User Manual

Digital Satellite Receiver

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1. Safety precautions

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.



Warning:

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 install 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 install 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. Never spill any liquid on the STB.

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, user is required to request the service technician to conduct the overall safety check to ensure the machine is In the proper condition.

2. Environment protection



Attention

Your product Is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

Information on Disposal for Users (private households) in the European Union

Used electrical and electronic equipment must be treated separately and In accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*. In some countries* your local retailer may also take back your old product free of charge if you purchase a similar new one. *) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

Information on Disposal for Business Users

In the European Union

If the product is used for business purposes and you want to discard It:

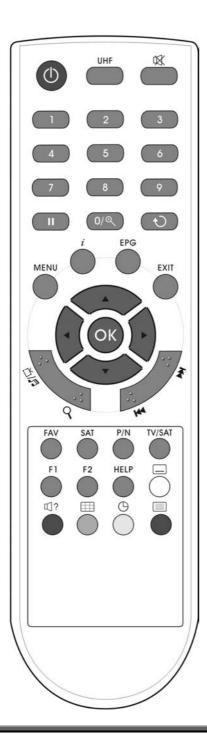
Please contact your local dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling Small products (and small amounts) might be taken back by your local collection facilities,

In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.

3. Remote Control

You can power on/off the receiver, operate on screen menu, and use a variety of hot key function.



POWER

To switch your receiver on from standby or standby to on.

MUTE

Used to enable or disable the audio

MENU

Displays the Main Menu on the screen, or return to the previous menu or status

₺(PREVIOUS)

Return to the previous menu or status.

SAT

Display satellite list.

EXIT

Cancel the user selection and return to the viewing mode from a menu.

当ば(TV/RADIO)

Receiver switches between TV and Radio mode.

1(INFORMATION)

To display channel status or various program information of current service.

NUMERIC KEYS

Used to select channels or enter programming parameters

OK

To select menu option, or to updated on entry.

II PAUSE

Used to select the freeze function.

Press once to freeze the screen picture.

Press again to go to normal state.

<,> KEY

To adjust volume level, or to move cursor left or right in the menu

^,v KEY

To change channels, or to move cursor up or down in the menu

UHF

In case your TV is connected through RF Modulator (UHF), select output channel number between CH21 and CH69 with up and down key.

FAV(FAVORITE)

To set receiver to the favorite server mode,

display the favorite channel

AUDIO

To select audio mode; Left, Right, Stereo

P+/P-

To move up the cursor to the next or previous page

in the menu or channel list

TV/SAT

Receiver switches between TV and Satellite receive mode.

⊕ (ZOOM)

Press [⊕] key select zoom times, from X1 to X16.

□(WHITE KEY)

Subtitle Display.

OTIMER(YELLOW KEY)

Press timer key then enter timer menu. You can setup up total 8 tasks.

\square ?(RED KEY)

Audio channels setup, to select audio mode; Left, Right, Stereo.

⊞(GREEN KEY)

Multi channels display. You can choice the desire channel use <,> ^,v and press ok confirm.

TELETEXT(BLUE KEY)

Shows teletext information of the current channel supports.

\prec (FIND)

Use to prompt find channels sort by character.

4. Front panel

STANDBY/ON: To switch the receiver power on/stand by

▲,▼ KEY: To change channels, or to move cursor up or down in the menu Green Signal Led: When received signal is strong, the signal led is lighted. Red Power Led: When receiver is in standby mode, red power led is lighted.

MENU: (Optional) To enter into the main menu.

VOL ◀,▶ : (Optional) To adjust volume level, or to move cursor left or right in the menu

OK KEY: (Optional) To see TV/Radio channel list, or to confirm in the menu.

Remote Sensor: Detects infrared signal from remote control unit

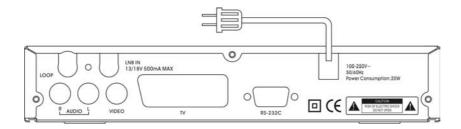
Display(4-Digit/7-Segment LED or VFD optional): Indicates operating status of receiver

5. Rear Panel

- -

Do not connect the unit to the mains socket until all other connections have been made and checked. 12V Version has a 12V power supply instead of a mains plug.

.



LNB IN 13/18V 500mA MAX: This port is to connect the coaxial cable from LNB of your Dish.

LOOP: This enables the connection of another receiver.

VIDEO: This RCA connector is used to connect any external video.

AUDIO R/L: These RCA connectors are used to connect any external audio amp or system.

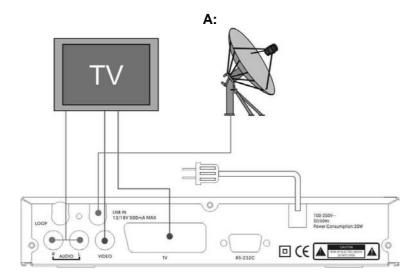
TV: This is used to connect your TV through SCART cable.

RS 232C SERIAL PORT: This is used to connect your receiver to a computer through a serial cable

6. Connecting Your System

There are four ways to connect the receiver to your existing TV system. We recommend using one of the following cases for the best result:

- 1. Connect one end of SCART cable to the TV (SCART) jack on the back of the receiver and the other end to a SCART jack on your TV.
- 2. Connect one end of RCA cable to the RCA jack on the back of the receiver and the other end to a RCA jack on your TV.
- 3. If your TV doesn't have a RCA jack, connect one end of RF cable to the TV on the back of the receiver and the other end to a RF input jack on your TV (optional)
- 4. If you have a high definition television set, you should use a HDMI cable for best result, Plug one end of the cable into the HDMI socket (optional) on the receiver, and the other end into the matching socket on your television. In this case, you do not have to make audio connections because the HDMI connector can output stereo audio.



Finally connect the coaxial cable from the LNB to the LNB IN jack on the receiver.

With External Audio / Hi-Fi System

To connect any external Audio Hi-Fi system, the receiver has been provided with two RCA connectors at the back of the receiver marked with Audio L and R.

Connect an RCA stereo cable from the AUDIO L, R jacks on the back of the receiver to the LINE, AUX, SPARE OR EXTRA input jacks on your Hi-Fi System.

TV with Motorized System (DiSEqC 1.2)

Connect one end of your coaxial cable to the LNB IN connector on the receiver and the other end to the REC or Receiver connector on the DiSEqC 1.2 motor.

Connect the coaxial cable from the LNB to the LNB connector on the DiSEqC 1.2 motor.

All our receivers are designed to be DiSEqC 1.0 and DiSEqC 1.2 compatible.

This allows multiple antennas to be connected to the receiver at the same time.

If you have two or more fixed antennas or LNBs, then we recommend you use a DiSEqC 1.0 switch.

Connect the coaxial cable from the first LNB to the LNB 1 or LNB A input connector of the DiSEqC switch.

Do the same for any other LNBs that you have.

Connect one end of a coaxial cable to the RF output connector of the DiSEqC switch, connect the other end to the LNB IN socket on the receiver.

To the digital receiver, you can connect either a single satellite antenna directly or LNB of multi-feed equipment.

7. Basic

Operations

7.1 Turn on STB

Firstly, press the Device's Main Power to turn on the unit.

If the STB is used for the first time, it will play the first channel from the default Channel List. Otherwise, it will play the last channel before being turned 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 Video1 input of the TV set, the TV set has to be switched to Video1.

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

A: This means the channel you select has no signal. There could be several causes:

- 1 The channel which you select is not in your allocated satellite. The solution is to change the channel.
- 2 The signal of current TV channel is too weak. Try to switch to other strong signal channels. If the problems still exist, please

consult your local dealer or other professionals for technical service.

3 You have used the Dual LNB, and need Modify LNB Type

7.2 Standby Mode

1 Pressing Key Power [$^{\circlearrowleft}$] can enter the Standby mode.

2 In Standby mode, pressing Key Power again can move back to the unit and go on playing the previous channel.

3 Users can also disconnect the device's main power to end the Standby mode.

7.3 Next / Previous Channel

In full screen, press keys Channel Up/Channel Down to change channel.

7.4 Volume

In full screen, press keys Volume +/Volume to adjust volume.

7.5 Number Keys

In full screen, use number keys and press OK on the Remote Control Unit to change channels.

7.6 Mute

1 Press key [$\[\]$ to mute the sound and the screen will show up.

2 Press key Mute again to restore sound.

7.7 Pause

1 In playing mode, press key Pause [II] , and the

picture will pause, but the sound of the channel will still remain.

2 Press key Pause again, and the screen's picture will skip over to the current playing picture, and the sound of the channel will correspondingly play.

7.8 Recall

Press key Recall [\circ] will directly switch to the previous

channel that you watch before current channel.

7.9 FAV

1 In full screen, press key [FAV] , and it will display a window of "Favorite Group on the left of the screen like below.

2 In the window of "Favorite Group", you can move highlight by pressing keys Channel Up/Channel

Down ,then press OK key to set favorite channel you choose.

3 Keys ◀,▶ and ▲,▼ can implement the "Page up/Page down" function.

4 The favorite group is the favorite channels you have marked in Menu "TV channel list". Please refer to Favorite.

5 Press Exit key to draw back from "Favorite" menu

? Frequently Asked Question

Q: Why the screen displays "No Favorite Channel", after pressing FAV key?

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



1 The key Zoom [$0/^{\oplus}$]allows you to magnify a certain area on the images and the current screen will show.

2 Press key Zoom again, the image will enlarge rotate as x1, x2, x4, x6, x8, x12, x16.

3 In "x2 ~ x16" image, ◀,▶/▲,▼keys are to move the inner yellow square you want to see.

4 In zoom mode, press Exit to close "Zoom"

7.11 Audio Track / Audio Mode

1 In full screen, pressing key Audio can open the "Audio Mode" window on the right side of the screen.

2 You can move highlight by pressing ▲,▼ keys and switch each selection by pressing ◀,▶ keys

7.12 Information

In full screen, pressing key Info can open information screen. The window shows the parameters of current channel.

7.13 EPG

window.

1 The STB has an Electronic Program Guide (EPG) to help you select channels through all the possible viewing options. The EPG supplies information such as channel lists and time starting/ ending for all available channels.

Press key [EPG] to display EPG screen.

- 1 Pressing $[\blacktriangle, \blacktriangledown]$ key can switch between channels.
- 2 Pressing [green] key will display more details about currently shown channel
- 3 Pressing [yellow] key will display more details about next program displayed on current channel

3 In EPG menu, press key Exit to close EPG screen.

7.14 TV/RADIO

In TV mode, pressing key TV/RADIO [首/昂] can switch to Radio mode.

In Radio mode, pressing key TV/RADIO can switch to TV mode.

7.15 Channel List

1 In full screen, pressing [OK] key can enter "Channel List", please refer to TV Channel List for detailed information.

2 In "Channel List" menu, press OK key to draw back to full screen.

7.16 Change Satellite

1 In full screen mode, pressing key [SAT] can open installed satellite list and switch satellites.

2. In full screen, pressing key [OK] and ◀,▶ can switch satellite directly.

7.17 MultiPictures

In full screen, pressing key [\boxplus] can enter the MultiPictures mode like below:



1 In MultiPictures mode, the screen will display 9 channels' preview window (static) from the current channel. And only the highlighted preview program can play normally.

keys can move highlight among each preview program, and only the highlighted preview program can play normally.

3 When the highlight moves to the preview program that you want to play, you can press key OK to enter the full screen play.

8. 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 Channel, Installation, System and Tools.
- 2 Press[OK]key to enter the selected item.



In "Channel" menu:

- 1 Press[Channel Up/Channel Down]key to select menu items among TV Channel, Radio Channel and Delete All.
- 2 Press[OK]key to enter the selected item.

8.1 TV Channel Manager

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 preview the current highlighted program in the right side preview window.
- 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 switch "Program Group".
- 4 You can press[Menu]or[Exit]keys to enter full screen playing mode.
- 5 Press color key can implement the corresponding function in "Channel Manager".

8.1.1 **Group**



- 1 Press [Red] key can open the "Group" window like above
- 2 You can press [Up/Dwon] key to move highlight and press [OK] key to select group.
- 3 Press [Red] key or [Menu] key to close "Group" list.

8.1.2 Skip



- 1 In "TV Channel Manager" menu, press [Green] key can make a "skip mark" in the right side of the highlighted channel.
- 2 After save and exit "TV Channel Manager" menu, the channel will be skip while user change channel in the full screen.

8.1.3 Edit

Press [Yellow] key, it will show input password dialog. If the password is correct, it will open the window like below. The default password is $\mathbb{O}\mathbb{O}\mathbb{O}$.



8.1.3.1 Delete

- 1 In this menu, press [Red] key can make a delete mark in the right side of the highlighted channel.
- 2 Press [Red] key again can cancel the deleted mark on the current channel.
- 3 When exit the menu, it will ask you whether to save the change. Select "Yes" to save the change.

8.1.3.2 Create

If you press[Green] key, it will display create window like below:



- 1 In "Satellite" item, press[OK] key can display satellite list and you can select a satellite that you want to setting.
- 2 In "TP Index" item, you can press[Volume Up/Volume Down]key can switch TP number, and the next three items will show up corresponding parameters.

- 3 In "Name" item, press[OK]key can display the keypad, and you can edit new name here for selected channel.
- 4 In "Video PID", "Audio PID" and "PCR PID" items, you can use the number key directly to modify corresponding parameters of the items.
- 5 After modification, move highlight to "Save" item and press[OK]key, can save parameter and exit "Edit" mode. Otherwise, move highlight to [Exit]item and press[OK]key can exit "Edit" mode and won't save any modification.

8.1.3.3 Edit

If you press[Yellow] key, it will show the window like below:



- 1 On the "Name" item, press[OK]key can display keypad to edit the name of selected channel.
- 2 On the "Video PID", "Audio PID" and "PCR PID" items, you can input numerals to modify the according item's value.
- 3 After modification, move highlight to "Save" item and press[OK]key can save the modified value and exit "Edit" mode. Otherwise, move highlight to [Exit]item and press[OK]key can exit "Edit" mode and won't save any modification.

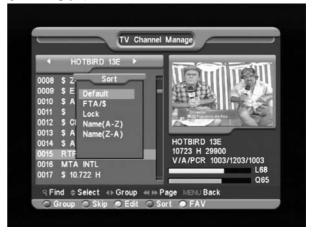
8.1.3.4 Lock

Press [Blue] key can make a "lock mark" in the right side of the highlighted channel. After save and exit the menu, STB will request you to input the password while you want to watch the locked channel.

8.1.3.5 Move

- 1 In this menu, press [White] key can make a moving mark in the right side of the highlighted channel.
- 2 Press [Up/Down] key to move the channel
- 3 Press [OK] key to put the channel to the target place.
- 4 When exit the menu, it will ask you whether to save the change. Select "Yes" to save the change.

8.1.4 Sort



- 1 Press [Blue] key can open the "Sort" window like above. There are five kinds of sorting ways. You can press[Channel Up/Channel Down]key to move highlight and press[OK]key to confirm you selection
- 2 The five kinds of sorting way are:
 - ♦ Default: Sorting by scanning result.
 - ♦ Name (A-Z): Sorting in Alphabetical Order, ignore "\$" symbol.
 - ♦ Name (Z-A): Sorting in Alphabetical Order, ignore "\$" symbol.

- FTA: Sort channel by free and scramble sequence. Free channel will at front of channel list and scramble channel will at reat of channel list
- Lock: Accumulated all locked channels and list in the last of TV Channel List.

8.1.5 Favorite



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

8.1.6 Find



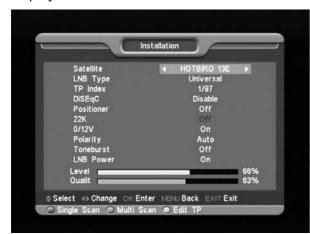
- 1 Press[Find] key can open the "Find" window like above. You can press[Channel Up/Channel Down/Volume Up/Volume Down]key to move highlight and press[OK]key to input the selected symbol or letter into the dialogue.
- 2 After input each character, the program list on the left will search the channel according your input, and list the matched channel.
- 3 Press[Exit]key can close "Find" window and you can select channel from the channels list directly.

8.2 Radio Channel List

Basically, the operation of "Radio Channel Manager" is same as "TV Channel Manager", but there is one point different: In "Radio Channel Manager" mode, there is no video information, so it will always display Radio's logo in the right side preview window.

9. Installation

When you enter to "Installation" menu, there will display the screen like below:



9.1 Satellite

Satellite: Press[OK]key to enter the Satellite list.



1 You can press color key to add/edit/delete satellite. Press [Page] key to page up or page down.

9.2 LNB type

In this item, press[Volume Up/ Volume Down]key can switch among "Standard", "User" and "Universal" mode.

For Example: If you use the Dual LNB, then you should select "User" option in "LNB Type" and set the correct frequency in LNB Type, then you can play the channel normally.

9.3 DiSEqC

DiSEqC: You can use[Volume Up/ Volume Down]key to switch options. There are several options for your selection:

- ♦ Disable: without DiSEqC.
- ♦ 1/2, 2/2: two ports DiSEqC
- ♦ 1/4, 2/4, 3/4, 4/4: 4 ports DiSEqC
- ♦ 1/8, 2/8... 8/8: 8 ports DiSEqC
- ♦ 1/16, 2/16....16/16: 16 ports DiSEqC

9.4 Positioner







Positioner: In "Positioner" item, you can press [Volume Up/ Volume Down]key to switch "None / DiSEqC 1.2 / USALS" functions.

9.5 22k

You can use[Volume Up/ Volume Down]key to switch "ON / Off". When this item is switched to "ON", receiver will receive TV and radio input signal from 22K port. If the item is switched to "Off", the receiver will receive all signal from 0K port.

! Notice

When you choose LNB type "Universal", you can not modify 22K.

9.6 0/12V

You can use[Volume Up/ Volume Down]key to switch "0V / 12V". When this item switches to "12V", receiver will receive TV and radio input signal from 12V port. If the item switches to "0V", the receiver will receive all signals from 0V

9.7 Tonebusrt

In "Toneburst" item, you can press [Volume Up/ Volume Down]key to switch "Off/On" functions.

9.8 Polarity

In "Polarity" item, [Volume Up/ Volume Down]key to switch "Auto / H / V" functions.

9.9 TP Scan

When you enter to "TP Scan" menu, there will display the screen like below:



- 1 In "Satellite" item, press[Volume Up/ Volume Down]key to switch satellite that you want to scan or press[OK]key to enter satellite list for selection.
- 2 In "TP Index" item, you not only can use [Volume Up/ Volume Down]key to select transponder but also can use[Add]and[Delete]functions.
- ♦ When you press[Red] key, it will display "New Carrier" in "TP Index" item; You should set the parameters of "TP Frequency" and "Symbol Rate" for this new transponder. The parameters of "TP Frequency" and "Symbol Rate" can set by number keys. The available range are "3000~13450 MHz" and "1000~45000Ks/s".
- When you press[Green] key, there will show up a warning message for reminding whether you will delete the current transponder or not. If you select "Yes", the current transponder will be deleted, and the total account of transponder will reduce 1 correspondingly.
- 3 For the existed transponder, you also can use number keys to modify the parameters of "TP Frequency" and "Symbol Rate" or press[Volume Up/ Volume Down]key to switch it directly.

- 4 "Polarity" and "Scan Mode" are use for setting scans conditions, you can press[Volume Up/ Volume Down]key to select different mode. "Polarity" means you want to scan this TP in horizontal mode or in vertical mode. "Scan Mode" means you want to scan all channels or only scan free channels.
- 5 When you complete your modification, move highlight to "Search" item and press [OK]key, it will show up a dialog to ask you scan mode, program type and NIT Search on/off. After you set up, press [OK] key to start scanning.
- 6 In the "TP Scan" item, press [Exit] key to exit the scanning and save the current parameters.

9.10 Single Search

- 1 Press [Left/Right] key to select search mode. Quick means preset scan, that is searching the existed TP. Detail means blind scan. It is no need existed TP info.
- 2 Press [OK] key, it will show up a dialog to ask you scan mode, program type and NIT Search on/off. After you set up, press [OK] key to start scanning.

9.11 Multi Search

- Multi Search can support search the multi satellite one by one as user select.
- 2 Press [Left/Right] key to select search mode. Quick means preset scan, that is searching the existed TP. Detail means blind scan. It is no need existed TP info.
- 3 Press [OK] key, it will show up a dialog to ask you scan mode, program type and NIT Search on/off. After you set up, press [OK] key to start scanning.

10.System Setup

When you enter to "System Setup" menu, you will see the screen like below:



In "System Setup" menu:

- 1 Press[Channel Up/Channel Down]key to select menu items among Language, TV System, Time, Timer, Channel Play Type, Startup Channel OSD Setting, Parental Lock.
- 2 Press[OK]key to enter the selected item.

10.1 Language

When you enter to "Language" menu, you will see the screen like below:



1 Language: press [Volume Up/ Volume Down] key to select languages, the selections of languages include: English, French, German, Portuguese, Turkish, Spanish, Polish and Italian.

- 2 First Audio: Some channels have more than one audio language for choosing; by this function you can set the first audio for this channel. If the playing channel has the same audio as the "First Audio" you set, system will play this audio language as default. If the channel hasn't the suited audio language, then the system will compare automatically with second audio language. The selections of audio languages include: English, French, German, Russian, Arabic, Portuguese, Turkish, Spanish, Polish and Italian.
- 3 Second Audio: If the channel has no correspond audio with "First Audio" but have corresponded audio with "Second Audio", system will play the second audio language as default. If no audio language corresponds with the "Second Audio", then the default language of current channel will be played automatically. The selections of audio languages include: English, French, German, Russian, Arabic, Portuguese, Turkish, Spanish, Polish and Italian.
- 4 EPG: Press [Left/Right] key can select EPG language.
- 5 Subtitle Language: Press [Left/Right] key can select subtitle language.
- 6 Press [Exit]key to draw back from "Language" menu.

10.2 TV System

When you enter to "TV System" menu, you will see the screen like below:



- Display Mode is use for switching the screen-displaying mode. Now we provide below options: Auto / PAL-M / PAL-BG / NTSC (optional HDMI (576i50 /480i60 /576P50 /480P60)). You can press [Volume Up/ Volume Down] key to select each mode circularly.
- 2 Aspect Mode is used for switching the screen aspect ratio mode. Now we provide below options: 4:3 PS / 4:3 LB / 16:9. You can press [Volume Up/ Volume Down] key to select each mode circularly.
- 3 Video Output: Press [Left/Right] to select RGB, CVBS and YUV (special cable required for connecting YUV signal to TV set).
- 4 RF System is use for switching RF format. Now we provide below options: PAL-BG / PAL-I / PAL-DK / NTSC.
- 5 RF Channel is use for setting TV frequency range, please refer to the table as below:

	Range
PAL-BG	21~69(Italian; default
	value)
	28~68(Australian)
PAL-I	21~69
PAL-D/K	13~57
NTSC	14~69

RF function can receive satellite TV channel from receiver and add new channel to your TV channel. After setting, while you want to

- see the satellite channels, you can search the channel in TV mode and needn't switch video to AV mode.
- 6 Press [Exit] key to draw back from "TV System" menu.

10.3 Local Time Setting

When you enter to "Time & Timer Setting" menu, you will see "Time" and "Timer" items.

1 Time: When you select "Time" and press [OK] key to enter the menu, you will see the screen like below:



- GMT Usage: This item is use for open the usage of GMT. You can press [Volume Up / Volume Down] keys to switch "On/Off".
- → The "GMT Offset" item is valid only when the setting of "GMT Usage" is "Yes". You can press [Volume Up / Volume Down] keys to switch "GMT Offset" value, and the range is "-12:00 ~ +12:00", increase each half hour progressively.
- You can press [Left/Right] to control Summer time on or off.
- "Date" and "Time" items are valid only when the setting of "GMT Usage" is "No". You can press [Volume Up / Volume Down] keys to moving highlight and use number keys to input directly.

If the current channel provides the correct time information, you will see the current time

- while you enter "Time" menu. If the channel doesn't provide time information, you have to input the date and time information manually.
- Time Display can control time display on or off when full screen play.
- Press [Exit]key to draw back from "Time" menu.

10.4 Timer

Press [enter] key to open timer menu.

- Current time information will display on the first column; if the current time is incorrect, please modify the time information in "Time" item.
- Timer Number: You can press [Volume Up / Volume Down] keys to set Timer number, and there are 8 timers in total.
- Timer Mode: There are several modes for Timer to setting, include Off, Once, Daily, Weekly, Monthly and Yearly.
- Timer Service: There are two options for "Timer Service", include "TV Channel" and "Radio Channel" (timer setting for channel change and Wakeup/Sleep) and Message (reminding message).
- When you select "Channel" (timer setting for channel change and Wakeup/Sleep) option in "Timer Service", the screen will display like below:



- Wakeup Channel: press [OK] key to enter channel list and select channel that you want to setting.
- Wakeup Date: use number keys to input your wakeup date.
- On Time: use number keys to input your wakeup time. Once the time's up, no matter what the system is in standby mode or in playing mode, the system will automatically switch to the channel you want and start to play.
- ➤ Duration: After you set a time for "Duration" item, once the time's up, the system will automatically switch to standby mode. If you want not work this function, set the duration is �����.
- When you select "Message" (reminding message) option in "Timer Service", the screen will display like below:



- Wakeup Message: press [Volume Up / Volume Down] key to select reminding message as Birthday, Anniversary and General.
- Wakeup Date, you can use number key to input your wakeup date.
- On Time: use number keys to input your wakeup time. Once the time's up, no matter what the system is in standby mode or in

- playing mode, the system will automatically pop a reminding message.
- ➤ The message will always display on the screen, you can press [Exit] key to close it.
- > Press [Exit]key to exit the current menu.

10.5 Startup Channel

Press [OK] key to enter "Startup Channel" menu, and you will see the screen like below:



- If the setting of "Boot on Channel" is "On", it means the following two items can be work. If the setting is "Off", it means the "Boot on Channel" function can't work.
- In the "Mode" item, you can set the "Startup Channel" as "TV channel" mode or "Radio channel" mode.
- In "Startup Channel" menu, you can press [OK] key to open the channel list, and select the channel that you want it to startup, press [OK] key again to confirm.

10.6 Channel Play type



- 1 Press [OK] key to enter "Channel Play Type" menu, and you can select the "playing channels" as "Free", "Scrambled" or "All".
- 2 For Example: If you select "Free", in full screen play, all scrambled channels will be skipped when you change channels by use [Channel up/Channel Down] key.
- 3 Press [Exit] to draw back from "Channel Setup" menu.

10.7 OSD Setting

When you input to "OSD Setting" menu, you will see a screen like below:



1 Subtitle Display: You can press [Volume Up/Volume Down] key to select "On" or "Off". If the current channel has subtitle information, it will be showed up while this function is "On". If this function is "Off", there

- won't show up subtitle information even if the current channel has subtitle information.
- 2 OSD Timeout: When you switch channels in full screen, there will show up some information about current channel on the lower of the screen. And regarding to the duration of these information show up on the screen, you can press [Volume Up/Volume Down] key to set the time. The range of the duration is "1 second ~ 10seconds".
- 3 OSD Position: control display position of the info bar in full screen mode. You can choose "bottom" or "top".
- 4 OSD Transparency: Besides the setting of "OSD Menu Style", you also can set the transparency of OSD. You can press [Volume Up/Volume Down] key to select the values. There are 5 levels of transparency, 10%, 20%, 30%, and 40% and "NO" (means no transparency function).
- 5 Load OSD Setting Default: If you are not satisfy with your setting, you can move highlight to this item and press [OK] key to reset parameters as default value.
- 6 Press [Exit] key to draw back from the "OSD Setting" menu.

10.8 Parental Lock

You can set a password for anyone who wishes to operate in the "Installation" menu. And you can also set the password for the lock channels. (How to set the lock channel please refer to LOCK) Here will show you how to setting and how to revising the password.

1 In "Parental Lock" function, press [OK] key, there will pop an dialogue for you to input the password. When you input the correct password, you will see a screen like below:



- 2 Menu Lock determining that when user wish to enter "Installation" menu, whether have to input Password or not. If the setting of "Menu Lock" is "Yes" which means user have to key in password, set "No" means unlock.
- 3 Channel Lock determining that when user wish to play the lock channels, whether have to input the password or not. If the setting is "Yes", play the channels with lock mark will show up a dialogue on the screen and ask for the password. If the setting of "Channel Lock "is "No", the Lock function will invalid.
- 4 New Password is used for revising password; you can input the new password in this item by using number keys directly. After you filled in 4 digital numbers, the highlight will auto skip to Confirm Password and ask you to input the new password again. If the password is correct, the screen will show up a message of "Saving Data, Please Wait...". After finish saving and draw back to "System Setup" menu, the revising is complete.
- 5 Press [Exit] key to draw back from the "Parental Lock" menu.

11. Tools

When you enter to "Tools" menu, you will see a screen like below:



In "Tools" menu:

- 1 Press [Volume Up/Volume Down] key to select menu pages among Channel, Installation, System and Tools.
- 2 Press [Channel Up/Channel Down] key to select menu items among Information, Satellite Guide, Game, Default Value, Software Upgrade, SatcoDX Auto Programming and Help
- 3 Press [OK] key to enter the selected item.

11.1 Information



1 When you enter to "Information" menu, you will see a screen like above. The screen displays software and hardware information. 2 Press [Exit] key to draw back from "Tools" menu.

11.2 Satellite Guide

When you enter to "Satellite Guide" menu, you will see the screen like below:



"Satellite Guide" is use for user to enter local longitude; local latitude and satellite longitude. By the evaluation from the receiver evaluate the antenna azimuth and antenna elevation; user can follow this guidance to adjust antenna.

- 1 You can use number keys to input parameters in "Local Longitude", "Local Latitude" and "Satellite Longitude".
- 2 You can use [Left/Right] key to select east or west in "Local Longitude" and "Satellite Longitude", select north and south in "Local Latitude".
- 3 Moving highlight to "Start" item and press [OK] key. The lower column on the screen will calculate the corresponding value automatically.
- 4 Orientation means the angle between south and satellite.
- 5 Press [Exit] key to draw back to "Tools" menu.

11.3 Default Value



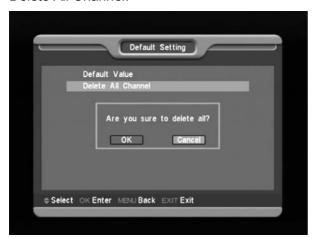
Default Value:



When you press [OK] key In the "Default Value" item:

- 1 There will pop a dialogue for you to enter the password, and the default password is "●●●●".
- 2 After you input the correct password, there will show a warning message to inquiry you "The operation will load default and erase all the channels that user added, continue?".
- 3 If you select "Yes" option, the all revised parameters of the receiver will reset to default value. Please carefully to using this function.
- 4 In step 1 and step 2, press[Exit]key can draw back from this item and without saving.

Delete All Channel:



When you press [OK] key in the "Delete All Channel":

- 1 There will display an dialogue for user to key in password. The default Password is "●●●●.".
- When you input the correct password, there will show up a warning message box to inquire you whether delete all or not.
- 3 If you select "Yes", all channels will be deleted.
- 4 In step 1 and step 2, press[Exit]key can exit the function directly without save.

? Frequently Asked Question

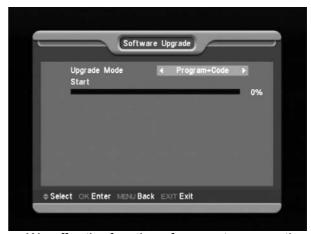
Q: IF I incautiously delete all channels, what should I do?

A: there are two ways to restore:

- To re-search all channels in "Installation" function.
- Use "Default Value" function to restore all channels in "Tools" function.

11.4 Software Upgrade

Upgrade by RS232:



- 1 We offer the functions for user to connecting receiver (Master) to the other receiver (Slave) via serial interface.
- 2 Connect master receiver to slave receiver via serial interface. Enter "Software Upgrade" menu in master receiver and press[Volume Up/Volume Down]keys to switch upgrade mode.
 - Upgrade modes include: code / Program List / user back /video back / radioback / defaultdb / code + program list.
- 3 Turn on slave receiver and it needn't operate any setting.
- 4 Moving highlight to "Start" on master receiver and press[OK]key to start upgrade.
- 5 Press [Exit]key to save the parameters and draw back.

12. Game



When you enter "Game" menu, you will see three Games include Tetris, Snake and Othello.

Basic operation statement:

12.1 Tetris

- Moving highlight to "Setup" and press [Volume Up/Volume Down] key to select the game level (speed).
- Moving highlight to "Start" and press [OK] key to start the game.
- Moving highlight to [Cancel]keys and press [OK]key to draw back from the game.
- ♦ Start on the game:
 - [Volume Up/Volume Down] Move shape left or right
 - > "Channel Up" Rotate clockwise
 - ➤ "Channel Down" Faster drop
 - > [OK] Pause/Play the game
 - > [Exit] Quit game and draw back to "Game" menu.

12.2 Snake

Moving highlight to "Setup" and press [Volume Up/Volume Down] key to select the game level (speed).

- ♦ Moving highlight to "Start" and press [OK] key to start the game.
- Moving highlight to[Cancel]keys and press [OK]key to draw back from the game.
- ♦ Start on the game:
 - [Volume Up/Volume Down/Channel UP/Channel Down] use these arrow keys to guide the snake.
 - > [OK] Pause/Play game
 - > [Exit] Quit game and draw back to "Game" menu.

12.3 Othello

- Moving highlight to "Setup" and press [Volume Up/Volume Down] keys to select the game level (degree of difficulty).
- Moving highlight to "Start" and press [OK] key to start the game.
- Moving highlight to [Cancel] keys and press [OK] key to draw back from the game.
- ♦ Start on the game:
- [Volume Up/Volume Down/Channel UP/Channel Down] use these arrow keys to guide chessman.
- > [OK] set chessman.
- > [Exit] Quit game and draw back to "Game" menu.

13. Trouble Shooting

If you suspect there is a fault with your receiver, please check the following trouble shooting guide before calling authorized service agent.

Warning! Under no circumstances attempt to repair the receiver yourself. Tampering with the receiver may result in fatal electric shock and will invalidate your warranty.

Symptom	Possible cause
Settings you made in the menu have not change	The receiver lost power before being able to enter into standby mode Some of the Settings saved by user can be deleted partly or fully
No signal	The level of signal is weak LNB is out of order The cable from the LNB is incorrectly Connected (short circuit or open circuit) The position of dish is aligned incorrectly
Receiver is on but no picture or sound except the following messages (NO TV program)	Channel is not available Channel is scramble
Receiver not responding to remote control unit	RCU batteries are dead or inserted incorrectly The RCU is pointing toward wrong direction
Poor picture Quality	The level of Signal strength is low
No sound	RCA cable is connected incorrectly The Volume level is low Muting function is active
No display on the LED Display Panel	The power cord is not plugged in correctly.
No picture on the screen	Receiver is in Standby mode RCA Jack is not connected firmly to the video output port of television Incorrect channel or video output is selected on television Brightness level of your TV set is incorrectly defined

14. Specifications

General

System standard Fully MPEGII/DVB Compliant
Channel Storage Max.4000 TV and Radio Channels

Input Frequency 950~2150Mhz RF Input level -65~-25dBm LNB Control DiSEqC1.0/1.2

LNB Power 13V/18V (Max, 500mA)

LNB tone switch

Waveform

Symbol rate

22KHZ

QPSK

2~45Mbps

A/V Mode

Video format MPEG-II Main profile/Main level

Audio format MPEG-II layer I&II

Aspect Ratio 16:9, 4:3 Audio sampling rate 32,44.1, 48kHz

Audio Type Mono Dual Mono, Stereo, Joint stereo

Graphic display 720x576(PAL)

Microprocessor & Memories

Processor 200 MIPS based CPU

RAM 64Mbits FLASH 16Mbits

Power & Environment Condition

Supply Voltage (230V AC, or 12V Satlink 12V)

Supply Power Max.16W Operating temp 5° C~45 $^{\circ}$ C

Physical Specification

LED display 4 digits (optional)

Weight 1.2kg (220mm size)

Dimensions 220(W) x 135(D) x 40(H)mm

Connection

Satellite IF input F-type (Digital)
Satellite IF loop out 950-2150MHz

RS232 9 way D Rs232 DCE serial port

Scart TV

Video Composite Video I/O, RGB, CVBS

Audio Audio left, Audio right

Control Output (Optional) 0/12V out

Modulator (Optional) UHF CH 21-69 Adjustable

Specifications subject to change without notice.

15. Declaration of conformity

The manufacturer herewith declares the conformity of that product with the following directives and standards:

Low Voltage Directive LVD 2006/95/EG

EN 60 065:2002+A1:2006

EMC Directive 2004/108/EG

EN 55 013:2001+A1:2003+A2:2006 EN 55 020:2007 EN 61 000-3-2:2006 EN 61 000-3-3:1995+A1:2001+A2:2005

Model: Satlink 2800 (12V)

CE