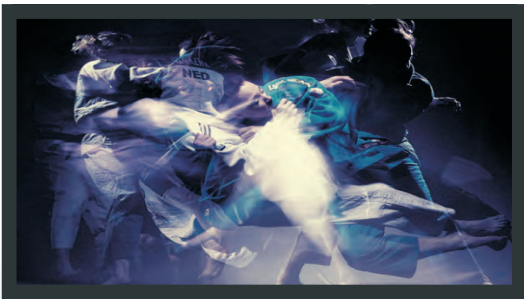


USER'S GUIDE

HA2800

Full HD 1080p HIGH DEFINITION Digital OTT BOX ATSC Receiver



This Receiver will take you to the new and exciting world. A world of crystal clear wide screen pictures, digital sound, more information and new services. To make full use of your new receiver please take the time to familiarize yourself with the extensive features of the unit detailed in this User Guide. If you need help in setting up please call your dealer or a customer service adviser.

Main Features

- Android/Linux, WIFI Hotspot, ATSC support
- Webkit based Android full browser
- Browser, Media Player, Picture browser, Game, Setting, FileManager, Youtube, Twitter, Facebook and more
- Firmware upgrade by network,USB disk
- Various channel editing functions(favorite, moving, locking,renaming, deleting and sorting)
- Multi Language
- Fully support to 7 days Electronic Program Guide(EPG)
- 3D Graphical User Interface(Support OpenGL ES2.0)
- Support Record Timeshift and Player
- Parental control for channels
- Support FAT16/FAT32/FAT12 NTFS
- 480i/p, 576i/p, 720p, 1080i, 1080p
- MP4, AVI, MKV, FLV, MPEG TS
- H.264(MPEG4-AVC, VC-1), MPEG2, DviX3/4/5/6,Xvid
- MP3, AAC, OGG, MPEG, MPEG Audio, Dolby Digital
- JPEG, PNG, BMP,GIF
- DLNA 1.5 compliant
- Mimic Cast
- Easy download and installation of applications

GENERAL INFORMATION

For Your Safety

- To avoid electric-shock hazards, do not open the cabinet, refer servicing to qualified personnel only.
 - Keep the receiver away from flower vases, tubs, sinks, etc., in order to avoid damaging the equipment.
 - Do not expose the receiver under the sunlight. And keep it away from the heat source.
 - Do not block ventilation holes of the Receiver so that air can circulate freely.
 - When the abnormal phenomenon occurs, you should cut off the power immediately.
 - Do not touch receiver during thundering in case of being electric shocked.
1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference.(2) This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.
- FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, Human proximity to the antenna shall not be less than 20cm(8 inches) during normal operation.

GENERAL INFORMATION

Unpacking(optional)



Remote Control



User's manual



IR



External power supply

RCU



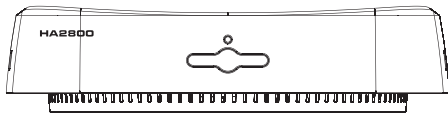
Key	Function
	Standby On/Off
	Enter main menu
	When watching a channel, change channels or move to the next higher or lower item in the menu
	When watching a channel, adjust the volume or move to the left or right item in the menu
	Return to the previous menu on the menu screen or escape from the menu
	Press to pop up the function list
	Adjust the volume

The picture is only for reference, please make the object as the standard.

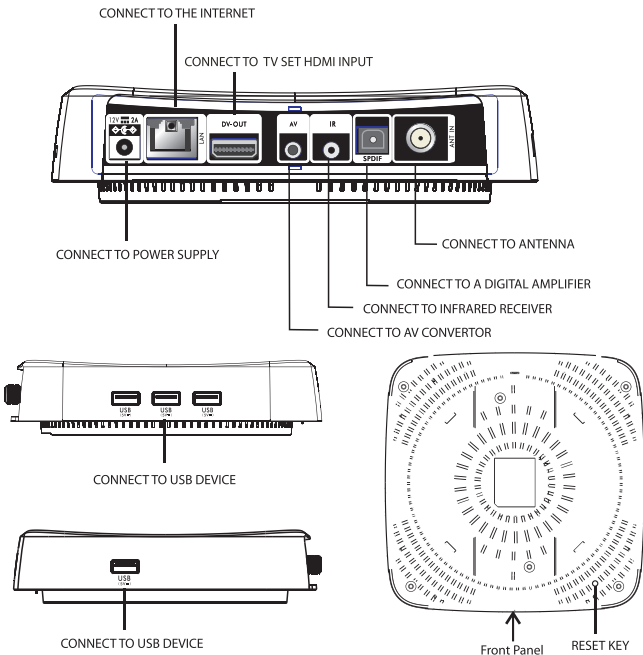
GENERAL INFORMATION

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Front Panel

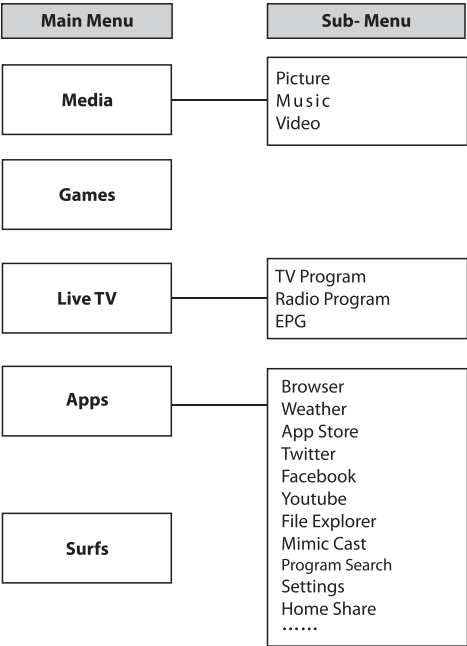


Rear Panel



The picture is only for reference, please make the object as the standard.

Menu Map



Main Menu.

Main menu consists of 5 major sub-menus as follow:

- Media
- Games
- Live TV
- Apps
- Surfs



You can use < > keys to select menu, and use ^ v keys to select the sub menu, while using OK key to enter or EXIT key to previous menu.

1. Media

This menu consists of 3 major sub-menus as follows

- Picture
- Music
- Video



2. Games

System here provides Games. Select one and press OK to play.

3. Live TV

Once you have properly installed and connected the cables of receiver, you will be able to start enjoying the various programs and features.

In this menu you can watch TV program, listen to the radio program and edit program.



4. Apps

In Apps we provide many Apps such as Browser, Weather, App Store, Twitter, Facebook, Youtube, File Explorer, Settings, Mimic Cast, Homeshare and so on. You can download apps, install and uninstall apps in this menu.



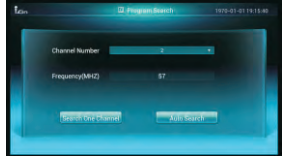
Program Search

If the receiver is in Factory mode or no channel installed, system will lead you to 'Search Programs' for your first enter into 'Program' sub-menu.

Channel Number: Press OK key to pop up a drop list select the channel Number in the drop list.

Frequency: Press OK key to pop up a keyboard, press ^ v < > keys to select the number and symbol.

Then select search one TP or Auto search.



Factory Data Reset

Select Reset STB button and press OK key to reset the data.

System upgrade

You can upgrade through USB device.

5. Surfs

System here provides you many direct access to Google, Picasa, Yahoo, MSN, Twitter Facebook, and more. You can also go to other web pages by inputting address in browser.



6. Router settings

Configure the settings at URL <http://192.168.1.254>

Problem	Possible causes	What to do
The display on the front panel does not light up.	Main cable is not connected.	Check that the main cable is plugged into the power socket.
No sound or picture, but the front panel shows red light.	The receiver is in standby mode.	Press the standby button.
No sound or picture.	No signal or weak signal.	Check the cable connections, antenna and other equipment connected between the antenna and the receiver.
	Signal is too strong.	Connect a signal attenuator to the antenna input.
Bad picture / blocking error.	Antenna noise factor too high.	Change to an antenna with lower noise factor.
	The antenna is faulty.	Change the antenna.
	Battery exhausted.	Change the batteries.
The RCU is not working.	RCU is incorrectly aimed.	Aim RCU at the receiver, or check that nothing blocks the front panel.

- **Note** : If you failed to solve problems by all the recommended actions above, please contact your dealer or a customer service adviser.

1. Main Chip Sets

CPU frequency	1GHz
Flash Memory	2G/4G/8G EMMC flash
SDRAM Memory	4PC×256MByte DDR3

2. ATSC Tuner

Frequency Range	57MHZ~177MHZ, 183MHZ~473MHZ, 479MHZ~863MHZ
Input Impedance	75 Ω
Input Level Range	-65dBm ~ -25dBm

3. ATSC Channel Decoder

ATSC Demod standard	ATSC
ATSC Demodulation	8VSB
ATSC Code Rate	2/3

4. TS Demux

Demultiplexer	MPEG2 ISO/IEC 13818-1+1171
Input Bit Rate	Max 100Mbit/s

5. AV Output

Video Bandwidth	SD:5.0MHz (-3dB)
Video Impedance	75 Ω
Video Voltage Level	1.0 Vp-p
Audio Freq. Range	20~20KHz
Audio Impedance	600 Ω
Audio Voltage Level	2V rms(5.6Vp-p)

6. Environment

Input Voltage	DC 12V
Consumption	Max 24W
Temperature	0~40℃
Humidity	<95%