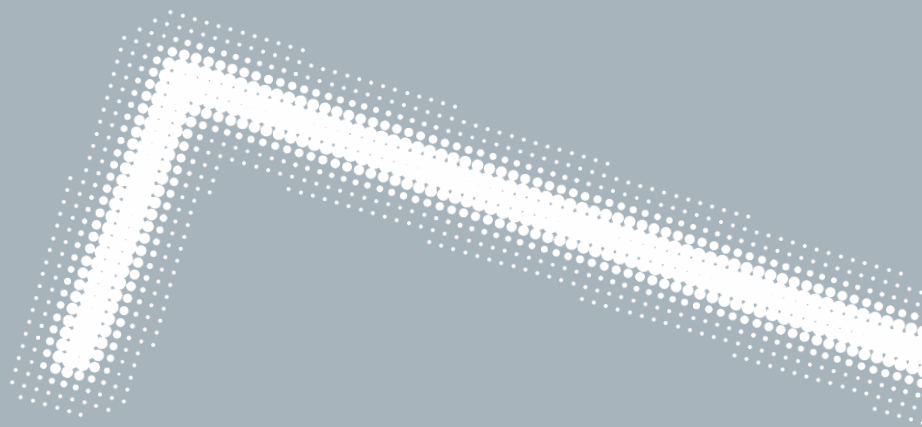# HYUNDAI

USER'S GUIDE

DIGITAL OUTDOOR SIGNAGE

MODELS : H325SS*, H467S**, H557S** ,H757SS*

DIGITAL SIGNAGE

Contents

* RS232C COMMAND SPEC

DIGITAL SIGNAGE

Major features

This product has been designed to enable users ease of use and display information effectively and conveniently.

- Anti-vandalism glass
- All Weather Capable
- Automatic temperature control
- Auto Light Sensor function
- High brightness level for readability against direct sunlight

Safety Information

This product is designed to ensure user's safety.
Avoid the following items to prevent serious electric shock and other dangers.

- Do not cover the ventilation holes with anything or insert anything into the ventilation holes.

- Do not place product on a location where damage can be caused by oil, smoke and etc.

- The product is not suitable for use at visual display workplaces according to §2 of the German Ordinance for Work with Visual Display Units.

- An apparatus with CLASS I construction shall be connected to a Mains socket outlet with a protective earthing connection.

- Make sure that the power cord and other cables are properly plugged in.

- When not connecting proper power plug into power outlet, otherwise this may cause fire by electric shock.

- Do not touch the power cord with wet hands, otherwise it may cause electric shock.

- Overloaded AC outlets and extension cables are as dangerous as the power cord being damaged. Call service engineer for replacement since it may cause electric shock or fire.

- Do not use multiple devices in a single power outlet, otherwise this may cause overheating or fire.

- The main plug of the power supply cord shall remain readily operable. The disconnect device shall remain readily operable.

- The socket-outlet shall be installed near the equipment and shall be easily accessible.

- Do not use or place sharp objects near the LCD surface because this can cause in itself damage to the product.

- When cleaning the LCD screen / surface, do not use strong chemicals such as ethyl, ethyl or a Isopropyl. This can seriously

damage the special coatings on the screen. Use the soft cloths only adding a little water.

- When cleaning the product, make sure to remove the power cord and wipe with a dry cloth.

- Keep batteries for the remote control being out of children's sight.

- Batteries should be inserted with correct polarity (+,-).

- Use only new batteries. Do not use new battery and used battery at the same time.

- When the product keeps un-using for a long time, make sure to unplug the power cord.

- In case of damage or breakage, do not attempt to self repair.
  Please contact the local service engineer.

- Ensure that more than 4 people at least should work together when moving, lifting or installing.

- When a cart is used, use it with cautious when moving the cart/apparatus combination to avoid injury from tip-over.

DIGITAL SIGNAGE

Be sure to understand

Image quality of the product

⚠ CAUSE

Due to the nature of LCD's property, Afterimage can occur. Afterimage appears when identical frames / images are displayed continuasly. If displayed for prolonged periods of time this can become permanent.

⚠ PREVENTION

When you display a freeze frame for a long time, lower the brightness and contrast
(Brightness, 70/ Contrast, 80). Also it can be decreased by using Pixelshift function.

⚠ COUNTERMEASURES

Temporary afterimage can be alleviated by displaying white or moving frame about 10 hours.(But, permanent afterimage cannot be disappeared according to the property of LCD) This method is used to remove temporary afterimage that may occur after displaying a still frame for a certain time.
It can take several minutes or hours to remove afterimage according to the severity. In the case that your cannot avoid displaying identical still image continuously, you can prevent it by displaying moving image for 2 or 3 minutes in every hour. As the brightness of still image and time of display are the cause of afterimage, you are recommended to lower the brightness in that case.

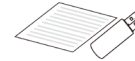**!** Above problem shall not be covered by warranty.

DIGITAL SIGNAGE

Check the accessories list

Please check the following components provided with the product after you open the box.

Remote control   User's manual

! Please check the following components provided with the product after you open the box and contact the dealer if any missing. The contents may vary depending on models and sometimes the contents may be attached on the product.

Proper location and recommended installation

- Place product on a stable surface.
- Product is installed at where the place is clean and product does not sink under water even though heavy raining. It must be installed at where water does not flood at least over the bottom of the product.
- Locate the product at least 1 m away from the electric appliance or heating product.
- Keep the product out of direct ray of light and locate screen not to be reflected by the sunlight.
- Install product in a well ventilated location. Ensure that there is a clearance of more than 100 cm from the wall.
- On LCD panel direction basis, install product avoiding western and eastern direction.
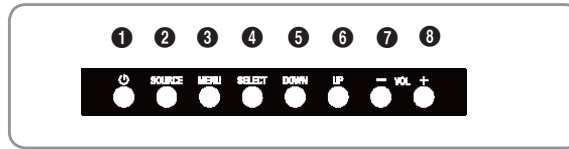- Make sure anchors to be tightened firmly before installation.

! For further details such a base construction and anchor, refer to appendix guide on installation.
Please take extra care during installation, It can cause damage if the unit is handled badly or knocked.

DIGITAL SIGNAGE

Title and function of each part

Control panel

❶ Power button ; to turn the power on or off.

❷ Input selection button : to select other connected device.

❸ Menu button : to display menu or exit from the menu.

❹ Select button.

❺ To move down in OSD menu.

❻ To move up in OSD menu.

❼ To move left and control the volume down in OSD menu.

❽ To move right and control the volume up OSD menu.

* The locations of OSD board and remote control receiving sensor may vary depending on models.

DIGITAL SIGNAGE

Terminal panel
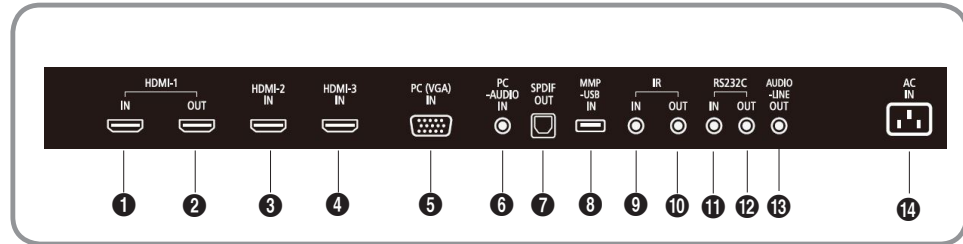
① HDMI 1 Input
② HDMI 1 Output
③ HDMI 2 Input
④ HDMI 3 Input
⑤ PC(VGA) Input
⑥ PC Audio Input

⑦ SPDIF Output
⑧ MMP-USB Input
⑨ IR Input
⑩ IR Output
⑪ RS232 Input
⑫ RS232 Output

⑬ Audio Line Out
⑭ AC Power Input

DIGITAL SIGNAGE

Exterior & Interior view
– H325SS*, H467SS*
  H557SS*

EYE BOLT

Terminal Panel

Control Panel

Door Open Handle

Power Indicator
Remote control Sensor
Light Sensor

PC Case

Heater Unit

Exterior & Interior view
 – H757SS*

EYE BOLT

Terminal Panel

Control Panel

Door Open
Handle

PC Case

Heater Unit

Power Indicator
Remote control Sensor
Light Sensor
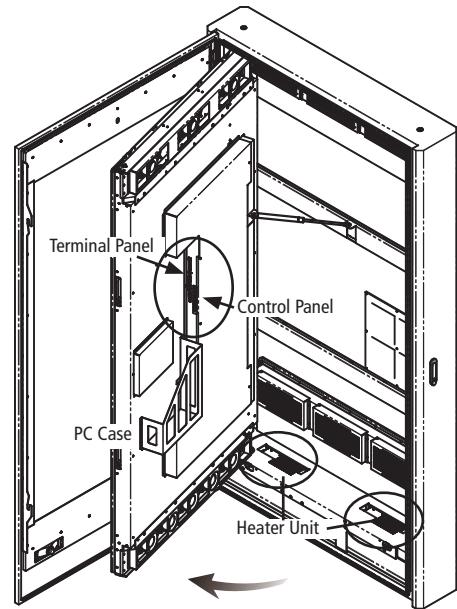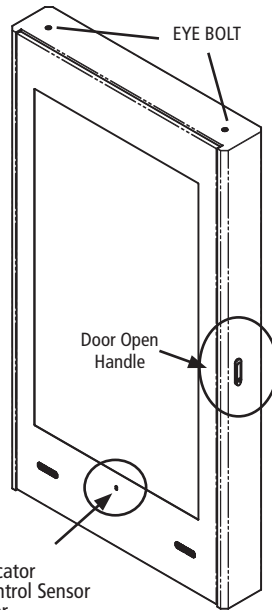
Remote control
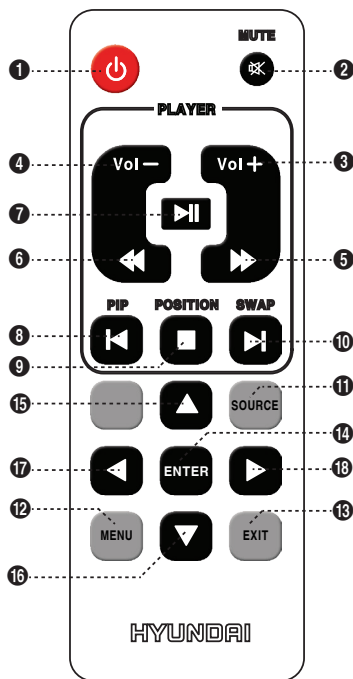
1 Turn the power on or off.

2 Temporary sound switch off.

3 Control the volume up in OSD menu.

4 Control the volume down in OSD menu.

5 Execut the fast forward function in Media player.

6 Execut the rewind function in Media player.

7 Execut play and pause function in Media player.

8 Move a previous menu in Media player.

9 Stop the currently playing content.

10 Move a next menu in Media player.

11 Display the menu of signal source and choose it.

12 Display the OSD menu and move previous menu.

13 Close the OSD menu.

14 Select in OSD menu.

15 Move up in OSD menu.

16 Move down in OSD menu.

17 Move left in OSD menu.

18 Move right in OSD menu.

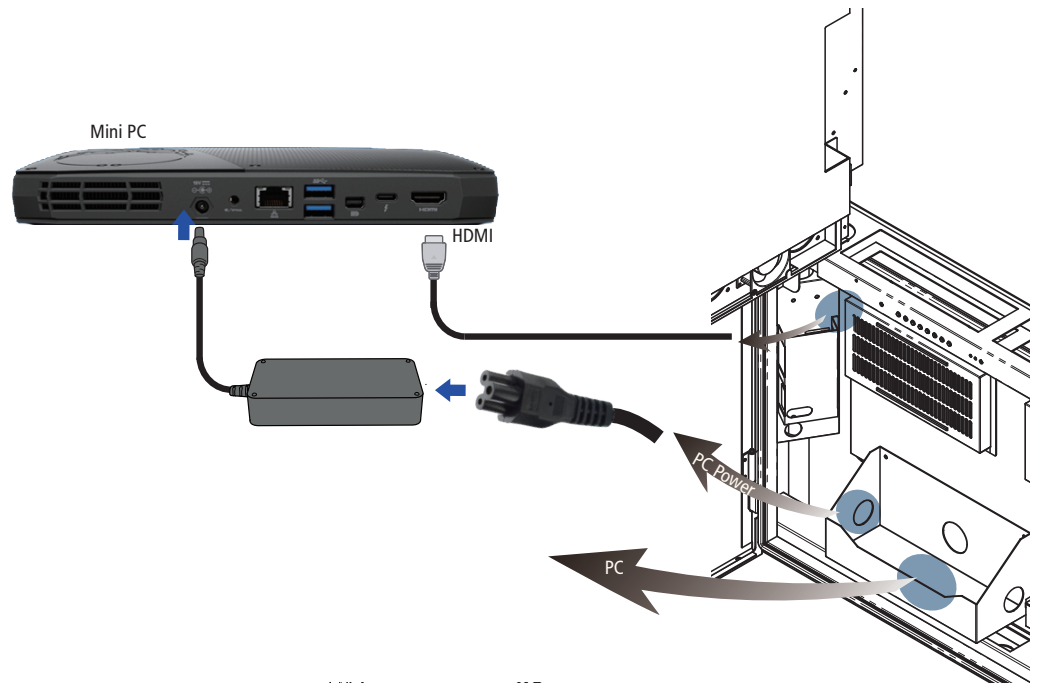※ 8, 9,10 not support the PIP, Swap, Position function for these models.

[TIP] If it doesn't need to control display by a remote-controller, press button of remote-controller in order following.

MENU → SOURCE → EXIT → ▼ → ENTER(↵)

* Press button once again in order above so that original condition is returned.

How to connect to Player
 - In case of using a Mini PC

Mini PC

HDMI

PC Power

PC

DIGITAL SIGNAGE

Support timing for HDMI

No	Resolution	H Frequency(KHz)	V Frequency(Hz)
1	480p	640 x 480p	60
2	576p	720 x 576p	50
3	720p	1280 x 720p	50 / 60
4	1080i	1920 x 1080i	50 / 60
5	640 x 480	31.47	59.94
6	800 x 600	37.88	60.32
7	1024 x 768	48.36	60
8	1360 x 768	47.71	60
9	1280 x 1024	63.98	60
10	1920 x 1080	66.59	60
11	1080p	1920 x 1080p	60

※ Recommended Resolution : Full HD Models 1920 x 1080

DIGITAL SIGNAGE

Support timing for PC

NO	Resolution	Horizontal frequency (KHz)	Vertical frequency (Hz)
1	640 x 480	31.47 / 37.5	59.94 / 75
2	720 x 400	37.5	70
3	800 x 600	37.88 / 46.88 / 48.28	60.32 / 72.19 / 75
4	1024 x 768	48.36 / 60.02	60.00 / 75.03
5	1360 x 768	47.71	60.00
6*	1280 x 1024	64.00	60.00
7*	1600 x 1200	75.00	60.00
8*	1920 x 1080	67.50	60.00

!   6, 7 and 8 are only for Full HD

Adjusting OSD and explanation of its function

Input & Information

Input Source
PC - RGB
HDMI1
HDMI2
HDMI3
USB
↵ ENTER
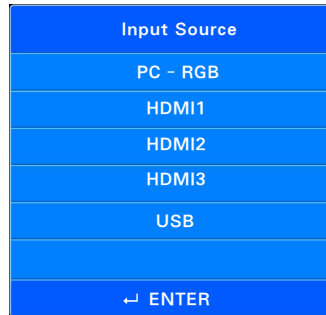
How to select the input source

1. Press the Source button.
2. Press the ▲/▼ button to select the desired source.
3. Press enter button or waiting 3 second to selection.

No Signal

"No Signal" message is shown in case of no connected signals.
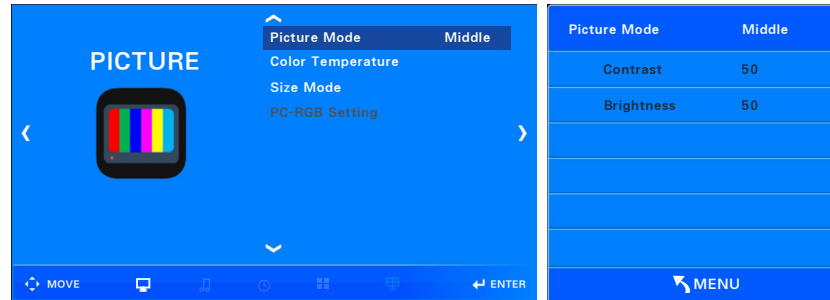
1 HDMI1　　　1920×1080@ 60Hz

Press enter button and the information about input source, signal, set-up is displayed as shown on the picture.

How to Select the Picture Mode

User can adjust and select the screen mode according to the input mode.

PICTURE

Picture Mode	Middle
Color Temperature	
Size Mode	
PC-RGB Setting	

MOVE   ENTER

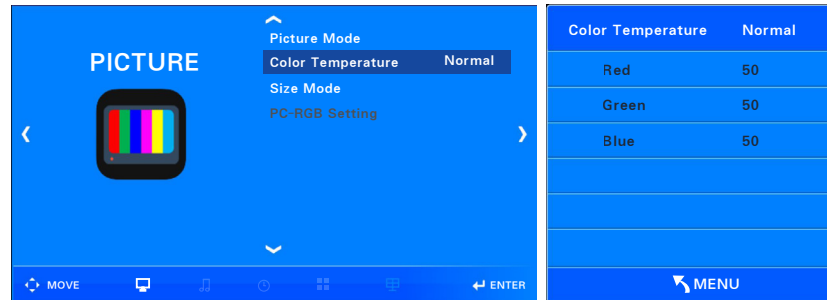| Picture Mode | Middle |
| Contrast | 50 |
| Brightness | 50 |

MENU

1. Press the Menu button to display Screen items.
2. Press the button "Enter" to select the "Screen mode" icon.
3. Press the button "◀/▶" to select the "Screen mode".
4. Mode is displayed in the order below.
   Standard → Dark → User → Bright
  - Standard : Most of videos are suitable for this mode, and it is used when the Standard picture quality is desired.
  - Dark : It is used when there is an eye strain from the darkness of ambient light.
  - User : It is used when the user directly adjusts set-up value of the screen menu.
  - Bright : It is used when you want the brighter screen from the light of ambient light.
     ☞ Contrast : Adjust wallpaper and difference between brightness and darkness of things.
     ☞ Brightness : Adjust the brightness of the whole screen.
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

  ※ "PC-RGB setting" item on OSD is not activated in case of HDMI input.

DIGITAL SIGNAGE

How to Select a Colour Ton

User can select and adjust the color that user wants.

1. Press the menu button to display screen items.
2. Press the button "▼/▲" to move to the "Color temperature" item.
3. Press the button "Enter" to select the "Color temperature" icon.
4. Press the button "◀/▶" to select the "Color temperature mode".
5. Modes are displayed in the order as below.
   Standard → Warm → User → Cold
   - Standard : It is used when you want the most common colors.
   - Warm : It is used when you want a warm feeling of red color.
   - User : It is used when the user directly adjusts set-up value of color that user wants.
   - Cold : It is used when user wants cool feeling of blue color.
6. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

How to Set the Display Size

User can adjust size of screen that user wants.
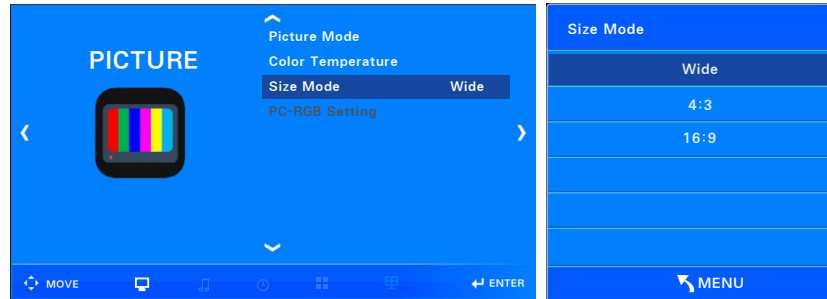
1. Press the Menu button to display Screen items.
2. Press the ▼ / ▲ button to move to the "Screen Size".
3. Press the ENTER button to select the "Screen Size" icon.
4. Press the ▼ / ▲ button to set the screen size.
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.
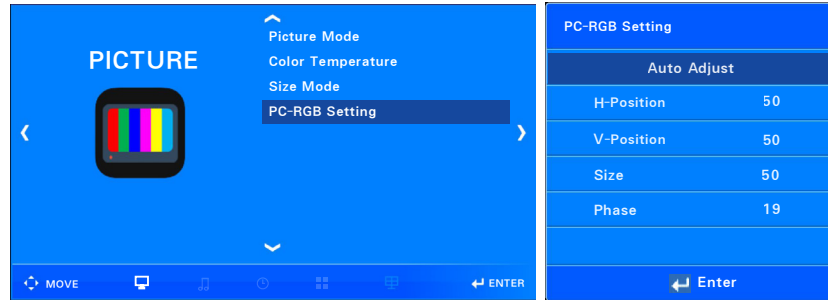 ☞ Item of screen size
  – Wide : Screen that appears to fit the whole Screen
  – 4:3 : Screen that appears with 4: 3 in the middle of screen
  – 16:9 : Screen that adjusted general broadcast screen with 16: 9.

 ※ "Wide" and "4: 3" items are only displayed on the OSD in case of PC-RGB input.

DIGITAL SIGNAGE

How to set image adjustment in PC mode
(Supported only in PC mode)

User can use PC RGB setting on PC mode.

PICTURE

Picture Mode
Color Temperature
Size Mode
PC-RGB Setting

MOVE   ENTER

PC-RGB Setting

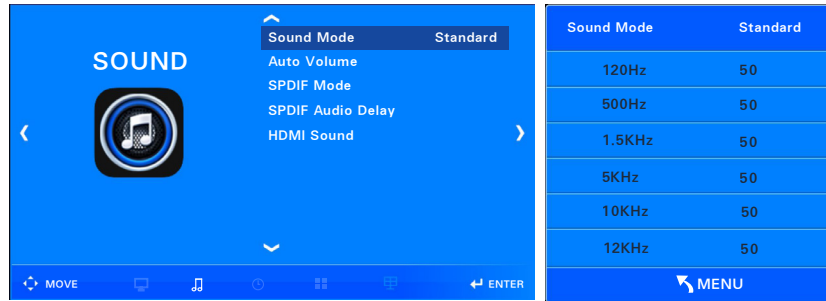| Auto Adjust	
H-Position	50
V-Position	50
Size	50
Phase	19

Enter

1. Press the Menu button to display screen items.
2. Press the button " ▼/▲" to move to the "PC-RGB setting" item.
3. Press the button "Enter" to select the "PC-RGB setting" icon.
4. Press the button "Enter" to run "Automatic adjustment".
5. If the automatic adjustment fails, move to the ▼ / ▲ button and adjust manually by using the ◀ / ▶ button.
6. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.
   ☞ Setting item
   - Automatic adjustment : Adjusts the horizontal position and the vertical position automatically.
   - Horizontal position : Adjusts the horizontal position of the screen.
   - Vertical position : Adjusts the vertical position of the screen.
   - Screen size : Removes noise caused by shaking screen greatly.
   - Fine-tuning : Removes noise caused by shaking screen minutely.

How to Select the Sound Mode

User can select and adjust the desired sound mode.

SOUND	Sound Mode	Standard
	Auto Volume	
	SPDIF Mode	
	SPDIF Audio Delay	
	HDMI Sound	

MOVE   ENTER

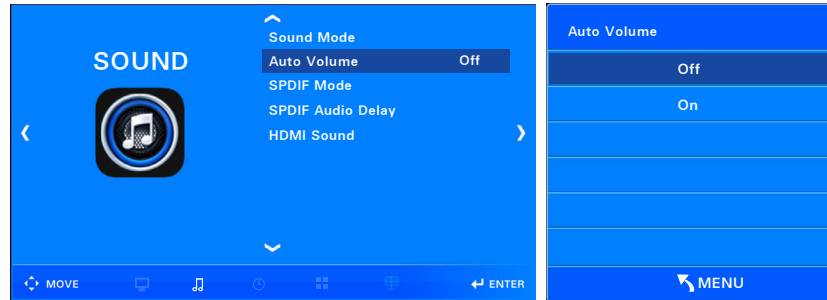| Sound Mode	Standard
120Hz	50
500Hz	50
1.5KHz	50
5KHz	50
10KHz	50
12KHz	50
↰ MENU	

1. Press the Menu button. Press the "◀ / ▶" button to display the sound item.
2. Press the button "Enter" to select the "Sound mode" icon.
3. Press the button "◀/▶" to select the "Sound mode".
4. Mode is displayed in the order below.
   Standard → Music → Movie → Sports → User
   - Standard : Most of videos are suitable for this mode, and it is used when you want a standard sound.
   - Music : It is used whed listen to original sound such as concert.
   - Movie : It is used when listen to grand sound.
   - Sports : It is used when want to hear the voice clearly such as sports broadcasts.
   - User : It is used when the user directly adjusts setting value of sound menu.
     ☞ 120Hz   : Bass, Timpani (Percussion instrument such as drum), fundamental tone of small drum
     ☞ 500Hz   : Double stop, fundamental tone of string instrument, percussion instrument
     ☞ 1.5kHz : High frequency low-band, harmonics of all instrument sounds are the highest bandwidth
     ☞ 5kHz : High frequency high-band, Perspective adjustment bandwidth
     ☞ 10,12kHz : Super high frequency, Brightness adjustment of all band
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

How to Adjust the Auto volume

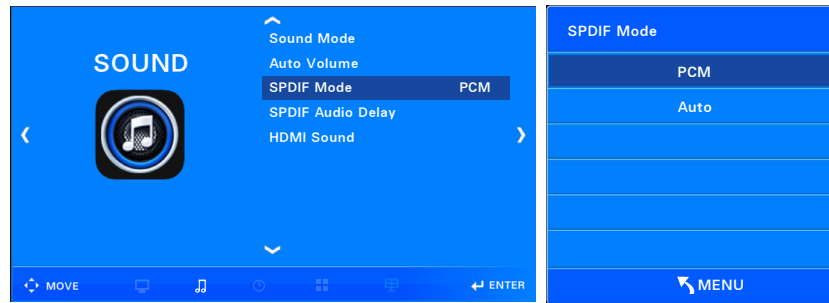Automatically set the volume to a similar level for each input source.

1. Press the Menu button. Press the "◀ / ▶" button to display the sound item.
2. Press the button "▼/▲" to move to the "Automatic volume adjustment" icon.
3. Press the button "Enter" to select the "Automatic volume adjustment" icon.
4. Press the button "▼/▲" to move to the "Action", "Release" icon and select.
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

How to Adjust the SPDIF mode

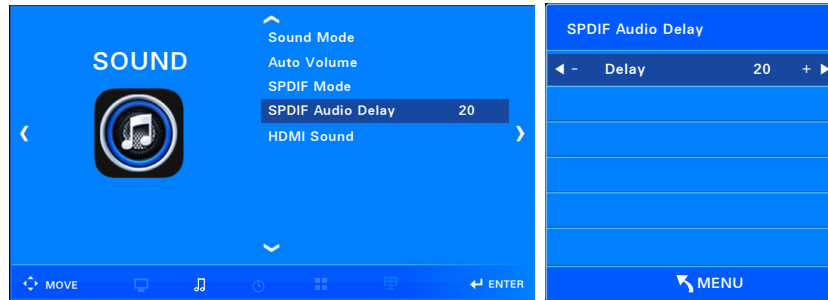User can select high-quality digital audio output mode.

1. Press the Menu button. Press the "◀ / ▶" button to display the sound item.
2. Press the button "▼/▲" to move to the "SPDIF Mode" icon.
3. Press the button "Enter" to select the "SPDIF Mode" icon.
4. Press the button "▼/▲" to move to "PCM", "Auto" icon and select.
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

 - SPDIF : Sony Philips Digital Interface (Using optical cables of square shape method)
 - PCM : Pulse Code Modulation (Uncompressed digital modulation method, only 2ch stereo transmission)

How to Adjust the SPDIF Audio Delay

User can adjust when the sound of the person's mouth and the sound on the screen do not match. (Lip sync)
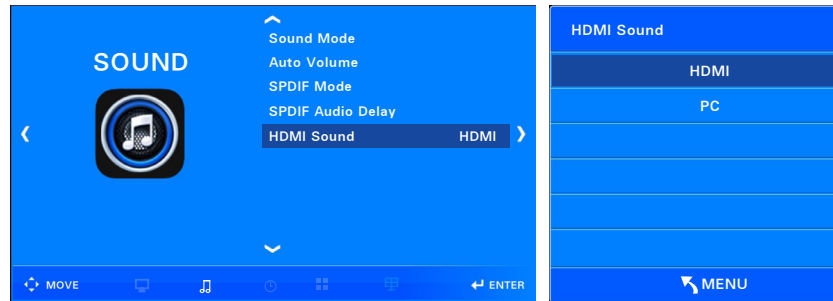

1. Press the Menu button. Press the "◀ / ▶" button to display the sound item.
2. Press the button "▼/▲" to move to the "SPDIF Audio Delay" icon.
3. Press the button "Enter" to select the "SPDIF Audio Delay" icon.
4. Press the button "◀/▶" to adjust the Delay value.
   The initial value is "20" and can be adjusted to "250".
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

DIGITAL SIGNAGE

How to Select HDMI Sound

User can select the sound according to the HDMI input signal (HDMI / DVI).

1. Press the Menu button. Press the "◀ / ▶" button to display the sound item.
2. Press the button "▼/▲" to move to the "HDMI sound" icon.
3. Press the button "Enter" to select the "HDMI sound" icon.
4. Press the button "◀/▶" to move to "HDMI", "PC" icon and select.
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.
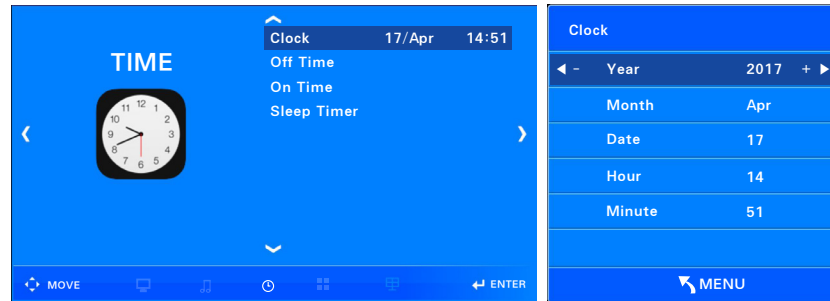
   ※ When input DVI signal to HDMI input terminal, you need to select "PC" to hear the sound.
      At this time, a stereo cable must be connected to the PC audio input.

How to Set Current time

User can set Year, Month, Day, Hour, Minute.

|		
TIME	Clock 17/Apr 14:51	Clock
	Off Time	◄ - Year 2017 + ►
	On Time	Month Apr
	Sleep Timer	Date 17
		Hour 14
		Minute 51
MOVE ENTER		MENU

1. Press the Menu button. Press the "◄ / ►" button to display the time item.
2. Press the button "Enter" to select the "Current time" icon.
3. Press the ▼ / ▲ button to move to each item, then press the ◄ / ► button to set.
   ☞ Year → Month → Day → Hour → Minute
4. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

How to Set Off time
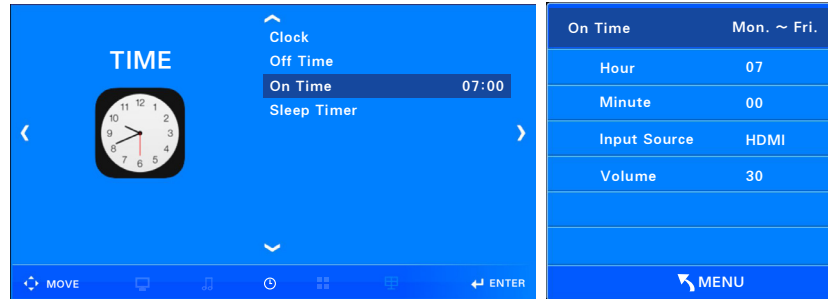
User can set the product off time by days of the week.
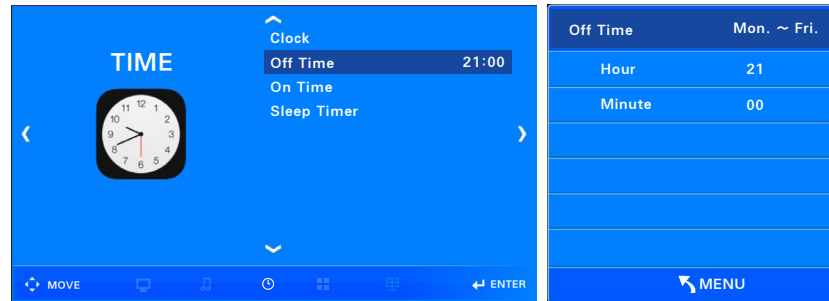
1. Press the Menu button. Press the "◀ / ▶" button to display the time item.
2. Press the button "▼/▲" to move to the "Off time" icon.
3. Press the button "Enter" to select the "Off time" icon.
4. Select the schedule to turn off the product using ◀ / ▶ button.
   ☞ Release → Once → Everyday → Monday to Friday → Monday to Saturday → Saturday to Sunday → Sunday
5. Press the ▼ / ▲ button to move to each item, then press the ◀ / ▶ button to set.
   ☞ Hour → Minute
6. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

How to Set On time

User can set the turn-on time of the product by days of the week and set the input signal and volume.

TIME

Clock
Off Time
On Time　　　　　　07:00
Sleep Timer

◇ MOVE　　　　　　　　　　↵ ENTER

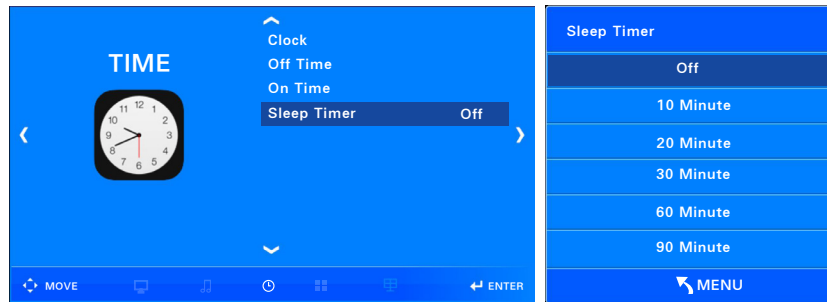| On Time	Mon. ~ Fri.
Hour	07
Minute	00
Input Source	HDMI
Volume	30
↖MENU	

1. Press the Menu button. Press the "◀ / ▶" button to display the time item.
2. Press the button "▼/▲" to move to the "On time" icon.
3. Press the button "Enter" to select the "On time" icon.
4. Select the schedule to turn off the product using ◀ / ▶ button.
   ☞ Release → Once → Everyday → Monday to Friday → Monday to Saturday → Saturday to Sunday → Sunday
5. Press the ▼ / ▲ button to move to each item, then press the ◀ / ▶ button to set.
   ☞ Hour → Minute → Input Signal → Volume
6. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

How to Set Sleep timer

User can set the sleep time to turn off automatically after the desired time.

TIME

Clock
Off Time
On Time
Sleep Timer   Off

MOVE   ENTER

Sleep Timer

Off

10 Minute

20 Minute

30 Minute

60 Minute

90 Minute

MENU

1. Press the Menu button. Press the "◀ / ▶" button to display the time item.
2. Press the button "▼/▲" to move to the "Sleep time" icon.
3. Press the button "Enter" to select the "Sleep time" icon.
4. Press the button "▼/▲" to move and to set-up each item.
    ☞ Release → 10 minutes → 20 minutes → 30 minutes → 60 minutes → 90 minutes → 120 minutes
       → 180 minutes → 240 minutes
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

DIGITAL SIGNAGE

Choosing the Your Languages

User can select the language to use.
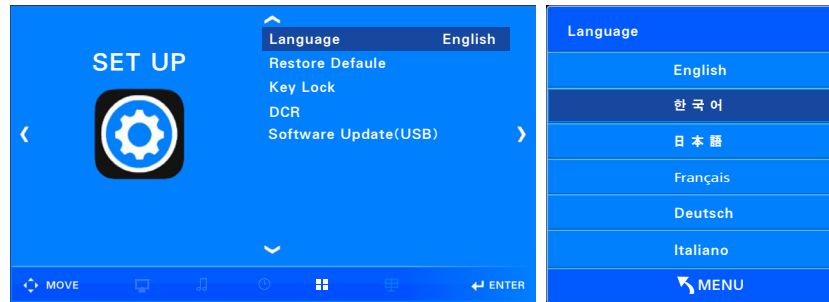
1. Press the Menu button. Press the "◀ / ▶" button to display the setting item.
2. Press the button "Enter" to select the "Language" icon.
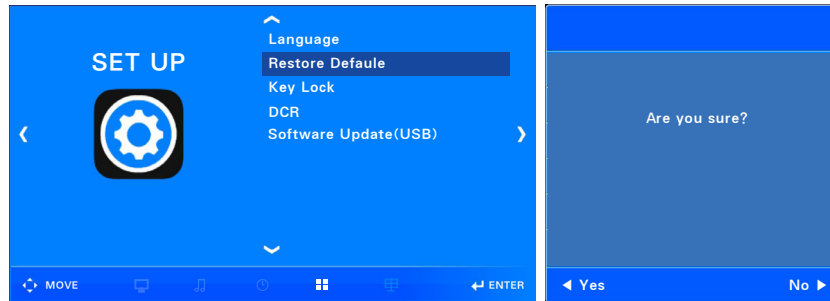3. Press the button "▼/▲" to move to preferred language.

   ☞ Supported languages in 12 countries

   English , 한국어, 日本語 , Français , Deutsch , Italiano , Español , Dutch , Swedish , Polskie , čeština, Русский

4. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

How to Reset

The user clears the saved settings and reverts to the initial purchase status of the product. (Language is excluded)

SET UP

Language
Restore Defaule
Key Lock
DCR
Software Update(USB)

◈ MOVE   ↵ ENTER
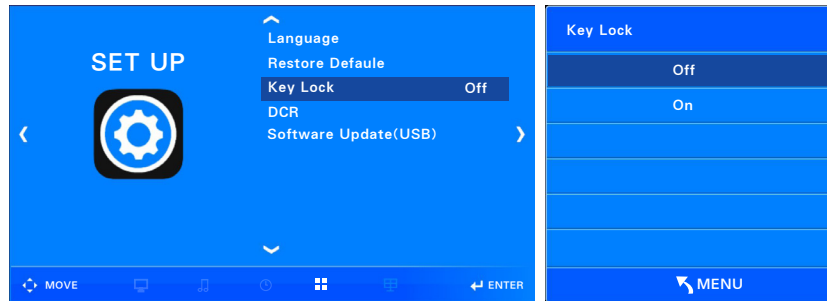
Are you sure?

◀ Yes   No ▶

1. Press the Menu button. Press the "◀ / ▶" button to display the setting item.
2. Press the button "▼/▲ " to move to the "Restore defaults" icon.
3. Press the button "Enter" to select the "Restore defaults" icon.
4. Press the button "◀" to restore the OSD setting item to the default value.
   Pressing the button "▶" does not restore to the default value.
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

DIGITAL SIGNAGE

How to Set Key-Lock

User can set the key pad on the product to lock.

SET UP
Language
Restore Defaule
Key Lock   Off
DCR
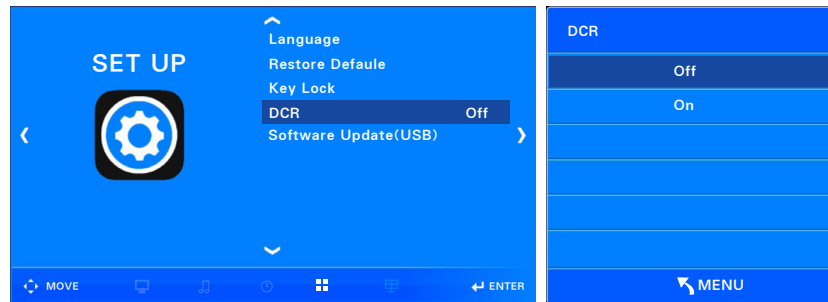Software Update(USB)

MOVE   ENTER

Key Lock
Off
On
MENU

1. Press the Menu button. Press the "◀ / ▶" button to display the setting item.
2. Press the button "▼/▲ " to move to the "Key lock" icon.
3. Press the button "Enter" to select the "Key lock" icon.
4. Press the button "▼/▲" to move and to set-up each item
   ☞ Off / On
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

   ※ It can be set up OSD items by remote controller and RS232 function when key lock is set.

How to Set DCR function

User can set to use Dynamic Contrast Ratio.

SET UP
Language
Restore Defaule
Key Lock
DCR   Off
Software Update(USB)

MOVE   ENTER

DCR
Off
On
MENU

1. Press the Menu button. Press the "◀ / ▶" button to display the setting item.
2. Press the button "▼/▲ " to move to the "DCR" icon.
3. Press the button "Enter" to select the "DCR" icon.
4. Press the button "▼/▲" to move and to set-up each item.
   ☞ Off / On
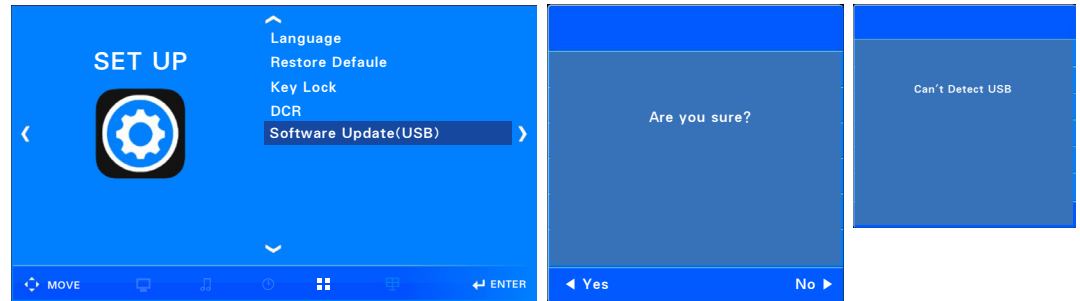5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

   ※ Dynamic Contrast Ratio : It is a function that helps you to see the screen more clearly by increasing
     the contrast ratio by making the dark screen darker and the bright screen brighter.
   ※ In the screen where the screen changes rapidly, the screen may appear blinking according to the brightness,
     but this is not a bad symptom.

How to Update the software

User can update latest software for product.

SET UP

Language
Restore Defaule
Key Lock
DCR
Software Update(USB)

MOVE   ENTER

Are you sure?

◀ Yes   No ▶

Can't Detect USB

1. Press the Menu button. Press the ◀ / ▶ button to display the setting item.
2. Press the ▼ / ▲ button to move to the "Software Update" item.
3. Press the ENTER button to select the "Software Update" icon.
4. Press the ◀ button to update.
   If you press the ▶ button, the update will not proceed.
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

 ※ To proceed with the update, you must connect the USB device containing the update file to the USB port.

 ※ If the USB device is not connected to the USB port, it will be displayed as the left figure.
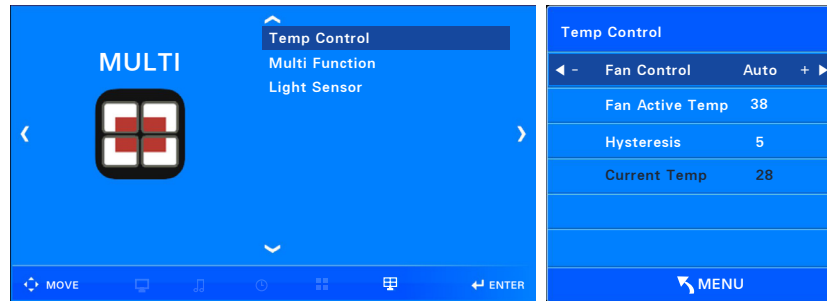   If this happens, check the USB connection and proceed with replacing the USB device with other one.
 ※ Please contact us for the latest software.

How to set the Temp control

User can set Temp control according to the internal temperature of the product.

MULTI

Temp Control
Multi Function
Light Sensor

MOVE   ENTER

Temp Control

◀ –   Fan Control   Auto   + ▶

Fan Active Temp   38
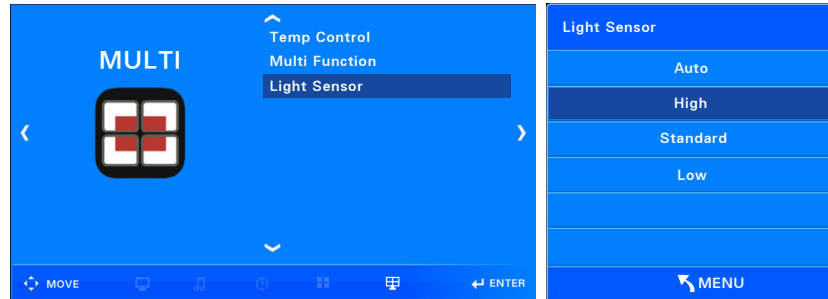
Hysteresis   5

Current Temp   28

↖ MENU

1. Press the Menu button. Press the ◀ / ▶ button to display the multi item.
2. Press the ENTER button to select the "Temperature control" icon.
3. Use the ▼ / ▲ button to select an item and adjust it with the ◀ / ▶ button.
   ☞ Fan Mode / Fan Operation Temperature / Fan Operation Margin
4. In Fan mode, you can select the fan operation option with the ◀ / ▶ button.
  – Automatic : The fan operates when the measured temperature is higher than the fan operating temperature.
  – Action : The fan keeps on regardless of the temperature.
  – Off : The fan remains off regardless of temperature.
5. The fan operates at the set temperature of the fan operation temperature item.
    (when the fan mode is selected automatically)
    ※ It is possible to set between 20 ~ 100 ℃, and it is adjusted by 1 ℃ interval.
6. Fan Operation Margin is the item to set the fan off at a certain degree as the internal temperature
   drops and the fan operation is not required.
    ※ It is possible to set between 1 ~ 20 ℃.
7. The measured temperature is the measured temperature value on the internal temperature sensor.
8. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

How to set the Light sensor

Depending on the setting, the screen brightness is automatically adjusted according to the external brightness.
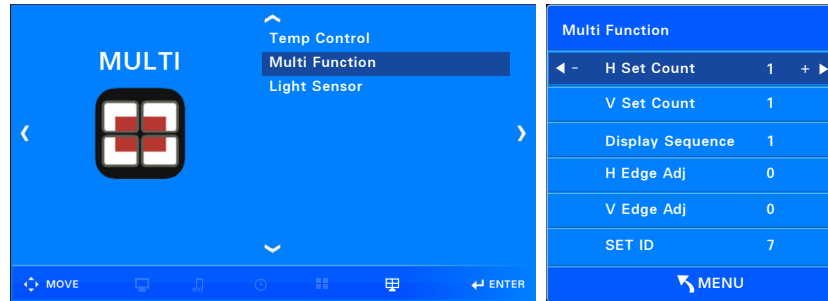

1. Press the Menu button. Press the ◄ / ► button to display the multi item.
2. Press the ▼ / ▲ button to move to the "Light sensor" item.
3. Press the ENTER button to select the "Light sensor" item.
4. User can select an option by pressing the ▲ / ▼ button on the illuminance sensor item.
  ☞ Auto → High → Standard → Low
 - Auto : The brightness is automatically adjusted according to the surrounding brightness.
 - High : The brightness is set to the maximum brightness.
 - Standard : The brightness is set to Standard brightness.
 - Low : The brightness is set to Low brightness.
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.

DIGITAL SIGNAGE

How to set the Multi Function

User can configure a large screen using several products.

```
MULTI          ⌃ Temp Control
               Multi Function
               Light Sensor
               ⌄
⊹ MOVE   ⏎ ENTER
```

```
Multi Function
◄ -   H Set Count      1    + ►
      V Set Count      1
      Display Sequence 1
      H Edge Adj       0
      V Edge Adj       0
      SET ID           7
           ↖MENU
```

1. Press the Menu button. Press the ◄ / ► button to display the multi item.
2. Press the ▼ / ▲ button to move to the "Multi-vision function" item.
3. Press the ENTER button to select the "Multi-vision function" icon.
4. Use the ▼ / ▲ button to select an item and adjust it with the ◄ / ► button.
☞ Number of Horizontal Sets / Number of Vertical Sets / Product Order / Horizontal Edges / Vertical Edges / Product ID / Master
5. Press the EXIT button to exit the OSD and press the MENU button to return to the previous menu.
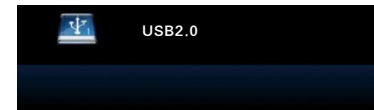
※ This product does not use multi-function.

DIGITAL SIGNAGE

**Play the Multi Media through USB.**

Play Photo files.

User can play photo / music / movie files when you connect USB memory to the USB input port of the product.
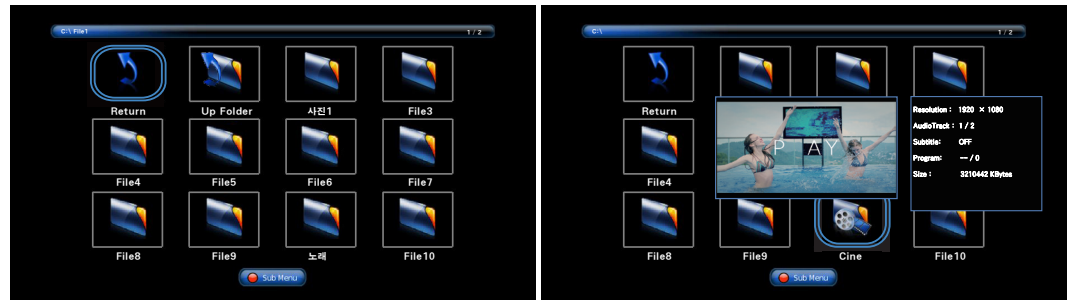

1. Press the Source button on the remote control.
2. Press the ▼ / ▲ button to move to the USB item.
3. Press the ENTER button to select the USB item.
4. The screen will appear as shown above.
5. Connect playback USB to the product.
6. When the normal connection is established, the USB connection indication is displayed as shown on the right.
   Use ◄ / ► to move to the "Photo" item.
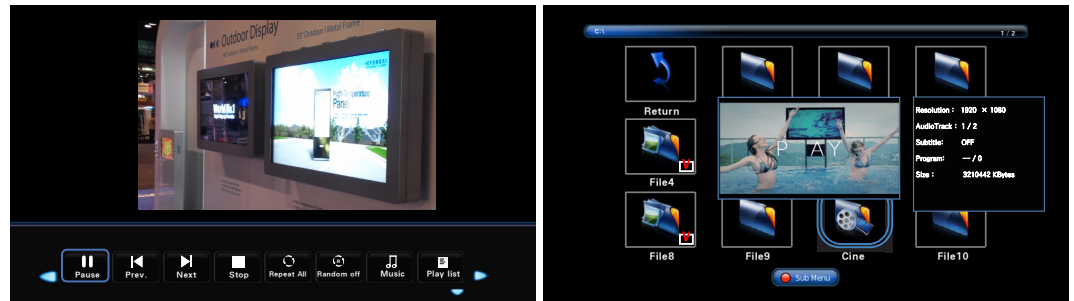
DIGITAL SIGNAGE
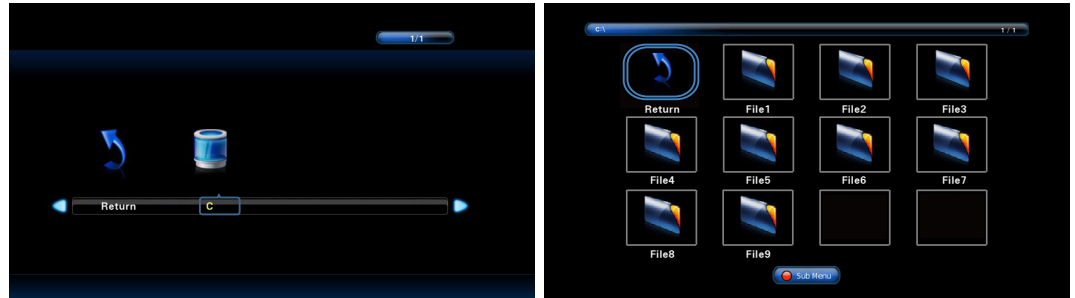
7. Press the ENTER button on the "Picture" item and the "Return" and "C" items will appear.
8. Press the ▶ button to move to "C" and press the ENTER button.
   ☞ Press "Return" button and ENTER button to move to the first screen.
9. Use ▲ ▼ ◀ ▶ buttons to move to the desired file.
If the button is a folder, press the ENTER button.
   ☞ Press "Return" button and ENTER button to move to the first screen.

DIGITAL SIGNAGE

10. Press the ENTER button to move to the next folder. Press the "Up Folder" button to move
    to the upper folder.
    ☞ Press "Return" button and ENTER button to move to the first screen.
11. After moving to the file you want to play back, the preview screen and the information window
   of the file will appear after a while.

DIGITAL SIGNAGE

12. Press the Play / Pause button on the remote control to play the picture files in order.
    Press the Play / Pause button during playback to pause. Press the Pause button to return
    to the Playlist screen.
13. If you want to play only the desired file, press the ENTER button in the file item to create a check mark.
    If you press Play button at this time, only the selected file will be played.

14. 14. For picture file types that can not be played back,
    "Unsupported File" appears.
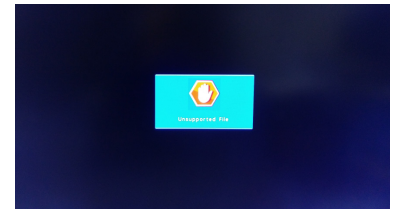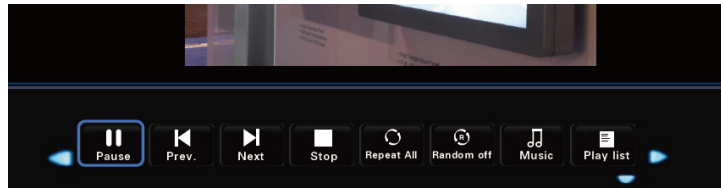
15. When playing a photo file, a menu item is created at the bottom of the screen and can be set
    by pressing the ◀ ▶ button and then the ENTER button.
    You can hide the menu items with the ▼ button and the menu items show when the ▲ / ENTER button is pressed.
  – Pause / Play : Play and Pause (Playback time is approx. 7 seconds)
  – Previous : Go to previous file
  – Next : Play Go to next file
  – Stop : Playback stops and the screen changes to a picture file.
  – Repeat All : Plays the entire photo file repeatedly.
    Repeat X : After playing all the photo files, the screen will be transferred to the screen where you can view the photo files.
    Repeat 1 : Only one picture file is played repeatedly.
  – Random off : Plays back picture files in order.
    Random Action : Plays back photo files in any order.
  – Music : Plays music files with photo files.
    However, it must be stored in the same folder with the picture file.
  – Playlist : Shows a list of photo files being played.
  – Information : Information of the currently playing photo file is displayed.
  – Rotation : You can rotate left / right 90 degrees / 180 degrees / 270 degrees.
  – Zoom : You can zoom in 1x / 2x / 4x / 8x zoom.
  – Reduction : It can be reduced to 1/2, 1/4 size.
  – Move View : When you enlarge the picture size, you can move to the desired place.
 – Slide show : Standard / Random setting.

The table below shows information about playable photo files

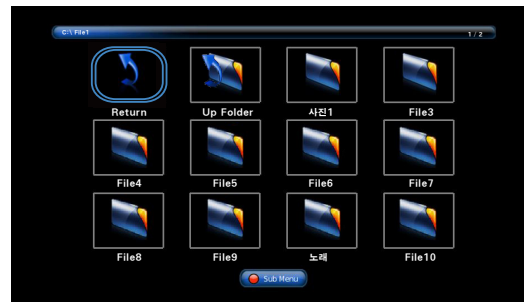| Image	Photo	Resolution (Mstar suggest)	Required DRAM size (Mbytes)	Remark
JPEG	Base-line	15360x8704 (1920x8 x 1088x8)	3.96	Depends on RAM size
JPEG	Progressive	1024x768	6.00	
PNG	non-interlace	9600x6400	3.66	
PNG	interlace	1200x800	3.66	
BMP		9600x6400	3.66	

DIGITAL SIGNAGE

Play Music files.
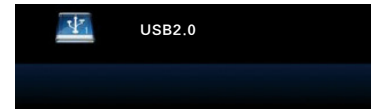
1. Press the Source button on the remote control.
2. Press the ▼ / ▲ button to move to the USB item.
3. Press the ENTER button to select the USB item.
4. The screen will appear as shown above.
5. Connect playback USB to the product.
6. When the normal connection is established, the USB connection indication is displayed as shown on the right.
   Use ◄ ► to move to "Music" item.

DIGITAL SIGNAGE
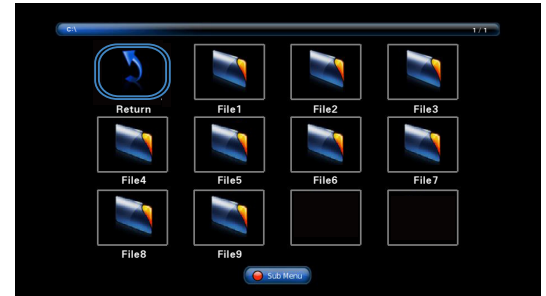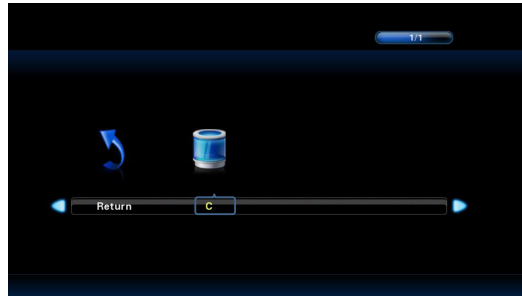
7. Press the ENTER button on the "Music" item to display the "Return" and "C" items.
8. Press the ▶ button to move to "C" and press the ENTER button.
   ☞ Press "Return" button and ENTER button to move to the first screen.
9. Use ▲ ▼ ◀ ▶ buttons to move to the desired file.
If the button is a folder, press the ENTER button.
   ☞ Press "Return" button and ENTER button to move to the first screen.

DIGITAL SIGNAGE

10. Press the ENTER button to move to the next folder. Press the "Up Folder" button to move
to the upper folder.
☞ Press "Return" button and ENTER button to move to the first screen.
11. After moving to the file you want to play back, the preview screen and the information window
of the file will appear after a while.

DIGITAL SIGNAGE

12. Press the Play / Pause button on the remote control to play the picture files in order.
    Press the Play / Pause button during playback to pause. Press the Pause button to return to the
    Playlist screen.
13. If you want to play only the desired file, press the ENTER button on the file to create a check mark.
    If you press play / play button at this time, only the selected file will be played.

14. For picture file types that can not be played back,
    "Unsupported File" appears.
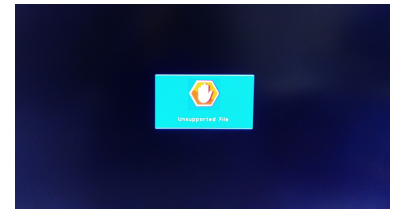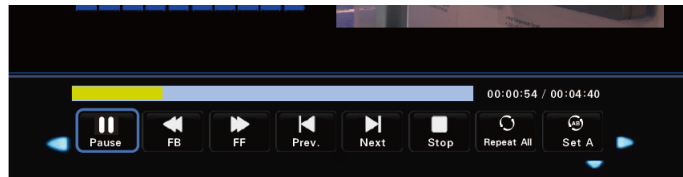
15. When playing a music file, a menu item is created at the bottom of the screen and can be set by
    pressing the ◀ ▶ button and then the ENTER button.
    You can hide the menu items with the ▼ button and the menu items show when the ▲ / ENTER
    button is pressed.
  - Stop / Play : Play and pause
  - Rewind: Wind back at 2/4/8/18 times speed.
  - Fast forward: Fast forward at 2/4/8/18 times speed.
  - Previous : Go to previous file
  - Next : Play Go to Next file
  - Stop : The playback will Stop and The screen will switch to The music file view.
  - Repeat All : Plays the entire music file repeatedly.
    Repeat X : After all the music files are played back, they are transferred to the screen where you can
    view the music files.
    Repeat 1 : Only one music file is played repeatedly.
  - Set AB : A section and B section are set and section is played repeatedly.
  - Random off : Play music files in order.
    Random Action : Plays music files in any order.
  - Quiet : Set to silence.
  - Playlist : Shows a list of music files being played.
  - Information : Information of the currently playing music file is displayed.
  - Time shift : You can enter the time you want to hear by entering the time in seconds and seconds.
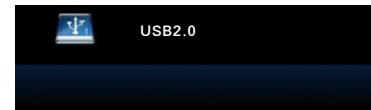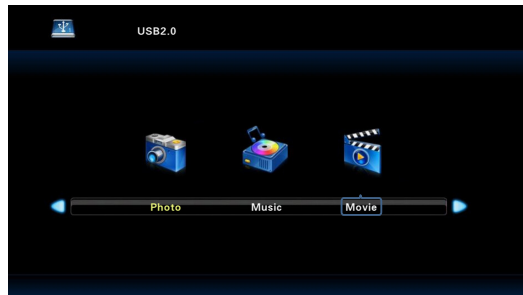
DIGITAL SIGNAGE

The table below shows information about playable music files

| Audio Codec	File Extension	Bit Rate
MPEG1 Layer2	MP3	32Kbps ~ 448Kbps(Bit rate) 32KHz ~ 48KHz(Sampling rate)
MPEG1 Layer3	MP3	32Kbps ~ 320Kbps(Bit rate) 32KHz ~ 48KHz(Sampling rate)

DIGITAL SIGNAGE

Play Movie files.

1. Press the Source button on the remote control.
2. ▼/▲ Press the button to move to the USB item.
3. Press the ENTER button to select the USB item.
4. The screen will appear as shown above.
5. Connect playback USB to the product.
6. When the normal connection is established, the USB connection indication is displayed as shown on the right.
   ◀▶ Use the button to move to the "Movie" item.

DIGITAL SIGNAGE
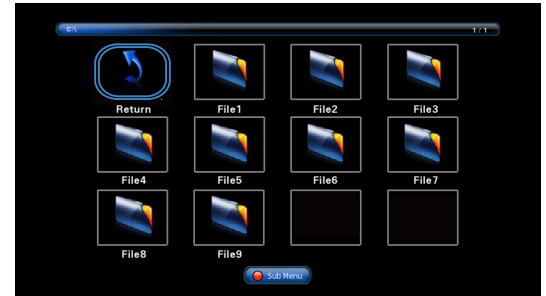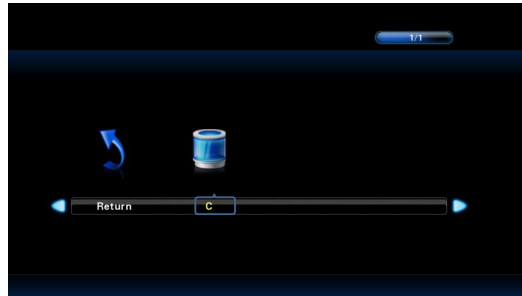

7. When you press ENTER button in "Movie" item, "Return" and "C" items appear.
8. Press the button to move to ""C"" and press the ENTER button.
    ☞ Press "Return" button and ENTER button to move to the first screen.
9. ▲▼◀▶buttons to move to the desired file.
   If the button is a folder, press the ENTER button.
    ☞ Press "Return" button and ENTER button to move to the first screen.

DIGITAL SIGNAGE
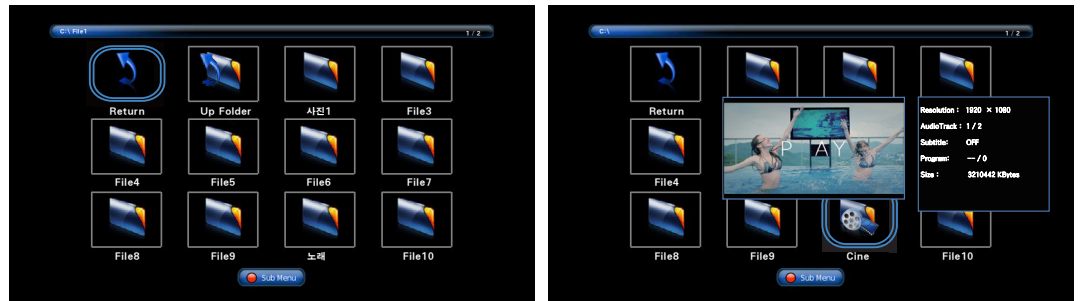
10. Press the ENTER button to move to the next folder. Press the "Up Folder" button to move to
    the upper folder.
    Press "Return" button and ENTER button to move to the first screen.
11. When you move to the file you want to play, the preview screen and the information window of
    the file will appear after a while.
12. Press the Play / Pause button on the remote control to play the picture files one after another.
    Press the Play / Pause button during playback to pause. Press the Pause button to return
    to the Playlist screen.
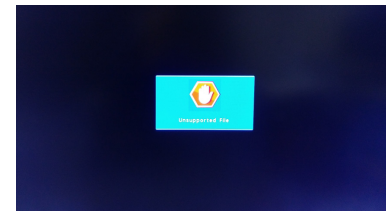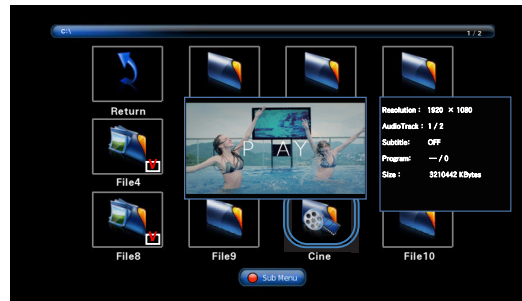
13. If you want to play only the desired file, press the ENTER button on the file in the file item to
    create a check mark.
    If you press PLAY/PLAY BUTTON at this time, only the selected file will be played.
14. For photo file types that can not be played back, the phrase "Unsupported File" appears.
    In a movie file, menu items do not appear at the bottom of the screen.
    You can control with the remote control key.
.
    - ▶‖ : Play and Pause
    - ◀◀ : Backward 2x / 4x / 8x / 16x / 32x
    - ▶▶ : Fast forward 2x / 4x / 8x / 16x / 32x
    - ■ : Stop
    - ◀‖ : Previous file (Move to the beginning of the current playback file)
    - ‖▶ : Next file (Move to next file in playlist)

DIGITAL SIGNAGE

The table below shows information about movie files that can be played

File Extension	Container	Video Codec	SPEC	Bit Rate
dat, mpg, mpeg	MPG, MPEG	MPEG1,2	1080P@ 30fps	20Mbit/sec
ts, trp, tp, m2ts	MPEG2 -TS	MPEG2 ,H.264	1080P@ 30fps	20Mbit/sec
vob	MPEG2 -PS	MPEG2	1080P@ 30fps	20Mbit/sec
mp4	MP4	MPEG4 DivX 3.11, DivX 4.12, DivX 5.x, DivX 6, XviD 1.00, XviD 1.01, XviD 1.02, XviD 1.03, XviD 1.10-beta1/2 H.264	1080P@ 30fps	20Mbit/sec

Diagnosis

When the product is not working properly, please check before you the customer center.

Symptoms	How to solve the problem
Screen displays late after the power is on.	It happens not to show the screen noise when the power is on. Therefore it is not a defect. But if the screen doesn't show up within 5 minutes after turning on, please contact the customer center.
The screen is too dark or bright?	Adjust the brightness or contrast.
The screen doesn't show up indication "Out of range".	You are using a signal which is outside the operating frequencies of the product (Unsupported), please change your video signal.
When the screen is scrambled.	Please check the cable connection and the signal generator and contact customer center.
Automatic switching-on function is not working / the input data were disappeared when reboot the system after setting up the time	Automatic switching-on function is working when the product has been turned off via remote control or power button on main body. It is because that the set-up values are deleted when the power cord is unplugged.
The screen and sound are not synchronized	Check if the power is on, suspended or is correctly plugged into the outlet. Plug the power cord of other peripheral device to the outlet that the product is being connected.

Symptoms	How to solve the problem
The screen displays without the sound.	Check the volume up and down with remote control and audio connection cable
No sound from either right speaker or left speaker.	Confirm the status of the sound balance on OSD menu and check the connection of speaker cable.
Remote control doesn't work.	Check if any foreign substances in the sensor and the polarity of battery is inserted. If the batteries are drained, replace them with new batteries.
PC D-SUB doesn't work.	Set up the resolution referring to frequency table of input terminal. And re-boot the system as it supports Plug and Play.
Fan on the rear doesn't work	Check the status of temperature control on OSD menu

• If any problem is unsolved after trying all of the above diagnosis, please call the customer center.

Specifications
Full HD models

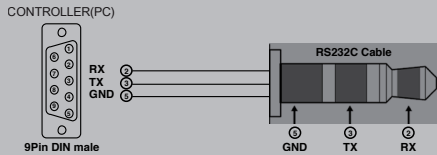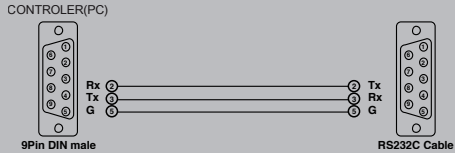| LCD	1920 x 1080 Pixel (Full HD)
Screen size (HxV/mm)	H325SS* : 698.40 x 392.85 mm , H467SS* : 1018.08 x 572.67 mm H557SS* : 1209.6 x 680.4 mm , H757SS* : 1650.24 x 928.26 mm
Recommended resolution	1920 x 1080P @ 60Hz
Input	HDMI × 3, Analog RGB, PC Audio, RS232C , IR , MMP(USB)
Output	HDMI, Audio Line Out, RS232C, IR , SPDIF
Power	AC 220 - 240V 50 / 60 Hz, AC 100 - 120V 50 / 60 Hz (option)
Consumption	H325SS* : 145 W (Typ.), 1345 w (Max.) H467SS* : 400 W (Typ.), 1600 w (Max.) H557SS* : 500 W (Typ.), 1700 w (Max.) H757SS* : 750 W (Typ.), 3150 w (Max.)
Control type	Remote control, key control

• Above specification may be changed without prior notification for quality improvement.

< RS232C COMMAND SPEC >

1. CONFIGURATION

1) SPEED : 9600 Baud/s, 8 bit, No parity, 1 Stop bit.
2) Cable Connection

CONTROLER(PC)

Rx ② ---- ② Tx
Tx ③ ---- ③ Rx
G ⑤ ---- ⑤ G

9Pin DIN male   **RS232C Cable**

CONTROLLER(PC)

RS232C Cable

RX ②
TX ③
GND ⑤

9Pin DIN male

GND ⑤   TX ③   RX ②

2. COMMAND FORMAT

- SET ID must select from the OSD menu and can't be select through the COMMAND.
- Only one unit can be set as Master unit, select Master ON from the OSD Menu. (DEFAULT OFF)
- For viewing COMMAND from Hyper Terminal windows, One unit must set as MASTER ON

1) Data Format

Item	HEADER	SET ID	COMMAND	END
askii	did:	xxx- or all-	follow 2.2	.
hexa	0x64 0x69 0x64 0x3A	0x78 0x78 0x78 0x2D or 0x61 0x6C 0x6C 0x2D	follow 2.2	0x2E

HEADER : Command head code.
SET ID : Set ID.
        all unit control - "xxx- or all-"
        unit no : "01 ~ 99"
COMMAND : follow 2.2
        END : inform end of send data.

Example. 1 To power on Set ID No 1

Item	HEADER	SET ID	COMMAND	END
askii	did:	01-	pn	.
hexa	0x64 0x69 0x64 0x3A	0x30 0x31 0x2D	0x70 0x6E	0x2E
decimal	100 105 100 58	48 49 45	112 110	46

Example. 2 To FAN on Set ID No 2

Item	HEADER	SET ID	COMMAND	END
askii	did:	02-	fn	.
hexa	0x64 0x69 0x64 0x3A	0x30 0x32 0x2D	0x70 0x6E	0x2E
decimal	100 105 100 58	48 50 45	102 110	46

2) Command Type

Item	Command	Description	hexa
Power	**pn**	power on	0x70 0x6E
	pf	power off	0x70 0x66
	ps	on, video out / on, video in / off, video out / off, video in / on, dpms mode	0x70 0x73
Input - Source	**sd**	input hdmi	0x73 0x64
	sv	input dvi	0x73 0x76
	sp	input pc	0x73 0x70
	sc	input component	0x73 0x63
	sa	input av	0x73 0x61
	sdp	input Droid PC	0x73 0x64 0x70
	sr	input Display Port	0x73 0x72
	is	input source status	0x69 0x73
Picture	**pc**	picture size : 4:3	0x70 0x63
	pw	picture size : wide	0x70 0x77
	at	pc auto	0x61 0x74
	rt	?x?, h?, v? ex) "1920x1080, h47, v60"	0x72 0x74
Audio	**zb**	volume up	0x7A 0x62
	zc	volume down	0x7A 0x63
Error		**"Error"**	
Return 232	**rf**	Return 232 off	0x72 0x66
	ro	Return 232 on	0x72 0x6F
	If you want receive return message in power off or DPMS. To set return 232 "ON".		