User's Manual

DVB-S2/T2

Digital Satellite Receiver

Personal Video Recorder

SAFETY PRECAUTION

CAUTION:

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to dangerous voltage and to prevent from a risk of electric shock.



Warming:
To reduce the risk of electric shock, don't open the cabinet.
Refer servicing to qualified personnel only.



The exclamation point within an equilateral triangle is intended to alert the user to important operating and maintenance (servicing).

WARNING: Do not use this STB where contact with or immersion in water is a possibility. Do not use near flower vase, washbowls, kitchen sinks, laundry tubs, swimming pools, etc.

WARNING: Do not put the candle or lamp stand on the cabinet; otherwise, there is the danger of fire.

WARNING: The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit. If you are not sure of the type of power supply(for example, 120 or 230 V)to your home, consult your local dealer or local power company.

WARNING: This product installs diodes. Do not open the cabinet or touch any parts in the inner mechanism. Consult your local dealer for technical service if the opening is required.

Note: To ensure proper use of this product, please read this User manual carefully and retain for further reference.

Note: This product installs diodes. Do not open the cabinet to avoid the unit direct exposure to radiation.

Unit Cleaning: After the unit power is turned off, you can clean the cabinet, panel and remote control With a soft cloth lightly moistened with a mild detergent solution.

Attachments: Never add any attachments and/or equipment without the manufacturer consent; as such additions may result in the risk of fire, electric shock, or other personal injury.

Locating: Slots and openings in the cabinet are provided for ventilation to protect it from overheating, Do not block these openings or allow them to be blocked by placing the STB on a bed, sofa, or other similar surface, nor should it be placed over a radiator or heat register.

Power-Cord Protection: Place the power-supply cord out of the way, where it will not be walked on. Please take special attentions to cords at plugs, convenience receptacles, and the point where they exit from the unit.

Object and Liquid Entry: Never put objects of any kind into this STB through openings, as they may Touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

Note: Moisture may be formed on the lens In the following conditions:

- » when the unit is suddenly moved from a cold environment or an air-condition room to a warm place.
- » immediately after a heater has been turned on.
- » in a steamy or very humid room.

If the moisture forms inside the unit, it may not operate properly. To correct this problem; turn on the power and wait about two hours for the moisture to evaporate.

Parts Replacement: When the unit parts need to be replaced, user should make sure the service technician use the replacement parts specified by the manufacturer or having the same characteristics as the original part. Unauthorized replacement may put the unit in the risk of fire, electric shock or other hazards.

Safety Check: After all the maintenances and repairs are done, use is required to request the service technician to conduct the overall safety check to ensure the machine is In the proper condition.

Feature SPEC

| Accessories | Main board,48keys IR controller, USB HDD BOX and IP CAMERA(customer option) |
|----------------------------|---|
| Board configuration | 350MHz MIPS CPU,128MB DDRII400 RAM,Memory Clock 198MHz,64MB Serial |
| Power Supply | Flash, Single Tuner, DVB-S/S2demodulator, DVB-T/T2 demodulator. |
| Power Supply | Input 100V~240V 50/60Hz |
| Power Consumption | 28W Max/ 1W Standby(it's optional by customer's board) |
| Rs232 | For FW Upgrading. |
| | |
| Standard Receiver Standard | DVB-S2 Standard(ETSI EN 302 307) and DVB-T2 Standard(IEC-TYPE,IEC169-2) |
| Input Frequency Range | 950MHz~2150MHz and 174MHZ~230MHz(VHF)/470MHz~862MHz(UHF) |
| Input Signal Level | -25dBm~-65dBm and -15~-75dbm |
| Demodulation | QPSK,8PSK,16APSK and QPSK,16QAM,64QAM |
| Transport Stream | MPEG-2 ISO/IEC 13818 Transport Stream Specification |
| MPEG Profile Level | MPEG2 SD,MPEG4 HD, H.264/AVC SD, H.264/AVC HD |
| LNB Power & Polarisation | Vertical+13.5V,Horizontal 18V,Current:MAX 450mA. |
| Multi Satellite receiving | 22K switcher, DiSEqC1.0, DiSEqC1.1, DiSEqC1.2, USAL |
| Conditional Access system | 1 CA card reader Slots |
| | |
| A/V Output ports | YUV, RCA with CVBS, HDMI1.4,Left/Right analog audio output(RCA), |
| | Digital audio output, COAXIAL output. |
| | |

| Aspect Ratio | Auto, 16:9 Pillar box, 4:3 Pan & Scan, 4:3 Letter Box. |
|------------------------|--|
| Audio Decoding | MPEG 1 layer I, MPEG 1 layer II, MPEG 1 layer III, MPEG2, AC3. |
| Audio Mode | Stereo/MONO/Left/Right |
| DVR supporting | DVR with USB HDD, Time shifting with USB HDD |
| USB2.0 High Speed HOST | 1 USB2.0 Port, USB media player to playback the media in USB flash disk or USB |
| | HDD or USB card reader with memory card or FW Upgrading. |
| File system | FAT12,FAT16,FAT32,NTFS. |
| Media Supporting | BMP,JPG,DIVX,XVID,MKV,TS,TP,AVI,MPS,MP4,VOB |
| Ethernet Interface | 10Mbit |
| Storage Temperature | -40℃ to +65℃ |
| Operating temperature | 0°C to +40°C |
| Weight | Appr. 1.5KG |

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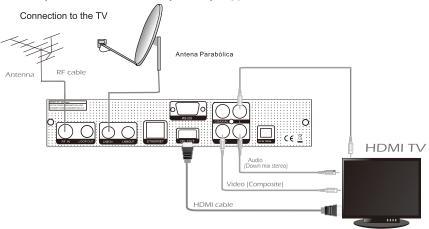
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SYSTEM CONNECTION

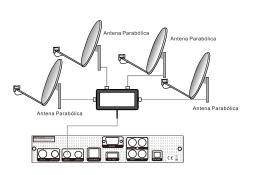
General

There are many different types of TV and other equipment that you can connect to the STB. In this manual you will see some of the most common ways to connect your equipment.



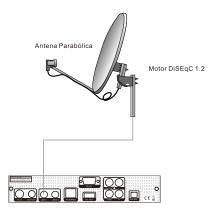
(2 Fixed Dishes Using a DiseqC switch)

Connect the output of DiSEqC 1.0 to DISH IN of the receiver.



(Moved Dish Using DiSEqC 1.2)

Connect the output of DiSEqC 1.2 to DISH IN of the receiver.



2. Remote Controller

1.Power: Turns the receiver On/Off.

2.Mute: Turns the sound On/Off.

3.TV/AUDIO:Switches between TV and Radio.

4.V.Format: Video format

5.TV/STB: Switches betweenTV andSTB

6.REC(Record): Record the channel

7.PLAY/PAUSE:Playback the recorded files Pause playing mode

8.STOP: Stop playing mode.

9.M/P:Press to display the multi-pictures window.

10.FAV: Selects the group of favorite.

11. \triangle/∇ :Changes the volume level in viewing mode.

12. () :Changes channels in viewing mode.

13.VOL+/-: Changes the volume level in viewing mode.

14.P+/-Directly to the previous or next page

15.OK:Confirms the choices and/ofselections the highlighted menu item. While watching TV or listening to Radio, press the OK button and thechannel list will appear.

16.MENU:Press to display the Main Menu on the screen.

17.INFO:Shows the information of the Banner and EPG.

18.EXIT: Exit from the present menu and moves to the previous menu.

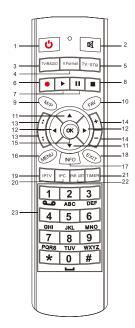
19.IPTV: Signal of IPTV

20.IPC: Signal of IP Camera

21.Time: Press to key seting the timer recording

22.PVR LIST: Display the file List

23.NUMERIC Key(0~9):Select channels or can use as a alphabetic search key in the sorted channel lists.



2. Basic Operations

2.1 Turn on STB

First, press the [Device's Main Power] to turn on the Unit.

When the STB is fist used, there will play the first channel from the default Channel List. If the STB is not first used, STB will play the same channel as last time before turning off.

? Frequently Asked Question

Q:The power of my STB has been turned on and not in Standby mode, but the TV screen showed nothing:

A:Make sure the TV set has been set to the correct video input (not the TV channels). For example, if you have connected the unit with the Video 1 input of the TV set, the TV set has to be switched to Video 1.

Q:The power of my STB has been turn on and not in Standby mode, but the TV screen showed nothing except"No Signal!".

A:That means the channel, which you select, is no signal. It could be several causes:

1. The channel which you select is not in your allocate satellite. The simply solution is to change Channel.

2. The signal of current TV channel is too weak. You can try to change channel to other strong signal channels. If the problems still exist, please consult your local dealer or other professionals for technical service.

3. You use the Dual LNB, and you need Modify LNB Type

2.2 Power

1.Press [Power] Key can enter the Standby state
2.In Standby state, press [Power] Key again can call
back the unit and go on play the previous channel
3.User can also disconnect the device's main power to
end the Standby state.

2.3 Channel Up/Channel Down

In full screen, press [CH+/CH-] to change channel.

2.4 Volume Up/Volume Down

In full screen, press [VOL+/VOL-] to adjust volume.

2.5 Number

In full screen, use number key and press [OK] on the Remote Control Unit to change channel.

2.6 Mute

- 1.Press [MUTE] key to mute the sound and the screen will show up mute OSD.
- 2.Press [MUTE] key again to restore sound.

2.7 Pause

- 1. In playing mode, press [Pause] key, the picture will be paused, but the sound of the channel will still continues.
- 2.Press [PAUSE] key again, the screen's picture will skip over to the current playing picture, and the sound of the channel will corresponding playing.

2.8 Recall

Press [RETURN] key will directly switch to the previous channel that you played before current channel.

2.9 Favorite



- 1. In full screen, press [FAV] key, it will display a window of "Favorite Group" on the left of the screen, which you can watch like below.
- 2. In the window of "Favorite", you can move highlight by press [Channel Up/Channel Down] key and press [OK] key to select favorite group.



3. In the window of "Fav group X", you can move highlight by press [Channel Up/Channel Down] key and press [OK] key to select favorite channels. Pressing [Page Up/Page Down] keys can implement the "Page Up/Page Down"function.



- 4. You also can press [Volume Up/Volume Down] keys to select different "Favorite Group".
- 5. Press [Exit] key to exit the current window.

? Frequently Asked Question Q:Why the screen displays "No Favorite Channel", after pressing [Favorite] key?

A:It is because that you haven't set any channels as "favorite channel".Please refer to Favorite.

2.10 Audio

1.In full screen, press [AUDIO] key can open the "Audio" window on the screen.



- 2. You can modify the audio track by press [Channel Up/ Channel Down] key and modify the audio mode by press [Volume Up/Volume Down] key.
- 3.Mode:Left/Right/Stereo/Mono

2.11 Information

In full screen, press [INFO] key can open information screen, in the window shows the parameters of current channel.



2.12 EPG

- 1. The STB has an Electronic Program Guide [EPG] to help you navigate channels through all the possible viewing options. The EPG supplies information such as channel listings and starting and ending times for all available channels. Press [EPG] key to display EPG screen.
- 2.Press [OK] key in each item.
- 3.Press [Green] key in EPG menu can display "Time Bar" 2.Press [Left/Right] key to switch the channel. Menu, In "Time Bar" Menu, you can press [Left/Right] to View more items.



2.13 TV/Radio

In TV mode, Press [TV/Radio] key can switch to Radio mode. In radio mode, press [TV/Radio] key to Switch to TV mode.

2.14 Channel List

- 1.In Full screen, press [OK] key can enter "Channel List"



3.Press [Red] or [Yellow] or [Blue] key to change group type, such as Favorite group Satellite, provider, A-Z.





2.15 Sleep

- 1. This function can set sleep timer. When you set a Sleep Timer and the time arrive. The system will enter To standby automatically.
- $2. Press \ [SLEEP] \ key, it will switch the mode between \\ Sleep \ Timer \ Off/10/30/60/90/120 \ Minutes.$

2.16 Page Up/Page Down

- 1.In Channel list, press [Page+/Page-] key can page up and page down the channel list.
- 2.In full screen, press [Page+/Page-] key can switch satellite directly.

2.17 TEXT

- 1.Press [TEXT] key in full screen, you can open teletext page on the channel which has teletext information.
- 2.If the channel has no teletext information, it will show "No Teletext Data" on the screen.

2.18 Subtitle

1.Press [SUBTITLE] key in full screen, you can switch subtitle on or off.

2.19 Find



- 1.Press [FIND] key in full screen will open the "Find" window like above. Press[Left/Right/Up/Down] key to move highlight and press [OK] key to input the selected symbol or letter into the dialogue. The search result display on the right screen. You can press [Red] key to delete the char. Press [Blue] key to confirm. Press [Green] key to cancel.
- 2.Press [Exit] key to close "Find" window.

2.20 TV/STB

1.Press [TV/STB] key can switch between TV mode and STB mode.

2.21 Menu

1.Press [MENU] key can open the menu, exit the current menu to last menu or close the window.



2.22 Video Format

1.Press [V-Format] key under Full Screen playback for 1st,it will show the current system outputting video resolution, continuously press this key, system will switch its outputting video resolution by sequence 576i->480i->576P->480P->720P_50->720P_60-> 1080i 50->1080i 60->1080P 50->1080P 60.



2.23 Exit

1.Press [Exit] key can exit the current menu to last menu or close the window.

3.Channel

When you press [Menu] key to enter menu, there will display the picture like below:



- 1.Press [Up/Down] key to select menu pages among Edit Channel.
- 2.Press [OK] key to enter the "Channel Edit".If Menu Lock is "ON",it will display an dialogue for user to key in password. The default Password is "0000".
- 3.Press [Left/Right] key to select menu items among All Satellite Channel and Satellite Channel.
- 4. Press [Exit] key to go back to main Menu.

3.1 TV Channel List

When you enter to "Channel List" menu, there will display the screen like below.



- 1. You can move highlight by press [Channel Up/Channel Down] key and press [OK] key to Operation the channel list database
- 2. You can press [Page UP/Page/Down] key to implement the Page UP/Page Down function.
- 3. You can use [Volume Up/Volume Down]] key to Satellite channels as you want.
- 4. You can press [Menu] or [Exit] key to go back to "Edit Channel" menu
- 5. Press color key can implement the corresponding function in "Channel List".

3.1.1. Hide

Press [INFO] to Hide the "Channel List".



3.1.2. Favorite



1.Pressing [Fav] key can open the "Favorite" window like above.

- 2.You can move highlight between 8 favorite groups by pressing [Up/Down] key and press [OK] key to make a favorite mark in the left side of the selected Favorite group.
- 3. Pressing [OK] key on the marked Favorite group can cancel the exist favorite mark.
- 4. After marking, pressing [Exit] key can back to "TV Channel List", there will show a favorite mark beside the marked channel.

3.1.3. Lock

1.Press [Red] key can enter lock mode.



2.Press [Up/Down] key to move the highlight and press [Red] key, it will display a dialogue to ask you to input password. If you input the correct password you can see a "lock mark" in the right side of the highlighted channel.

3.After save and exit menu, STB will request you to input the password while you want to watch the locked channel

3.1.4. Skip

- 1.Press [Green] key can enter skip mode.
- 2.Press [Up/Down] key to focus on the "Skip" icon. and press [OK] key, it will lock the selected channels.

3.1.5. Move

1.Press [Yellow] key to select one or more channels.



2.Press [Up/Down] key to focus on the "Move" icon. and press [OK] key, Now you can move the channel to the position as you want.



3.1.6. Edit



1. Press [Red] key can open the "Sort" window like above. There are four kinds of sorting ways. You can press [Up/Down] key to move highlight and press [Ok] key to confirm you selection.

The five kinds of sorting way are:

- Name (A-Z) or Name(Z-A): Sorting in Alphabetical Order, ignore "\$" symbol.
- FTA: Sort channel through free and scramble sequence. Free channel will in the front of channel list and scramble channel will at the rear of channel list.
- Lock: Accumulated all locked channels and list in the last of TV channel list.
- 2.Press [Green] key can enter Rename mode.
- 3.Press [Blue] key can channel deleted mode.

3.2 IP TV

When you enter to "Channel List" menu, and If in full screen mode, Press Remote Control [Red] key to switch the "IPTV" .there will display the screen like below.





3.3 IP Camera

When you enter to "Channel List" menu, and If in full screen mode, Press Remote Control [Green] key to switch the "IP Camera" .there will display the screen like below.





4.Installation

4.1 Satellite List



- 1.Press [OK] key to select one satellite.
- 2.Press [Red] key, you can enter add satellite menu.



3.Press [Green] key, you can enter edit satellite menu. You can edit satellite name and satellite longitude.



4. Press [Yellow] key, you can delete satellite menu.



5.Press [Blue] key to search, Press [Left/Right] key to select the current satellite or selected satellites.



6.Press [Info] key to the selected satellites.



4.2 Motor Antenna

- 1.Enter the "Antenna Setup" Menu, Select the Motor Type: None/DisEqC1.2/USALS.
- 2.Press [Left/Right] to the USALS or DisEqC1.2 mode, Press [Yellow] key to the "Postion Setting".



3.Set the postion number, Move to the "save" button, Press [Left/Right] to adjust the postion, Press [OK] key to save the postion.



4.Press [Red] key to Enter the litmit setup,to disable or enable motor limit.



5. To reset the motor, use the Goto Refere.



6.Press [Green] button to setting longitude and latitude.



4.3 TP List

- 1.Enter the "TP List" item.
- 2.Press [Red] key to add the TP parameter.



3. Press [Green] key to edit the focus to parameter.



4.Press [Yellow] key to delete the focus TP.



- 5.Press [Blue] key to search current TP. 6.Press [OK] to start search programs.

4.4 Terrestrial

Enter the "Terrestrial" item to zhe Channel Search main menu.



 ${\it 1.Select the "Auto Search"}, press "OK" button, a confirmation window is displayed.$

Press the "OK" button to start Auto Search, press "EXIT" button to cancel.



2.Select the "Manual Search", press the "OK" button to enter the Manual Search menu.

Press the "RIGHT" or "LEFT" cursor button to set Frequency channel, then press "OK" button to start channel scan



- 3.Press "LEFT" or "RIGHT" button to set the "Country". 4.Press "LEFT" or "RIGHT" button to set the "Antenna
- **Power"**. When "Antenna Power" is selected "on", the STB will provide 5V power to antenna. It will not provide when
- 5. You can activate/disactivate the **LCN** function by setting the "**LCN**" to on/off.

IF LCN {Logical Channel Number} Select function is activated, you can't change the original number of TV channels by scanning.

selected "Off"

5.Tools

5.1 Timer setting

1. Select "Timer Setting" item and press [OK] key to set the timer.



- 2. You can switch the Time Mode by two type: Once and Daily. Once:acitve the event by Date, time. Daily: active the event only by time.
- 3. The Timer Serivce means the event type. Channel: When time on, play the channel. Record: When time on, record the channel.



5.2 Parental Lock

- 1.To change the password, Enter the "Paratal Lock" menu.
- 2.Enter the New Password, and confirm again. If Menu Lock is on, some menu need the password to open. If channel Lock on, password is need when play a lock program.



6. Upgrade the software

1.Copy the software or data to the usb stick root.
2.Insert the usb stick, the system will display "usb Device connected", enter to the "Upgrade by USB" Menu. There are 3 upgrade mode: all, user DB, main code. Press [Left/Right] key to Select, all: Remove all the old data in flash, and write a new version software into the flash. user DB: Only upgrade the user DB, and main code: Only upgrade the main code.



3.If select the all mode, select the software file in usb, Press start the upgrade the software, and select "Yes" Upgrade will start, During upgrading, Do not power off the machine.





4.If select the "user DB" mode, the following dialog will pop up, and press [OK] key to select the files as you want. Press start to upgrade the data, if upgrade the program database, after upgrade over, please power off and power on the machine, the program will be valid. otherwise, it's invalid...

7.Network

After connecting to the Internet interface to enter the network settings menu.



7.1 Network Config

There are four kinds of the network configuration of the network connection mode: LAN, WIFI, GPRS, 3G Dongle.

Press the [OK] key to select the Active mode current need to connect the network. Once you have selected a green dot display.

Note: WIFI / GPRS/3G Dongle mode you need to add a

corresponding module can be used, otherwise it is grayed out is not optional.



2.Press the [Setup] key to select the set detailed parameters menu. press "Connect" to confirm the connection.



7.2 Network App

There are many types of network applications for customers to choose.



2.Press [OK] key to select the DLNA Start mode. Supports all video software with DLNA protocol.





7.3 IPCAMERA setting

Enter the "IPCAMERA setting" item .



Press the "RIGHT" or "LEFT" key choice opening and closing.

Press the "OK" button to Enter a valid Network SSID , and Enter a valid password Key



7.4 STB Name

Here you can customize the STB name, To connect using the account name DLNA. STB default "A5S".



8. Multimedia

Network place

Set LAN sharing disk Account menu



1. Press the color key to add/edit/delete the IP Address.



2.Press the [blue] key to call up the input shared account name and password.



3.press [Left/Right] key to switch to Video/Music/ Picture, press [Up/Down] key to play the Multimedia file sharing.



USB storage device

1.The Media Play has 4 function: Video, Music, Picture, Record. Video Format: mpeg 1,mpeg 2,mpeg 4,H.264, Avi, Mkv, Flv, Ts, Mov, 3gp. Music Format: mp3,wav,ogg. Picture Format: JPEG, BMP, GIF. Dts Record Format: Mpeg 1,Mpeg 2,Mpeg 4,H.264.

2.Press [Left/Right] key to switch every functions.





3.Press [Up/Down] key to explore the storage files, 4.If select the "Music" or "Picture" list mode. press the color key to edit the Play list/Sort/Repeat/ Partition, press the "FAV" key to edit the favorite list



9.PVR Function

9.1 USB Setting





1. Enter the "Storage Format" Menu, press [Left/Right] key to switch the partition. can watch like below.



9.2 Recording

1. When play the program, press [Record] key to record the current program, press [Record] again to set the recording During Time, the default is 2 hours.





2.If you want to stop Recording, Press [Stop] key and select yes to stop recording.



9.3 IP Camera Recording

1. When play the program, press [Record] key to record the current program.



2.Enter the Media player, press [Left/Right] key to switch to Video player, press [Up/Down] key to play the recording files. This video file suffix is .musb



9.4 Play recording File

Enter the Media player, press [Left/Right] key to switch to Record function, press [Up/Down] key to play the recording files, For window play mode, Press [Play] key; for full screen mode, press [OK] key.

1. Press the color key to edit the Lock/Delete/Rename/Partition.



2. If in full screen mode, Press [INFO] key to switch the recording files.



9.5 Time shiftEnter the "USB Setting" menu to DVR Configuration.



Set the Time shift "ON", and exit. When play the program, the time shift function is working, press [DVR INFO] key to display the DVR Bar, press [Pause] key to pause the program, press [Left/Right] key to slide the progress cursor, it can seek to the position as you want.



