or product near heat sources.

• A fire or electric shock may result.

Clean any dust around the pins of the power plug or the power socket with a dry cloth.

• A fire may result.

Caution

Do not disconnect the power cord while the product is being used.

• The product may become damaged by an electric shock.

Only use the power cord provided with your product by Samsung. Do not use the power cord with other products.

• A fire or electric shock may result.

Keep the power socket where the power cord is connected unobstructed.

- The power cord must be disconnected to cut off power to the product when an issue occurs.
- Note that the product is not completely powered down by using only the power button on the remote.

Hold the plug when disconnecting the power cord from the power socket.

• An electric shock or fire may result.

Installation

Warning

DO NOT PLACE CANDLES, INSECT REPELLANTS OR CIGARETTES ON TOP OF THE PRODUCT. DO NOT INSTALL THE PRODUCT NEAR HEAT SOURCES.

• A fire may result.

Have a technician install the wall-mount hanger.

- Installation by an unqualified person can result in an injury.
- Only use approved cabinets.

Do not install the product in poorly ventilated spaces such as a bookcase or closet.

• An increased internal temperature may cause a fire.

When installing the product, keep it at a distance from the wall so that it is well ventilated.

Refer to the Outdoor Installation Guide. (http://displaysolutions.samsung.com)

• An increased internal temperature may cause a fire.

Keep the plastic packaging out of the reach of children.

• Children may suffocate.

Do not install the product on an unstable or vibrating surface (insecure shelf, sloped surface, etc.)

- The product may fall and become damaged and/or cause an injury.
- Using the product in an area with excess vibration may damage the product or cause a fire.

Do not install the product within the reach of young children.

- The product may fall and injure children.
- As the front is heavy, install the product on a flat and stable surface.

Edible oil, such as soybean oil, can damage or deform the product. Do not install the product in a kitchen or near a kitchen counter.

Precautions during installation and storage

- After opening the cover, install the product within 1 hour under humidity of 60% or below. (P. 34)
- Keep the predefined humidity while opening the cover or assembling the housing (e.g. connection of external device, F/W update).
- During operation and storage of the product, be sure to attach the cover.

Caution

Do not drop the product while moving.

• Product failure or personal injury may result.

Do not set down the product on its front.

• The screen may become damaged.

When installing the product on a cabinet or shelf, make sure that the bottom edge of the front of the product is not protruding.

- The product may fall and become damaged and/or cause an injury.
- Install the product only on cabinets or shelves of the right size.

Set down the product gently.

• Product failure or personal injury may result.

If the product is installed in an unusual location, the surrounding environment may cause a serious quality problem. Therefore, be sure to contact Samsung Customer Service Center before installation.

Places where many fine dusts are generated, places where chemicals are used, places with too
high or low temperatures, places with a lot of moisture or water, transportation equipment such as
vehicles, airports and stations used continuously for a long time, and more.

Operation

Warning

There is a high voltage inside the product. Never disassemble, repair or modify the product yourself.

- A fire or electric shock may result.
- Contact Samsung Customer Service Center for repairs.

If the product generates abnormal sounds, a burning smell or smoke, disconnect the power cord immediately and contact Samsung Customer Service Center.

• An electric shock or fire may result.

Do not let children hang from the product or climb on top of it.

• Children may become injured or seriously harmed.

Do not leave heavy objects or items that children like (toys, sweets, etc.) on top of the product.

• The product or heavy objects may fall as children try to reach for the toys or sweets resulting in a serious injury.

Do not drop objects on the product or apply impact.

• A fire or electric shock may result.

Do not move the product by pulling the power cord or any cable.

• Product failure, an electric shock or fire may result from a damaged cable.

If a gas leakage is found, do not touch the product or power plug. Also, ventilate the area immediately.

• Sparks can cause an explosion or fire.

Do not lift or move the product by pulling the power cord or any cable.

• Product failure, an electric shock or fire may result from a damaged cable.

Do not use or keep combustible spray or an inflammable substance near the product.

• An explosion or fire may result.

Ensure the vents are not blocked by tablecloths or curtains.

• An increased internal temperature may cause a fire.

Do not insert metallic objects (chopsticks, coins, hairpins, etc) or objects that burn easily (paper, matches, etc) into the product (via the vent or input/output ports, etc).

- Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Center.
- Product failure, an electric shock or fire may result.

Do not block the vent on the product. The product may not function properly due to potential overheating.

Do not attempt to insert your fingers or objects into the vents.

• Product failure or personal injury may result.

Caution

Leaving the screen fixed on a stationary image for an extended period of time may cause afterimage burn-in or defective pixels.

• Activate power-saving mode or a moving-picture screen saver if you will not be using the product for an extended period of time.

Disconnect the power cord from the power socket if you do not plan on using the product for an extended period of time (vacation, etc).

• Dust accumulation combined with heat can cause a fire, electric shock or electric leakage.

Use the product at the recommended resolution and frequency.

• Your eyesight may deteriorate.

Do not hold the product upside-down or move it by holding the stand.

• The product may fall and become damaged or cause an injury.

Looking at the screen too close for an extended period of time can deteriorate your eyesight.

Rest your eyes for more than 5 minutes for every 1 hour of product use.

• Eye fatigue will be relieved.

Do not touch the screen when the product has been turned on for an extended period of time as it will become hot.

Store small accessories out of the reach of children.

Exercise caution when adjusting the product angle or stand height.

- Your hand or finger may get stuck and injured.
- Tilting the product at an excessive angle may cause the product to fall and an injury may result.

Do not place heavy objects on the product.

• Product failure or personal injury may result.

When using headphones or earphones, do not turn the volume too high.

• Having the sound too loud may damage your hearing.

Be careful that children do not place the battery in their mouths when removed from the remote control. Place the battery in a location that children or infants cannot reach.

• If children have had the battery in their mouths, consult your doctor immediately.

When replacing the battery, insert it with the right polarity (+, -).

• Otherwise, the battery may become damaged or it may cause fire, personal injury or damage due to leakage of the internal liquid.

Use only the specified standardized batteries, and do not use a new battery and a used battery at the same time.

• Otherwise, the batteries may be damaged or cause fire, personal injury or damage due to a leakage of the internal liquid.

The batteries (and rechargeable batteries) are not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable batteries for recycling.

• The customer can return used or rechargeable batteries to a nearby public recycling center or to a store selling the same type of the battery or rechargeable battery.

Chapter 02 Preparations

Checking the Components

Components

- Contact the vendor where you purchased the product if any components are missing.
- The pictures may look different from the actual components.
- A stand is not provided with the product. To install a stand, you can purchase one separately.



QUICK SETUP GUIDE



Batteries (AAA x 2)
(Not available in some locations)



Warranty card
(Not available in some locations)



Remote Control



Regulatory guide

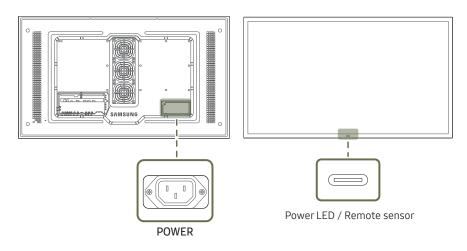


Power cord

Parts

Parts

The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



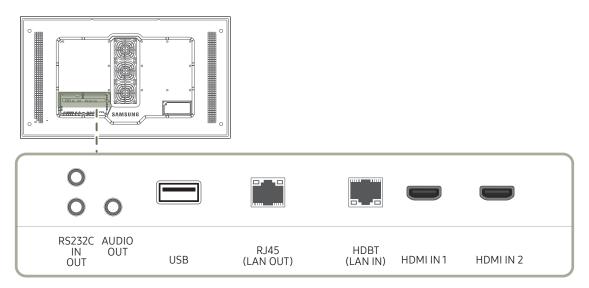
Parts	Description
Remote sensor	Press a button on the remote control pointing at the sensor on the front of the product to perform the corresponding function.
Remote sensor	Using other display devices in the same space as the remote control of this product can cause the other display devices to be inadvertently controlled.

Use the remote control within 7 m to 10 m from the sensor on the product at an angle of 30° from the left and right.

- $\overline{}$ Store used batteries out of reach of children and recycle.
- $^{\rm -}$ Do not use a new and used battery together. Replace both batteries at the same time.
- Remove batteries when the remote control is not to be used for an extended period of time.

Reverse Side

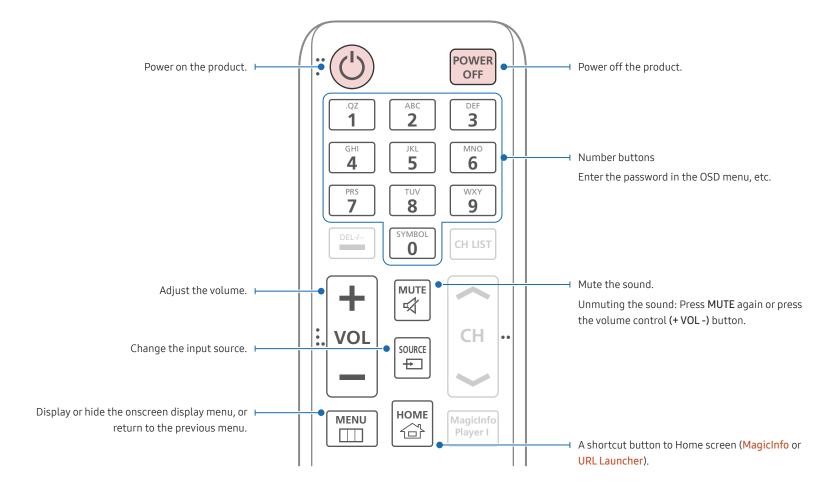
The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

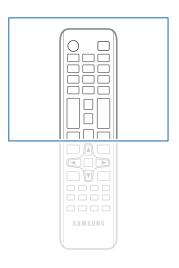


Port	Description	
RS232C IN	Connects to MDC using an RS232C cable.	
RS232C OUT		
AUDIO OUT	Outputs sound to an audio device via an audio cable.	
USB	Connect to a USB memory device.	
RJ45 (LAN OUT)	 Wired LAN connection port used to connect an external device such as a laptop to connect to the Internet. Connects to MDC and the Internet using a LAN cable. (10/100 Mbps) 	
HDBT (LAN IN)	- Sends the HDMI signal to a connected LAN cable using an HDBaseT transmitter Connects to MDC and the Internet using a LAN cable. (10/100 Mbps)	
HDMI IN 1, HDMI IN 2	Connects to a source device using a HDMI cable or HDMI-DVI cable.	

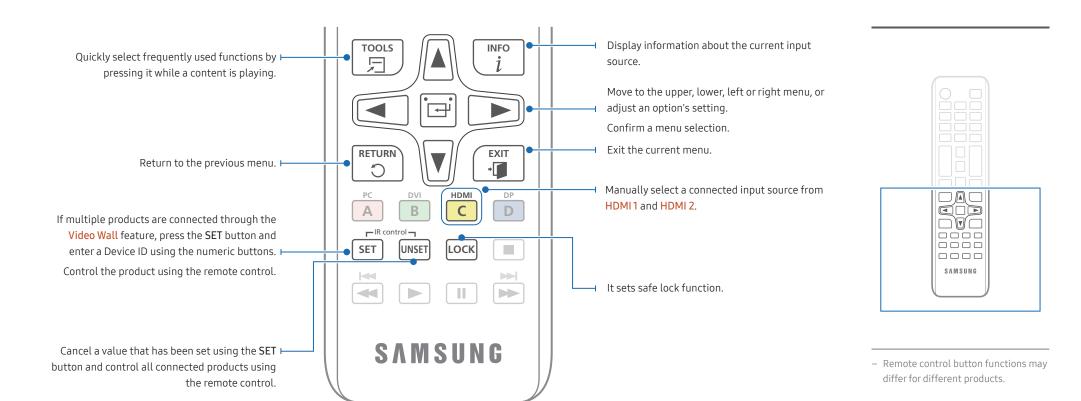
Remote Control

- Using other display devices in the same space as the remote control of this product can cause the other display devices to be inadvertently controlled.
- A button without a description in the image below is not supported on the product.

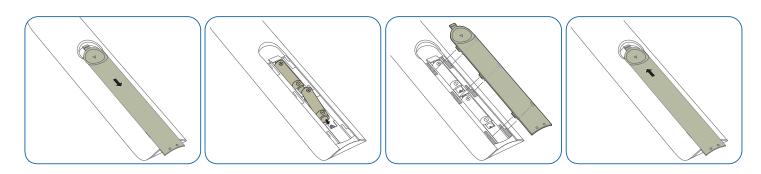




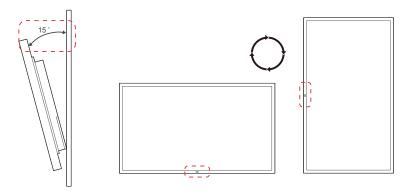
- Remote control button functions may differ for different products.
- Remove batteries when the remote control is not to be used for an extended period of time.



To place batteries in the remote control (AAA x 2)



Before Installing the Product (Installation Guide)



To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

- Ensure that an authorized installation company installs the wall mount.
- Otherwise, it may fall and cause personal injury.
- Make sure to install the specified wall mount.

Tilting Angle and Rotation

Contact Samsung Customer Service Center for further details.

- The product can be tilted at a maximum angle of 15° from a perpendicular wall surface.
- To use the product vertically (portrait), turn it clockwise so that the LED is pointing down.

Air vent

Figure 1.1 Side view

Ventilation

Installation on a Perpendicular Wall

A Minimum 50 mm

B Ambient temperature: Under 50°C

• When installing the product on a perpendicular wall, allow at least 50 mm of space between the product and wall surface for ventilation and ensure that the ambient temperature is kept below 50°C.

— Do not block the vent on the product.

Refer to the Outdoor Installation Guide. (http://displaysolutions.samsung.com)

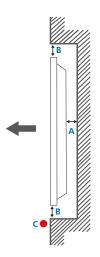


Figure 1.2 Side view

Installation on an Indented Wall

- Contact Samsung Customer Service Center for further details.
- A Minimum 50 mm
- B Minimum 50 mm
- C Ambient temperature: Under 50°C
- When installing the product on an indented wall, allow at least the space specified above between the product and wall for ventilation and ensure that the ambient temperature is kept below 50°C.
- Refer to the Outdoor Installation Guide. (http://displaysolutions.samsung.com)

Installing the Wall Mount

The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

Installing the Wall Mount Kit

The wall mount kit (sold separately) allows you to mount the product on the wall.

For detailed information on installing the wall mount, see the instructions provided with the wall mount.

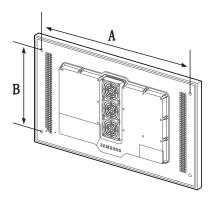
We recommend you contact a technician for assistance when installing the wall mount bracket.

Samsung Electronics is not responsible for any damage to the product or injury to yourself or others if you select to install the wall mount on your own.

Wall Mount Kit Specifications

Install your wall mount on a solid wall perpendicular to the floor. If you install the product on a slanted wall, it may fall and result in severe personal injury.

Before attaching the wall mount to surfaces other than plaster board, please contact your nearest service center for additional information.



- Samsung wall mount kits contain a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws that are longer than the standard length or do not comply with the VESA standard screw specifications. Screws that are too long may cause damage to the inside of the product.
- For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.
- Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.
- Samsung is not liable for product damage or personal injury when wall mount is used or the consumer fails to follow the product installation instructions.
- Do not mount the product at more than a 15 degree tilt.
- Always have two people mount the product on a wall.
- Standard dimensions for wall mount kits are shown in the table below.

Unit: mm (inches)

Model name	Screw hole specs (A * B) in millimeters	Standard Screw	Quantity
OH46F / OH55F	995 x 500 (39.2 x 19.7)	M8	4

Do not install your Wall Mount Kit while your product is turned on. It may result in personal injury due to electric shock.

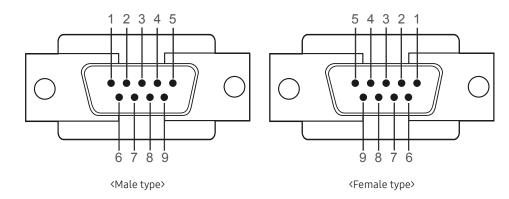
Remote Control (RS232C)

Cable Connection

RS232C Cable

Interface	RS232C (9 pins)		
Pin	TxD (No.2), RxD (No.3), GND (No.5)		
Bit rate	9600 bps		
Data bits	8 bit		
Parity	None		
Stop bit	1 bit		
Flow control	None		
Maximum length	15 m (only shielded type)		

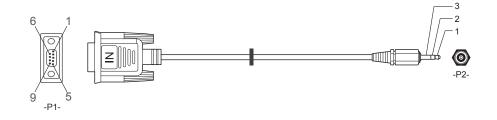
• Pin assignment



Pin	Signal
1	Detect data carrier
2	Received data
3	Transmitted data
4	Prepare data terminal
5	Signal ground
5	Prepare data set
7	Send request
3	Clear to send
9	Ring indicator

• RS232C cable

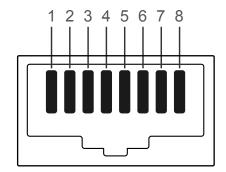
Connector: 9-Pin D-Sub to Stereo Cable



-P1-		-P1-	-P2-		-P2-
Male type	Rx	3	 2	Tx	STEREO
	Tx	2	 1	Rx	PLUG
	Gnd	5	 3	Gnd	(3.5ø)

LAN Cable

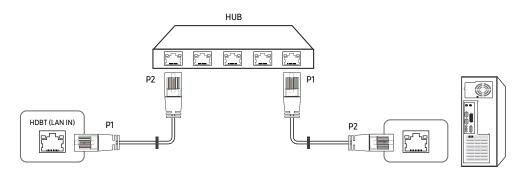
• Pin assignment



Pin No Standard Color		Standard Color Signal	
1	White and orange	TX+	
2	Orange	TX-	
3	White and green	RX+	
4	Blue	NC	
5	White and blue	NC	
6	Green	RX-	
7	White and brown	NC	
8	Brown	NC	

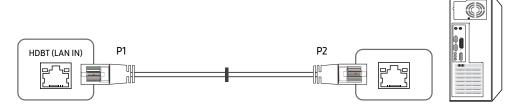
• Connector: RJ45

Direct LAN cable (PC to HUB)



Signal	P1		P2	Signal
TX+	1	<>	1	TX+
TX-	2	<>	2	TX-
RX+	3	<>	3	RX+
RX-	6	<>	6	RX-

Cross LAN cable (PC to PC)

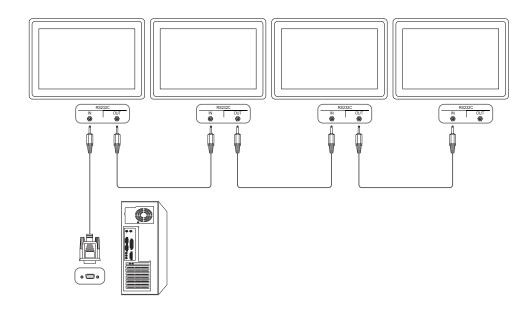


Signal	P1		P2	Signal
TX+	1	<>	3	RX+
TX-	2	<>	6	RX-
RX+	3	<>	1	TX+
RX-	6	<>	2	TX-

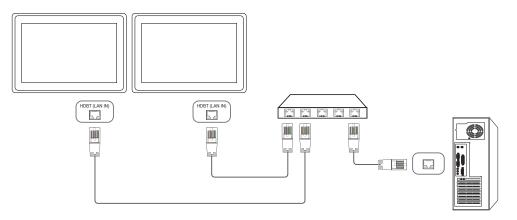
Connection

 $^-$ Ensure you connect each of the adapters to the correct RS232C IN or OUT port on the product.

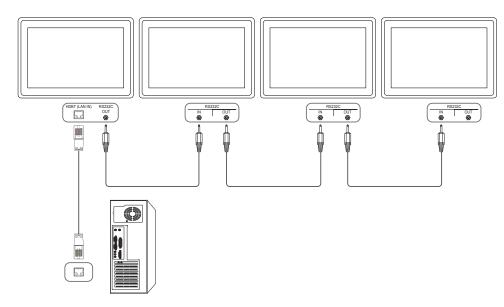
Connection 1



• Connection 2



• Connection 3



Control Codes

Viewing control state (Get control command)

Header	Command	ID	Data length	Checksum
0xAA	Command type	_	0	_

Controlling (Set control command)

Header	Command	ID	Data length	Data	Checksum
0xAA	Command type	_	1	Value	_

Command

No.	Command type	Command	Value range
1	Power control	0x11	0~1
2	Volume control	0x12	0~100
3	Input source control	0x14	-
4	Screen mode control	0x18	-
5	Screen size control	0x19	0~255
6	Video wall mode control	0x5C	0~1
7	Safety Lock	0x5D	0~1
8	Video Wall On	0x84	0~1
9	Video Wall User Control	0x89	-

[•] All communications take place in hexadecimals. The checksum is calculated by adding up all values except the header. If a checksum adds up to be more than 2 digits as shown below (11+FF+01+01=112), the first digit is removed.

E.g. Power On & ID=0

Header	Command	ID	Data length	Data 1	Checksum
0xAA	0x11		1	"Power"	
Header	Command	ID	Data length	Data 1	12
0xAA	0x11		1	1	

To control all devices connected by a serial cable simultaneously irrespective of IDs, set the ID
as "0xFE" and transmit commands. Commands will be executed by each device but ACK will not
respond.

Power control

- Function
 A product can be powered on and off using a PC.
- Viewing power state (Get Power ON / OFF Status)

Header	Command	ID	Data length	Checksum
0xAA	0x11	_	0	_

• Setting power ON/Off (Set Power ON / OFF)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x11	_	1	"Power"	_

"Power": Power code to be set on a product.

1: Power ON

0: Power OFF

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x11	"Power"	_

"Power": Power code to be set on a product.

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x11	"ERR"	_

[&]quot;ERR": A code showing what error has occurred.

Volume control

Function

The volume of a product can be adjusted using a PC.

• Viewing volume state (Get Volume Status)

Header	Command	ID	Data length	Checksum
0xAA	0x12	_	0	_

• Setting the volume (Set Volume)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x12	_	1	"Volume"	_

"Volume": Volume value code to be set on a product. (0-100)

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	-	3	'A'	0x12	"Volume"	

"Volume": Volume value code to be set on a product. (0-100)

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x12	"ERR"	

[&]quot;ERR": A code showing what error has occurred.

Input source control

Function

The input source of a product can be changed using a PC.

• Viewing input source state (Get Input Source Status)

Header	Command	ID	Data length	Checksum
0xAA	0x14	_	0	_

• Setting the input source (Set Input Source)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x14	_	1	"Input Source"	_

"Input Source": An input source code to be set on a product.

0x0C	Input source
0x20	MagicInfo
0x21	HDMI1
0x22	HDMI1_PC
0x23	HDMI2
0x24	HDMI2_PC
0x55	HDBT

HDMI1_PC and HDMI2_PC cannot be used with the Set command. They only respond to "Get" commands.

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'A'	0x14	"Input	
						Source"	

"Input Source": An input source code to be set on a product.

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'N'	0x14	"ERR"	

[&]quot;ERR": A code showing what error has occurred.

[—] Available input sources may vary depending on the model.

[—] MagicInfo is only available with models that contain the MagicInfo function.

Screen mode control

Function

Header

0x31

The screen mode of a product can be changed using a PC. Screen mode cannot be controlled when the Video Wall function is enabled.

• Viewing screen status (Get Screen Mode Status)

Header	Command	ID	Data length	Checksum
0xAA	0x18	_	0	_

• Setting the picture size (Set Picture Size) Command

Wide Zoom

0xAA	0x18	1	"Screen Mode"	
"Screen Mo	ode": A code that sets th	ne product status		
0x01	16 : 9			
0x04	Zoom			

4:3 0x0B

Ack							
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x18	"Screen Mode"	_

Data length

Data

Checksum

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x18	"ERR"	

[&]quot;ERR": A code showing what error has occurred

Screen size control

Function

Header

The screen size of a product can be changed using a PC.

• Viewing the screen size (Get Screen Size Status)

Command

0xAA	0x19			0			
• Ack							_
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'A'	0x19	"Screen Size"	_

Data length

Checksum

"Screen Size": product screen size (range: 0 – 255, unit: inch)

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'N'	0x19	"ERR"	_

[&]quot;ERR": A code showing what error has occurred

[&]quot;Screen Mode": A code that sets the product status

Video Wall Mode Control

Function

Video Wall mode can be activated on a product using a PC.

This control is only available on a product whose Video Wall is enabled.

• Viewing video wall mode (Get Video Wall Mode)

Header	Command	ID	Data length	Checksum
0xAA	0x5C		0	

• Setting the video wall (Set Video Wall Mode)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x5C	_	1	"Video Wall Mode"	_

[&]quot;Video Wall Mode": A code used to activate Video Wall mode on a product

1: Full

0: Natural

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x5C	"Video Wall Mode"	_

[&]quot;Video Wall Mode": A code used to activate Video Wall mode on a product

• Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x5C	"ERR"	

[&]quot;ERR": A code showing what error has occurred

Safety Lock On

Function

PC can be used to turn the Safety Lock On function on or off on a product.

This control is available regardless of whether or not the power is turned on.

• Viewing the safety lock state (Get Safety Lock Status)

Header	Command	ID	Data length	Checksum
0xAA	0x5D	_	0	_

• Enabling or disabling safety lock (Set Safety Lock Enable / Disable)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x5D		1	"Safety Lock"	

[&]quot;Safety Lock": Safety lock code to be set on a product

1: ON

0: OFF

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x5D	"Safety Lock"	_

[&]quot;Safety Lock": Safety lock code to be set on a product

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x5D	"ERR"	

[&]quot;ERR": A code showing what error has occurred

Video Wall On

Function

Turn Video Wall on or off on the product from your computer.

• Get Video Wall On/Off Status

Header	Command	ID	Data length	Checksum
0xAA	0x84	_	0	_

• Set Video Wall On/Off

Header	Command	ID	Data length	Data	Checksum
0xAA	0x84	_	1	V.Wall_On	_

• V.Wall_On: Video Wall code to be assigned to the product

1: Video Wall ON

0: Video Wall OFF

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x84	V.Wall_On	

V.Wall_On : Same as above

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'N'	0x84	ERR	

[&]quot;ERR": A code showing what error has occurred

Video Wall User Control

Function
 Turn the Video Wall function on or off on the product from your computer.

• Get Video Wall Status

Header	Command	ID	Data leng	th	Checksum	
0xAA	0x89		0			
Set Vide	eo Wall					_
Header	Command	ID	Data length	Val1	Val2	Checksum
0xAA	0x89		2	Wall_Div	Wall_SNo	

Wall_Div: Video Wall Divider code assigned to the product

10x10 Video Wall Model

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Off	0x00														
1	0x11	0x12	0x13	0x14	0x15	0x16	0x17	0x18	0x19	0x1A	0x1B	0x1C	0x1D	0x1E	0x1F
2	0x21	0x22	0x23	0x24	0x25	0x26	0x27	0x28	0x29	0x2A	0x2B	0x2C	0x2D	0x2E	0x2F
3	0x31	0x32	0x33	0x34	0x35	0x36	0x37	0x38	0x39	0x3A	0x3B	0x3C	0x3D	0x3E	0x3F
4	0x41	0x42	0x43	0x44	0x45	0x46	0x47	0x48	0x49	0x4A	0x4B	0x4C	0x4D	0x4E	0x4F
5	0x51	0x52	0x53	0x54	0x55	0x56	0x57	0x58	0x59	0x5A	0x5B	0x5C	0x5D	0x5E	0x5F
6	0x61	0x62	0x63	0x64	0x65	0x66	0x67	0x68	0x69	0x6A	0x6B	0x6C	0x6D	0x6E	0x6F
7	0x71	0x72	0x73	0x74	0x75	0x76	0x77	0x78	0x79	0x7A	0x7B	0x7C	0x7D	0x7E	N/A
8	0x81	0x82	0x83	0x84	0x85	0x86	0x87	0x88	0x89	0x8A	0x8B	0x8C	N/A	N/A	N/A
9	0x91	0x92	0x93	0x94	0x95	0x96	0x97	0x98	0x99	0x9A	0x9B	N/A	N/A	N/A	N/A
10	0xA1	0xA2	0xA3	0xA4	0xA5	0xA6	0xA7	0xA8	0xA9	0xAA	N/A	N/A	N/A	N/A	N/A
11	0xB1	0xB2	0xB3	0xB4	0xB5	0xB6	0xB7	0xB8	0xB9	N/A	N/A	N/A	N/A	N/A	N/A
12	0xC1	0xC2	0xC3	0xC4	0xC5	0xC6	0xC7	0xC8	N/A						
13	0xD1	0xD2	0xD3	0xD4	0xD5	0xD6	0xD7	N/A							
14	0xE1	0xE2	0xE3	0xE4	0xE5	0xE6	0xE7	N/A							
15	0xF1	0xF2	0xF3	0xF4	0xF5	0xF6	N/A								

Wall_SNo: Product Number code assigned to the product

10x10 Video Wall Model : (1 ~ 100)

Set Number	Data
1	0x01
2	0x02
99	0x63
100	0x64

Ack

Header	Command	ID	Data length	Ack/Nak r-CMI		Val1	Val2	Checksum	
0xAA	0xFF	_	4	'A'	0x89	Wall_Div	Wall_SNo	_	
• Nak									
Header	Command	ID	Data length	Ack	k/Nak i	r-CMD V	/al1	Checksum	
0xAA	0xFF		3	'N'	(0x89 E	ERR		

[&]quot;ERR": A code showing what error has occurred

Chapter 03

Connecting and Using a Source Device

Before Connecting

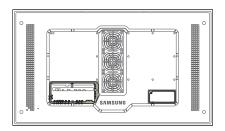
Pre-connection Checkpoints

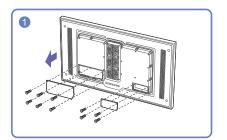
- Before connecting a source device, read the user manual provided with it.

 The number and locations of ports on source devices may differ from device to device.
- Do not connect the power cable until all connections are completed.
 Connecting the power cable during connection may damage the product.
- Check the types of ports at the back of the product you want to connect.

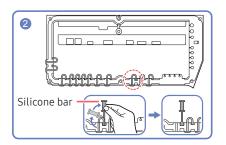
Before connecting cables

The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.





Unfasten the screws, then remove the cover.



Remove the appropriate silicone bar for the thickness of the cable to connect.

Different hole sizes and corresponding cable thickness for each:

* JACK

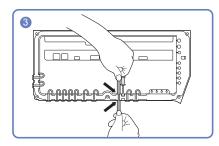
- 7 Ø hole x 2: Insert the 7 Ø cable

 $^-$ 5.5 Ø hole x 6 : Insert the 5.5 Ø cable

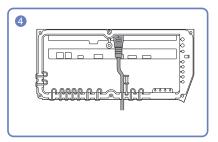
- 3 Ø hole x 4 : Insert the 3 Ø cable

* POWER INLET

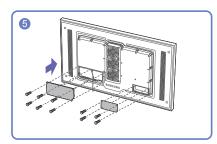
- 7 Ø hole x 1: Insert the 7 Ø cable



Insert the appropriate cable into the hole from which the silicone bar was removed.



The cable should be connected as shown.



Close the cover, then fasten the screws.

- After all the cables are connected, make sure to close the cover and fasten the screws to ensure it is water tight.
- Recommended torque : 10 12 kgf.cm

Connecting to a PC

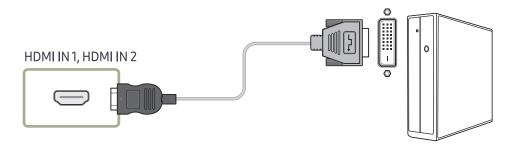
- Do not connect the power cable before connecting all other cables.

 Ensure you connect a source device first before connecting the power cable.
- A PC can be connected to the product in a variety of ways. Select a connection method suitable for your PC.

Connection Using an HDMI-DVI Cable

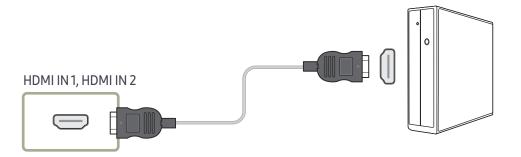
After connecting a computer to the product with an HDMI-DVI cable, make sure to configure the settings as shown below to enable the video from the computer.

- The appearance may differ depending on the product.
- Connecting parts may differ in different products.
- Audio is not available if the DVI port on the product is connected to the HDMI port on the PC using a DVI-HDMI adapter.



Connection Using an HDMI Cable

- The appearance may differ depending on the product.
- Connecting parts may differ in different products.



[—] Connecting parts may differ in different products.

Connecting to a Video Device

- Do not connect the power cable before connecting all other cables.

 Ensure you connect a source device first before connecting the power cable.
- You can connect a video device to the product using a cable.
- Connecting parts may differ in different products.
- Press the **SOURCE** button on the remote control to change the source.

Using an HDMI cable or HDMI to DVI Cable (up to 1080p)

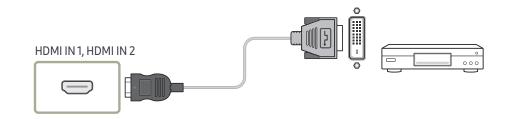
- For better picture and audio quality, connect to a digital device using an HDMI cable.
- An HDMI cable supports digital video and audio signals, and does not require an audio cable.
- The picture may not display normally (if at all) or the audio may not work if an external device that uses an older version of HDMI mode is connected to the product. If such a problem occurs, ask the manufacturer of the external device about the HDMI version and, if out of date, request an upgrade.
- Be sure to use an HDMI cable with a thickness of 14 mm or less.
- Be sure to purchase a certified HDMI cable. Otherwise, the picture may not display or a connection error may occur.
- A basic high-speed HDMI cable or one with ethernet is recommended.

 This product does not support the ethernet function via HDMI.

Connection Using an HDMI-DVI Cable

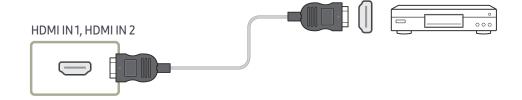
Supported resolutions include 1080p (50/60Hz), 720p (50/60Hz), 480p, and 576p.

- The appearance may differ depending on the product.
- Connecting parts may differ in different products.
- Audio will not be enabled if the product is connected to a video device using an HDMI-DVI cable.



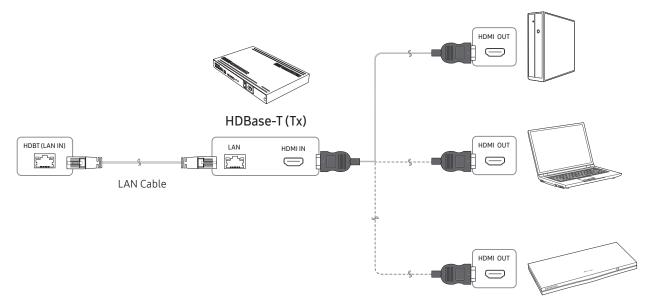
Connection Using an HDMI Cable

- The appearance may differ depending on the product.
- Connecting parts may differ in different products.



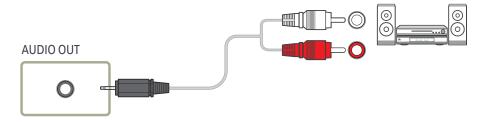
Connecting the HDBase-T

- The appearance may differ depending on the product.
- Connecting parts may differ in different products.
- HDBT (LAN IN) transmits data from an external device to HDBase-T (Tx). Make sure to connect them directly using a LAN cable.
- Data transmission is not available if HDBT (LAN IN) is connected to HDBase-T (Tx) through a hub.
- HDBase-T works with unshielded twisted pair (UTP) or shielded twisted pair (STP) cables; but, to ensure CE compliance, STP cables and STP Connectors are required. STP cable and connectors are recommended to safeguard against unpredictable environmental electrical noise which may impact performance. It is recommended to use an STP cable to maximize performance. Using a UTP cable or patch may decrease performance.
- For a long distance (50 m) transmission using many LAN cables in a bundle, use FTP or STP type of cables. When using UTP cables adjacent to other cables, it may cause a trouble of signal transmission.



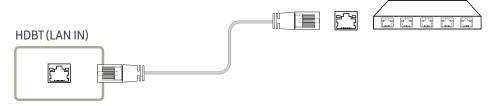
Connecting to an Audio System

- The appearance may differ depending on the product.
- Connecting parts may differ in different products.



Connecting the LAN Cable

- The appearance may differ depending on the product.
- Connecting parts may differ in different products.



- Use Cat7(*STP Type) cable for the connection. (10/100 Mbps)
 - *Shielded Twist Pair

Changing the Input source (except the LH55OHFPSBC model)

Source

SOURCE → Source



The displayed image may differ depending on the model.

Source allows you to select a variety of sources and change source device names.

You can display the screen of a source device connected to the product. Select a source from source list to display the screen of the selected source.

The input source can also be changed by using the **SOURCE** button on the remote control.

The screen may not display correctly if an incorrect source is selected for the source device you want to convert to.

Edit

SOURCE → Source → ▲ → Edit → ENTER

Edit the name and device type of a connected external device.

• The list can include the following source devices. Source devices on the list differ depending on the selected source.

HDMI1 / HDMI2 / HDBT / Cable Box / Game Console / PC / Blu-ray player

• You cannot edit the following sources.

MagicInfo S / URL Launcher / Web Browser

Web Browser (except the LH55OHFPSBC model)

SOURCE → Source → Web Browser → ENTER



The displayed image may differ depending on the model.

Settings

SOURCE → Source → Web Browser → ▲ → Settings → ENTER 🚭

General

Hide Tabs and Toolbar automatically

If the browser tabs, menu or toolbar are not used for a while, they will automatically disappear. To make them appear again, move the pointer or focus to the top of the screen.

Use / Do not use

Pop-up Blocker

Make your browsing experience more pleasant by blocking pop-up windows.

• Use / Do not use

Reset Settings

All your customized web Browser settings will be reset to their default values. Your bookmarks and history won't be affected.

Search Engine

If you enter a keyword in the URL/keyword input field, Web Browser will open the Search Results page. Choose the search engine you want to use.

Google / Bing

Connect a LAN cable to access Internet from the product, similar to accessing the Internet from a computer.

Privacy & Security

Security Mode

Provides warnings about unsafe pages or blocks access to enhance Web Browser security. This may slow the Web Browser down.

• Use / Do not use

Private Browsing

When Private Browsing is active, your browsing history won't be recorded.

• Use / Do not use

Do Not Track

Ask websites not to track you.

• Use / Do not use

JavaScript

Allow all sites to run JavaScript for a better browsing experience.

• Use / Do not use

Clear History

Clear your entire browsing history.

Clear History

Delete browsing data

Delete all browsing data such as cookies, cached images and data.

Your bookmarks and history won't be affected.

• Delete browsing data

Blocked pages

Blocked pages

Blocks access to pages that you have listed in Blocked pages.

• Use / Do not use

Blocked pages

Block or unblock specific pages.

Add

Approved pages

Approved pages

Enables web access only to pages that you have approved.

Use / Do not use

Password for Approved pages

Set a password for managing Approved pages.

Set Password

Approved Pages

Approve specific pages or remove them from Approved pages.

Add

Encoding

Choose an encoding method for web pages. The current setting is Auto.

• Auto / Manual (Current : Unicode)

Refresh Options

 $SOURCE \rightarrow Source \rightarrow Web Browser \rightarrow \blacktriangle \rightarrow Refresh Options \rightarrow ENTER$

Refresh Interval

Set the time for the web browser to wait before returning to the home page.

• Off / 5 min. / 10 min. / 15 min. / 30 min.

Zoom1

Set the zoom scale to apply when the web browser is refreshed.

• 50% / 75% / 100% / 125% / 150%

Home Page

Set the website to display when the web browser is refreshed.

Samsung Display / Custom

Custom

Enter the URL to set as the home page.

Enter URL

Available only when **Home Page** is set to **Custom**.

Changing the Input source (applies to the LH55OHFPSBC model only)

Source

SOURCE



The displayed image may differ depending on the model.

Source allows you to select a variety of sources and change source device names.

You can display the screen of a source device connected to the product. Select a source from source list to display the screen of the selected source.

The input source can also be changed by using the SOURCE button on the remote control.

The screen may not display correctly if an incorrect source is selected for the source device you want to convert to.

Edit

SOURCE → ▲ → Edit → ENTER 🚭

Edit the name and device type of a connected external device.

• The list can include the following source devices. Source devices on the list differ depending on the selected source.

HDMI1 / HDMI2 / HDBT / Cable Box / Game Console / PC / Blu-ray player

• You cannot edit the following sources.

MagicInfo S / URL Launcher / Web Browser

Web Browser

Connect the network to access the Internet from the product like accessing the Internet from a computer.

Settings

 $\mathsf{SOURCE} \to \bigoplus \mathsf{Web} \, \mathsf{Browser} \to \blacktriangle \to \mathsf{Settings} \to \mathsf{ENTER} \, \blacksquare$

Refresh Interval

Set the time for the web browser to wait before returning to the home page.

• Off / 5 min / 10 min / 15 min / 30 min

Zoom

Set the zoom scale to apply when the web browser is refreshed.

• 50% / 75% / 100% / 125% / 150% / 200% / 300%

Home Page

Set the website to display when the web browser is refreshed.

• Samsung Display / Custom

Custom

Enter the URL to set as the home page.

Enter URL

Available only when **Home Page** is set to **Custom**.

Advanced Settings

If the browser tabs, menu or toolbar are not used for a while, they will automatically disappear. To make them appear again, move the pointer or focus to the top of the screen.
Use / Do not use
Hide the cursor to prevent interference with touch operation. • Use / Do not use
Make your browsing experience more pleasant by blocking pop-up windows.
Use / Do not use
Configure a proxy server for the web browser.
Use / Do not use
All your customized Web Browser settings will be reset to their default values. Your bookmarks and history won't be affected.

Search Engine

If you enter a keyword in the URL/keyword input field, Web Browser will open the Search Results page. Choose the search engine you want to use.

• Google / Bing

Privacy & Security	
Do Not Track	Ask websites not to track you.
	Use / Do not use
Delete History	Delete your entire browsing history.
JavaScript	Allow all sites to run JavaScript for a better browsing experience.
	Use / Do not use
Delete browsing data	Delete all browsing data such as cookies, cached images and data
	Your bookmarks and history won't be affected.
Encoding	
Encoding	Choose an encoding method for web pages. The current setting is
	Auto.
	Auto / Manual (Current : Unicode)
About	
Display the current version	of Wah Provisor

Chapter 04 Using MDC

Multiple display control "MDC" is an application that allows you to easily control multiple display devices simultaneously using a PC.
- For details on how to use the MDC program, refer to Help after installing the program. The MDC program is available on the website.

MDC Program Installation/Uninstallation

Installation

- MDC installation can be affected by the graphics card, mother board and network conditions.
- 1 Click the MDC Unified installation program.
- 2 Select a language for installation. Next, click "OK".
- 3 When the "Welcome to the InstallShield Wizard for MDC_Unified" screen appears, click "Next".
- 4 In the "License Agreement" window displayed, select "I accept the terms in the license agreement" and click "Next".
- 5 In the displayed "Customer Information" window, fill out all the information fields and click "Next".
- 6 In the displayed "Destination Folder" window, select the directory path you want to install the program in and click "Next".
- If the directory path is not specified, the program will be installed in the default directory path.
- 7 In the displayed "Ready to Install the Program" window, check the directory path to install the program in and click "Install".
- 8 Installation progress will be displayed.
- 9 Click "Finish" in the displayed "InstallShield Wizard Complete" window.
 - Select "Launch MDC Unified" and click "Finish" to run the MDC program immediately.
- 10 The MDC Unified shortcut icon will be created on the desktop after installation.
 - The MDC execution icon may not be displayed depending on the PC system or product specifications.
 - Press F5 if the execution icon is not displayed.

Uninstallation

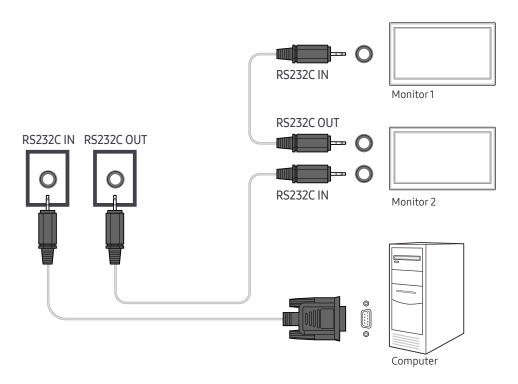
- 1 Select Settings > Control Panel on the Start menu and double-click Add/Delete Program.
- 2 Select MDC Unified from the list and click Change/Remove.

Connecting to MDC

Using MDC via RS-232C (serial data communications standards)

An RS-232C serial cable must be connected to the serial ports on the PC and monitor.

The appearance may differ depending on the product.

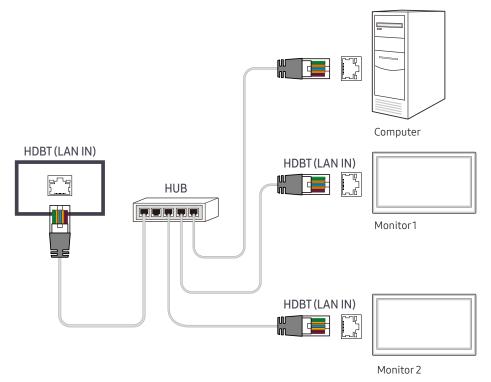


Using MDC via Ethernet

Enter the IP for the primary display device and connect the device to the PC. Display devices can be connected to each other using a LAN cable.

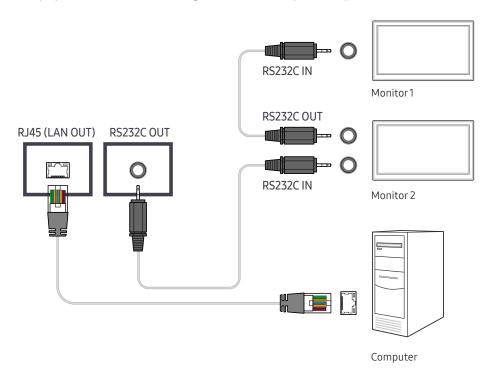
Connection using a direct LAN cable

- The appearance may differ depending on the product.
- Multiple products can be connected using the HDBT (LAN IN) port on the product and the LAN ports on the HUB



Connection using a cross LAN cable

- The appearance may differ depending on the product.
- $^{\rm -}$ Multiple products can be connected using the RS232C IN / OUT port on the product.



Chapter 05

Player feature (except the LH55OHFPSBC model)

Accessible using the HOME button on the remote control

Player

HOME $\triangle \rightarrow Player \rightarrow ENTER \ \blacksquare$

Play a range of content such as channels with schedules assigned, templates or files.



The displayed image may differ depending on the model.

No.	Description
0	Select between internal or external memory.
2	Play content, templates and schedules configured on the server. • You can view whether the server is connected (approval) in the Player screen. To view whether the server is connected when a Network Channel is running,
	 Select Network Channel from the Player screen. The No channel. message appears if no channel has been registered in Network Channel. Network Channel will run.
3	Play content stored on the server.
4	Play a template stored in the internal memory.
5	Select a content type as criterion to search for a desired content list.
6	Set different options for Player.

Viewing content

- 1 Select either internal or external memory. The files saved in the selected memory appear.
- 2 Select the desired file. The content appears on the screen. (For more information on compatible file formats, see the "File formats compatible with Player" section.)

To use the **Player** feature, set **Play via** to **MagicInfo** in **System**.

When content is running

Control buttons on the remote

You can use buttons on your remote control to play, pause, or skip between content on the playlist.

Button	Function
TOOLS	Brings up the menu bar.
INFO	Displays the information of the content.
>	Goes to next file or page.
◀	Goes to previous file or page.
♂/▶/II	Plays or pauses slide show or video content.
	Stops displaying content and goes to the Player screen.
44	Rewinds the video content.
>>	Fast forwards the video content.

Available menu

Press the TOOLS button on the remote control during content playback to configure settings.

Menu	Description
Playlist	View a list of content items currently playing.
Picture Mode	Customizes the screen settings for the content currently playing.
Sound Mode	Customizes the audio settings for the content currently playing.
Repeat	Set the repeat mode.
Background Music	Set the background music to be played when content is running.
Reset	Reset the background music.
Pause	Pause the background music.
Prev	Play the previous background music on the list.
Next	Play the next background music on the list.

Reset, Pause, Prev, Next only appear when the background music is set.

File Formats Compatible with Player

- Supported file systems include FAT32 and NTFS.
- A file with a vertical and horizontal resolution larger than the maximum resolution cannot be played.
 Check the vertical and horizontal resolution of the file.
- Check the supported video and audio Codec types and Versions.
- Check the supported file versions.
 - PowerPoint version up to 97 2007 is supported
- Only the last USB device that was connected is recognized.

Network Schedule Multiframe

Playback restrictions

- A maximum of two video files (Video) can be played simultaneously.
- In portrait playback mode, only one video file can be played at a time.
- For Office files (PPT and Word files) and PDF files, only one file type is supported at a time.
- LFD(.lfd) files are not supported.

Sound output restrictions

- More than one sound output cannot be used.
- Playback priority: network BGM > local BGM > video file in the main frame selected by the user
- Network BGM: Settings can be configured in step 1 when creating a server schedule.
- Local BGM: BGM settings can be configured using the tools displayed after the TOOLS button is pressed during Player playback.
- User-selected main frame: Main frame settings can be configured in step 2 when creating a server schedule.

Template files and LFD(.lfd) files

Restrictions

• Ensure a distributed folder (content / schedules) exists in Internal / USB memory.

Playback restrictions

- A maximum of two video (Video) files can be played.
- For Office files (PPT and Word files) and PDF files, only one file type is supported at a time.
- Multiple videos (Video) cannot be played on a single display of a video wall simultaneously.

Sound output restrictions

- More than one sound output cannot be used.
- Playback priority: network BGM > local BGM > video file in the main frame selected by the user

Contents

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi *.mkv *.asf *.wmv *.mp4 *.mov	AVI MKV ASF MP4 3GP MOV	H.264 BP/MP/HP HEVC (H.265 - Main, Main10, Main4:2:210) Motion JPEG MVC	4096x2160 1920 x 1080	4096X2160: 24 3840X2160: 30 60 30	80 80 20	AC3 LPCM ADPCM(IMA, MS) AAC HE-AAC WMA
*.3gp *.vro *.mpg *.mpeg *.ts *.tp *.trp *.mov *.flv *.vob *.svi *.m2ts	FLV VRO VOB PS TS SVAF	MPEG4 SP/ASP Window Media Video v9 (VC1) MPEG2 MPEG1 Microsoft MPEG-4 v1, v2, v3 Window Media Video v7(WMV1),v8(WMV2) H 263 Sorenson VP6		30	20	DD+ MPEG(MP3) G.711(A-Law, μ-Law)
*.mts *.webm	WebM	VP8 VP9	1920x1080 4096x2160	90 4096X2160: 24 3840X2160: 30	20 20	Vorbis
*.rmvb	RMVB	RV8/9/10 (RV30/40)	1920x1080	60	20	RealAudio 6

Audio Video Image • 3D video is not supported. • Audio content with a Bit rate or Frame rate larger than the rate • Compatible image file format : JPEG, PNG, BMP specified in the table above can cause choppy audio during • Content with a resolution larger than the resolution specified in 32-bit, 24-bit and 8-bit BMP files are supported. playback. the table above is not supported. • Supported maximum resolution: 4096 x 4096 • Audio content will not play, or not play correctly, if there is an • Video content with a Bit rate or Frame rate larger than the rate Supported maximum file size: 20MB error in the content or the container. specified in the table above can cause choppy video during Supported image effects: 9 effects playback. • Some USB/digital camera devices may not be compatible with (Fade1, Fade2, Blind, Spiral, Checker, Linear, Stairs, Wipe, • Video content will not play, or not play correctly, if there is an Random) error in the content or the container. • Supports up to WMA 10 Pro 5.1 channel. WMA lossless audio is not supported. • Some USB/digital camera devices may not be compatible with the player. • QCELP, AMR NB/WB are not supported. • Supports up to H.264, Level 4.1 H.264 FMO / ASO / RS, VC1 SP / AP L4 and AVCHD are not supported. • For all Video codecs except MVC, VP8, VP6: - Below 1280 x 720: 60 frame max - Above 1280 x 720: 30 frame max • GMC 2 or higher is not supported. • Supports only BD MVC Spec. • Only one video file can play at a time if video files on the monitor use incompatible codecs or the resolution is 1080 x 1920. • When a single video file is playing, Seamless mode is not supported under the following conditions: Incompatible codec (MVC, VP3, MJPEG) ↔ Incompatible codec

The resolution is different from that of the monitorThe frequency is different from that of the monitor

PDF WORD Power Point • Compatible document file formats • Compatible document file formats • Compatible document file formats - Extension : ppt, pptx - Extension : pdf Extension : .doc, .docx - Version : Office 97 ~ Office 2007 - Version : Office 97 ~ Office 2007 Functions not supported • Functions not supported • Functions not supported - Content less than 1 pixel not supported because of performance degradation issue. Page background effect Animation effect - Masked Image, Tiled Image content not supported. - 3D shapes (which will be displayed in 2D) Some paragraph styles - Content with Rotated Text, not supported. Header and footer (some subitems are not supported) Word Art - 3D Shadow Effects not supported. - Word Art Align Some characters not supported A group alignment error may occur - Align (Special characters may be corrupted) - 3D shapes (which will be displayed in 2D) A group alignment error may occur - Office 2007 - Office 2007 SmartArt is not fully supported. 97 out of 115 subitems are SmartArt is not fully supported. 97 out of 115 subitems are supported. supported. Object insertion - Charts Half-width characters Half-width characters - Letter spacing - Letter spacing - Charts Vertical text Some subitems are not supported Vertical text Some subitems are not supported Slide notes and handout Slide notes and handout

emplate files	LFD		
Creation/editing/playback are only available in Template.	 Supported in Network Channel Compatible document file formats Extension: .lfd 		

Schedule

HOME $\stackrel{\triangle}{\longrightarrow} \rightarrow$ Schedule \rightarrow ENTER \blacksquare



 $[\]overline{}$ The displayed image may differ depending on the model.

You can check the content's playback schedule on the server, imported from an external storage, or on a mobile device.

No. Desc		Description
	1	Select between server and external memory.
	2	View weekly schedule of content playback. Select to view detailed information of each event.
	3	View a thumbnail image and brief information of the content.

Clone Product



The displayed image may differ depending on the model.

Export settings on the product to an external storage device. You can also import settings from an external storage device.

This option is useful when assigning the same settings to several products.

When a duplicate file is not found on the external storage device

- 1 Connect the external storage device, then run the Clone Product function.
- 2 The No cloning file found on the external storage device. Export this device's settings to the external storage device? message appears.
- **3** Select Export to export the settings.

When a duplicate file is found on the external storage device

- 1 Connect the external storage device, then run the Clone Product function.
- 2 The Cloning file found. Please select an option. message appears.
 Run the Import from External Storage or Export to External Storage function.
 - Import from External Storage: Copy settings saved on an external storage device to the product.
 - Export to External Storage: Copy settings on the product to an external storage device.

After configuration is complete, the product is rebooted automatically.

ID Settings

HOME → ID Settings → ENTER ■



The displayed image may differ depending on the model.

Assign an ID to a set.

Device ID

Enter the ID number of the product connected to the input cable for input signal reception. (Range: $0\sim224$)

Press ▲/▼ to select a number, and press 🗗.

Device ID Auto Set

This feature automatically allots an ID number to a device connected via an RS232C cable.

When multiple devices are connected, enable the feature on either the first or last device.

This function is only available on the first device within an RS-232C daisy chain.

PC Connection Cable

Select a method to connect to MDC to receive the MDC signal.

RS232C cable

Communicate with MDC via the RS232C-stereo cable.

• RJ-45 (LAN)/Wi-Fi Network

Communicate with MDC via the RJ45 cable or a Wi-Fi network.

Enter the number you want using the number buttons on the remote control.

For the models (LH550HF2VBC, LH460HF2VBC) that do not support wireless communication, only the RJ-45(LAN) menu appears.

Video Wall

HOME

→ Video Wall → ENTER

→



The displayed image may differ depending on the model.

Customize the layout of multiple displays that are connected to form a video wall.

In addition, display part of a whole picture or repeat the same picture on each of the connected multiple displays.

To display multiple images, refer to MDC Help or the MagicInfo user guide. Some models may not support the MagicInfo function.

Video Wall

You can activate or deactivate Video Wall.

To organize a video wall, select On.

Off / On

Horizontal x Vertical

This feature automatically splits a videowall display based on a videowall matrix configuration.

Enter the videowall matrix.

The videowall display is split based on the configured matrix. The number of vertical or horizontal display devices can be set within the range 1 and 15.

A videowall display can be split into a maximum of 100 screens.

Screen Position

To rearrange split screens, adjust the number for each product in the matrix using the Screen Position feature.

Selecting Screen Position will display the videowall matrix with the numbers assigned to the products that form the videowall.

To rearrange products, use the direction buttons on the remote control to move a product to another desired number. Press the 🖼 button.

Screen Position allows you to split the screen into a maximum of 100 views (15x15).

The Screen Position option is only enabled when Video Wall is set to On.

To use the function, make sure Horizontal x Vertical is configured.

The Horizontal x Vertical option is only enabled when Video Wall is set to On.

Format

Select how to display images on the videowall display.

- Full: Display images in full screen with no margin.
- Natural: Display images in the original aspect ratio without enlarging or reducing the size.

The Format option is only enabled when Video Wall is set to On.

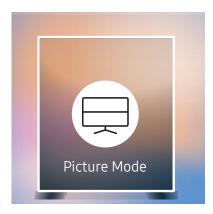
Network Status



The displayed image may differ depending on the model.

Check the current network and Internet connection.

Picture Mode



The displayed image may differ depending on the model.

Select a picture mode (Picture Mode) suitable for the environment where the product will be used.

Video/Image mode improves the picture quality of the video device. Text mode improves the picture quality of the computer.

Shop & Mall

Suitable for shopping malls.

- Select either Video/Image or Text depending on the picture mode.

Office & School

Suitable for offices and schools.

- Select either Video/Image or Text depending on the picture mode.

Terminal & Station

Suitable for bus terminals and train stations.

- Select either Video/Image or Text depending on the picture mode.

Video Wall

Suitable for environments where videowall display are used.

- Select either Video/Image or Text depending on the picture mode.

Calibration

In this mode, the brightness, color, gamma and uniformity settings customized using the color calibration program **Color Expert** are applied.

- To apply the Calibration mode properly, make sure you configure the picture quality settings, such
 as brightness, color, gamma and uniformity, using the color calibration program Color Expert.
- To download the Color Expert program, visit www.samsung.com/displaysolutions.

On/Off Timer



The displayed image may differ depending on the model.

You must set Clock Set before you can use this feature.

On Timer

Set On Timer so that your product turns on automatically at a time and on a day of your choosing. The power is turned on with the specified volume or input source.

On Timer: Set the on timer by making a selection from one of the seven options. Ensure you set the current time first.

(On Timer 1 ~ On Timer 7)

- Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual. If you select Manual, you can choose the days you want On Timer to turn on your product.
 - The check mark indicates days you've selected.
- Time: Set the hour and minute. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.
- Volume: Set the desired volume level. Use the up and down arrow buttons to change the volume level.
- Source: Select the input source of your choice.
- Content (when the Source is set to Internal/USB): From the USB device or internal memory, select a file (e.g. music, photo, or video) to play just after the product is turned on.
- This function is available only when a USB device is connected.
- If there is no music file on the USB device or you don't select a folder containing a music file, the Timer function does not operate correctly.
- If there is only one photo file in the USB, the Slide Show will not play.
- If a folder name is too long, the folder cannot be selected.
- Each USB you use is assigned its own folder. When using more than one of the same type of USB, make sure the folders assigned to each USB have different names.
- We recommend that you use a USB memory stick and a multi card reader when using On Timer.
- The On Timer function may not work with USB devices with a built-in battery, MP3 players, or PMPs made by some manufacturers because the product can take too long to recognize these devices.

Off Timer

Set the off timer (Off Timer) by making a selection from one of the seven options. (Off Timer 1 ~ Off Timer 7)

- Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual. If you select Manual, you can choose the days you want Off Timer to turn off your product.
 - The check mark indicates days you've selected.
- Time: Set the hour and minute. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.

Holiday Management

Timer will be disabled during a period specified as a holiday.

• Add Holiday: Specify the period you want to add as a holiday.

Select the start and end dates of the holiday you want to add using the ▲/▼ buttons, and click the Done button.

The period will be added to the list of holidays.

- Start: Set the start date of the holiday.
- End: Set the end date of the holiday.
- Delete: Delete selected items from the list of holidays.
- Edit: Select a holiday item and then change the date.
- Set Applied Timer: Set the On Timer and Off Timer to not activate on public holidays.
 - Press ☐ to select the On Timer and Off Timer settings you do not want to activate.
 - The selected On Timer and Off Timer will not activate.

Ticker



The displayed image may differ depending on the model.

Input text while a video or image is displayed and display the text on the screen.

- Off / On
- Message: Enter a message to display on the screen.
- Time: Set the Start Time and End Time to display a Message.
- Font Options: Specify the text font and color for the message.
- Position: Select an orientation to display a Message.
- Scroll: Specify the scroll Direction and Speed for the message.
- Preview: Preview configured caption settings.

URL Launcher

HOME → URL Launcher → ENTER



[—] The displayed image may differ depending on the model.

For details on how to use the URL Launcher feature, contact the dealer the product was purchased from.

To use the URL Launcher feature, set Play via to URL Launcher in System.

URL Launcher Settings



 $[\]overline{}$ The displayed image may differ depending on the model.

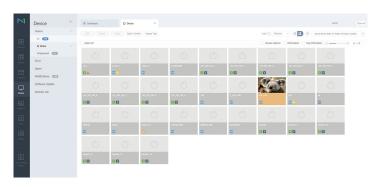
- Install Web App: Enter URL to install the web application.
- Install from USB Device: Install the web application from the USB storage device.
- Uninstall: Remove the installed web application.
- Timeout Setting: Set the timeout period for connecting to the URL.
- Developer Mode: Enable developer mode.

Approving a connected device from the server

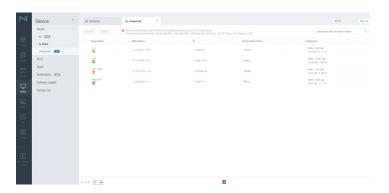
First configure the server **Server Network Settings** before device approval.



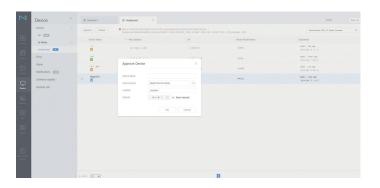
- 1 Access the server you have assigned to your device.
- 2 Enter your ID and password to log in.



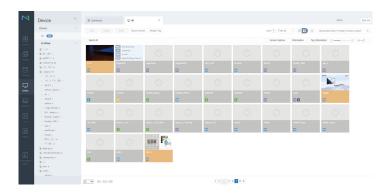
3 Select Device from the top menu bar.



- 4 Select Unapproved from the sub-menus.
- 5 Select the device from the list and click the Approve button.



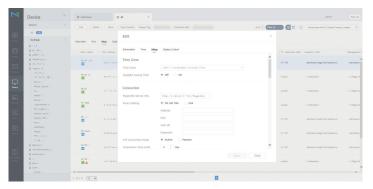
- 6 Enter the information required to approve the device.
 - **Device Name**: Enter the device name.
 - **Device Group**: Select **Q** to specify the group.
 - Location: Enter the current location of the device.
 - Expired: Set expiry date for the device's approval. If you do not want to set the expiry date, select **Never** expired.
 - Pressing the INFO button on the remote when a network schedule is running will display the details of the schedule. Check that the correct device has been selected by viewing the device ID in the details.



- 7 Select the All menu to check that the device has been registered.
- 8 When the device is approved by the server, the schedule registered in the selected group will be downloaded to the device. The schedule will run after it is downloaded.
- For further details on how to configure a schedule, refer to the <MagicInfo Lite Server user's manual>.
- If a device is deleted from the list of devices approved by the server, the device will reboot to reset its settings.

Setting the current time

A schedule may not run if the time set on the device is different from the server's current time.



- 1 Select Device from the side menu bar.
- 2 Select your device.
- 3 Select Edit → Setup.
- 4 Select Time Zone.
 - When connecting to the server for the first time, the time on the product is set using the GMT time of the region where the server is installed.
 - The time on the product can be changed from the server as shown in step 3.
- Turning the product off and then on again will restore the time setting on the product to the last time that was set from the server.
- For further details on how to manage the time (scheduling, holiday management, etc.), refer to the <MagicInfo Lite Server user's manual>.

Chapter 06

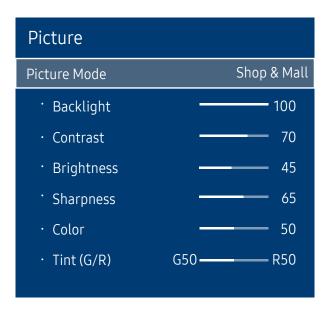
Screen Adjustment (except the LH55OHFPSBC model)

Configure the Picture settings (Backlight, Color Tone, etc.).

The layout of the Picture menu options may vary depending on the product.

Picture Mode

MENU Ⅲ → Picture → Picture Mode → ENTER 🚭



The displayed image may differ depending on the model.

Select a picture mode (Picture Mode) suitable for the environment where the product will be used.

Video/Image mode improves the picture quality of the video device. Text mode improves the picture quality of the computer.

Shop & Mall

Suitable for shopping malls.

- Select either Video/Image or Text depending on the picture mode.

Office & School

Suitable for offices and schools.

- Select either Video/Image or Text depending on the picture mode.

Terminal & Station

Suitable for bus terminals and train stations.

- Select either Video/Image or Text depending on the picture mode.

Video Wall

Suitable for environments where videowall display are used.

- Select either Video/Image or Text depending on the picture mode.

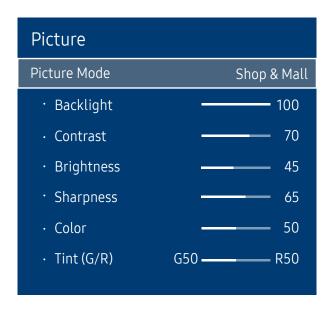
Calibration

In this mode, the brightness, color, gamma and uniformity settings customized using the color calibration program Color Expert are applied.

- To apply the Calibration mode properly, make sure you configure the picture quality settings, such as brightness, color, gamma and uniformity, using the color calibration program Color Expert.
- To download the Color Expert program, visit www.samsung.com/displaysolutions.

Backlight / Contrast / Brightness / Sharpness / Color / Tint (G/R)

MENU **□** → Picture → ENTER **□**



The displayed image may differ depending on the model.

Your product has several options for adjusting picture quality.

- When you make changes to Backlight, Contrast, Brightness, Sharpness, Color or Tint (G/R), the OSD will be adjusted accordingly.
- You can adjust and store settings for each external device you have connected to an input on the product.

Lowering picture brightness reduces power consumption.

Color Temperature

MENU **III** → Picture → Color Temperature → ENTER **!**

Picture

Color Temperature 16000K

White Balance

MENU Ⅲ → Picture → White Balance → ENTER 🗗

Picture

White Balance

It sets color temperature. The value and temperature increase simultaneously, so the ratio of blue color rises. (Range: 2800K–16000K)

Enabled when Color Tone is set to Off.

2 Point

Adjust the color temperature for a more natural picture.

- R-Offset / G-Offset / B-Offset: Adjust each color's (red, green, blue) darkness.
- R-Gain / G-Gain / B-Gain: Adjust each color's (red, green, blue) brightness.
- Reset: Suitable for environments where videowall display are used.

10 Point

Controls the white balance in 10 point interval by adjusting the red, green, and blue brightness.

Off / On

Interval: Select interval to adjust.

Red: Adjust the red level.

Green: Adjust the green level.

Blue: Adjust the blue level.

Reset: Suitable for environments where videowall display are used.

The displayed image may differ depending on the model.

The displayed image may differ depending on the model.

Color Temperature is disabled if Picture Mode is set to Calibration.

[—] Some external devices may not support this function.

Enabled when Picture Mode is set to Office & School (Video/Image).

Gamma

MENU **III** → Picture → Gamma → ENTER **I**



The displayed image may differ depending on the model.

Adjust the primary color intensity.

If Picture Mode is set to Calibration, Gamma is disabled.

Calibrated Value

MENU Ⅲ → Picture → Calibrated Value → ENTER 🗗



[—] The displayed image may differ depending on the model.

Select whether to apply the brightness, color, gamma and uniformity settings customized using the color calibration program **Color Expert** to the Information and Advertisement modes.

Don't Apply / Apply

To download the Color Expert program, visit www.samsung.com/displaysolutions.

If Picture Mode is set to Calibration, Calibrated Value is disabled.

Advanced Settings

MENU **□** → Picture → Advanced Settings → ENTER **□**

Advanced Settings	
Dynamic Contrast	High
Black Tone	Darkest
Flesh Tone	0
RGB Only Mode	Off
Color Space	Native
HDMI UHD Color	
Motion Lighting	On

The displayed image may differ depending on the model.

— If Picture Mode is set to Calibration, Advanced Settings is disabled.

Dynamic Contrast

Adjust the screen contrast.

• Off / Low / Medium / High

Black Tone

Select the black level to adjust the screen depth.

• Off / Dark / Darker / Darkest

Flesh Tone

Emphasize pink Flesh Tone.

RGB Only Mode

Displays the Red, Green and Blue color for making fine adjustments to the hue and saturation.

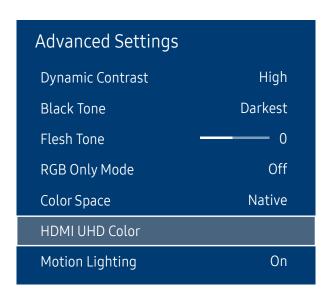
• Off / Red / Green / Blue

Color Space

Adjusts the range and variety of colors (the color space) available to create images.

Auto / Native / Custom

To adjust Color, Red, Green, Blue and Reset, set Color Space to Custom.



The displayed image may differ depending on the model.

HDMI UHD Color

Enable to optimize picture quality for HDMI UHD connection.

- HDMI1 (Off / On)
- HDMI2 (Off / On)

Motion Lighting

Reduces power consumption by reducing screen brightness when the picture on the screen is in motion.

Off / On

Enabled when Picture Mode is set to Shop & Mall (Text).

Picture Options

MENU Ⅲ → Picture → Picture Options → ENTER 🖃

Picture Options	
Color Tone	Off
Digital Clean View	Auto
HDMI Black Level	Auto
Film Mode	Off
Dynamic Backlight	Off

Color Tone

If Picture Mode is set to Text

Off / Cool / Standard / Warm

If Picture Mode is set to Video/Image

• Off / Cool / Standard / Warm1 / Warm2

If Picture Mode is set to Calibration, Color Tone is disabled.

— Settings can be adjusted and stored for each external device connected to an input on the product.

Digital Clean View

Reduce picture noise to avoid distractions such as flickering.

Off / Auto

The displayed image may differ depending on the model.

Picture Options	
Color Tone	Off
Digital Clean View	Auto
HDMI Black Level	Auto
Film Mode	Off
Dynamic Backlight	Off
the state of the s	

HDMI Black Level

Selects the black level on the screen to adjust the screen depth.

Auto / Low / Normal

Film Mode

Make frame transitions from older video sources smoother. This function is only available when the input signal is TV, AV, Component (480i, 1080i), or HDMI (1080i).

Off / Auto1 / Auto2

Dynamic Backlight

Automatically adjust the backlight to provide the best possible screen contrast under the current conditions.

Off / On

The displayed image may differ depending on the model.

Available only in **HDMI1** and **HDMI2** mode (AV Timing : 480p, 576p, 720p, 1080i, 1080p).

Picture Size

MENU → Picture → Picture Size → ENTER

Picture Size Picture Size 16:9 Standard Fit to Screen Zoom/Position

choose size and aspect ratio picture displayed on screen.

Picture Size

Different screen adjustment options are displayed depending on the current input source.

Available ports may differ depending on the model.

- 16:9 Standard: Sets the picture to 16:9 Standard wide mode.
- Custom: Changes the resolution to suit the user's preferences.
- 4:3: Sets the picture to basic (4:3) mode.
- Do not set your product to 4:3 format for a long time.

The borders displayed on the left and right, or top and bottom of the screen may cause image retention (screen burn) which is not covered by the warranty.

Fit to Screen

Adjusts the picture position. When selected, the full program image will be displayed. No part of the image will be cut off.

Off / On / Auto

Zoom/Position

Adjusts the picture zoom and position. This option is available when the input source is set to HDMI1, HDMI2 (1080i/1080p). Picture Size must be set to Custom for the option to be available.

The displayed image may differ depending on the model.

If you want to reset the picture to its original position, select **Reset** in the **Zoom/Position** screen. The picture will be set to its default position.

Picture Off

MENU **□** → Picture → Picture Off → ENTER **□**

Picture

Picture Off

Selecting Picture Off switches off the screen. The volume is not disabled. To switch the screen on, press any button other than the volume button.

Reset Picture

MENU Ⅲ → Picture → Reset Picture → ENTER 🚭

Picture

Reset Picture

Resets your current picture mode to its default settings.

[—] The displayed image may differ depending on the model.

The displayed image may differ depending on the model.

Chapter 07

OnScreen Display (except the LH55OHFPSBC model)

Display Orientation

MENU Ⅲ → OnScreen Display → Display Orientation → ENTER 🖃

Display Orientation	
Onscreen Menu Orientation	Landscape
Source Content Orientation	Landscape
Aspect Ratio	Full Screen

The displayed image may differ depending on the model.

Onscreen Menu Orientation

Configure the menu screen.

- Landscape: Display the menu in landscape mode (default).
- Portrait: Display the menu in portrait mode on the right side of the product screen.

Source Content Orientation

Rotate the product screen orientation.

- Landscape: Display the screen in landscape mode (default).
- Portrait: Display the screen in portrait mode.

Aspect Ratio

Set the rotated screen to be either full screen or original.

- Full Screen: Display the rotated screen in full screen.
- Original Ratio: Display the rotated screen in the original aspect ratio.

Available only when **Source Content Orientation** is set to **Portrait**.

Screen Protection

MENU Ⅲ → OnScreen Display → Screen Protection → ENTER 🕞



The displayed image may differ depending on the model.

Auto Protection Time

If the screen displays a still image for a certain period of time you define, the product activates the screen saver to prevent the formation of burnt in ghost images on the screen.

• Off / 2 hours / 4 hours / 8 hours / 10 hours

Screen Burn Protection

To reduce the possibility of screen burn, this unit is equipped with Screen Burn Protection screen burn prevention technology.

Screen Burn Protection moves the picture slightly on the screen.

The Screen Burn Protection Time setting allows you to program the time between movements of the picture in minutes.

Pixel Shift

Minimize image retention by finely moving pixels horizontally or vertically.

- Pixel Shift (Off / On)
- Horizontal, Vertical and Time are enabled only when Pixel Shift is set to On.
- Horizontal: Sets how many pixels the screen moves horizontally.
- Vertical: Sets how many pixels the screen moves vertically.
- Time: Set the time interval for performing the horizontal or vertical movement, respectively.

Available Pixel Shift Settings and Optimum Settings.

	Available Settings	Optimum Settings	
Horizontal (pixels)	0 ~ 4	4	
Vertical (pixels)	0 ~ 4	4	
Time (minute)	1 min. ~ 4 min.	4 min.	

The Pixel Shift value may differ depending on the product size (inches) and mode.

Displaying a still image or a 4:3 output for an extended period of time may cause image retention. This is not a defect in the product.

Screen Burn Protection Pixel Shift Timer Immediate Display Off

Timer

You can set the timer for Screen Burn Protection.

The Screen Burn Protection feature stops automatically after a specified period of time.

Timer

Off

Repeat: Display the image retention-preventive pattern set in Mode at specified time intervals(Period).

Interval: Display the image retention-preventive pattern set in Mode for a specified period of time (from Start Time to End Time).

Mode, Period, Time, Start Time and End Time are enabled only when Timer is set to Repeat or Interval.

- Mode: Select a screen protective pattern to display.
 - Pixel: Pixels on the screen alternate black continuously.
 - Rolling Bar: A vertical bar moves left to right.
 - Fading Screen: The entire screen becomes brighter, then darker.

The Rolling Bar and Fading Screen patterns appear only once regardless of the specified repeat period or time.

- Period: Specify the time interval to activate the Screen Burn Protection function.
 - The option is enabled when **Repeat** is selected for **Timer**.
- Time: Specify the duration to keep the Screen Burn Protection function on.
- Enabled when **Timer** is set to **Repeat** and **Mode** is set to **Pixel**.
- Start Time: Set the start time to activate the screen protection function.
- The option is enabled when **Interval** is selected for **Timer**.
- End Time: Set the end time to deactivate the screen protection function.
- The option is enabled when **Interval** is selected for **Timer**.

The displayed image may differ depending on the model.

Screen Burn Protection Pixel Shift Timer Immediate Display Off

Immediate Display

Select the screen saver you want to display immediately.

Off / Pixel / Rolling Bar / Fading Screen

[—] The displayed image may differ depending on the model.

Message Display

MENU Ⅲ → OnScreen Display → Message Display → ENTER 🗗

Message Display	
Source Info	On
No Signal Message	On
MDC Message	On
Download Status Message	Off

The displayed image may differ depending on the model.

Source Info

Select whether to display the source OSD when the input source changes.

Off / On

No Signal Message

Select whether to display the no-signal OSD when no signal is detected.

Off / On

MDC Message

Select whether to display the MDC OSD when the product is controlled by the MDC.

Off / On

Download Status Message

Select to display the status when downloading content from a server or other device.

• Off / On

Language

MENU **□** → OnScreen Display → Language → ENTER **□**



[—] The displayed image may differ depending on the model.

Set the menu language.

A change to the language setting will only be applied to the onscreen menu display. It will not be applied to other functions on your PC

Reset OnScreen Display

MENU Ⅲ → OnScreen Display → Reset OnScreen Display → ENTER 🕞

OnScreen Display

Reset OnScreen Display

This option returns the current settings under OnScreen Display to the default factory settings.

The displayed image may differ depending on the model.

Chapter 08

Network (except the LH55OHFPSBC model)

Network Status

MENU Ⅲ → Network → Network Status → ENTER 🗗

You can check the current network and Internet status.

Open Network Settings

MENU Ⅲ → Network → Open Network Settings → ENTER 🗗

Configure network settings to use various smart hub features such as Internet search, content sharing through a home network and feature updates.

Network type

Wireless / Wired

For the models (LH550HF2VBC, LH460HF2VBC) that do not support wireless communication, the Wired Network Settings menu appears.

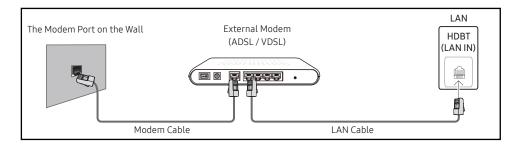
Network Settings (Wired)

Connecting to a Wired Network

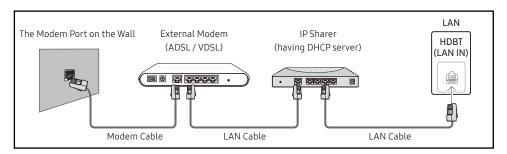
There are three ways to attach your product to your LAN using cable.

• You can attach your product to your LAN by connecting the LAN port on the back of your product to an external modem using a LAN cable.

See the diagram below.

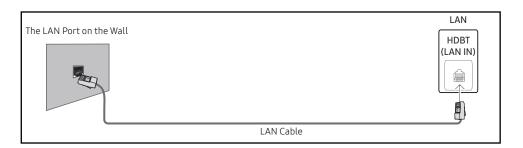


• You can attach your product to your LAN by connecting the LAN port on the back of your product to an IP Sharer which is connected to an external modem. Use LAN cable for the connection. See the diagram below.



Depending on how your network is configured, you may be able to attach your product to your LAN
by connecting the LAN port on the back of your product directly to a network wall outlet using a LAN
cable.

See the diagram below. Note that the wall outlet is attached to a modem or router elsewhere in your house.



If you have a Dynamic Network, you should use an ADSL modem or router that supports the Dynamic Host Configuration Protocol (DHCP). Modems and routers that support DHCP automatically provide the IP address, subnet mask, gateway, and DNS values your product needs to access the Internet so you do not have to enter them manually. Most home networks are Dynamic Networks.

Some networks require a Static IP address. If your network requires a Static IP address, you must enter the IP address, subnet mask, gateway, and DNS values manually on your product Cable Setup Screen when you set up the network connection. To get the IP address, subnet mask, gateway, and DNS values, contact your Internet Service Provider (ISP).

If you have a Windows computer, you can also get these values through your computer.

- You can use ADSL modems that support DHCP if your network requires a Static IP address.
- ADSL modems that support DHCP also let you use Static IP addresses.

Set the network connection to use Internet services such as perform software upgrades.

Automatic Open Network Settings (Wired)

Connect to the network using a LAN cable.

Make sure a LAN cable is connected first.

How to set up automatically

- 1 Set Network type to Wired from the Open Network Settings page.
- 2 Press the Connect button to start Open Network Settings.
 - The Connect button is only enabled when the LAN cable is properly connected.
- The network test screen appears and verifies the network connection.
 When the connection has been verified, the "Wired network and Internet connection completed."
 message appears.

Manual Open Network Settings (Wired)

Offices may use static IP addresses.

If this is the case, ask the network administrator for the IP address, subnet mask, gateway and DNS server address. Enter these values manually.

Getting the Network Connection Values

To view the Network connection values on most Windows computers, follow these steps.

1 Right click the Network icon on the bottom right of the screen.

- 2 In the pop-up menu that appears, click Status.
- 3 On the dialog that appears, click the Support tab.
- 4 On the Support Tab, click the Details button. The Network connection values are displayed.

How to set up manually

- 1 Set Network type to Wired from the Open Network Settings page.
- 2 Press the Connect button to start Open Network Settings.
 - The Connect button is only enabled when the LAN cable is properly connected.
- 3 The network test screen appears and the verification process starts. Press Stop. The verification process stops.
- 4 Select IP Settings on network connection screen. The IP Settings screen appears.
- 5 Select the field at the top, press , and then set IP Settings to Enter manually. Repeat the entry process for each field in the IP Address.
- Setting IP Settings to Enter manually automatically changes DNS Setting to Enter manually.
- 6 When done, select OK at the bottom of the page, and then press ♣. The network test screen appears and the verification process starts.
- 7 When the connection has been verified, the "Wired network and Internet connection completed." message appears.

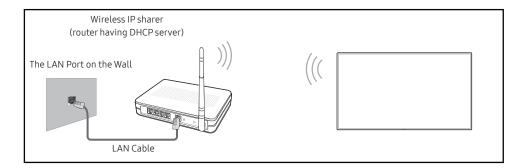
If the connection process fails, check the LAN port connection.

If the automatic process cannot find the network connection values or if you want to set the connection manually, go to the next section, network setup.

Network Setting (Wireless)

Models that do not support wireless communication: LH550HF2VBC, LH460HF2VBC

Connecting to a Wireless Network



Samsung recommends using IEEE 802.11n. When you play video over a network connection, the video may not play smoothly.

- Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device nearby, this will result in interference and communication failure.
- Your product supports only the following wireless network security protocols.

 If you select the Pure High-throughput (Greenfield) 802.11n mode and the Encryption type is set to WEP, TKIP or TKIP AES (WPS2Mixed) on your AP or wireless router, Samsung products will not support a connection in compliance with new Wi-Fi certification specifications.
- If your wireless router supports WPS (Wi-Fi Protected Setup), you can connect to the network via PBC (Push Button Configuration) or PIN (Personal Identification Number). WPS will automatically configure the SSID and WPA key in either mode.
- Connection Methods: You can setup the wireless network connection in three ways.

 Auto Setup (Using the Auto Network Search function), Manual Setup, WPS(PBC)

Automatic Network Setup (Wireless)

Most wireless networks have an optional security system that requires devices that access the network to transmit an encrypted security code called an Access or Security key. The Security key is based on a Pass Phrase, typically a word or a series of letters and numbers of a specified length you were asked to enter when you set up security for your wireless network. If you use this method of setting up the network connection, and have a Security key for your wireless network, you will have to enter the Pass Phrase during the automatic or manual setup process.

How to set up automatically

- 1 Set Network type to Wireless from the Open Network Settings page.
- 2 The Network function searches for available wireless networks. When done, it displays a list of the available networks.
- 3 In the list of networks, press the ▲ or ▼ button to select a network, and then press the ᠍ button twice.
 - If the desired wireless router does not appear, select Refresh to search again.
- If the router cannot be found after retrying, select the **Stop** button.

 The **Add Network** button appears.
- 4 If the Enter password. screen appears, go to step 5. If you select a wireless router that does not have security, go to step 7.
- 5 If the router has security, enter the Enter password. (Security key or PIN).
- When done, use the right arrow button to move the cursor to **Done**, and then press . The network connection screen appears and the verification process starts.
- A connection with the router is established, but the Internet cannot be accessed.
- 7 When the connection has been verified, the "Your wireless network and Internet connection are setup and ready to use." message appears.

Manual Network Setup (Wireless)

Offices may use static IP addresses.

If this is the case, ask the network administrator for the IP address, subnet mask, gateway and DNS server address. Enter these values manually.

Getting the Network Connection Values

To view the Network connection values on most Windows computers, follow these steps.

- 1 Right click the Network icon on the bottom right of the screen.
- 2 In the pop-up menu that appears, click Status.
- **3** On the dialog that appears, click the **Support** tab.
- 4 On the Support Tab, click the Details button. The Network connection values are displayed.

How to set up manually

- 1 Set Network type to Wireless from the Open Network Settings page.
- 2 The Network function searches for available wireless networks. When done, it displays a list of the available networks.
- 3 In the list of networks, press the ▲ or ▼ button to select a network, and then press the ☑ button twice
- If the desired wireless router does not appear, select Refresh to search again.
- If the router cannot be found after retrying, select the **Stop** button.
- 4 If the Enter password. screen appears, go to step 5. If you select a wireless router that does not have security, go to step 7.
- 5 If the router has security, enter the Enter password. (Security key or PIN).
- 6 When done, use the right arrow button to move the cursor to **Done**, and then press **!** The network connection screen appears and the verification process starts.
- 7 Select Stop while network connections are being attempted. This will stop the connection.
- 8 Select IP Settings on network connection screen. The IP Settings screen appears.
- 9 Select the field at the top, press , and then set IP Settings to Enter manually. Repeat the entry process for each field in the IP Address.
 - Setting IP Settings to Enter manually automatically changes DNS Setting to Enter manually.
- 10 When done, select OK at the bottom of the page, and then press . The network test screen appears and the verification process starts.
- 11 When the connection has been verified, the "Your wireless network and Internet connection are setup and ready to use." message appears.

WPS(PBC)

How to set up using WPS(PBC)

If your router has a WPS(PBC) button, follow these steps.

- 1 Set Network type to Wireless from the Open Network Settings page.
- 2 Select WPS(PBC), press →, and then press → again.
- 3 Press the WPS(PBC) button on your router within 2 minutes. Your product automatically acquires all the network setting values it needs and connects to your network.
- 4 The network connection screen appears, and network setup is done.

Server Network Settings

MENU Ⅲ → Network → Server Network Settings → ENTER 🖃

Connect to Server

To run Player connect to a network.

Server Address / SSL / Port

If the SSL option is enabled, the server is configured to use https and data transfer is encrypted.

Enter the server IP address and port number. Use 7001 as the port number. (If unable to connect to the server using port number 7001, check with your server administrator to find the correct port number and then change the port number.)

MagicInfo Mode

Select the appropriate MagicInfo Mode depending on the environment where you are using the product.

• Lite / Premium

Server Access

Select a method to connect the server network.

Allow / Deny

FTP Mode

Specify the FTP operating mode.

Active / Passive

Proxy Server

Set up your proxy server connection and related functions.

Address / Port / ID / Password

Address / Port / ID and Password are enabled only when Proxy Server is set to On.

To use this function, your mobile device should be supported by the **Wi-Fi Direct**.

Wi-Fi Direct

MENU Ⅲ → Network → Wi-Fi Direct → ENTER 🚭

Set to connect the product to wireless mobile devices. Using this function, you can connect wireless mobile devices with your product directly without a router.

Models that do not support wireless communication: LH550HF2VBC, LH460HF2VBC

To connect your mobile device with your product using Wi-Fi Direct, follow these steps:

- 1 Go to Wi-Fi Direct screen. The product starts to search devices.
- 2 Turn on the Wi-Fi Direct function on your device. Select the desired Wi-Fi device.
- PBC (Push Button Configuration): Press the WPS(PBC) button on your Wi-Fi device within 2 minutes. Your product automatically acquires all the network setting values it needs and connects to your network.
- PIN: Input the displayed PIN on your device.

If you want to disconnect the device, select the connected Wi-Fi device, and then select **Disconnected**.

Mobile Device Manager

Allow other devices on your network, like smart phones and tablets, to share content with your product.

Models that do not support wireless communication: LH550HF2VBC, LH460HF2VBC

Access Notification

Display a notification when a device is connected for the first time.

Turn off Access Notification to connect devices automatically.

The Wi-Fi Direct feature is not supported currently.

Off / First Time Only / Always On

Mobile Device List

View and manage connected devices.

Device Name

MENU Ⅲ → Network → Device Name → ENTER 🔫

Select or enter a device name.

This name can be shown on network remote controls over the network.

• [Signage]Display1 ~ 6 / User Input

Chapter 09

System (except the LH55OHFPSBC model)

Accessibility

MENU Ⅲ → System → Accessibility → ENTER 🗗

System

Accessibility

Start Setup

Time

Auto Source Switching

Power Control

Eco Solution

Fan & Temperature

Voice Guide

Switch Voice Guide on or off. The language used for Voice Guide will be the same as the current menu language.

• Off / On

Menu Transparency

Adjust transparency of menu box.

• High / Low

High Contrast

Set the background and font to high-contrast colors in Menu. Menu transparencies become opaque when the option is selected.

Off / On

Enlarge

Set whether to enlarge highlighted item in Menu.

Off / On

[—] The displayed image may differ depending on the model.

Start Setup

MENU **□** → System → Start Setup → ENTER **□**

System

Accessibility

Start Setup

Time

Auto Source Switching

Power Control

Eco Solution

Fan & Temperature

Go through the initial setup steps like you did the first time you used this product.

Enter your 4 digit PIN number. The default PIN number is "0-0-0-0".

If you want to change the PIN number, use the Change PIN function.

The displayed image may differ depending on the model.

Time

MENU **□** → System → Time → ENTER **□**

Time	
Clock Set	
NTP Settings	
DST	On
Sleep Timer	Off
Power On Delay	0

The displayed image may differ depending on the model.

You can configure Clock Set or Sleep Timer. Configure various time-related settings.

Press the INFO button if you want to view the current time.

Clock Set

Select Clock Set. Select Date or Time, and then press .

Use the number buttons to enter numbers or press the up and down arrow buttons. Use the left and right arrow buttons to move from one entry field to the next. Press when done.

You can set the Date and Time directly by pressing the number buttons on the remote control.

NTP Settings

Set up the server URL and time zone to use the network time.

DST

Switches the DST (Daylight Saving Time) function on or off.

Off / On

- Start Date: Set the start date of Daylight Saving Time.
- End Date: Set the end date of Daylight Saving Time.
- Time Offset: Select the correct time offset your timezone.

Sleep Timer

Automatically shuts off the product after a preset period of time.

(Off / 30 min. / 60 min. / 90 min. / 120 min. / 150 min. / 180 min.)

— Use the up and down arrows to select a period of time, and then press ☑. To cancel Sleep Timer, select Off.

Power On Delay

When connecting multiple products, adjust the power-on time for each product to prevent power overload (within the range 0–50 seconds).

Start Date, End Date and Time Offset are enabled only when DST is set to On.

Auto Source Switching

MENU Ⅲ → System → Auto Source Switching → ENTER 🗗

Auto Source Switching	
Auto Source Switching	Off
Primary Source Recovery	Off
Primary Source	All
Secondary Source	HDMI1

Turning on the display with Auto Source Switching On, and the previous video source selection is not active, the display will automatically search the different video input sources for active video.

Auto Source Switching

When the Auto Source Switching is On, the display video source will automatically be searched for active video.

The Primary Source selection will be activated, if the current video source is not recognized.

Secondary Source selection will become active, if no primary video source is available.

If both the primary and secondary input sources are not recognized, the display will perform two searches for an active source, each search checking the primary and then secondary source. If both searches fail, the display will return to the first video source and display a message indicating that there is no signal.

Primary Source Recovery

Select whether to restore the selected primary input source when a primary input source is connected.

The Primary Source Recovery function is disabled if Primary Source is set to All.

Primary Source

Specify Primary Source for the automatic input source.

Secondary Source

Specify Secondary Source for the automatic input source.

The Secondary Source function is disabled if Primary Source is set to All.

The displayed image may differ depending on the model.

Power Control

MENU Ⅲ → System → Power Control → ENTER 🗗

Power Control	
Auto Power On	Off
Max. Power Saving	On
Standby Control	On
Network Standby	Off
Power Button	Power On Only

The displayed image may differ depending on the model.

Auto Power On

This feature automatically turns on the product as soon as it is plugged in. Pressing the power button is not needed.

Off / On

Max. Power Saving

Conserve power by turning off PC monitor when PC is not used for certain time.

Off / On

Standby Control

You can set the screen standby mode to be applied when an input signal is received.

Auto

Power-saving mode will activate if no input signals are detected even though a source device is connected to the display.

The message No Signal will appear if no source device is connected.

Off

The message No Signal will appear if no input signals are detected.

— If **No Signal** is displayed although a source device is connected, check the cable connection.

If No Signal Message is set to Off, the No Signal message does not appear.

If this is the case, set No Signal Message to On.

• On

Power-saving mode will activate if no input signals are detected.

Power Control	
	Off
Auto Power On	
Max. Power Saving	On
Standby Control	On
Network Standby	Off
Power Button	Power On Only

Network Standby

This feature keeps the network power on when the product turns off.

Off / On

Power Button

The power button on the remote control @ can be set to turn on the power or turn on or off the power.

- Power On Only: Set the power button on the remote control 💍 only to turn on the power.
- Power On/Off: Set the power button on the remote control (b) to turn on or off the power.

The displayed image may differ depending on the model.

Eco Solution

MENU Ⅲ → System → Eco Solution → ENTER 🚭

Eco Solution	
Energy Saving Mode	Off
Eco Sensor	Off
Screen Lamp Schedule	Off
No Signal Power Off	Off
Auto Power Off	Off

Energy Saving Mode

Reduce the power consumption by adjusting the screen brightness.

• Off / Low / Medium / High

Eco Sensor

To enhance your power savings, the picture settings will automatically adapt to the light in the room.

Off / On

Adjusting the Backlight setting under Picture while Eco Sensor is on will disable the Off.

If the screen contrast is not sufficient, set the Eco Sensor to Off. If the Eco Sensor is Off, it may not comply with energy standards.

Min. Backlight

When Eco Sensor is On, you can manually adjust the minimum screen brightness. Min. Backlight is the darkest backlight mode. Make sure the Min. Backlight setting is lower than the Backlight setting.

If Eco Sensor is On, the display brightness may change (become slightly darker or brighter) depending on the surrounding light intensity.

The displayed image may differ depending on the model.

Eco Solution	
Energy Saving Mode	Off
Eco Sensor	Off
Screen Lamp Schedule	Off
No Signal Power Off	Off
Auto Power Off	Off

Screen Lamp Schedule

Screen Lamp Schedule

Enable or disable the lamp schedule.

Off / On

Schedule1, Schedule2

Time

The panel brightness will change to the brightness set in Lamp at a specified time.

Lamp

Adjust the panel brightness. A value closer to 100 makes the panel brighter.

• 0 ~ 100

No Signal Power Off

Save power by turning the device off when no signal is received from any source.

- Off / 15 min. / 30 min. / 60 min.
- Disabled when an attached PC is in power saving mode.

Auto Power Off

The product will automatically turn off if you don't press a button on the remote or touch a button on product front panel within select hours to prevent overheating.

Off / 4 hours / 6 hours / 8 hours

The displayed image may differ depending on the model.

The product will automatically power off at a specified time. The time can be changed as required.

Fan & Temperature

MENU Ⅲ → System → Fan & Temperature → ENTER 🖃

System

Fan & Temperature

Protects the product by detecting the fan speed and internal temperature.

Fan Control

Selects auto or manual for the fan speed settings.

Auto / Manual

Fan Speed Setting

Sets the fan speed within a range of 0 and 100.

Enabled when Fan Control is set to Manual.

Outdoor Mode

To use the product at a low temperature below 0°C, make sure to set Outdoor Mode to "On."

This feature keeps the internal temperature of the product steady so that the product can start properly when it is powered on.

- Off / On
- Do not disconnect the power cable when this feature is set to "On."
- The product consumes more power when it is turned off if this feature is set to "On" rather than to "Off."

Temperature Control

This function detects the internal temperature of the product. You can specify the temperature range that is acceptable.

The default temperature is set to 90 °C.

The recommended operating temperature for this product is 75 to 90 °C (based on an ambient temperature of 50 °C).

The screen will become darker if the current temperature exceeds the specified temperature limit. If the temperature continues to rise, the product will power off to prevent overheating.

The displayed image may differ depending on the model.

Input Device Manager

MENU Ⅲ → System → Input Device Manager → ENTER 🗗

Input Device Manager Keyboard Language Keyboard Type Input Language Shortcut

Play via

MENU Ⅲ → System → Play via → ENTER 🗗



The displayed image may differ depending on the model.

Configure options for external input devices connected to the product.

Keyboard Language

Configure the key combination used to change the input language.

Keyboard Type

Specify the keyboard type.

Input Language Shortcut

Select shortcut keys for switching between input languages.

Select the appropriate Play via mode depending on the environment where you are using the product. The home screen may be different depending on the setting.

• MagicInfo / URL Launcher

[—] The displayed image may differ depending on the model.

Change PIN

MENU **□** → System → Change PIN → ENTER **□**

System
Change PIN

The Change PIN screen will appear.

Choose any 4 digits for your PIN and enter it in Enter New PIN. Reenter the same 4 digits in Confirm New PIN.

The product has memorized your new PIN.

— Default password: 0 - 0 - 0 - 0

The displayed image may differ depending on the model.

Security

MENU **III** → System → Security → ENTER **-**

Security	
Safety Lock On	
· Power On Button	On
USB Auto Play Lock	On
Mobile Connection Lock	Off
Remote Management	

Safety Lock On

Enter your 4 digit PIN number. The default PIN number is "0-0-0-0".

If you want to change the PIN number, use the Change PIN function.

All the menus and buttons of the product and remote control, except for the LOCK button on the remote control, will be locked by the Safety Lock On function.

To unlock the menus and buttons, press the LOCK button and then enter the password (default password: 0-0-0-0).

Power On Button

Turn on this feature to enable the remote control's Power button to turn on the device while Safety Lock On is enabled.

Off / On

USB Auto Play Lock

Select whether to automatically play MagicInfo content saved on a connected USB device.

Off
 Play MagicInfo content saved on the USB device automatically.

• On

Do not play MagicInfo content saved on the USB device automatically.

Mobile Connection Lock

Restrict other devices on your network, such as smart phones and tablets, to share content with your signage.

Off / On

Models that do not support wireless communication: LH550HF2VBC, LH460HF2VBC

Remote Management

You can Allow or Deny external commands to access your device via a network.

• The changed setting remains even after the product is turned off and on using the Panel key.

The displayed image may differ depending on the model.

Connecting a USB device containing MagicInfo content displays "USB Auto Play Lock: On" for five seconds.

General

MENU **□** → System → General → ENTER **□**

General	
Smart Security	
Anynet+ (HDMI-CEC)	On
HDMI Hot Plug	On
Custom Logo	
Game Mode	Off
Empty Storage	

The displayed image may differ depending on the model.

Smart Security

The security provided to protect your display device and connected storage devices against viruses includes.

Scan

Inspect your display device and connected storage devices to check for viruses.

Isolated List

This is the list of items that have been Isolated for containing viruses.

Real-Time Monitoring

Scans for viruses by monitoring the display device in real time.

Monitoring Results

Check the list of files, networks, and processes that have been blocked.

General	
Smart Security	
Anynet+ (HDMI-CEC)	On
HDMI Hot Plug	On
Custom Logo	
Game Mode	Off
Empty Storage	

The displayed image may differ depending on the model.

Anynet+ (HDMI-CEC)

Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung product remote. The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

- Off / On
- You can only control **Anynet+** devices using the product remote control, not the buttons on the product.
- The product remote control may not work under certain conditions. If this occurs, reselect the **Anynet+** device.
- Anynet+ works when the AV device supporting Anynet+ is in the standby or on status.
- Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.

Troubleshooting for Anynet+

Problem	Possible Solution
Anynet+ does not work.	Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only.
	Check if the Anynet+ device power cord is properly connected.
	Check the Anynet+ device's Video/Audio/HDMI cable connections.
	• Check whether Anynet+ (HDMI-CEC) is set to On in the System menu.
	Check whether the remote control is Anynet+ compatible.
	Anynet+ doesn't work in certain situations. (initial setup)
	• If you have removed and then reconnected the HDMI cable, please make sure to search devices again or turn your product off and on again.
	Check if the Anynet+ function of the Anynet device is set on.
I want to start Anynet+.	• Check if the Anynet+ device is properly connected to the product and check if the Anynet+ (HDMI-CEC) is set to On in the System menu.
I want to exit Anynet+.	Press the SOURCE button on the product remote control and select a non- Anynet+ device.
The message "Disconnecting	You cannot use the remote control when you are configuring Anynet+ or switching to a view mode.
Anynet+ device" appears on the screen.	• Use the remote control after the product has completed Anynet+ configuration or has finished switching to Anynet+.
The Anynet+ device does not play.	You cannot use the play function when initial setup is in progress.
The connected device is not	Check whether or not the device supports Anynet+ functions.
displayed.	Check whether or not the HDMI cable is properly connected.
	• Check whether Anynet+ (HDMI-CEC) is set to On in the System menu.
	Search Anynet+ devices again.
	Anynet+ requires an HDMI connection. Make sure the device is connected to your product with an HDMI cable.
	Some HDMI cables may not support Anynet+ functions.
	• If the connection is terminated because there has been a power failure or the HDMI cable has been disconnected, please repeat the device scan.

General	
Smart Security	
Anynet+ (HDMI-CEC)	On
HDMI Hot Plug	On
Custom Logo	
Game Mode	Off
Empty Storage	

The displayed image may differ depending on the model.

HDMI Hot Plug

This feature is used to activate the time delay to turn on a DVI/HDMI source device.

• Off / On

Custom Logo

You can download, select, and set the display time of a custom logo that appears when the product turns on.

- Custom Logo
- You can select a custom logo (image/video) or turn off the custom logo display.
- You must download the custom logo from an external USB device to set the custom logo.
- Logo Display Time
- If the type of custom logo is Image, you can set the Logo Display Time.
- · Download Logo File
- You can download a custom logo into the product from an external USB device.
- The file name of the custom logo you want to download must be saved as "samsung" in all small letters.
- When there are multiple numbers of external USB connections, the product will attempt to download the custom logo from the last device that has been connected to the product.

Custom logo file restrictions

- For image type custom logo, only bitmap files (aRGB 32bpp format) are supported.
- The resolution of the image type custom logo must be between a minimum of 128x64 and the maximum screen resolution. (Horizontal/Vertical values of the resolution must be multiples of 4.)
- For video type custom logo, only TS Stream types are supported.
- The maximum supported video file is 150 MB. The recommended length of a video file is 20 seconds or less.

General	
Smart Security	
Anynet+ (HDMI-CEC)	On
HDMI Hot Plug	On
Custom Logo	
Game Mode	Off
Empty Storage	

The displayed image may differ depending on the model.

Reset System

MENU **□** → System → Reset System → ENTER **□**

System

Reset System

Game Mode

When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting game mode.

• Off / On

Precautions and limitations for Game Mode

To disconnect the game console and connect another external device, set Game Mode to Off in the setup menu.

Empty Storage

Delete files to make space for new content. Recently played files will not be deleted.

This option returns the current settings under system to the default factory settings.

[—] The displayed image may differ depending on the model.

Chapter 10

Support (except the LH55OHFPSBC model)

Software Update

MENU Ⅲ → Support → Software Update → ENTER 🚭

The Software Update menu lets you upgrade your product software to the latest version.

- Be careful not to turn off the power until the upgrade is complete. The product will turn off and on automatically after completing the software upgrade.
- When you upgrade software, all video and audio settings you have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.

Update now

Update the software to the latest version.

Current version: This is the software version already installed in the product.

Auto Update

This feature automatically updates the product when not in use.

Off / On

Contact Samsung

MENU Ⅲ → Support → Contact Samsung → ENTER 🗗

View this information when your product does not work properly or when you want to upgrade the software.

You can find information regarding our call centers and how to download products and software.

Contact Samsung and find the product Model Code and Software Version.

Reset All

MENU → Support → Reset All → ENTER

This option returns all the current settings for a display to the default factory settings.

Chapter 11

Player feature (applies to the LH55OHFPSBC model only)

Accessible using the HOME button on the remote control

Player

HOME $\stackrel{\triangle}{\rightarrow}$ Player \rightarrow ENTER $\boxed{-}$

Play a range of content such as channels with schedules assigned, templates or files.



- The displayed image may differ depending on the model.
- To use the Player feature, set Play via to MagicInfo in System.
 (MENU III → System → Play via → MagicInfo)
- You must set Clock Set before you can use this feature.

No.	Description				
1	Select between internal or external memory.				
2	Play content, templates and schedules configured on the server.				
	 You can view whether the server is connected (approval) in the Player screen. To view whether the server is connected when a Network Channel is running, press INFO on the remote control. 				
	Select Network Channel from the Player screen. The No channel. message appears if no channel has been registered in Network Channel.				
	2 Network Channel will run.				
3	Play content stored on the server.				
4	Play templates stored in My Templates folder in the Internal Memory.				
5	Select a content type as criterion to search for a desired content list.				
6	Set different options for Player.				

Viewing content

- 1 Select either internal or external memory. The files saved in the selected memory appear.
- 2 Select the desired file. The content appears on the screen. (For more information on compatible file formats, see the "File formats compatible with Player" section.)

When content is running

Control buttons on the remote control

You can play, pause, or skip the content on the playlist by pressing buttons on the remote control.

Function
Brings up the menu bar.
Displays the general information of the content.
Goes to next file or page.
Goes to previous file or page.
Plays or pauses slide show or video content.
Stops displaying content and goes to the Player screen.
Rewinds the video content.
Fast forwards the video content.

[—] If there is only one image file in the Internal Memory or USB, the Slide Show will not play.

Available menu

Press the TOOLS button on the remote control during content playback to configure settings.

Menu	Description
Playlist	View a list of content items currently playing.
Channel List	Network Channel / Internal Channel / USB
Repeat All / Repeat One	Set the repeat mode.
Background Music	Set the background music to be played when content is running.
Reset	Reset the background music.
Pause	Pause the background music.
Prev	Play the previous background music on the list.
Next	Play the next background music on the list.

Reset, Pause, Prev, Next only appear when the background music is set.

[—] If the name of a folder is too long on the USB, you cannot select the folder.

[—] Portrait option for Content Orientation is not available for contents with a resolution higher than 3840 x 2160.

Content Size for videos with a resolution higher than 3840 x 2160 supports Full Screen only.

File Formats Compatible with Player

- Supported file systems include FAT32 and NTFS.
- A file with a vertical and horizontal resolution larger than the maximum resolution cannot be played.
 Check the vertical and horizontal resolution of the file.
- Check the supported video and audio Codec types and Versions.
- · Check the supported file versions.
- PowerPoint version up to 97 2013 is supported

For USB-Internal Memory file transfer, click Options → Send.

- Location of template files
 - Internal Memory → USB transfer: USB → under MagicinfoSlide folder
 - USB → Internal Memory transfer: Internal Memory → under My Templates folder
- Location of other files (non-template)
 - Internal Memory → USB transfer: USB → under MagicinfoSlide folder
 - USB → Internal Memory transfer: Under the root folder

Network Schedule Multiframe

Playback restrictions

- 1 to 3 FHD video files can be played simultaneously or only one UHD video file and one FHD video file
 at a time. In portrait playback mode, 3 FHD video files can be played simultaneously or only one UHD
 video file at a time.
- For Office files (PPT and Word files) and PDF files, only one file type is supported at a time.
- LFD(*.LFD) files are not supported.
- Contents with a resolution higher than 3840 x 2160 are not supported.

Sound output restrictions

- More than one sound output cannot be used.
- Playback priority: network BGM → local BGM → video file in the main frame selected by the user
- Network BGM: Settings can be configured when creating a server schedule.
- Local BGM: BGM settings can be configured using the tools displayed after the TOOLS button is pressed during Player playback.
- User-selected main frame: Main frame settings can be configured when creating a server schedule.

Template files(*.LFD)

Restrictions

- Check that you have Contents and Schedules folders published to the USB storage device.
- A properly published content appears as Published Content [a] in the USB device.
- When copying a content you published to a USB device (Published Content a) to the Internal Memory, the content appears in Internal Memory as Published Content appears are not visible under Internal Memory.

Playback restrictions

- A maximum of two video (Video) files can be played.
- For Office files (PPT and Word files) and PDF files, only one file type is supported at a time.
- When playing more than one video files simultaneously, make sure that the display areas are not overlapping one another.

Sound output restrictions

- More than one sound output cannot be used.
- Playback priority: network BGM → local BGM → video file in the main frame selected by the user

Video codecs

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi *.mkv *.asf *.wmv *.mp4 *.mov *.3gp *.vro *.mpg *.mpeg *.ts *.tp *.tp *.trp *.flv *.vob *.svi *.m2ts *.mts	AVI MKV ASF MP4 3GP MOV FLV VRO VOB PS TS SVAF	H.264 BP/MP/HP HEVC (H.265 - Main, Main10) Motion JPEG MVC MPEG4 SP/ASP Window Media Video v9 (VC1) MPEG2 MPEG1 Microsoft MPEG-4 v1, v2, v3 Window Media Video v7(WMV1), v8(WMV2) H 263 Sorenson VP6	3840 x 2160 1920 x 1080	4096 x 2160: 30 3840 x 2160: 60 60 30 60	80 80 20	Dolby Digital AC3 LPCM ADPCM(IMA, MS) AAC HE-AAC WMA DD+ MPEG(MP3) AC-4 G.711(A-Law, µ-Law) OPUS
*.webm	WebM	VP8 VP9	1920 x 1080 3840 x 2160	60 3840 x 2160: 60	20	Vorbis
*.rmvb	RMVB	RV8/9/10 (RV30/40)	1920 x 1080	60	20	RealAudio 6

Other restrictions

- Codecs may not function properly if there is a problem with the content.
- Video content does not play or does not play correctly if there is an error in the content or container.
- Sound or video may not work if they have standard bit rates/frame rates above the TV's compatibility ratings.
- If the Index Table is has an error, the Seek (Jump) function will not work.
- When playing video over a network connection, the video may not play smoothly because of data transmission speeds.
- Some USB/digital camera devices may not be compatible with the TV.
- HEVC codec is only available in MKV / MP4 / TS containers.
- The MVC codec is supported partly.

Video decoders

- H.264 UHD is supported up to Level 5.1, and H.264 FHD is supported up to Level 4.1. (TV does not support FMO / ASO / RS)
- HEVC UHD is supported up to Level 5.1, and HEVC FHD is supported up to Level 4.1.
- HEVC 8K is supported up to Level 6.1.
- VC1 AP L4 is not supported.
- GMC 2 or above is not supported.
- When a single video file is playing, Seamless mode is not supported under the following conditions:
 - Incompatible codec (MVC, VP3, MJPEG) ↔ Incompatible codec

 - The resolution is different from that of the monitor
 - The frequency is different from that of the monitor

Audio decoders

- WMA is supported up to 10 Pro 5.1 channels, M2 profile.
- WMA1, WMA lossless / Voice are not supported.
- QCELP and AMR NB/WB are not supported.
- Vorbis is supported for up to 5.1 channels.
- Dolby Digital Plus is supported for up to 5.1 channels.
- The supported sample rates are 8, 11.025, 12, 16, 22.05, 24, 32, 44.1, and 48 kHz, and differ with the codec.

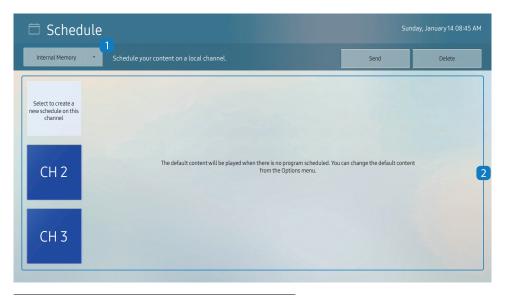
Image

- Compatible image file format: JPEG, PNG, BMP
- 32-bit, 24-bit and 8-bit BMP files are supported.
- Supported maximum resolution: 7680 x 4320 (JPEG), 4096 x 4096 (PNG, BMP)
 - When playing 10 files in one LFD file 5120 x 5120
- Supported maximum file size: 20MB
- Supported Slideshow Effect: 9 effects

(Fade1, Fade2, Blind, Spiral, Checker, Linear, Stairs, Wipe, Random)

PDF WORD Power Point • Compatible document file formats • Compatible document file formats • Compatible document file formats - Extension : ppt, pptx - Extension: pdf Extension : .doc, .docx - Version : Office 97 ~ Office 2013 Version : Office 97 ~ Office 2013 Functions not supported • Functions not supported Content less than 1 pixel not supported because of performance Functions not supported degradation issue. Animation effect Page background effect - Masked Image, Tiled Image content not supported. - 3D shapes (which will be displayed in 2D) Some paragraph styles Content with Rotated Text, not supported. Header and footer (some subitems are not supported) Word Art - 3D Shadow Effects not supported. Word Art - Align Some characters not supported A group alignment error may occur - Align (Special characters may be corrupted) A group alignment error may occur - 3D shapes (which will be displayed in 2D) - Office 2007 - Office 2007 SmartArt is not fully supported. 97 out of 115 subitems are SmartArt is not fully supported. 97 out of 115 subitems are supported. supported. Object insertion Charts - Half-width characters Half-width characters Letter spacing Letter spacing Charts Vertical text Some subitems are not supported Vertical text Some subitems are not supported Slide notes and handout Slide notes and handout

Schedule



[—] The displayed image may differ depending on the model.

You can check the schedule imported from a selected storage device.

No.	Description
1	Select the saved location of the schedule.
2	Create/Edit/Delete/View schedule of content playback.

Clone Product

HOME
→ Clone Product → ENTER



The displayed image may differ depending on the model.

Export settings on the product to an external storage device. You can also import settings from an external storage device.

This option is useful when assigning the same settings to several products.

When a duplicate file is not found on the external storage device

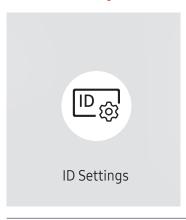
- 1 Connect the external storage device, then run the Clone Product function.
- 2 The No cloning file found on the external storage device. Export this device's settings to the external storage device? message appears.
- **3** Select Export to export the settings.

When a duplicate file is found on the external storage device

- 1 Connect the external storage device, then run the Clone Product function.
- 2 The Cloning file found. Please select an option. message appears.
 Run the Import from External Storage or Export to External Storage function.
 - Import from External Storage: Copy settings saved on an external storage device to the product.
 - After configuration is complete, the product is rebooted automatically.
 - Export to External Storage: Copy settings on the product to an external storage device.

ID Settings

HOME → ID Settings → ENTER ■



The displayed image may differ depending on the model.

Assign an ID to a set.

Device ID

Set a unique ID number for each product. (Range: 0~224)

Press ▲/▼ to select a number, and press 🗗.

Enter the number you want using the number buttons on the remote control.

Device ID Auto Set

This feature automatically allots an ID number to a device connected via an RS232C cable.

This function is only available on the first device within an RS-232C daisy chain.

PC Connection Cable

Select which type of cable you are using to connect the display to the PC.

RS232C cable

Communicate with MDC via the RS232C cable.

• RJ45(LAN) cable

Communicate with MDC via the RJ45 cable.

Video Wall



The displayed image may differ depending on the model.

Customize the layout of multiple displays that are connected to form a video wall.

In addition, display part of a whole picture or repeat the same picture on each of the connected multiple displays.

To display multiple images, refer to MDC Help or the MagicInfo user guide. Some models may not support the MagicInfo function.

Video Wall

You can activate or deactivate Video Wall.

To organize a video wall, select On.

Off / On

Horizontal x Vertical

This feature automatically splits a videowall display based on a videowall matrix configuration.

Enter the videowall matrix.

The videowall display is split based on the configured matrix. The number of vertical or horizontal display devices can be set within the range 1 and 15.

A videowall display can be split into a maximum of 225 screens.

The Horizontal x Vertical option is only enabled when Video Wall is set to On.

Screen Position

To rearrange split screens, adjust the number for each product in the matrix using the Screen Position feature.

Selecting Screen Position will display the videowall matrix with the numbers assigned to the products that form the videowall.

To rearrange products, use the direction buttons on the remote control to move a product to another desired number. Press the 🖼 button.

Screen Position allows you to split the screen into a maximum of 225 views (15 x 15).

The Screen Position option is only enabled when Video Wall is set to On.

To use the function, make sure Horizontal x Vertical is configured.

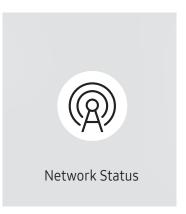
Format

Select how to display images on the videowall display.

- Full: Display images in full screen with no margin.
- Natural: Display images in the original aspect ratio without enlarging or reducing the size.

Network Status

HOME
→ Network Status → ENTER



The displayed image may differ depending on the model.

Check the current network and Internet connection.

The Format option is only enabled when Video Wall is set to On.

On/Off Timer

HOME
→ On/Off Timer → ENTER



The displayed image may differ depending on the model.

You must set Clock Set before you can use this feature.

On Timer

Set On Timer so that your product turns on automatically at a time and on a day of your choice.

The power is turned on with the specified volume or input source.

On Timer: Set the on timer by making a selection from one of the seven options. Ensure you set the current time first.

(On Timer 1 ~ On Timer 7)

- While the internal/USB memory option can be used with **On Timer** for **MagicInfo** mode, it is recommended to use an internal memory.
- Proper operation of On Timer feature cannot be guaranteed if used with a battery powered USB device, which can take longer to be recognized.
- Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual. If you select Manual, you can choose the days you want On Timer to turn on your product.
 - The check mark indicates days you've selected.
- Time: Set the hour and minute. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.
- Volume (For models with built-in speakers): Set the desired volume level. Use the up and down arrow buttons to change the volume level.
- Source: Select the input source of your choice.
- Content (when the Source is set to Internal/USB for MagicInfo mode): From the USB device or internal memory, select a file (e.g. music, photo, or video) to play just after the product is turned on.

Off Timer

Set the off timer (Off Timer) by making a selection from one of the seven options. (Off Timer 1 ~ Off Timer 7)

- Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual. If you select Manual, you can choose the days you want Off Timer to turn off your product.
 - The check mark indicates days you've selected.
- Time: Set the hour and minute. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.

Holiday Management

Timer will be disabled during a period specified as a holiday.

• Add Holiday: Specify the period you want to add as a holiday.

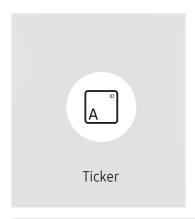
Select the start and end dates of the holiday you want to add using the ▲/▼ buttons, and click the Done button.

The period will be added to the list of holidays.

- Start Date: Set the start date of the holiday.
- End Date: Set the end date of the holiday.
- Delete: Delete selected items from the list of holidays.
- Edit: Select a holiday item and then change the date.
- Set Applied Timer: Set the On Timer and Off Timer to not activate on public holidays.
 - Press 🗗 to select the On Timer and Off Timer settings you do not want to activate.
 - The selected On Timer and Off Timer will not activate.

Ticker

HOME
→ Ticker → ENTER
→



The displayed image may differ depending on the model.

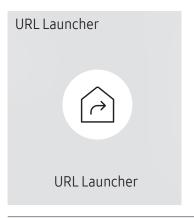
Input text while a video or image is displayed and display the text on the screen.

You must set Clock Set before you can use this feature.

- Off / On: Set whether or not to use Ticker.
- Message: Enter a message to display on the screen.
- Time: Set the Start Time and End Time to display a Message.
- Font Options: Specify the text font and color for the message.
- Position: Select a position to display a Message.
- Scroll: Turn scroll effects of Ticker on or not. Specify the scroll Direction and Speed for the message.
- Preview: Preview your Ticker settings.

URL Launcher

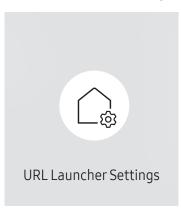
HOME
→ URL Launcher → ENTER
-



The displayed image may differ depending on the model.

For details on how to use the **URL Launcher** feature, contact the dealer the product was purchased from.

URL Launcher Settings



The displayed image may differ depending on the model.

- Install Web App: Enter URL to install the web application.
- Install from USB Device: Install the web application from the USB storage device.
- Uninstall: Remove the installed web application.
- Timeout Setting: Set the timeout period for connecting to the URL.
- Developer Mode: Enable developer mode.

To use the URL Launcher feature, set Play via to URL Launcher in System.

(MENU Ⅲ → System → Play via → URL Launcher)

For details on how to use the **URL Launcher** feature, contact the dealer the product was purchased from.

Chapter 12

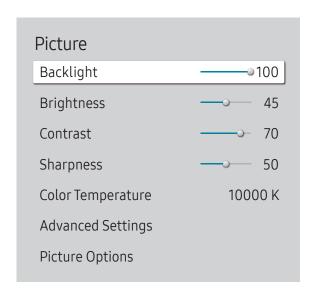
Screen Adjustment (applies to the LH55OHFPSBC model only)

Configure the Picture settings (Backlight, Color Tone, etc.).

The layout of the Picture menu options may vary depending on the product.

Backlight / Brightness / Contrast / Sharpness

MENU **□** → Picture → ENTER **□**



The displayed image may differ depending on the model.

Your product has several options for adjusting picture quality.

You can adjust and store settings for each external device you have connected to an input on the product.

Lowering picture brightness reduces power consumption.

Color Temperature

MENU → Picture → Color Temperature → ENTER

Picture	
Color Temperature	10000 K

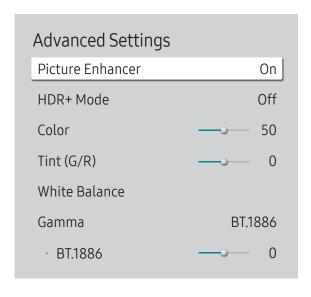
The displayed image may differ depending on the model.

It sets color temperature. The value and temperature increase simultaneously, so the ratio of blue color rises. (Range: 2800K–16000K)

Enabled when Color Tone is set to Off.

Advanced Settings

MENU → Picture → Advanced Settings → ENTER



The displayed image may differ depending on the model.

Configure advanced picture settings to create your preferred picture.

Picture Enhancer

Displays enhanced color and sharpness.

• Off / On

HDR+ Mode

Automatically provide an optimal HDR effect based on the video source.

• Off / On

Color

Adjust the color saturation levels. Color saturation intensifies as the value nears 100. (Range: 0~100)

Tint (G/R)

Adjust the ratio of green to red tint levels. Increasing values intensifies the saturation of red and green colors. (Range: 0~50)

White Balance

Adjust the color temperature of the picture so that white objects appear brighter.

2 Point

Adjust red, green, and blue luminosity levels in two sections for precise white balance optimization.

- R-Offset / G-Offset / B-Offset: Adjust the proportion of each of red, green and blue colors in dark areas.
- R-Gain / G-Gain / B-Gain: Adjust the proportion of each of red, green and blue colors in bright areas.
- Reset: Restore the white balance settings to the default values.

20 Point Settings

Controls the white balance in 20 point interval by adjusting the red, green, and blue brightness.

20 Point

Adjust red, green, and blue luminosity levels in twenty sections for precise white balance optimization.

- Off () / On ()
- Interval: Select interval to adjust.
- Red: Adjust the red level.
- Green: Adjust the green level.
- Blue: Adjust the blue level.
- Reset: Restore the current level's 20 point White Balance to the default values.

Gamma

Adjust the mid-range brightness of the picture.

HLG / ST.2084 / BT.1886 / S Curve

Gamma settings HLG, ST.2084, and BT.1886 may change depending on the input video settings. For models with the HDR+ Mode support, the Gamma settings HLG, ST.2084, and BT.1886 may change depending on the input video and HDR+ Mode settings. If HDR+ Mode is set to Off, HLG, ST.2084, and BT.1886 settings may be available depending on the input video. To adjust S Curve, set HDR+ Mode to Off.

HLG / ST.2084 / BT.1886 / S Curve

Adjust the HLG, ST.2084, BT.1886, S Curve levels of the picture.

Contrast Enhancer

Automatically balance the contrast to prevent excessive differences between bright and dark areas.

Off / Low / Medium / High

Black Tone

Select the black level to adjust the screen depth.

• Off / Dark / Darker / Darkest

[—] Some external devices may not support this function.

Flesh Tone

Adjust the flesh tone color by increasing or decreasing red levels.

RGB Only Mode

Fine-tune the saturation and tint of the red, green, and blue color channels.

• Off / Red / Green / Blue

Color Space Settings

Configure color space settings to refine the spectrum of colors on your screen.

Color Space

Choose a color space.

Auto / Native / Custom

Input Signal Plus

Expands the input signal range for HDMI connections.

- HDMI1 (Off ()) / On ())
- HDMI2 (Off () / On ())

Supported Resolutions for UHD Input Signals

Check the supported resolution for UHD input signals.

• Resolution: 3840 x 2160p, 4096 x 2160p

If Input Signal Plus is set to Off

Frame rate (fps)	Color Depth / Chroma Samplin	RGB 4:4:4 g	YCbCr 4:4:4	YCbCr 4:2:2	YCbCr 4:2:0
50 / 60	8 bit	-	-	-	0
If Input Signal	Plus is set to On				
Frame rate (fps)	Color Depth / Chroma Samplin	RGB 4:4:4 g	YCbCr 4:4:4	YCbCr 4:2:2	YCbCr 4:2:0
50 / 60	8 bit	0	0	0	0
	10 bit	-	-	0	0
	12 bit	-	-	0	0

Motion Lighting

Reduces power consumption by reducing screen brightness when the picture on the screen is in motion.

Off / On

To adjust Color, Red, Green, Blue and Reset, set Color Space to Custom.

When Input Signal Plus is set to On, up to the 4096 x 2160p @ 60 Hz resolution is supported.

When Input Signal Plus is set to Off, up to the 1920 x 1080 @ 60 Hz resolution is supported.

Even if the UHD signal is input, display outputs as a 1920 x 1080 @ 60 Hz resolution on the actual screen.

Picture Options

MENU **□** → Picture → Picture Options → ENTER **□**

Picture Options	
Color Tone	Off
Digital Clean View	Off
HDMI Black Level	Auto
Film Mode	Off
Dynamic Backlight	On

The displayed image may differ depending on the model.

Color Tone

Select the color tone that best suits your viewing preferences.

Off / Cool / Standard / Warm1 / Warm2 / Natural

Digital Clean View

Reduce picture noise to avoid distractions such as flickering.

Auto / Off

HDMI Black Level

Adjust the black level to optimize the HDMI picture brightness and contrast.

Normal / Low / Auto

Film Mode

Make frame transitions from older video sources smoother. This function is only available when the input signal is TV, AV, Component (480i, 1080i), or HDMI (1080i).

Off / Auto1 / Auto2

Dynamic Backlight

Automatically adjust the backlight to provide the best possible screen contrast under the current conditions.

Off / On

[—] Settings can be adjusted and stored for each external device connected to an input on the product.

Apply Picture Settings

MENU → Picture → Apply Picture Settings → ENTER

Picture

Apply Picture Settings All Sources

Apply the picture settings to all external devices connected to the device or to the current source only.

All Sources / Current Source

The displayed image may differ depending on the model.

Picture Size Settings

MENU **■** → Picture → Picture Size Settings → ENTER **→**

Picture Size Settings

Picture Size

16:9 Standard

· Fit to Screen

Off

Zoom and Position

Choose size and aspect ratio picture displayed on screen.

Picture Size

Different screen adjustment options are displayed depending on the current input source.

- 16:9 Standard: Sets the picture to 16:9 Standard wide mode.
- Custom: Changes the resolution to suit the user's preferences.
- 4:3: Sets the picture to basic (4:3) mode.
- Do not set your product to 4:3 format for a long time.

The borders displayed on the left and right, or top and bottom of the screen may cause image retention (screen burn) which is not covered by the warranty.

Fit to Screen

Adjusts the picture position. When selected, the full program image will be displayed. No part of the image will be cut off.

Off / On / Auto

Zoom and Position

Adjusts the picture zoom and position. This function is available only if Picture Size is set to Custom.

If you want to reset the picture to its original position, select **Reset** in the **Zoom and Position** screen. The picture will be set to its default position.

The displayed image may differ depending on the model.

Reset Picture

Restore all picture settings to the factory default.

MENU Ⅲ → Picture → Reset Picture → ENTER 🚭

Picture

Reset Picture

The displayed image may differ depending on the model.

Chapter 13

OnScreen Display (applies to the LH55OHFPSBC model only)

Display Orientation

MENU Ⅲ → OnScreen Display → Display Orientation → ENTER 🖃

Display Orientation

Onscreen Menu Orientation Landscape

Source Content Orientation Landscape

Aspect Ratio

Full Screen

Onscreen Menu Orientation

Select whether the onscreen menu should be displayed in landscape or portrait orientation.

- Landscape: Display the menu in landscape mode.
- Portrait: Display the menu in portrait mode on the right side of the product screen.

Source Content Orientation

Rotate the product screen orientation.

This feature is not available for input source resolutions higher than 7680 x 4320.

- Landscape: Display the screen in landscape mode.
- Portrait: Display the screen in portrait mode.

Aspect Ratio

Set the rotated screen to be either full screen or original.

- Full Screen: Display the rotated screen in full screen.
- Original Ratio: Display the rotated screen in the original aspect ratio.

The displayed image may differ depending on the model.

[—] Available only when Source Content Orientation is set to Portrait.

Screen Protection

MENU Ⅲ → OnScreen Display → Screen Protection → ENTER 🗗

Auto Protection Time

If the screen displays a still image for a certain period of time you define, the product activates the screen saver to prevent the formation of burnt in ghost images on the screen.

• Off / 2 hours / 4 hours / 6 hours / 8 hours / 10 hours

Screen Burn Protection

To reduce the possibility of screen burn, this unit is equipped with Screen Burn Protection (screen burn prevention technology).

Screen Burn Protection moves the picture slightly on the screen.

Timer

You can set the timer for Screen Burn Protection.

The Screen Burn Protection feature stops automatically after a specified period of time.

Timer

Off

Repeat: Display the image retention-preventive pattern set in Mode at specified time intervals(Period). Interval: Display the image retention-preventive pattern set in Mode for a specified period of time (from Start Time to End Time).

Mode, Period, Time, Start Time and End Time are enabled only when Timer is set to Repeat or Interval.

- Mode: Select a screen protective pattern to display.
 - Pixel: Pixels on the screen alternate black continuously.
 - Rolling Bar: A vertical bar moves left to right.
 - Fading Screen: The entire screen becomes brighter, then darker.
 - The Rolling Bar and Fading Screen patterns appear only once regardless of the specified repeat period or time.
- Period: Specify the time interval to activate the Screen Burn Protection function.
- The option is enabled when **Repeat** is selected for **Timer**.
- Time: Specify the duration to keep the Screen Burn Protection function on.
 - Enabled when Timer is set to Repeat and Mode is set to Pixel.
- Start Time: Set the start time to activate the screen protection function.
- The option is enabled when Interval is selected for Timer.
- End Time: Set the end time to deactivate the screen protection function.
- The option is enabled when **Interval** is selected for **Timer**.

Immediate Display

Select the screen saver you want to display immediately.

Off / Pixel / Rolling Bar / Fading Screen

Message Display

MENU Ⅲ → OnScreen Display → Message Display → ENTER 🗗

Message Display	
Source Info	On
No Signal Message	On
MDC Message	On
Download Status Message	Off

The displayed image may differ depending on the model.

Source Info

Select whether to display the source OSD when the input source changes.

• Off / On

No Signal Message

Select whether to display the no-signal OSD when no signal is detected.

The message No Cable Connected will appear if no source device is connected.

Off / On

MDC Message

Select whether to display the MDC OSD when the product is controlled by the MDC.

Off / On

Download Status Message

Select to display the status when downloading content from a server or other device.

Off / On

Language

OnScreen Display

Language English

Set the menu language.

A change to the language setting will only be applied to the onscreen menu display. It will not be applied to other functions on your PC.

Reset OnScreen Display

MENU Ⅲ → OnScreen Display → Reset OnScreen Display → ENTER 🖃

OnScreen Display

Reset OnScreen Display

This option returns the current settings under OnScreen Display to the default factory settings.

The displayed image may differ depending on the model.

[—] The displayed image may differ depending on the model.

Chapter 14

Network (applies to the LH550HFPSBC model only)

Network Status

MENU Ⅲ → Network → Network Status → ENTER 🔫

You can check the current network and Internet status.

Open Network Settings

MENU **III** → Network → Open Network Settings → ENTER **II**

Configure network settings to connect to an available network.

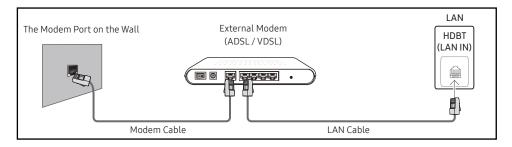
Network Settings (Wired)

Connecting to a Wired Network

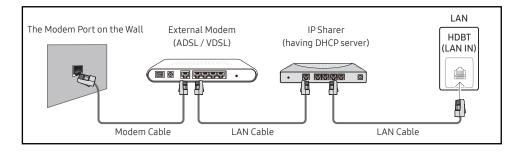
There are three ways to attach your product to your LAN using cable.

• You can attach your product to your LAN by connecting the LAN port on the back of your product to an external modem using a LAN cable.

See the diagram below.

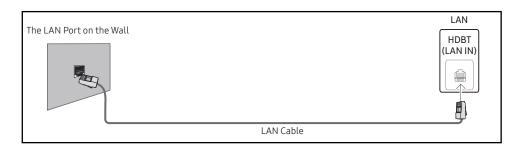


 You can attach your product to your LAN by connecting the LAN port on the back of your product to an IP Sharer which is connected to an external modem. Use LAN cable for the connection. See the diagram below.



Depending on how your network is configured, you may be able to attach your product to your LAN
by connecting the LAN port on the back of your product directly to a network wall outlet using a LAN
cable.

See the diagram below. Note that the wall outlet is attached to a modem or router elsewhere in your house.



If you have a Dynamic Network, you should use an ADSL modem or router that supports the Dynamic Host Configuration Protocol (DHCP). Modems and routers that support DHCP automatically provide the IP Address, Subnet Mask, Gateway, and DNS values your product needs to access the Internet so you do not have to enter them manually. Most home networks are Dynamic Networks.

Some networks require a Static IP address. If your network requires a Static IP address, you must enter the IP Address, Subnet Mask, Gateway, and DNS values manually on your product IP Settings when you set up the network connection. To get the IP Address, Subnet Mask, Gateway, and DNS values, contact your Internet Service Provider (ISP).

If you have a Windows computer, you can also get these values through your computer.

- You can use ADSL modems that support DHCP if your network requires a Static IP address.
- ADSL modems that support DHCP also let you use Static IP addresses.

Set the network connection to use Internet services such as perform software upgrades.

Automatic Open Network Settings (Wired)

Connect to the network using a LAN cable.

Make sure a LAN cable is connected first.

How to set up automatically

- 1 Select Open Network Settings. The Open Network Settings session starts.
- 2 The network test screen appears and verifies the network connection.
 When the connection has been verified, the "Success! Your device is connected to the Internet. If you have any problems using online services, please contact your Internet service provider." message appears.
- If the connection process fails, check the LAN port connection.
- If the automatic process cannot find the network connection values or if you want to set the connection manually, go to the next section(Manual Open Network Settings (Wired)).

Manual Open Network Settings (Wired)

Offices may use static IP addresses.

If this is the case, ask the network administrator for the IP Address, Subnet Mask, Gateway and DNS server address. Enter these values manually.

Getting the Network Connection Values

To view the Network connection values on most Windows computers, follow these steps.

- 1 Right click the Network icon on the bottom right of the screen.
- 2 In the pop-up menu that appears, click Status.
- 3 On the dialog that appears, click the Support tab.
- 4 On the Support Tab, click the Details button. The Network connection values are displayed.

How to set up manually

- 1 Select Open Network Settings. The Open Network Settings session starts.
- 2 The network test screen appears and the verification process starts. Press Cancel. The verification process stops.
- 3 Select IP Settings on network connection screen. The IP Settings screen appears.
- 4 Select the field at the top, press , and then set IP Setting to Enter manually. Repeat the entry process for each field in the IP Address.
- Setting IP Setting to Enter manually automatically changes DNS Setting to Enter manually.
- 5 When done, select OK at the bottom of the page, and then press ➡. The network test screen appears and the verification process starts.
- 6 When the connection has been verified, the "Success! Your device is connected to the Internet. If you have any problems using online services, please contact your Internet service provider." message appears.

The path to the settings depends on the installed OS.

IPv6

MENU \longrightarrow Network \rightarrow IPv6 \rightarrow ENTER \longrightarrow Enable or disable IPv6.

• Off () / On ()

IPv6 Status

MENU
→ Network → IPv6 Status → ENTER

Check the status of your IPv6 Internet connection.

Server Network Settings

MENU Ⅲ → Network → Server Network Settings → ENTER 🗗

Connect to Server

Connect to MagicInfo server.

- Server Address / TLS / Port
- If you do use the TLS option, the server is configured to use https and data transfer is encrypted. (Port number: 7002)
- If you don't use the TLS option, enter the server IP address and port number. Use 7001 as the port number. (If you are unable to connect to the server using port number 7001, check with your server administrator to find the correct port number and then change the port number.)
- Enter the server IP address and port number. Use 7001 as the port number. (If unable to connect to the server using port number 7001, check with your server administrator to find the correct port number and then change the port number.)
- For the MagicInfo Server user guide, visit the following website: http://displaysolutions.samsung.com → Support → Resources → MagicInfo Web Manual.

MagicInfo Mode

Select the appropriate MagicInfo Mode depending on the environment where you are using the product.

- Lite / Premium
- Supported content types may be limited while MagicInfo Mode is set to Lite.

Server Access

Allow or deny access to MagicInfo server.

Allow / Deny

FTP Mode

Specify the FTP operating mode.

Active / Passive

Proxy Server

Set up your proxy server connection and related functions.

Off / On

Address / Port / ID / Password

Address / Port / ID and Password are enabled only when Proxy Server is set to On.

Device Name

Select or enter a device name.

This name can be shown on network device over the network.

• [Signage] Display1 ~ 6 / User Input

Chapter 15

System (applies to the LH55OHFPSBC model only)

Accessibility

MENU Ⅲ → System → Accessibility → ENTER 🗗

System

Accessibility

Start Setup

Time

Auto Source Switching

Power Control

Eco Solution

Fan & Temperature

Voice Guide Settings

Voice Guide

Switch Voice Guide on or off. The language used for Voice Guide will be the same as the current menu language.

• Off () / On ()

Volume, Speed and Pitch are enabled only when Voice Guide is set to On.

Volume

Set the volume level for the Voice Guide.

• Loud / Medium / Soft

Speed

Set the speed of the Voice Guide.

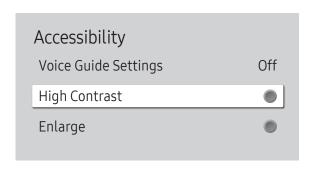
Very Fast / Fast / Normal / Slow / Very Slow

Pitch

Tune the pitch of the Voice Guide.

• High / Medium / Low

The displayed image may differ depending on the model.



The displayed image may differ depending on the model.

Start Setup



The displayed image may differ depending on the model.

High Contrast

Set the background and font to high-contrast colors in Menu. Menu transparencies become opaque when the option is selected.

• Off () / On ()

Enlarge

Enlarge the size of the Menu area.

• Off () / On ()

Go through the initial setup steps like you did the first time you used this product.

— Enter your 4 digit PIN number. The default PIN number is "0-0-0-0". If you want to change the PIN number, use the **Change PIN** function.

— Change the PIN to keep your device secure.

Time

MENU **□** → System → Time → ENTER **□**

Time	
Clock Set	
NTP Settings	
DST	Off
Power On Delay	0

The displayed image may differ depending on the model.

You can configure Clock Set or DST. Configure various time-related settings.

Clock Set

Select Clock Set. Select Date or Time, and then press 🖃.

Use the number buttons to enter numbers or press the up and down arrow buttons. Use the left and right arrow buttons to move from one entry field to the next. Press when done.

You can set the **Date** and **Time** directly by pressing the number buttons on the remote control.

NTP Settings

Set up the server URL and time zone to use the network time.

DST

Switches the DST (Daylight Saving Time) function on or off.

Off / On

- Start Date: Set the start date of Daylight Saving Time.
- End Date: Set the end date of Daylight Saving Time.
- Time Offset: Select the correct time offset for your timezone.

Power On Delay

When connecting multiple products, adjust the power-on time for each product to prevent power overload (within the range 0–50 seconds).

Start Date, End Date and Time Offset are enabled only when DST is set to On.

Auto Source Switching

MENU **□** → System → Auto Source Switching → ENTER **□**

Auto Source Switching	
Auto Source Switching	Off
Primary Source Recovery	Off
Primary Source	All
Secondary Source	HDMI1
Default Input	Last Input

The displayed image may differ depending on the model.

Auto Source Switching

Switch to preset source or another source when the main source device gets disconnected.

Primary Source Recovery

Select whether to restore the selected primary input source when a primary input source is activated.

The Primary Source Recovery function is disabled if Primary Source is set to All.

Primary Source

Select a primary source to switch to when no signals are received from the current input.

Secondary Source

Select a secondary source to switch to when no signals are received from the current input.

The Secondary Source function is disabled if Primary Source is set to All.

Default Input

Select the default input to switch to when the new input is disconnected. The Last Input option only includes external inputs connected via cables.

Auto Source Switching must be set to New Input to enable the Default Input option.

Power Control

MENU Ⅲ → System → Power Control → ENTER 🖃

Off
On
On
Off
Power On Only

The displayed image may differ depending on the model.

Auto Power On

This feature automatically turns on the product as soon as it is plugged in. Pressing the power button is not needed.

Off / On

Max. Power Saving

Conserve power by turning off PC monitor when PC is not used for certain time.

Off / On

Standby Control

When no signal is detected, it determines whether or not to enter sleep mode.

Auto

The display stays off to save energy until working signals are detected even if there is an external device connected.

The message No Cable Connected will appear if no source device is connected.

Off

The message No Signal will appear if no input signals are detected.

- If the message, "No Signal" appears even though a source device is connected, check the cable connections and the settings of your source device.
- If <u>No Signal Message</u> is set to **Off**, the **No Signal** message does not appear. In this case, set **No Signal Message** to **On**.
- On

The display turns off to save energy if no input signals are detected.

Power Control	
Auto Power On	Off
Max. Power Saving	On
Standby Control	On
Network Standby	Off
Power Button	Power On Only

[—] The displayed image may differ depending on the model.

Network Standby

This feature keeps the network power on when the product turns off.

• Off / On

Power Button

The power button on the remote control @ can be set to turn on the power or turn on or off the power.

- Power On Only: Set the power button on the remote control 🔘 only to turn on the power.
- Power On/Off: Set the power button on the remote control (b) to turn on or off the power.

Eco Solution

 $\mathsf{MENU} \ \blacksquare \ \to \mathsf{System} \ \to \mathsf{Eco} \ \mathsf{Solution} \ \to \mathsf{ENTER} \ \blacksquare$

Eco Solution	
Power Saving Mode	Off
Eco Sensor	Off
· Minimum Backlight	0
Screen Lamp Schedule	Off
No Signal Power Off	15 minutes
Auto Power Off Off (F	Recommended)

[—] The displayed image may differ depending on the model.

Power Saving Mode

Reduce the power consumption by adjusting the screen brightness.

• Off / Low / Medium / High

Eco Sensor

Automatically adjust the picture brightness based on the ambient light level.

Off / On

If the screen contrast is not sufficient, set the Eco Sensor to Off. If the Eco Sensor is Off, it may not comply with energy standards.

Minimum Backlight

Set the minimum brightness for the signage screen. This function only works if its value is lower than the value set in the Picture menu's Backlight setting.

If Eco Sensor is On, the display brightness may change (become slightly darker or brighter) depending on the surrounding light intensity.

Available only when Eco Sensor is set to On.

Eco Solution Power Saving Mode Off Eco Sensor Off Minimum Backlight O Screen Lamp Schedule Off No Signal Power Off 15 minutes Auto Power Off Off (Recommended)

Screen Lamp Schedule

Screen Lamp Schedule

Enable or disable the lamp schedule.

Off / On

Schedule1, Schedule2

Time

The panel brightness will change to the brightness set in Lamp at a specified time.

Lamp

Adjust the panel brightness. A value closer to 100 makes the panel brighter.

• 0 ~ 100

No Signal Power Off

Save power by turning the product off when no signal is received from any source.

Auto Power Off

Choose how long the display will wait before turning off after no user interaction is detected.

The displayed image may differ depending on the model.

This function does not operate if the display is in the standby mode.

The product will automatically power off at a specified time. The time can be changed as required.

Fan & Temperature

MENU **III** → System → Fan & Temperature → ENTER **I**

Fan & Temperature	
Fan Control	Auto
Fan Speed Setting	100
Outdoor Mode	Off

The displayed image may differ depending on the model.

It sets items related to the speed and temperature of the fan in each set.

Fan Control

Selects auto or manual for the fan speed settings.

Auto / Manual

Fan Speed Setting

Sets the fan speed within a range of 1 and 100.

Enabled when Fan Control is set to Manual.

Outdoor Mode

To use the product at a low temperature below 0 °C, make sure to set Outdoor Mode to "On".

This feature keeps the internal temperature of the product steady so that the product can start properly when it is powered on.

Off / On

Do not disconnect the power cable when this feature is set to "On".

The product consumes more power when it is turned off if this feature is set to "On" rather than to "Off".

Play via

System
Play via MagicInfo

Change PIN

System
Change PIN

Select the appropriate Play via mode depending on the environment where you are using the product.

The home screen may be different depending on the setting.

• MagicInfo / URL Launcher

Change your 4-digit Personal Identification Number (PIN).

Choose any 4 digits for your PIN and enter it in Enter a new PIN.. Reenter the same 4 digits in Enter the PIN again..

The product has memorized your new PIN.

The displayed image may differ depending on the model.

[—] The displayed image may differ depending on the model.

The default PIN number is "0-0-0-0".

[—] Change the PIN to keep your device secure.

Security

MENU **III** → System → Security → ENTER **I**

Security	
Safety Lock On	
· Power On Button	On
USB Auto Play Lock	Off
Remote Management	Allow
Secured Protocol	Off
Network Lock	Off
USB Lock	Off

[—] The displayed image may differ depending on the model.

Safety Lock On

Enter your 4 digit PIN number. The default PIN number is "0-0-0-0".

If you want to change the PIN number, use the Change PIN function.

Turn Safety Lock On on or off. Safety Lock On restricts the actions that can be carried out by the remote control. The correct PIN must be entered to turn Safety Lock On off.

Power On Button

Turn on this feature to enable the remote control's Power button to turn on the product while Safety Lock On is enabled.

Off / On

[—] Change the PIN to keep your device secure.

USB Auto Play Lock

Select whether to automatically play MagicInfo content saved on a connected USB device.

Your content should be a Published Content uthat is authored by using MagicInfo Premium application and published to the USB device you are using. The MagicInfo Premium application program is available on the website. (http://displaysolutions.samsung.com)

When published to a USB device, your **Published Content** si is saved to **Contents** and **Schedules** folders in the root folder of the connected USB device.

Off

Play MagicInfo content saved on the USB device automatically.

• On

Do not play MagicInfo content saved on the USB device automatically.

Connecting a USB device containing MagicInfo content displays "USB Auto Play Lock: On" for five seconds.

Remote Management

You can Allow or Deny external commands to access your product via a network.

Deny / Allow

Secured Protocol

Secure the protocol between this device and other devices.

Off / On

Network Lock

Block external network access. You can register networks on the server to allow access.

Off / On

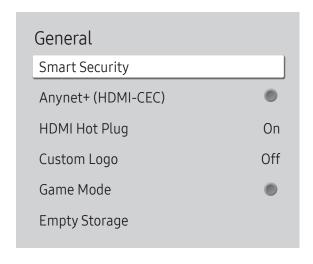
USB Lock

Block connection to external USB ports.

• Off / On

General

MENU Ⅲ → System → General → ENTER 🚭



The displayed image may differ depending on the model.

Smart Security

The security provided to protect your display device and connected storage devices against viruses includes.

Scan

Inspect your display device and connected storage devices to check for viruses.

Isolated List

This is the list of items that have been Isolated for containing viruses.

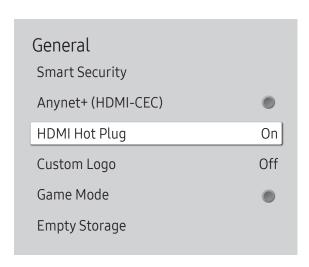
Anynet+ (HDMI-CEC)

Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung product remote control. The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

- Off () / On ()
- You can only control Anynet+ devices using the product remote control, not the buttons on the product.
- The product remote control may not work under certain conditions. If this occurs, reselect the Anynet+ device.
- Anynet+ works when the AV device supporting Anynet+ is in the standby or on status.
- Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.

Troubleshooting for Anynet+

Problem	Possible Solution
Anynet+ does not work.	Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only.
	Check if the Anynet+ device power cord is properly connected.
	Check the Anynet+ device's Video/Audio/HDMI cable connections.
	• Check whether Anynet+ (HDMI-CEC) is set to On in the System menu.
	Check whether the remote control is Anynet+ compatible.
	Anynet+ doesn't work in certain situations. (initial setup)
	• If you have removed and then reconnected the HDMI cable, please make sure to search devices again or turn your product off and on again.
	Check if the Anynet+ function of the Anynet device is set on.
I want to start Anynet+.	• Check if the Anynet+ device is properly connected to the product and check if the Anynet+ (HDMI-CEC) is set to On in the System menu.
I want to exit Anynet+.	Press the SOURCE button on the product remote control and select a non- Anynet+ device.
The message "Disconnecting	You cannot use the remote control when you are configuring Anynet+ or switching to a view mode.
Anynet+ device" appears on the screen.	• Use the remote control after the product has completed Anynet+ configuration or has finished switching to Anynet+.
The Anynet+ device does not play.	You cannot use the play function when initial setup is in progress.
The connected device is not	Check whether or not the device supports Anynet+ functions.
displayed.	Check whether or not the HDMI cable is properly connected.
	• Check whether Anynet+ (HDMI-CEC) is set to On in the System menu.
	Search Anynet+ devices again.
	Anynet+ requires an HDMI connection. Make sure the device is connected to your product with an HDMI cable.
	Some HDMI cables may not support Anynet+ functions.
	• If the connection is terminated because there has been a power failure or the HDMI cable has been disconnected, please repeat the device scan.



The displayed image may differ depending on the model.

HDMI Hot Plug

This feature is used to activate the time delay to turn on a DVI/HDMI source device.

Off / On

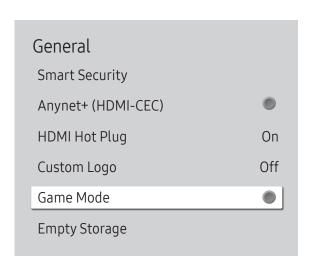
Custom Logo

You can download, select, and set the display time of a custom logo that appears when the product turns on.

- Custom Logo
- You can select a custom logo (image/video) or turn off the custom logo display.
- You must download the custom logo from an external USB device to set the custom logo.
- Logo Display Time
- If the type of custom logo is **Image**, you can set the **Logo Display Time**.
- Download Logo File
- You can download a custom logo into the product from an external USB device.
- The file name of the custom logo you want to download must be saved as "samsung" in all small letters.
- When there are multiple numbers of external USB connections, the product will attempt to download the custom logo from the last device that has been connected to the product.

Custom logo file restrictions

- Images up to 50 MB in size can be used.
 - Supported image file: samsung_image.*
 - Supported file extensions: jpg, jpeg, bmp, png
- Videos up to 150 MB in size can be used. The recommendation is under 20 seconds in length.
 - Supported video file: samsung_video.*
 - Supported file extensions: avi, mpg, mpeg, mp4, ts, wmv, asf



The displayed image may differ depending on the model.

Reset System

MENU Ⅲ → System → Reset System → ENTER 🖃



The displayed image may differ depending on the model.

Game Mode

When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting game mode.

• Off () / On ()

If you connect other external devices while **Game Mode** is on, the screen may not be in good condition.

Empty Storage

Delete files to make space for new content. Recently played files will not be deleted.

Reset all system settings to default.

Chapter 16

Support (applies to the LH55OHFPSBC model only)

Software Update

MENU Ⅲ → Support → Software Update → ENTER 🚭

The Software Update menu lets you upgrade your product software to the latest version.

- Be careful not to turn off the power until the upgrade is complete. The product will turn off and on automatically after completing the software upgrade.
- When you upgrade software, all video and audio settings you have made will return to their default settings.

 We advise you to write down your settings so that you can easily reset them after the upgrade.

Update Now

Update the software to the latest version.

Current version: This is the software version already installed in the product.

Contact Samsung

MENU **III** → Support → Contact Samsung → ENTER **II**

You can view the address of the Samsung website, the call center phone number, your product's model number, software version, Open Source License and other information.

Go to Contact Samsung and find the product Model Code and Software Version.

Terms & Conditions

MENU → Support → Terms & Conditions → ENTER

View and set the privacy policy for MagicInfo and other services.

Make sure that the product is connected to the network.

Reset All

MENU → Support → Reset All → ENTER

This option returns all the current settings for a display to the default factory settings.

Chapter 17 Troubleshooting Guide

 Before calling Samsung Customer Service Center, test your product as follows. If the problem persists, contact Samsung Customer Service Center.

 If the screen remains blank, check the PC system, video controller and cable.

Requirements Before Contacting Samsung Customer Service Center

Testing the Product

Check if your product is operating normally by using the product test function.

If the screen remains blank while the Power LED / Remote sensor blinks even when the product is correctly connected to a PC, perform product testing.

- 1 Power off both the PC and product.
- 2 Disconnect all the cables from the product.
- **3** Power on the product.
- 4 If No Cable Connected is displayed, the product is operating normally.

Checking the Resolution and Frequency

Not Optimum Mode will briefly be displayed if a mode that exceeds a supported resolution is selected (refer to Supported Preset Timing Modes).

Check the followings.

Installation issue (PC mode)

The screen keeps switching on and off.	Check the cable connection between the product and PC, and ensure the connection is secure.		
Blank spaces are found on all four sides of the screen when an	The blank spaces found on the screen have nothing to do with the product.		
HDMI or HDMI-DVI cable is connected to the product and PC.	Blank spaces on the screen are caused by the PC or graphics card. To resolve the problem, adjust the screen size in the HDMI or DVI settings for the graphics card.		
	If the graphics card settings menu does not have an option to adjust the screen size, update the graphics card driver to the latest version.		
	(Please contact the graphics card or computer manufacturer for further details about how to adjust the screen settings.)		
Screen issue			
No Signal is displayed on the screen.	Check that the product is connected correctly with a cable.		
	Check that the device connected to the product is powered on.		
Not Optimum Mode is displayed.	This message is displayed when a signal from the graphics card exceeds the product's maximum resolution and frequency.		
	Supported Preset Timing Modes Table and set the maximum resolution and frequency according to the product specifications.		
The images on the screen look distorted.	Check the cable connection to the product.		
The screen is not clear. The screen is blurry.	Set the resolution and frequency to the recommended level.		
The screen appears unstable and shaky.	Check that the resolution and frequency of the PC and graphics card are set within a range compatible		
There are shadows or ghost images left on the screen.	 with the product. Then, change the screen settings if required by referring to the Additional Information on the product menu and the Standard Signal Mode Table. 		
The screen is too bright. The screen is too dark.	Adjust Brightness and Contrast.		
Screen color is inconsistent.	Go to Picture and adjust the Color Space settings.		
White does not really look white.	Go to Picture and adjust the White Balance settings.		

Screen issue

There is no image on the screen and the Power LED / Remote	The product is in power-saving mode.		
sensor blinks every 0.5 to 1 second.	Press any key on the keyboard or move the mouse to return to the previous screen.		
The product will turn off automatically.	Go to System and make sure Sleep Timer is set to Off.		
	If a PC is connected to the product, check the power status of the PC.		
	Make sure the power cable is connected properly to the product and power outlet.		
	If the signal from a connected device is not detected, the product automatically turns off after 10 to 15 minutes.		
Picture quality of the product is different from the dealer shop where it was purchased.	Use an HDMI cable to obtain high-definition (HD) picture quality.		
The screen display does not look normal.	Encoded video content may cause the display to appear corrupted in scenes featuring fast moving objects such as in a sports event or action video.		
	Low signal level or low picture quality may cause the display to appear corrupted. This does not mean the product is defective.		
	A cell phone within a distance of one-meter radius may cause static on analog and digital products.		
The brightness and color do not look normal.	Go to Picture and adjust the screen settings such as Color Temperature, Brightness and Sharpness.		
	Go to System and adjust the Energy Saving Mode settings.		
	Reset the screen settings to the default settings.		
Lines (red, green or blue) are displayed on the screen.	These lines are displayed when there is a defect in DATA SOURCE DRIVER IC on the monitor. Contact a Samsung Service Center to resolve the issue.		
The display looks unstable and then freezes.	The screen may freeze when a resolution other than the recommended resolution is used or if the signal is not stable. To resolve the issue, change the PC resolution to the recommended resolution.		
The screen cannot be displayed in full screen.	A scaled SD (4:3) content file can cause black bars on both sides of an HD channel screen.		
	A video with an aspect ratio different from the product can cause black bars at the top and bottom of the screen.		
	Change the screen size setting to full screen on the product or source device.		

Remote control issue		
The remote control does not work.	Make sure that the batteries are correctly in place (+/-).	
	Check if the batteries are flat.	
	Check for power failure.	
	Make sure that the power cord is connected.	
	Check for any special lighting or neon signs switched on in the vicinity.	
Source device issue		
A beeping sound is heard when my PC is booting.	If a beeping sound is heard when your PC is booting, have your PC serviced.	
Other issue		
The product smells like plastic.	The plastic smell is normal and disappears over time.	
Audio or video cuts out intermittently.	Check the cable connection and connect it again if required.	
	Using a very hard or thick cable may corrupt audio and video files.	
	Make sure cables are flexible enough to ensure durability. When mounting the product onto a wall, it is recommended to use right-angle cables.	
Small particles are found on the edges of the product.	The particles are part of the product design. The product is not defective.	
When I try to change the PC resolution, a message The defined resolution is not currently supported. appears.	The message The defined resolution is not currently supported. appears if the input source resolution exceeds the maximum resolution of the display.	
	To resolve the issue, change the PC resolution to a resolution supported on the display.	
HDMI Black Level is not functioning properly on an HDMI device with YCbCr output.	This function is available only when a source device, such as a DVD player and STB, is connected to the product via an HDMI (RGB signal) cable.	
There is no sound in HDMI mode.	Displayed picture colors may not look normal. Video or sound may not be available. This can occur if a source device that only supports an older version of the HDMI standard is connected to the product.	

\cap + \vdash	or	issu	
	161	1551	•

The IR sensor is not functioning.

Make sure the sensor light turns on when a button is pressed on the remote control.

If the sensor light does not turn on, turn the power switch off and then on again on the back of the product.

(The Power LED / Remote sensor lights up red when the screen is switched off.)

If the sensor light still does not turn on after the power switch is turned off and then on again, an internal jack may be disconnected.

Contact your nearest service center to have the product serviced.

If the sensor light that is on does not flash red when a button is pressed on the remote control, the IR sensor may be defective.

Contact your nearest service center to have the product serviced.

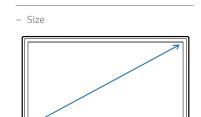
• This function is available only when a source device, such as a DVD player and STB, is connected to the product via an HDMI (RGB signal) cable.

Q&A

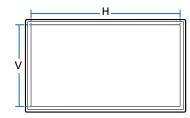
	Question	Answer		
	How can I change the frequency?	Set the frequency on your graphics card.		
		 Windows XP: Go to Control Panel → Appearance and Themes → Display → Settings → Advanced → Monitor and adjust the frequency in Monitor Settings. 		
		• Windows ME/2000: Go to Control Panel → Display → Settings → Advanced → Monitor and adjust the frequency in Monitor Settings.		
 Refer to the user manual for your PC or graphics card for further instructions on adjustment. 		 Windows Vista: Go to Control Panel → Appearance and Personalization → Personalize → Display Settings → Advanced Settings → Monitor and adjust the frequency in Monitor Settings. 		
		 Windows 7: Go to Control Panel → Appearance and Personalization → Display → Adjust resolution → Advanced Settings → Monitor and adjust the frequency in Monitor Settings. 		
		 Windows 8: Go to Settings → Control Panel → Appearance and Personalization → Display → Adjust resolution → Advanced Settings → Monitor and adjust the frequency in Monitor Settings. 		
		 Windows 10: Go to Settings → System → Display → Advanced display settings → Display adapter properties → Monitor, and adjust Screen refresh rate under Monitor settings. 		
	How can I change the resolution?	 Windows XP: Go to Control Panel → Appearance and Themes → Display → Settings and adjust the resolution. 		
		• Windows ME/2000: Go to Control Panel → Display → Settings and adjust the resolution.		
		 Windows Vista: Go to Control Panel → Appearance and Personalization → Personalize → Display Settings and adjust the resolution. 		
		• Windows 7: Go to Control Panel → Appearance and Personalization → Display → Adjust Resolution and adjust the resolution.		
		 Windows 8: Go to Settings → Control Panel → Appearance and Personalization → Display → Adjust Resolution and adjust the resolution. 		
		 Windows 10: Go to Settings → System → Display → Advanced display settings, and adjust the resolution. 		

Question	Answer
How do I set powersaving mode?	• Windows XP: Set power-saving mode in Control Panel → Appearance and Themes → Display → Screen Saver Settings or BIOS SETUP on the PC.
	 Windows ME/2000: Set power-saving mode in Control Panel → Display → Screen Saver Settings or BIOS SETUP on the PC.
	 Windows Vista: Set power-saving mode in Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC.
	 Windows 7: Set power-saving mode in Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC.
	 Windows 8: Set power-saving mode in Settings → Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC.
	 Windows 10: Set power-saving mode in Settings → Personalization → Lock screen → Screen timeout settings → Power & sleep or BIOS SETUP on the PC.

Chapter 18 Specifications



- Display area



General

Model Name		OH46F	OH55F			
Panel	Size	46 CLASS (45.9 inches / 116 cm)	55 CLASS (54.6 inches / 138 cm)			
	Display area	1018.08 mm (H) x 572.67 mm (V) / 40.1 inches (H) x 22.5 inches (V)	1209.6 mm (H) x 680.4 mm (V) / 47.6 inches (H) x 26.8 inches (V)			
Power Supply		AC100-240V~ 50/60Hz				
		Refer to the label at the back of the product as the standard voltage can vary in different countries.				
Environmental	Operating	Temperature : -22 °F -122 °F (-30 °C - 50 °C)				
considerations		* For installing the enclosure, keep the internal temperature at 40 °C or below.				
		Humidity:10% - 80%, non-condensing				
	Storage	Temperature : -4 °F - 113 °F (-20 °C - 45 °C)				
		Humidity : 5% - 95%, non-condensing				

Plug-and-Play

This monitor can be installed and used with any Plug-and-Play compatible systems. Two-way data exchange between the monitor and PC system optimizes the monitor settings. Monitor installation takes place automatically. However, you can customize the installation settings if desired.

[—] Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may appear brighter or darker on the panel. This does not affect product performance.

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

For detailed device specifications, visit the Samsung Electronics website.

Preset Timing Modes

This product can be set to only one resolution for each screen size to obtain the optimum picture quality due to the nature of the panel. Using a resolution other than the specified resolution may degrade the picture quality. To avoid this, it is recommended that you select the optimum resolution specified for your product.

Model Name		OH46F / OH55F
Synchronization	Horizontal Frequency	26 – 136 kHz
	Vertical Frequency	24 – 75 Hz
Resolution	Optimum Resolution	1920 x1080 @ 60 Hz
	Maximum Resolution	1920 x1080 @ 60 Hz

The screen will automatically be adjusted if a signal that belongs to the following standard signal modes is transmitted from your PC. If the signal transmitted from the PC does not belong to the standard signal modes, the screen may be blank with the Power LED / Remote sensor on. In such a case, change the settings according to the following table by referring to the graphics card user manual.

Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)	
31.469	70.087	28.322	-/+	
35.000	66.667	30.240	-/-	
49.726	74.551	57.284	-/-	
68.681	75.062	100.000	-/-	
31.469	59.940	25.175	-/-	
37.861	72.809	31.500	-/-	
37.500	75.000	31.500	-/-	
37.879	60.317	40.000	+/+	
	(kHz) 31.469 35.000 49.726 68.681 31.469 37.861 37.500	(kHz) (Hz) 31.469 70.087 35.000 66.667 49.726 74.551 68.681 75.062 31.469 59.940 37.861 72.809 37.500 75.000	(kHz) (Hz) (MHz) 31.469 70.087 28.322 35.000 66.667 30.240 49.726 74.551 57.284 68.681 75.062 100.000 31.469 59.940 25.175 37.861 72.809 31.500 37.500 75.000 31.500	(kHz) (Hz) (MHz) (H/V) 31.469 70.087 28.322 -/+ 35.000 66.667 30.240 -/- 49.726 74.551 57.284 -/- 68.681 75.062 100.000 -/- 31.469 59.940 25.175 -/- 37.861 72.809 31.500 -/- 37.500 75.000 31.500 -/-

- Horizontal Frequency
 The time required to scan a single line from the left to the right side of the screen is called a horizontal cycle.

 The reciprocal number of a horizontal cycle is called horizontal frequency.
 Horizontal frequency is measured in kHz.
- Vertical Frequency
 The product displays a single image multiple times per second (like a fluorescent light) to display what the viewer sees. The rate of a single image being displayed repeatedly per second is called vertical frequency or refresh rate. Vertical frequency is measured in Hz.

Resolution	Horizontal Frequency	Vertical Frequency	Pixel Clock	Sync Polarity
	(kHz)	(Hz)	(MHz)	(H/V)
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 720	45.000	60.000	74.250	+/+
VESA, 1280 x 800	49.702	59.810	83.500	-/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1280 x 1024	79.976	75.025	135.000	+/+
VESA, 1366 x 768	47.712	59.790	85.500	+/+
VESA, 1440 x 900	55.935	59.887	106.500	-/+
VESA(RB), 1600 x 900	60.000	60.000	108.000	+/+
VESA, 1680 x 1050	65.290	59.954	146.250	-/+
VESA, 1920 x 1080	67.500	60.000	148.500	+/+

Chapter 19 Appendix

Responsibility for the Pay Service (Cost to Customers)

When the service is requested, in spite of in warranty, we may charge you for a visit from a service technician in the following cases.

Not a product defect

Cleaning of the product, Adjustment, Explanation, Re-installation and etc.

- If a service technician gives instructions on how to use product or simply adjusts options without disassembling product.
- If a defect is caused by external environmental factors (Internet, Antenna, Wired Signal, etc.)
- If a product is reinstalled or devices are connected additionally after installing the purchased product for the first time.
- If a product is reinstalled to move to a different spot or to move to a different house.
- If customer requests instructions on how to use because of another company's product.
- If customer requests instructions on how to use the network or another company's program.
- If customer requests software installation and setup for the product.
- If a service technician removes/cleans dusts or foreign materials inside of the product.
- If customer requests an installation additionally after purchasing a product through home-shopping or online.

A Product damage caused by customer's fault

Product damage caused by customer's mishandling or wrong repair

If a product damage is caused by;

- External impact or drop.
- Use of supplies or separately sold product unspecified by Samsung.
- Repair from a person besides an engineer of outsourcing service company or partner of Samsung Electronics Co., Ltd.
- Remodeling or repairing the product by customer.
- Using it with incorrect voltage or non-authorized electrical connections.
- Not following the "cautions" in User Manual.

Others

- If product fails by natural disaster. (lightning, fire, earthquake, flood damage, etc)
- If consumable components are all used up. (Battery, Toner, Fluorescent lights, Head, Vibrator, Lamp, Filter, Ribbon, etc.)

If customer requests a service in case the product has no defect, service fee may be charged. So please read User Manual first.

Optimum Picture Quality and Afterimage Burn-in Prevention

Optimum Picture Quality

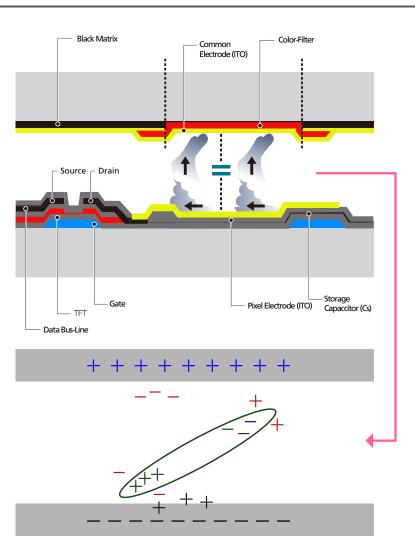
- Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may be brighter or darker on the panel. This does not affect product performance.
 - The number of sub-pixels by panel type: 6,220,800
- Leaving the screen fixed on a stationary image for an extended period of time may cause afterimage burn-in or defective pixels.
 - Activate power-saving mode or a dynamic screen saver if you will not be using the product for an
 extended period of time.

Prevention of Afterimage Burn-in

What is afterimage burn-in?

Afterimage burn-in should not occur when the LCD panel is operating normally. Normal operation refers to a continuously changing video pattern. If the LCD panel displays a fixed pattern for an extended period of time, a slight voltage difference may occur between the electrodes in pixels that control the liquid crystals.

Such a voltage difference between electrodes increases with time and makes the liquid crystals thinner. When this occurs, a previous image can remain on the screen when the pattern changes. To prevent this, the accumulated voltage difference should be reduced.



Afterimage burn-in should not occur when an LCD panel is operating in proper conditions.

Preventing afterimage burn-in

- The best way to protect the product from afterimage burn-in is switching the power off or setting the PC or system to run a screen saver when not in use. Also, Warranty service may be limited depending on instruction quide.
- Powering Off, Screen Saver and Power Saving Mode
 - Power off the product for 2 hours after using it for 12 hours.
 - Go to Display Properties > Power Supply on your PC and set the product to power off as required.
 - Using a screen saver is recommended.
 It is best to use a single-color or moving-image screen saver.
- Regular color Change
 - Use 2 colors
 Switch between 2 colors every 30 minutes as shown above.

Type 1 Type 2

FLIGHT TIME

OZ348 20:30

UA102 21:10

Type 2

FLIGHT TIME

OZ348 20:30

UA102 21:10

Avoid combinations of a text color and background color of contrasting brightness.
 (Brightness: refers to the lightness or darkness of a color which varies depending on the amount of light emitted.)

FLIGHT : TIME

OZ348 : 20:30

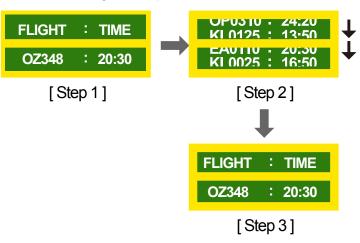
FLIGHT : TIME

OZ348 : 20:30

- Regular Text color Change
 - Use bright colors of similar brightness.
 Interval: Change text color and background color every 30 minutes



- Move and change text every 30 minutes as shown below.



Regularly display a moving image along with a logo.
 Interval: Display a moving image along with a logo for 60 seconds after using for 4 hours.

[—] Avoid using gray as it may contribute to afterimage burn-in.

Avoid using colors of contrasting brightness (black and white; gray).

License

DOLBY AUDIO**

Manufactured under license from Dolby Laboratories.

Dolby, Dolby Audio, Pro Logic, and the double-D symbol are trademarks of Dolby Laboratories.



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Open Source License Notice

In the case of using open source software, Open Source Licenses are available on the product menu. Open Source License Notice is written only English.

For information on the Open Source License Notice, contact the Samsung Customer Center or send email to oss.request@samsung.com.

Terminology

480i / 480p / 720p / 1080i / 1080p____ Each of the scanning rates above refers to the number of effective scanning lines that decides the screen resolution. The scanning rate may be indicated in i (interlaced) or p (progressive), depending on the scanning method.

- Scanning

Scanning refers to a process of sending pixels that form an image progressively. A larger number of pixels will deliver a clearer and more vivid picture.

- Progressive

In progressive scan mode, all lines of pixels are scanned one by one (progressively) on the screen.

- Interlaced

In interlaced scan mode, every other line of pixels is scanned from top to bottom first and then the remaining lines of pixels (that were not scanned) are scanned.

Non-interlace Mode and Interlace Mode____ Non-interlace mode (progressive scan) displays a horizontal line from the top to the bottom of a screen progressively. Interlace mode displays the odd number lines first and the even number lines next. Non-interlace mode is mainly used in monitors as it produces screen clarity and interlace mode is mainly used in TVs.

Dot Pitch____ The screen consist of red, green and blue dots. A shorter distance between the dots produces a higher resolution. Dot pitch refers to the distance between the shortest distance between dots of the same color. Dot pitch is measured in millimeters.

Vertical Frequency____ The product displays a single image many times per second (like a fluorescent light that flickers) to display an image for a viewer to see. The rate of a single image being displayed repeatedly per second is called vertical frequency or refresh rate. Vertical frequency is measured in Hz.

E.g. 60Hz refers to a single image being displayed 60 times in one second.

Horizontal Frequency____ The time required to scan a single line from the left to the right side of the screen is called a horizontal cycle. The reciprocal number of a horizontal cycle is called horizontal frequency. Horizontal frequency is measured in kHz.

Source____ Input source refers to a video source device connected to the product such as a camcorder or video or DVD player.

Plug & Play Plug & Play is a function that allows the automatic exchange of information between a monitor and PC to produce an optimum display environment. The product uses VESA DDC (international standard) to execute Plug & Play.

Resolution____ Resolution is the number of horizontal dots (pixels) and vertical dots (pixels) that form a screen. It represents the level of display detail. A higher resolution enables more data to be displayed on the screen and is useful to perform multiple tasks simultaneously.

E.g. A resolution of 1920 X 1080 consists of 1,920 horizontal pixels (horizontal resolution) and 1,080 vertical pixels (vertical resolution).

DVD (Digital Versatile Disc)____ DVD refers to a CD-sized mass storage disk where you can save multimedia (audio, video or game) applications using MPEG-2 video compression technology.

HDMI (High Definition Multimedia Interface)____ It is an interface that can be connected to a digital audio source as well as a high-definition video source by using a single cable without compression.

Multiple Display Control (MDC)____ MDC (Multiple Display Control) is an application that allows multiple display devices to be controlled simultaneously using a PC. Communication between a PC and monitor takes place using RS232C (serial data transmission) and RJ45 (LAN) cables.