Instruction Manual OUTDOOR SMART TV

(MODEL: 215FS)



*Precaution

Instructions and product specifications in this manual are based on the latest specification of date of preparation.

Instructions could be changed by addition, improvement, and alteration.

All rights of product and manual belong to manufacturer.



Product Specifications

Hardware		
Platform	CPU	Dual-core ARM Cortex A9 processor with NEON
	GPU	Quad-core high-performance GPU
Memory	RAM	1GB DDR3
	Flash	4/16/32/64 GB Emmc
	Srceen Diagonal	546*865(21.5")
	Active Area	476.64(H)*268.11(v)
	Pixel	1920(*3)*1080
	Pixel Pitch	248.25(Per one Triad)*248.25
Diamlay	Pixel Arrangement	R. G. B Vertical Stripe
Display	White Luminance	250 cd/m2(Typ)
	Contrast Ratio	3000(Typ.)(TBD)
	Optical Response	25ms(Typ.,on.off)(TBO)
	Power Consumption	16.55watt
	Temperature Range	0 to +50 Deg
T	_	DVB-S2/DVB-C/ISDB-S/ISDB-T/ATSC
Tuner	Tuner	*Each tuner module is optional
Operationg power	12-24V DC Adpat power	
	WLAN	IEEE 802.11b/g/n
Comms	Ethernet	10/100 Mbit/s
Commis	USB 2.0	2 port (1 front, 1 back)
0.0	e SATA	1 port
Software		
	OS	Android 4.4.2 Kitkat Web broswer
	Apps	Media Player
Platform		kodi with PVR Clinet(DVB Support)
Fiatioiiii		HDMI Recorder
	Ducksonla	Miracast
	Protocols	DLNA NFS/SAMBA
- "	Video	H.264 BP/MP/HP
Encoding	Audio	G.711(u/a),AMR-NB,AMR-WB,and AAC-LC
Decoding		MPEG 1/2/4,H.264,VC-1,Realvideo AVC-HD
	Video	AVI,WMV,3GP,MPS,MOV,MPG,VOB,MKV,FLV,
		TS
	Audio	MP3,MP2,OGG,AAC,FLAC,WAV,WMA,APE
	Image	JPG,BMP,PNG,GIF,TIF

Safety Warning and Precautions

To prevent fire, electric shock and the other negligent accident, Do not store a product in water or humid atmospheres. Do not open a cover of product and if you need to replace components by breakdown or other services is required, Contact agent where you purchase the product and get technical assistance and advice.

Before using product, Be familiar with safety tips and how to use below.

Power Supply	Use a provided DC12V, 2A Adapter
Cable	Use provided standard cable. In case of using other cable, could occur functional disorder.
Install Place	Install, Keep out of Lightning, rain and direct sun light.
Cleaning	When cleaning product surface, separate power cord from main body and sweep lightly by dried fabric
Load	Do not put heavy material on this product, It could cause fire or electric shock.
ventilation	 Install it which is lack of dust, well ventilated place. Do not install and use on the unstable furniture. Do not put on a carpet directly. There are concerned Fire and electric shock by static electricity. Do not install and keep near direct sun light and heating apparatus. Do not put other materials on this product.
Water Caution	Incase of cleaning, Prevent product from wet by water. It cause fire, electric shock and breakdown.
Foreign Substance	Do not insert coin, hairpin, screw and kind of metal material into air vent.
Accessories	Other accessories except this package contents are excluded from guarantee.
Connection	 Before using the product, antenna, internet and others must connect properly. Connecting the product, Look direction of TV or other peripheral device and connect properly.
A/S	 Do not disassemble and remodel. They cause fire, electric shock and critical breakdown. Inquire of manufacturer or distributor, when consider it breakdown.

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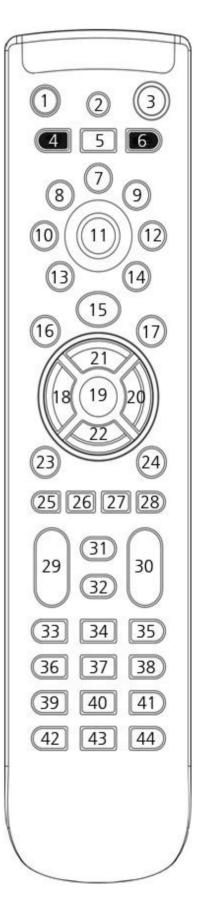
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Remote Control

This remote control could use not only this product but Television. Refer to Remote Control setup from instruction to control TV.

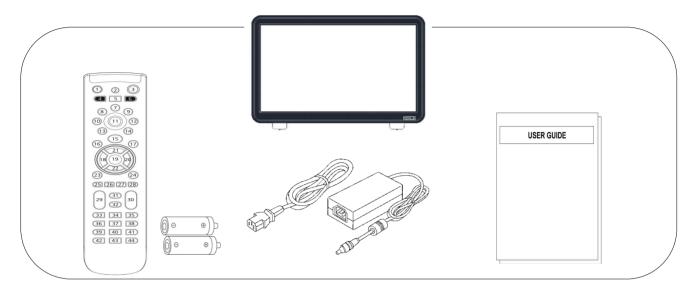
1. Mute	Turn off a TV volume
2. SAT	Switch TV's external input
3. Main Power	Turn ON/OFF from main body
4. Home button	Go back to main menu
5. KODI	Use KODI.(PICTURES, RADIO, TV, VIDEOS, MUSIC, SETTING)
6. Mouse	Switch to mouse and cursor control.
7. Pause	Pause while playing
8. Recording	Use it for recording watching channel
9. Stop	Stop recording or playing
10. Rewind	Play or rewind
11. Play	Play a Video
12. Fast Forward	Fast forwarding while playing
13. Volume setup	Setup overall volume
15. GUIDE	Open Guide(TV)
16. Menu	Call out menu, submenu.(TV)
17. Cancel	Use for cancel or back to the menu
18.20.21.22 (Menu)	Move cursor up, down, left and right
19. Enter	Choose a item and set
23. Program information	Indicate program information
24. FAV	Favourite
25. RED	Freeze frame, Capture, Search channel
26. GREEN	Input selection
27. YELLOW	Change resolution and bit rate
28. PURPLE	Recording time
29. Volume	Turn UP/DOWN volume
30. Channel	Change channel
31. Return	Return
32. Time	Time Check Button
33~41.43	Input number 0~9
42. List	List Button
42. List44. Subtitle	List Button Turn ON/OFF subtitle.



Package Contents

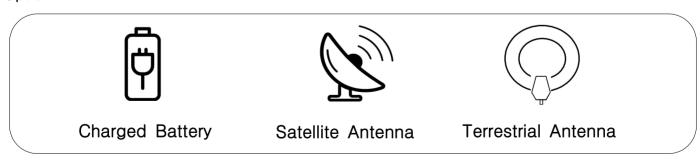
Please make sure the all contents are included, If there are any missing or damaged item. Contact to your manufacturer or distributor.

Basic Composition



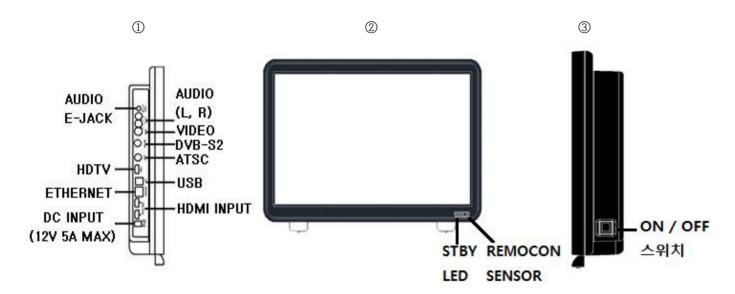
Item	Quantity
OUTDOOR SMART TV (model : 215FS)	1
Remote Control	1
AAA Battery	1
DC Power Adapter	1
Instruction Manual	1

Option



Antenna (Satellite and Terrestrial)	Option
Rechargable Battery	Option

Product Basic Composition Instruction



1

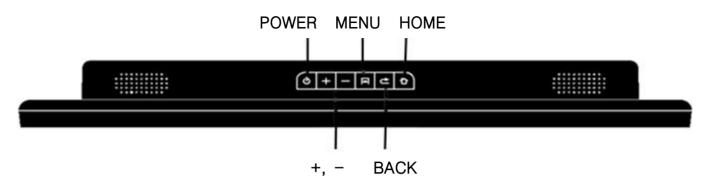
AUDIO E-JACK	Potable earphone connect terminal
AUDIO(L, R)	Audio Output Terminal(L, R)
VIDEO	Video Output Terminal
DVB-S2	Satellite Signal Input Terminal
ATSC	Terrestrial Signal Input Terminal
HDTV	External Monitor Connection Terminal
USB	terminal for external USB device (HDD • SD card reader • keyboard • mouse etc.)
ETHERNET	Network connect terminal
HDMI INPUT	HDMI Input Terminal
DC INPUT (12V 5A MAX)	Power cable connect terminal

2

STBY LED	LED Indicate for Energize
REMOCON SENSOR	Sensor for Remote Control

3

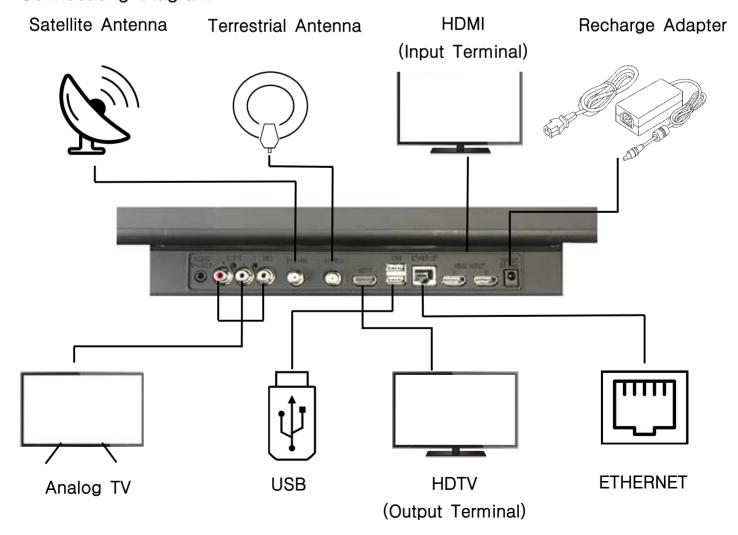
4



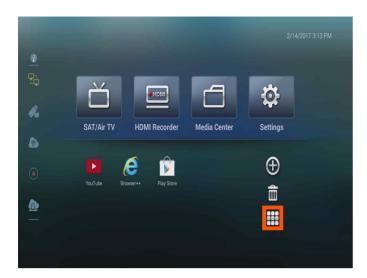
4

POWER	Turn on/off power
+ , -	Increase or decrease channel or volume
MENU	Open the menu
BACK	Return to former step
HOME	Return to Home

Connectiong Diagram



Manual Satellite Broadcasting Setup, Watching



[Picture 1] Click a menu located in right bottom (III) on the main screen.



[Picture 3] Select "Channel search" from "Kodi TV" menu.



[Picture 5] Wait for searching channel.



[Picture 2] Click "Kodi".



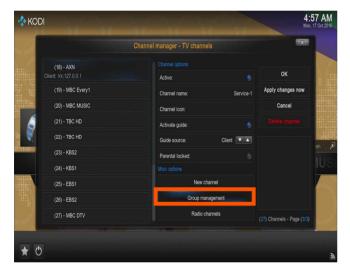
[Picture 4] Select "DCVB-S/S2, ATSC" or "Source Type" which is fit with region. and adjust "Satellite" as you want and click "Scan All".



[Picture 6] After searching, click "Yes".



[Picture 7] Click SAT/Air Tv from main screen.



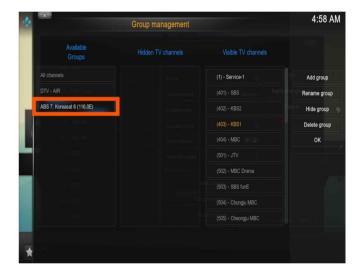
[Picture 9] Click "Group management"



[Picture 11] Click "OK" after selecting is finish.



[Picture 8] After Click SAT/Air Tv from main screen, then click number 16 button of remote control and click "Channel manager"



[Picture 10] Click which you connect satellite from "Available Groups"



[Picture 12] Click SAT/Air Tv from main screen.



[Picture 13] Click "TV", Channel list will show up. Select what you want to watch.



[Picture 14] Satellite connect screen 1.



[Picture 15] Satellite connect screen 2.



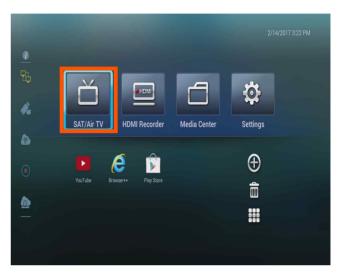
[Picture 16] Satellite connect screen 3.

Recording Satellite Broadcasting (.TS extension)

- Recorded file through Satellite Broadcasting save as "TS" at external storage(USB, External HDD) / _video_ /
- "TS" means Transport Stream which is Digital Format Method used in HDTV Broadcasting and other. It can transmit video, audio, data at one stream.
- If the removable disk is in FAT format during recording, it can not record more than 4G. For continuous recording, you must format the USB and HDD as NTFS (window) or EXT4 (linux) file system.



[Picture 1] Connect potable storage device(USB, HDD) to product.



[Picture 2] Click "SAT/Air TV" on main menu.



[Picture 3] Click red button of remote control(button number 8). Recoding start with PVR information indication.



[Picture 4] Click stop button of remote control (button number9) to stop recording.



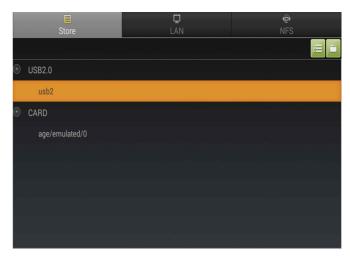
[Picture 1] Click "Media Center" from main screen.



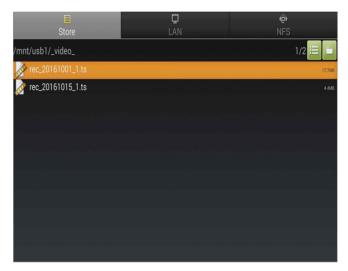
[Picture 3] Click a folder where recorded video saved.



[Picture 5] Recorded video screen.

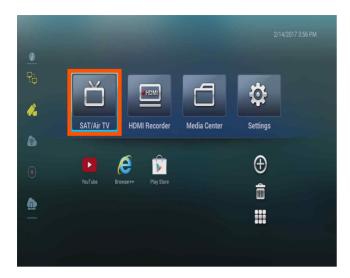


[Picture 2] Click potable storage device(USB, HDD).

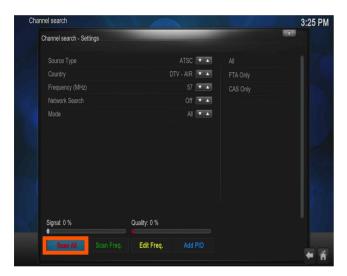


[Picture 4] Click a video(TS) which you want.

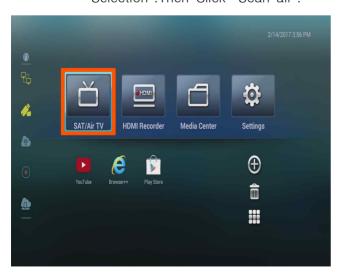
Terrestrial TV Setup and Watching



[Picture 1] Click "SAT/Air TV" on main menu.



[Picture 3] When above screen is show up, adjust "ATSC" from "Tuner Selection".Then Click "Scan all".



[Picture 5] Click "SAT/Air TV" on main menu.



[Picture 2] Click "Channel search".



[Picture 4] After completed all channel, Click "Yes" from a screen like above.



[Picture 6] Click "TV".



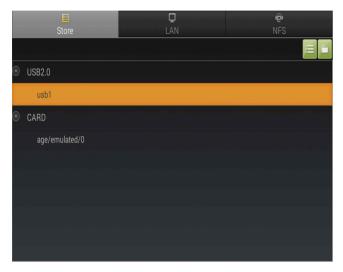
[Picture 7] When click "TV", Channel list show up like above. Select the channel what you want to see.



[Picture 8] Select a channel what you want to watch by clicking "OK" button from remote control.

Terrestrial Broadcasting Recording and Watching

- Recorded file through terrestrial broadcasting is saved as "PVR". (Media Center / potable storage device(USB, HDD) / pvrfiles / stream)
- "TS" refers to a transport stream, which can transmit video, audio, and data simultaneously in one stream, and is a digital format used for HDTV broadcasts.
- If the removable disk is in FAT format during recording, it can not record more than 4G. For continuous recording, you must format the USB and HDD as NTFS (window) or EXT4 (linux) file system.



[Picture 1] Connect potable storage device(USB, HDD) to product.



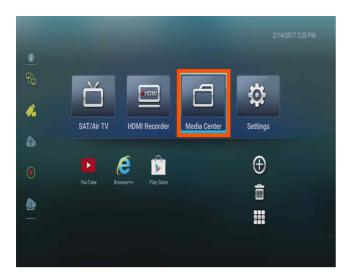
[Picture 2] Click "SAT/Air TV" on main menu.



[Picture 3] Click red button of remote control(button number 8). Recoding start with PVR information indication.



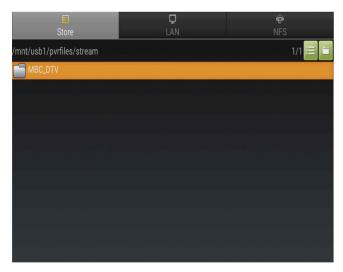
[Picture 4] Click stop button of remote control (button number9) to stop recording.



[Picture 1] Click "Media Center" from main screen.



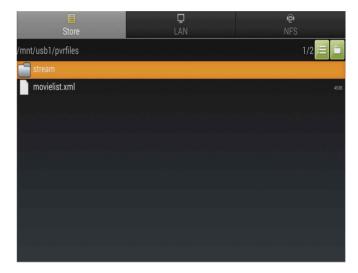
[Picture 3] Click pyrfiles.



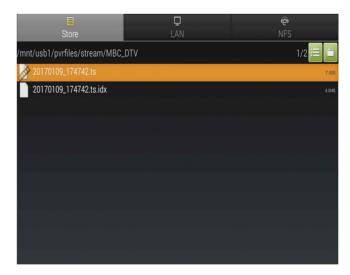
[Picture 5] Click a folder where recorded video saved.



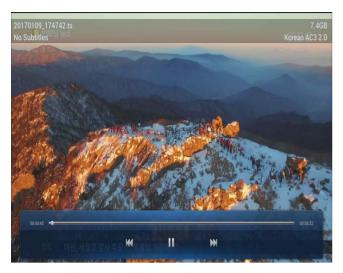
[Picture 2] Click potable storage device(USB, HDD).



[Picture 4] Click stream.



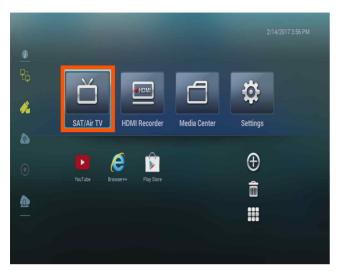
[Picture 6] Click a video(pvr) which you want.



[Picture 9] Recorded video screen.

Other Satellite / Terrestrial Broadcasting Setup Channel List Management

- Users can edit composed list themselves, also users can ide searched channel from channel list or change its name or remove channel.



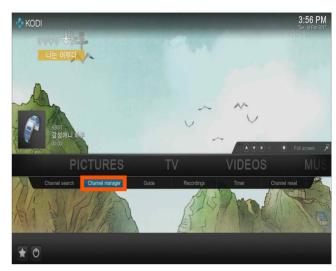
[Picture 1] Click "SAT/Air TV" on main menu.



[Picture 3] To delete channel, click "Delete Channel" and "Yes"



[Picture 5] Click "Delete", Deletion is done.



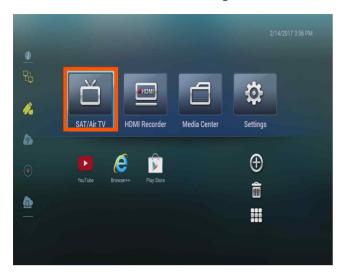
[Picture 2] Click "Channel Manager".



[Picture 4] Select channel want to delete.

Watching Reservation

- Users can control broadcasting reservation and watching from "Timer" of TV menu.



[Picture 1] Click "SAT/Air TV" on main menu.



[Picture 3] Click "Add Timer".



[Picture 5] Reservation is added like above screen.



[Picture 2] Click "Timer".

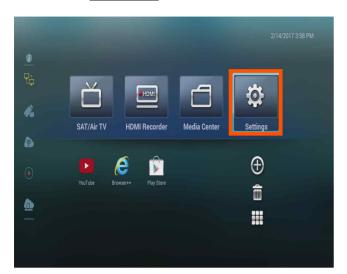


[Picture 4] Enter a desired channel, time on Timer setup, Click "Yes".

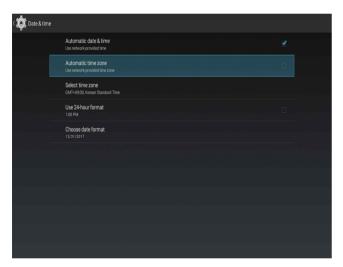
System Setup

Date and Time Setup

- Turn on(______) the "Wifi" when you setup the time.



[Picture 1] Click setting from main screen.



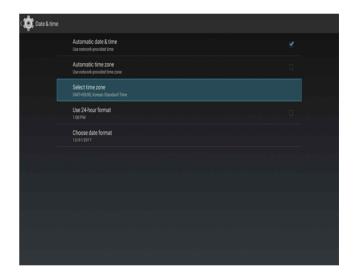
[Picture 3] Lift "Automatic Time Zone".



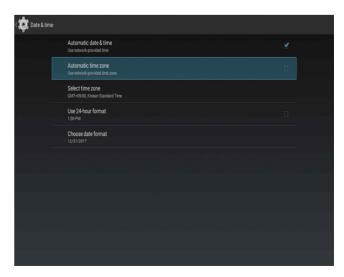
[Picture 5] Select Time Zone you want.



[Picture 2] Click "Date and Time.

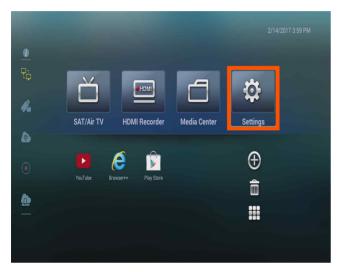


[Picture 4] Click "Time Zone"

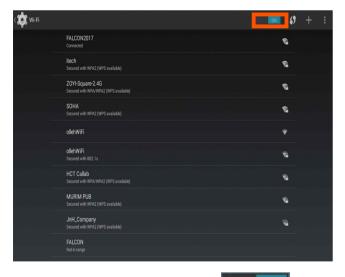


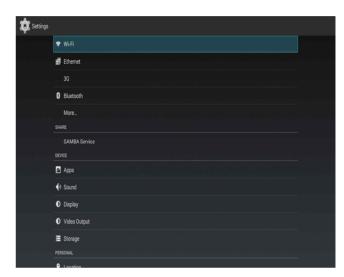
[Picture 6] Click "Time Zone setting Automatically" then Time and Date setup is finished

Wireless Network (WIFI) Setup

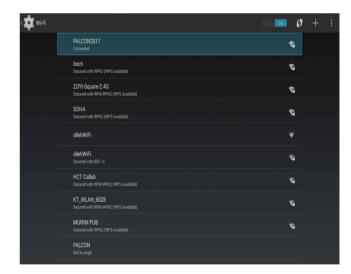


[Picture 1] Click setting from main screen.





[Picture 2] Click "WIFI".



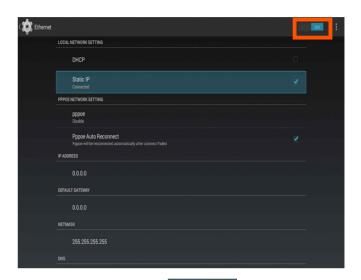
[Picture 4] Use WIFI when "Connected" message show up.

Wire Network (Ethernet) Setup

- This product support wire network based on internet. For using wire network, must connect wire LAN cable. This setup must be set incase of using wire network but in the majority of cases it is set by DHCP which is initial setting value setup for this product. Don't need to additional setting. Incase of using static network address (static IP), input assigned IP address

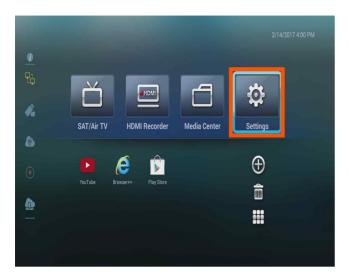


[Picture 1] After connect lan cable with product ,select ethernet from "Wireless and Network" of Menu.

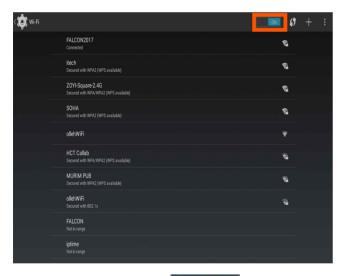


[Picture 2] Click "ON" on the right upper part and use "ETHERNET".

Other Network setup Hotspot setup



[Picture 1] Click "Setting" from main screen after turn on a hotspot function of mobile phone.



[Picture 5] Click "ON'(ON') right upper part. Connect the mobile phone's wireless network.



[Picture 2] Click "WIFI" from setting screen.



[Picture 4] After "Connected" message come out close setting screen and use network.

Screen of output setup(Display)

Custom Display Format Setup

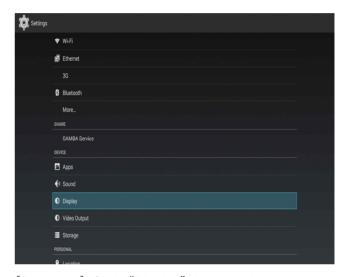
Generally in initial setting value (1980i 60Hz), you can watch image. If your image output device support 1080p, change to 1080p 60Hz or 1080p 500Hz to watch clear image quality. Device which support more than 1080p, set adequate frequency to image output device. Commonly used frequency for below countries.

(PAL: Television broadcast system for most of countries in Europe, NTSC: Television broadcast system for USA)

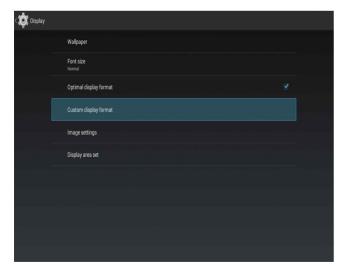
South Korea: 60Hz, USA: 60Hz, Europe: 60Hz, China: 50Hz, Japan: 50Hz, Middle East Asia: 50Hz



[Picture 1] Click "Setting" from main screen.



[Picture 2] Click "Display" from setting screen.



[Picture 3] Click "Custom display format" from display

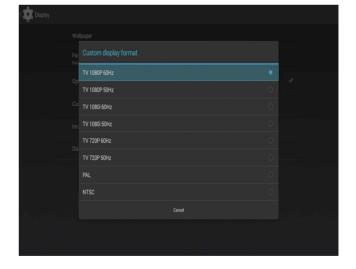
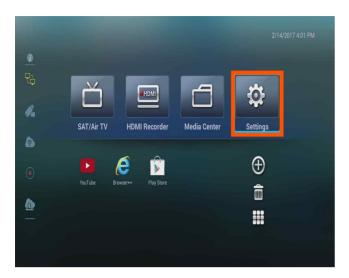


Image Setting Setup

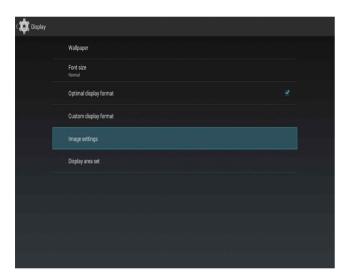
- Brightness of screen, contrast, chroma can setup through 'Image Setting'.



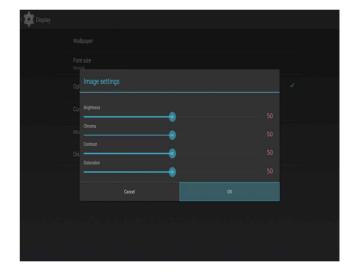
[Picture 1] Click "Setting" from main screen.



[Picture 2] Click "Display" from setting screen.



[Picture 3] Click "Image settings".

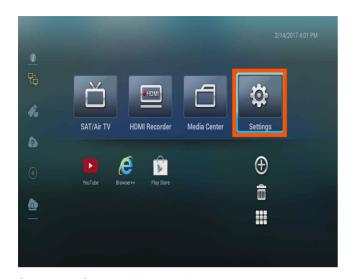


[Picture 4] Set up brightness, chroma, contrast.

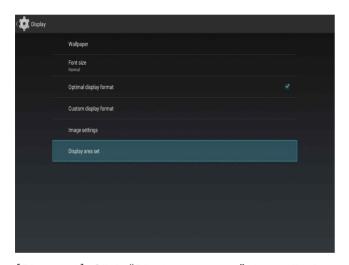
Initial set points are all "50.

Display area set Setup

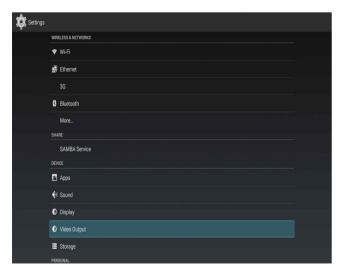
- Display area set up by Display Area set. setup for Video Output, horizontal to vertical ratio.



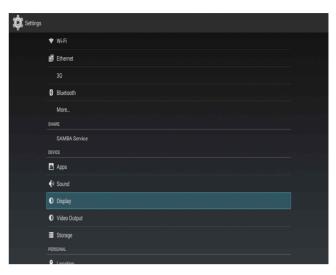
[Picture 1] Click "Setting" from main screen.



[Picture 3] Click "Display area set" from display



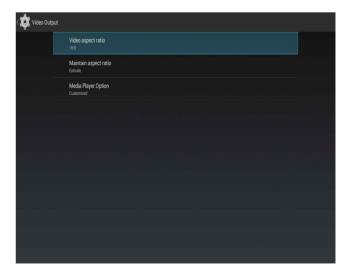
[Picture 5] setup "Video Output" from setting main screen.



[Picture 2] Click "Display" from setting screen.



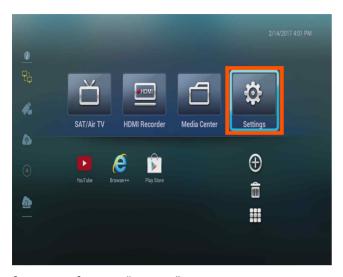
[Picture 4] Control screen rate by using arrow key.

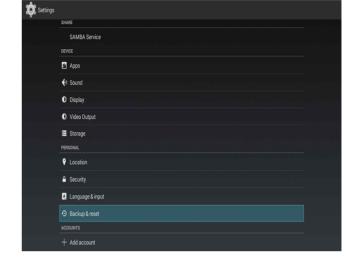


[Picture 6] setup "Video aspaect ratio" from setting main screen.

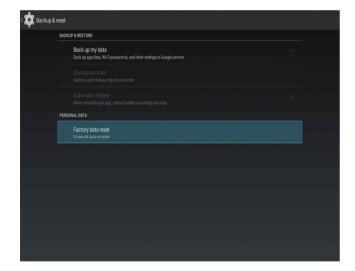
Backup and initialization Setup

- Backup Application data, Wi-Fi password and other settings at Google server.
- Factory data reset make product initialize to as a first when you purchase product, and remove everything saved in storage.





[Picture 1] Click "Setting" from main screen.

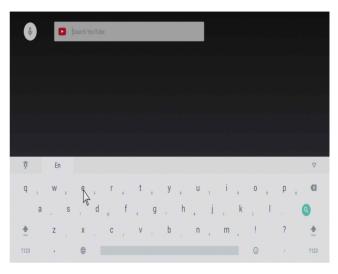


Remote Control Mouse

- Click Mouse button from Remote Control(Button number 6), and pressing arrow keys(Button number 18,20,21,22) then mouse point is activated. For finishing remote control mouse press mouse button from Remote Control(Button Number 6), then pointer disappear.



[Picture 1] Using Remote Control Mouse figure 1.



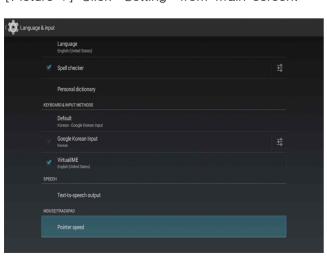
[Picture 2] Using Remote Control Mouse figure 2.

Remote control mouse response speed

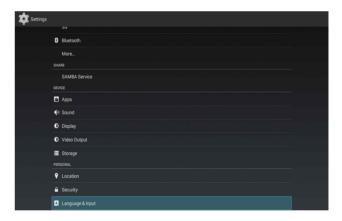
- How to adjust the mouse response speed of the remote control.



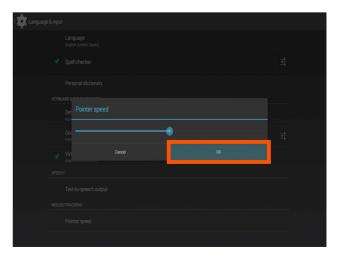
[Picture 1] Click "Setting" from main screen.



[Picture 3] Click the pointer speed.



[Picture 2] Click Language and Keyboard.



[Picture 4] Select the desired speed and click OK.

Firmware Update



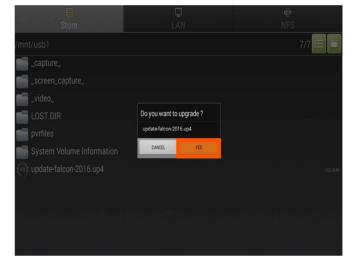
[Picture 1] Before you click "Media Center" on the main screen, save upgrade file in USB.



[Picture 2] Click a list from USB 2.0.

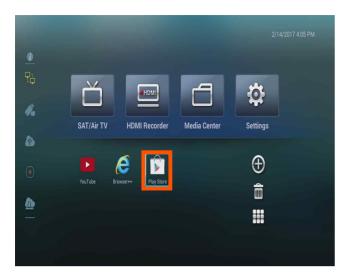


[Picture 3] Click update file.

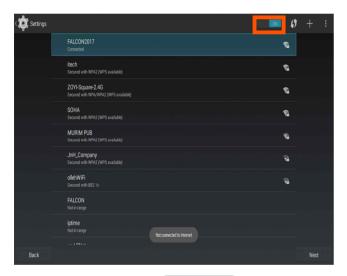


[Picture 4] Click "YES" and update will be progressed.

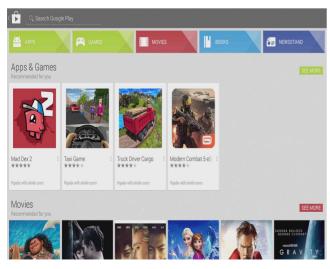
Application(APP) Setup Application(APP) Download



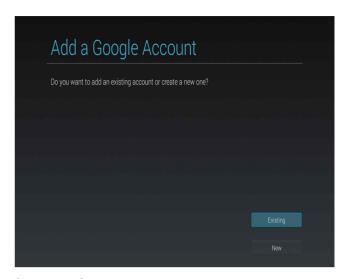
[Picture 1] Click "Play Store" in main screen.



[Picture 3] Click "ON"(on right upper part and setup WIFI or LAN.



[Picture 5] Search application at Play Store.



[Picture 2] Enter your account.



[Picture 4] Login after enter a account.



[Picture 6] Install application and open.



[Picture 7] Click a menu (|) located in right bottom on the main screen.



[Picture 8] Applications downloaded from "Play Store" are in the list

Application(APP) Addition & Remove

- To show up application downloaded from Play Store in main screen or remove.

Application Addition



[Picture 1] Click "+ shape" (on main menu

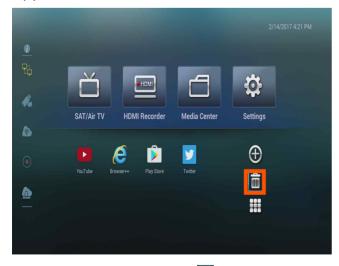


[Picture 2] Select application you want to add on main screen.

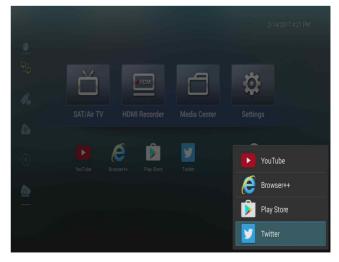


[Picture 3] Application is added on main screen.

Application Remove



[Picture 1] Click recycle bin(on main screen.



[Picture 2] Select application you want to remove. Application disappear from main screen.

Miracast

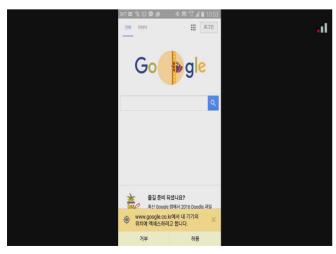
- Function that transfer a screen without cable. (Samsung Galaxy S7)



[Picture 1] Setup devices to smart phone or mirroring device. (wifi on, smart view on, samsung)



[Picture 3] Click "Miracast" Application.



[Picture 5] After screen connecting device through Miracast.



[Picture 7] Click a menu () located in right bottom on the main screen.



[Picture 4] When you connect smart phone or mirroring device "Wi-Fi Direct Connecting" message show up.

Miracast Setup

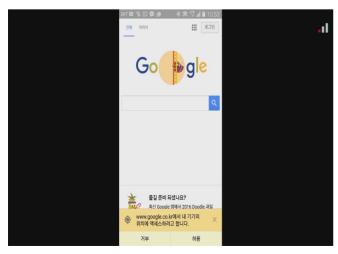
- Function that transfer a screen without cable. (LG G5)



[Picture 1] Setup devices to smart phone or mirroring device.(wifi on, Share view on ,LG)



[Picture 3] Click "Miracast" Application.



[Picture 5] After screen connecting device through Miracast.



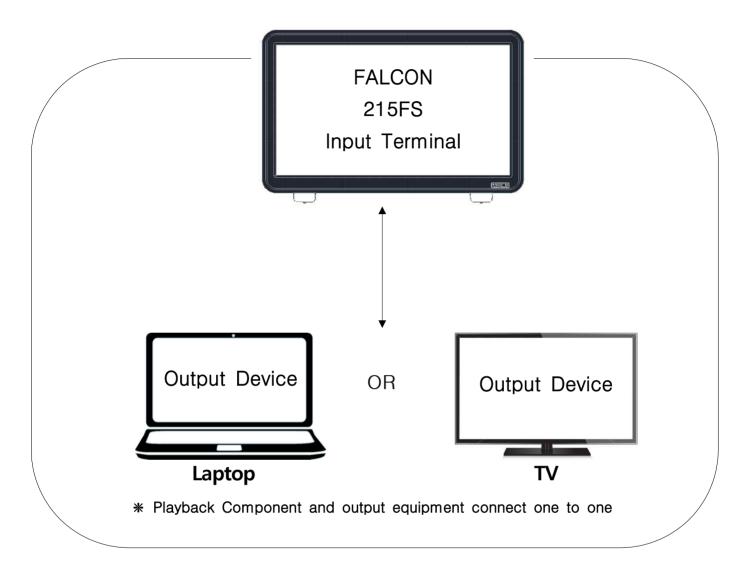
[Picture 7] Click a menu () located in right bottom on the main screen.



[Picture 4] When you connect smart phone or mirroring device "Wi-Fi Direct Connecting" message show up.

HDMI Recorder

- Record input video function through HDMI input terminal.





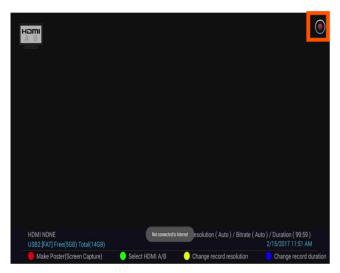
[Picture 1] After connecting input device and output device by HDMI cable, Click HDMI recorder



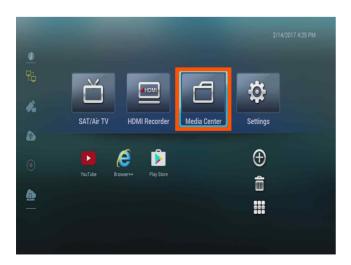
[Picture 2] Screen which is connected with Falcon 215FS.

HDMI Input Image Recording and Watching

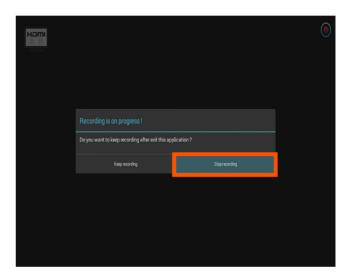
- To start recording, click button number 8 from remote control after connect portable storage device. Then recording start. During the recording, recording mark (●) indicate right upper part of screen. Press stop button of remote control if you want to stop recording (button number 9 of remote control).
- Recorded by HDMI file saves as "TS".(Media Center / Portable Storage Device(USB, External HDD) / _video_)
- "TS" means Transport Stream which is Digital Format Method used in HDTV Broadcasting and other. It can transmit video, audio, data at one stream.
- If the removable disk is in FAT format during recording, it can not record more than 4G. For continuous recording, you must format the USB and HDD as NTFS (window) or EXT4 (linux) file system.
- YouTube is not recorded.



[Picture 1] Click Record button from remote control (button number 8), then record starts with recording mark () at right upper part.



[Picture 1] Click "Media Center" on main menu.



[Picture 2] When press stop button from remote control (button number 9),

"Keep recording while after this application??" message show up, click record stop.



[Picture 2] Click connected portable storage device (USB, HDD).



[Picture 3] Click a folder where recorded video saved.



[Picture 3] Click video.



[Picture 4] Click a video(TS) which you want.

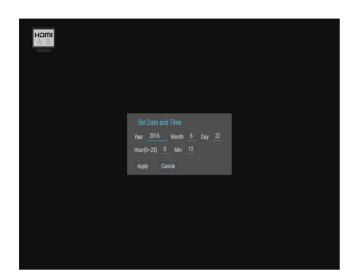


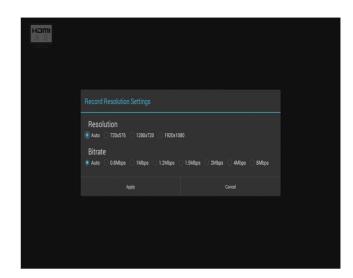
[Picture 5] Recorded video screen.

- If image don't show up connected by HDMI, try to these directions.
- 1) Separate HDMI cable and reconnect.
- 2) Turn off a device which is connected with HDMI terminal.
- 3) Close HDMI recorder menu and retry it

HDMI Bitrate and Resolution Setup

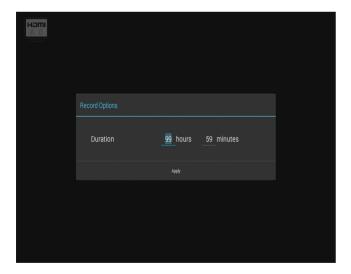
In active HDMI Recorder menu, click yellow button of remote control. (button number 27 from remote control
 Then you can setup record resolution and Bitrate. Initial setting value is Auto, but you can change setting optionally. It cause image quality difference.





HDMI Recording Time Setup

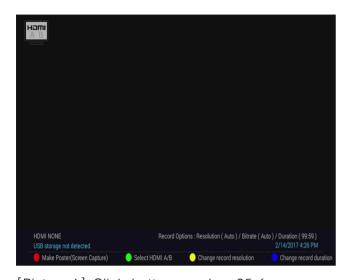
- You can see record duration option by clicking blue button of remote control In activating HDMI recorder menu (Button number 28 from remote control). If storage capacity is enough, maximum record time would be until 99hours 59minutes.



HDMI Screen Capture

- You can screen capture present display by clicking red button of remote control in activating HDMI recorder menu. (Button number 25 of remote control

).
- Still picture will be saved under a _ScreenCapture_ folder as JPG file format.



[Picture 1] Click button number 25 from remote control after connect HDMI cable.

Media Center Operate

- You can play a video or watch pictures which are recorded by this product or saved at external device(USB, HDD). You can watch MPEG 1/2/4. H.264, VC-1, Realvideo AVC-HD, AVI, WMV, 3GP, MPS, MOV, MPG, VOB, MKV, FLV, TS files.



[Picture 1] Click "Media Center" on main menu.



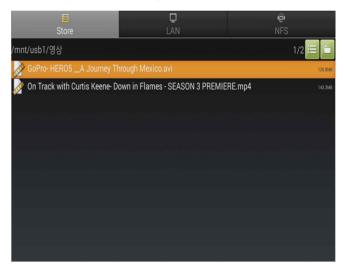
[Picture 3] Click a folder where video exist



[Picture 5] Screen of Play a video file.



[Picture 2] Click connected potable storage device(USB, HDD).



[Picture 4] Click video.