Digital Satellite Receiver

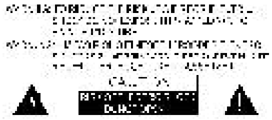
Common-Interface

TRAXIS
DBS-5500 CI
POWER
LOCK
4000
MENU
OK

DBS-5500 CI

TRAXIS

Safety First



Please review the following safety precautions. If this is the first time you have used a receiver, then read this manual before installing or using the receiver. If the receiver is not functioning properly, please contact your local distributor or system installer.

⚠ The lightning symbol in a triangle is used to alert you to the presence of dangerous voltage inside the receiver that may be sufficient to constitute a risk of electric shock to anyone opening the case. It is also used to indicate improper installation or handling of the receiver that could damage the electrical system in the receiver or in other equipment attached to the receiver.

⚠ The exclamation point in a triangle is used to alert you to important operating and maintenance instructions.Failure to follow these instructions could result in injury to you or damage to the receiver.

⚠ **Be careful with electricity:**

➢ Power outlet:	To prevent electric shock be sure the electrical plug used on the receiver's power cord matches the electrical outlet used to supply power to the receiver. Connect the power cord only to a power source that operates at 100~240 Volts AC, 50/60 Hz.
➢ Power cord:	Be sure the power cord is routed so that it will not be stepped on or pinched by heavy items.
➢ Power overloading:	Avoid overloading electrical outlets or extension cords, which otherwise could result in electric shock or fire.
➢ Power plug:	If a three-prong power plug is provided with the receiver, be sure it is used with a properly grounded three-wire power socket.
➢ Lightning:	For protection from lightning, or when the receiver is left unattended for a long period, disconnect it from the power source.
➢ Protect other equipment:	Unplug the receiver before connecting any other equipment,

especially the TV antenna connect all equipment to the receiver before plugging any power cords to the power source.

- Power line: Be sure your TV antenna is not located near overhead power lines, or where it might fall into any power lines. Also be careful to avoid touching any such power lines when installing the TV antenna.

Also follow these precautions:

- Ventilation: Do not block the ventilation slots on the receiver, or place any heavy object on top of it.
  Blocking the air flow could damage the receiver. Arrange components so that air can flow freely around the receiver.
  Ensure that there is adequate ventilation if the receiver is placed in a stand. Put the receiver in a properly ventilated area, away from direct sunlight or any source of heat.
- Overheating: Avoid stacking the receiver on top of a hot component such as a power amplifier.
- Risk Of Fire: Do not place the receiver on top of any easily combustible material, such as carpet or fabric.
- Proper Connections: Be sure all cables and equipment are connected to the receiver as described in this manual.
- Object Entry: To avoid electric shock, never stick anything in the slots on the case or remove the cover.
- Water Exposure: To reduce the risk of fire or electric shock, do not expose the receiver to rain or moisture.

The Way Of Prevent Satellite Receiving Antenna From Hitting By Mine

Satellite receiving antenna is fit on where is higher, which is easily hit by mine. Mine not only destroys the device, but also makes a menace to people's safety. So it is very important to fit on lightning rod on antenna.

1. The protection area of lightning rod

The protection area of lightning rod is $45^\circ \sim 60^\circ$ pie slice area under lightning rod. The antenna will be protected when it is in the pie slice area. Higher the lightning rod fit. Bigger the protection area is. Antenna must be fit in the protection area.

The distance between lightning rod and protected antenna should be more than 5m, because the faradism of lightning rod and its down-lead hit by mine can penetrate 2~3m air.

2. Wood pole lightning rod make and installation

Lightning rod is made up of (lightning rod's needlepoint), beanpole, grounded down-lead and grounded object.

The second image is wool pole beanpole lightning rod. Needlepoint is made of thicker brass wires and iron wires. The thick iron stick is better.

Beanpole may use wood pole or metal pole.

Grounded down-lead may use thicker iron wires or other metal bar, which upper part is connected with needlepoint,and its underpart is connected with grounded object under ground, the connection must use jointing. Grounded down-lead must use a whole wire, and select the shortest distance to connect with grounded object. Try your best not to make it bend.

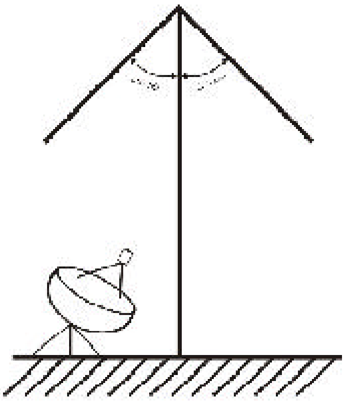
Grounded object is metal object under ground, which is usually made of steel tube, angle iron and steel needle etc. Its length should be 1~2m, and depth should be more than 2m. Grounded object of lightning rod can't be used by other grounded object at the same time. It must be connected with ground alone.

3. Metal pole lightning rod make and installation

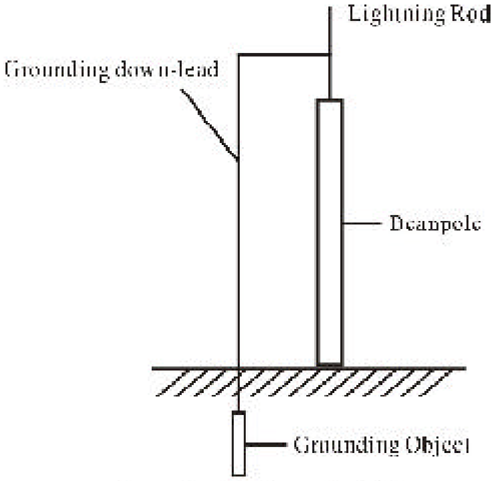
The lightning rod beanpole made of metal pole may use metal pole to lead mine electric current, without any additional grounded down-lead. Lightning rod's needlepoint is connected with metal pole by weld. Grounded object under ground can be made of steel tube, angle iron and steel needle etc, which length should be 1~2m. The depth should be more than 2m and dust some salt in the pit.

4. **Higher lightning rod fits, Bigger the protection area is.**

   When selected the setting place of lightning rod, users should try their best to keep away from ways and entrances where people often pass by, in order to prevent step voltage brought around lightning rod from harming people.



Lightning rod's protection area


Lightning Rod
Grounding down-lead
Beanpole
Grounding Object

Beanpole lightning rod sketch map

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Safety Instructions

1. Be sure to read this User's Manual before starting the operation of the receiver.
2. Do not open the cover. It is dangerous to touch the inside of the receiver due to possible electric hazard.
3. Use a soft cloth and a mild solution of washing-up liquid to clean the case.
4. When the reciver is unused for a long time, unplug the power cord from the wall outlet.
5. Do not connect or modify cables when the reciver is plugged in.
6. Do not use a damaged power cord that may cause a fire or an electric shock.
7. Do not touch a power cord with wet hand. It may cause an electric shock.
8. When connecting cables, the receiver must have been powered off.
9. Ensure a minimum distance of 5cm around the apparatus for sufficient ventilation.
10. Ensure that the ventilation is not impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
11. Do not place naked flame sources, such as lighted candles on the apparatus.
12. Take attention to the environmental aspects of battery disposal.
13. Use the apparatus only in moderate climates(not in tropical climates)
14. Do not expose the apparatus to dripping or splashing.
15. Do not place objects filled with liquids, such as vases, on the apparatus. The location of the markings is at the bottom of the apparatus.
16. CAUTION

    Danger of explosion if battery is incorrectly replaced.

    Replace only with the same of equivalent type.
17. Approval licence of CRT
18. Instruction for installation or use in a language acceptable to the country where the apparatus is intended to be used.
19. Current consumption is 150 mA

2 User's manual

General Features

1. Brilliant On Screen Graphic
2. MPEG-2 & Fully DVB Compliant
3. 2 Slot common interface for Viaccess, Irdeto, CryptoWorks, Nagravision, Conax, SECA and more.
4. MPEG-2 Video (MP@ML), MPEG-1 Audio Layerl, Layer2
5. 3~4 CH NTSC modulator
6. DiSEqC1.2 positioner for multi-satellites (63 satellites)
7. C/Ku band control for each antenna
8. User friendly and easy-to-use menu system
9. Easy and fast software upgrade through RS-232 port
10. LNB controlling logic (0/22KHz Tone)
11. SCPS/MCPC receivable form C/Ku-band satellites
12. Digital tuner with Loop-through
13. Wide symbol rate1~45Mbps & frequency input 950~2150MHz
14. DiSEqC1.2 supported
15. User friendly OSD menu with full function
16. 256 colors graphic user interface
17. Multi-language menu
18. 8-digit 7-segment LED display
19. Variable aspect ratio(4:3,16:9) with Pan Vector or Letter Box
20. EPG(Electronic Program Guide) for on-screen channel information.
21. Small screen picture on EPG
22. Capacity for storing multi channel(FTA.4000 channels,1500 transponders)
23. 8 favorite groups and Parental Lock function.
24. Pause and release picture.
25. Antenna positioning help feature.
26. SCPC/MCPC receivable from C/Ku band satellite
27. Multi LNB controlled by DiSEqC1.2 and 22KHz.
28. S-VIDEO output.
29. S/PDIF(Coaxial and optical AC-3) output.

Unpacking

Unpack the receiver and check to make sure that all of the following items are included in the packaging.

- **1 x User's Manual**
- **1 x Remote Control Unit (RCU)**
- **1 x Digital Satellite Receiver**
- **1 x Audio/Video Cable**

General Information

Throughout this manual you will notice that the everyday operation of your Receiver is based on a series of user friendly on-screen displays and menus. These menus will help you get the most from your Receiver, guiding you through installation, channel selection, viewing and many other functions.

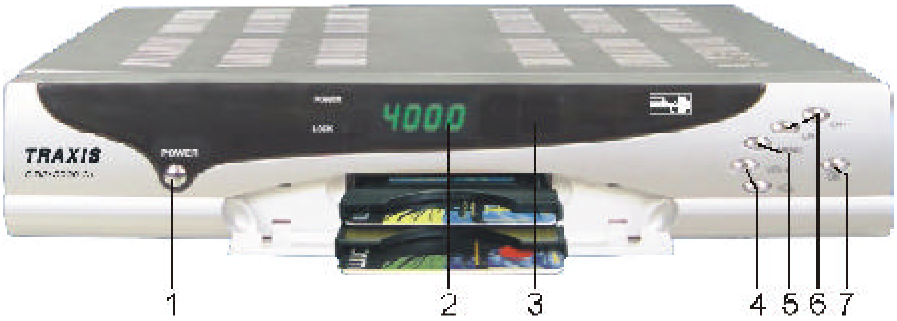
All functions can be carried out using the buttons on the remote control, and some of the functions can also be carried out using the buttons on the front panel.

Please be aware that new software may change the functionality of the Receiver.

Should you experience any difficulties with the operation of your Receiver, please consult the relevant section of this manual, including the Problem Solving, or alternatively call your dealer or a customer service requirement.

4 User's manual

Front panel

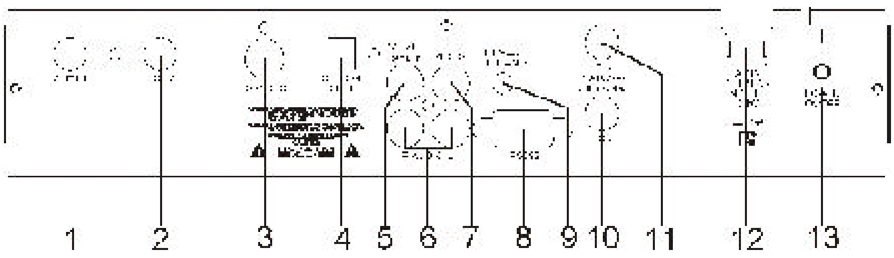


1. POWER: Is used to switch between the working mode or the standby mode.
2. Display (4-Digit/7-Segment): Displays the received channel while operating and time while in standby mode.
3. Remote Sensor: Detects the infrared signals from the remote control unit.
4. VOL+/-: To change volume, to move cursor, change numbers in the menu or to change the choice.
5. MENU: To enter into the main menu and exit all menus.
6. CH+/-: To change channel or move up and down within the menus.
7. OK: To select an item in the menu and confirm it or pop up channel list.

Front Panel Display

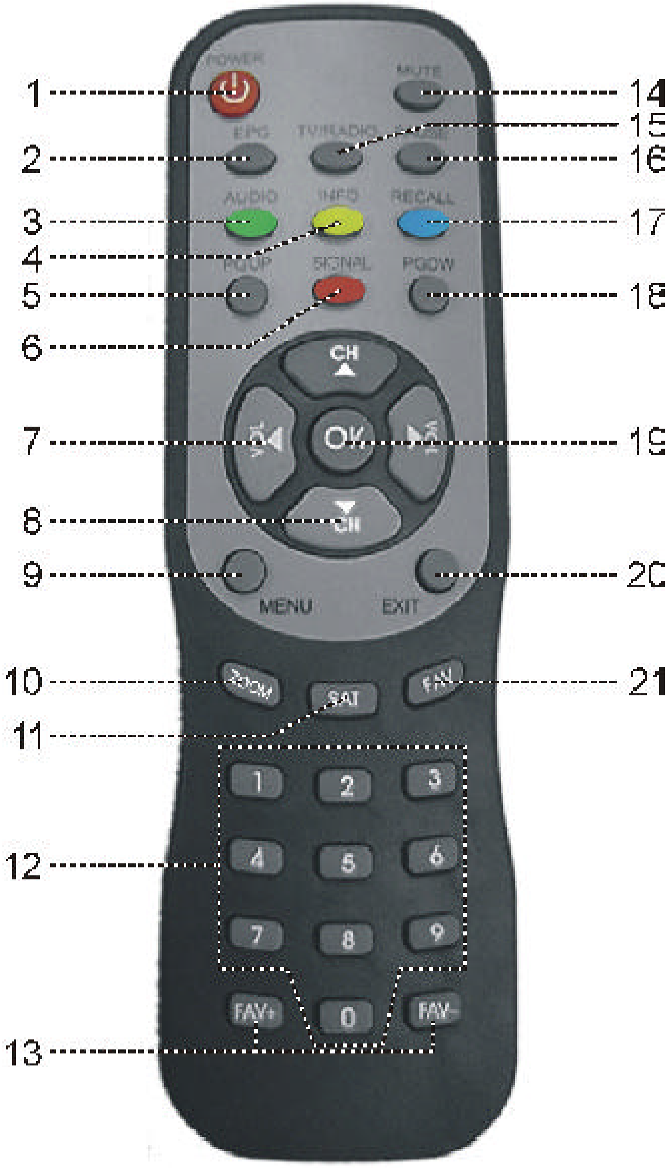
U 52	RF CHANNEL	LOAd	LOADER MODE
E007	FLASH ROM ERROR	HELLO	OPENING GREETINGS
ERR	ERROR	-ES-	UPDATE WAITING
00:25	STANDBY/TIME	A001	RECEIVE DATA
0001	TV/RADIO MODE	.	SIGNAL IS RECEIVED
-End	UPDATING IS FINISHED		NO SIGNAL IS RECEIVED

Rear panel



1. ANT IN: Input from terrestrial.
2. To TV: Output to TV.
3. S-VIDEO: S-Video output.
4. S/PDIF(OPTICAL): AC-3 output(optical).
5. S/PDIF(COAXIAL): AC-3 output(coaxial).
6. AUDIO: Audio output.
7. VIDEO: Video output.
8. RS-232: Serial port to upgrade software.
9. 0/12V: 0/12V DC output.
10. IF OUT: IF output from LNB to other digital tuner.
11. IF IN: IF input from LNB to digital tuner.
12. AC IN: AC power input(50/60Hz, 30W).
13. POWER ON/OFF(▌=On, ○ =Off).

Remote Control Unit


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
POWER
MUTE
EPG
TV/RADIO
AUDIO
INFO
RECALL
PGUP
SIGNAL
PGDW
CH
OK
CH
MENU
EXIT
ZOOM
SAT
FAV
1
2
3
4
5
6
7
8
9
FAV+
0
FAV-

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

1. POWER: Is used to switch between the working mode or the standby mode.
2. EPG: To display the electronic TV/Radio program guide.
3. AUDIO: To set the audio output mode and change the audio language.
4. INFO: To display the current transmission information, signal strength and quality.
5. PGUP: To move the cursor up by a page in the menu or channel list.
6. SIGNAL: To show the signal strength and quality of the current program.
7. VOL+/-: To adjust the volume level or change numbers, or move left and right in the menu.
8. CH+/-: To change channels in viewing mode or move the cursor up/down in menu mode.
9. MENU: To display the main menu in viewing mode and the TV/radio program screen in menu mode.
10. ZOOM: To enlarge the picture.
11. SAT: To select satellite channel list.
12. NUMERIC KEY(0-9): To control the numerical operation and especially change the program channel selection directly.
13. FAV+/-: To switch between the selected favorite channels.
14. MUTE: Turns the sound output on/off.
15. TV/RADIO: To switche between TV and radio programs.
16. PAUSE: To select or de-select picture freeze.
17. RECALL: To return to the previously selected channel.
18. PGDW: To move the cursor down by a page in the menu or channel list.
19. OK: To select an item in the menu and confirm it or pop up channel list.
20. EXIT: To exit from the menu or other onscreen displays.
21. FAV: To display the current favorite channel list, or to view general information see favorite channel list for more details.

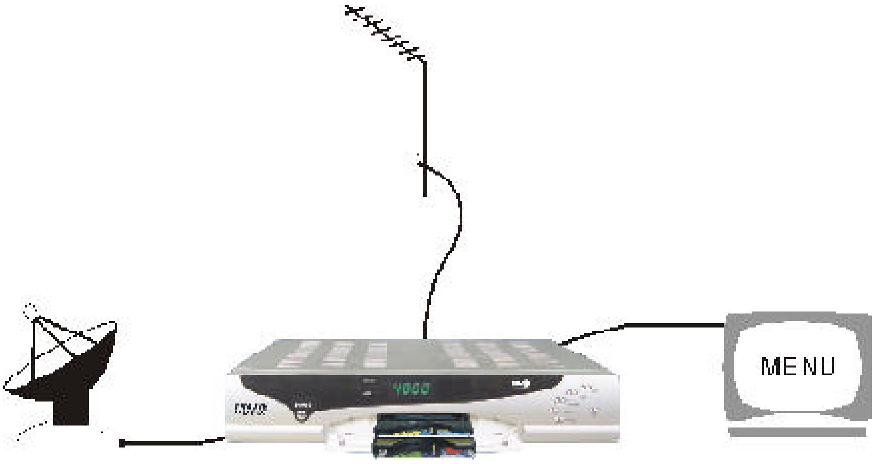
8

User's manual

Installation of Receiver

This section explains the installation of Receiver. Refer to the manuals supplied with the equipment for the installation of outdoor equipment such as the dish antenna. When adding new equipment, be sure to refer to the related parts of the manual for the installation.

Connecting to Antenna and TV



Connecting to a TV and VCR

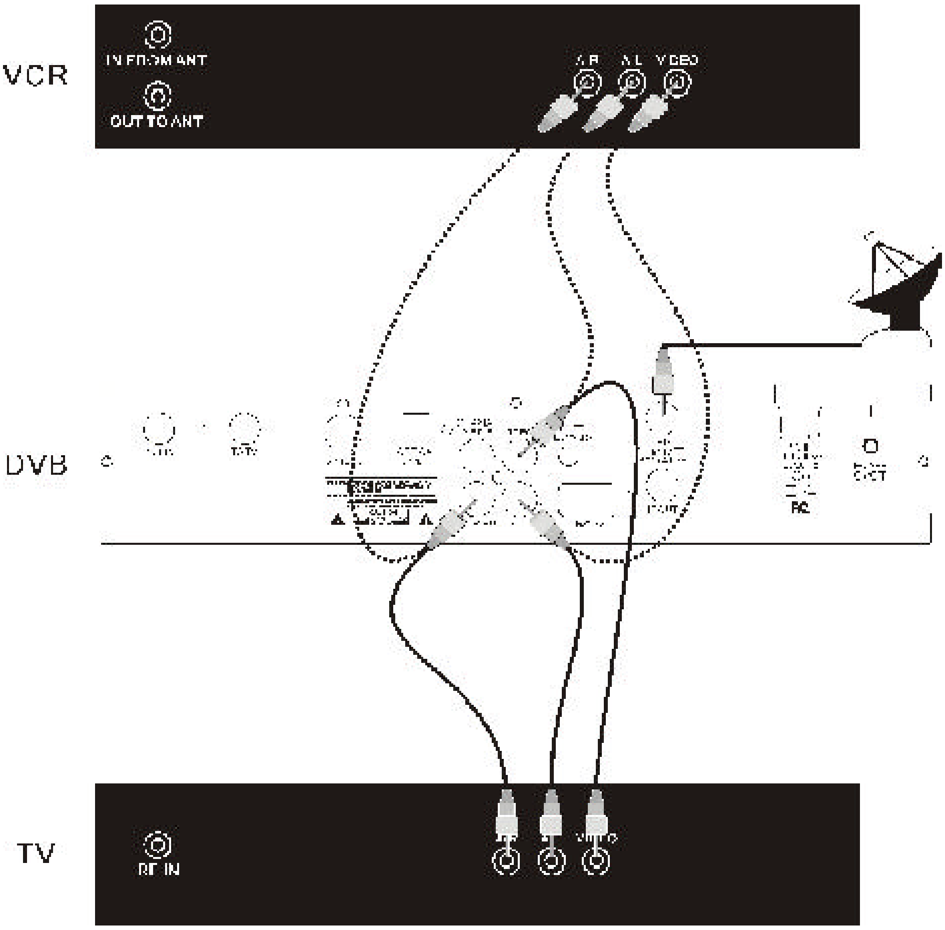
1. Refer to your video recorder manual for full instructions.

2. Connect one SCART cable between the main SCART socket on the TV and the TV SCART socket on the Receiver.

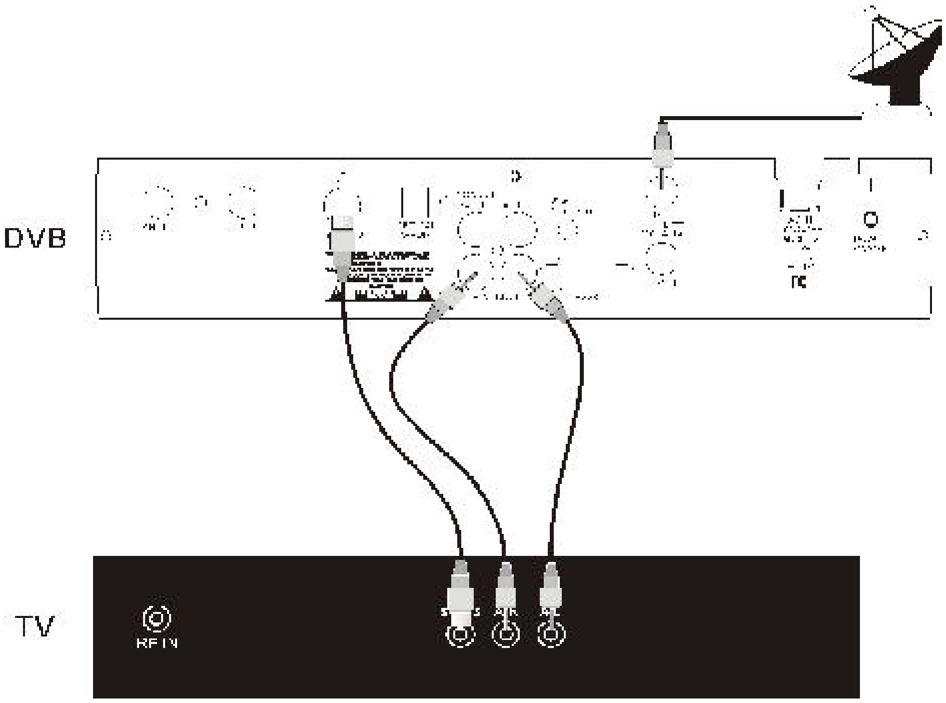
3. Connect the RF cable from the RF output on the VCR to the RF IN on the TV.

4. Connect the TV antenna to the **ANT IN** on the Receiver.

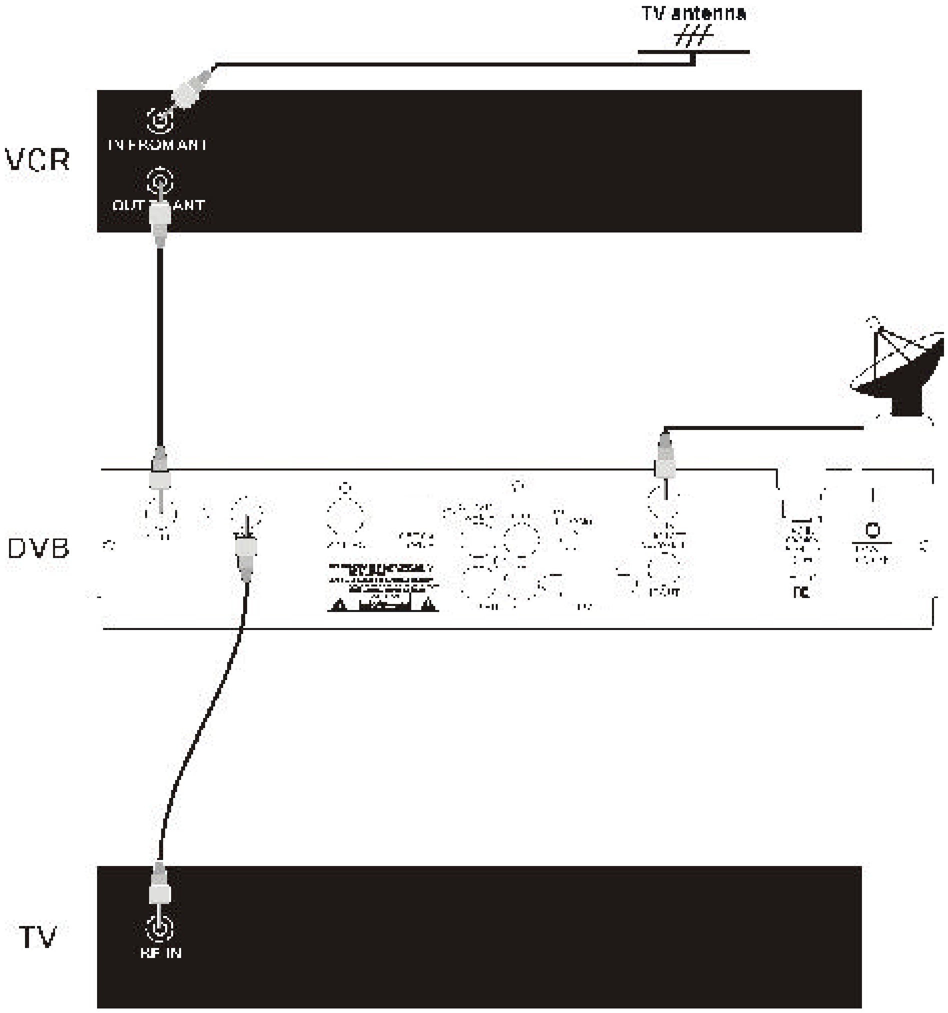
Connecting to TV using RCA Support


VCR
IN FROM ANT
OUT TO ANT
A R
A L
VIDEO
DVB
TV
RF IN
VIDEO

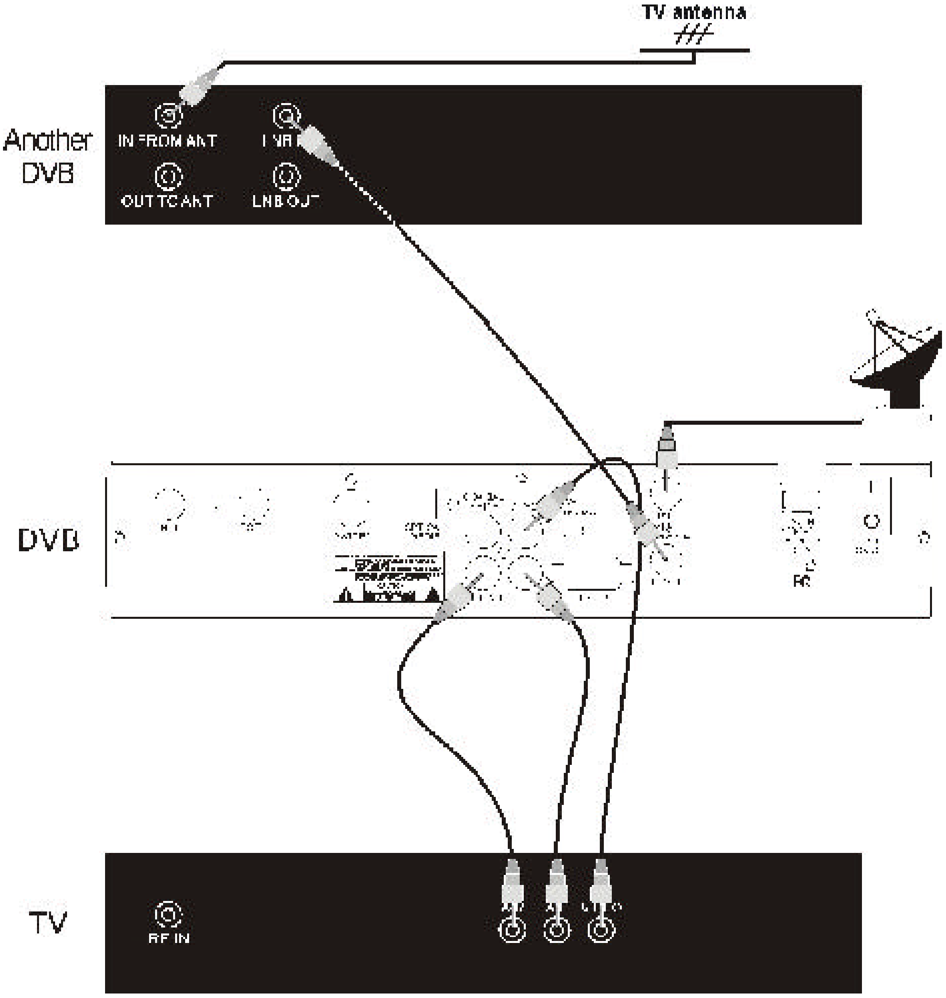
Connecting to TV using S-VHS Support



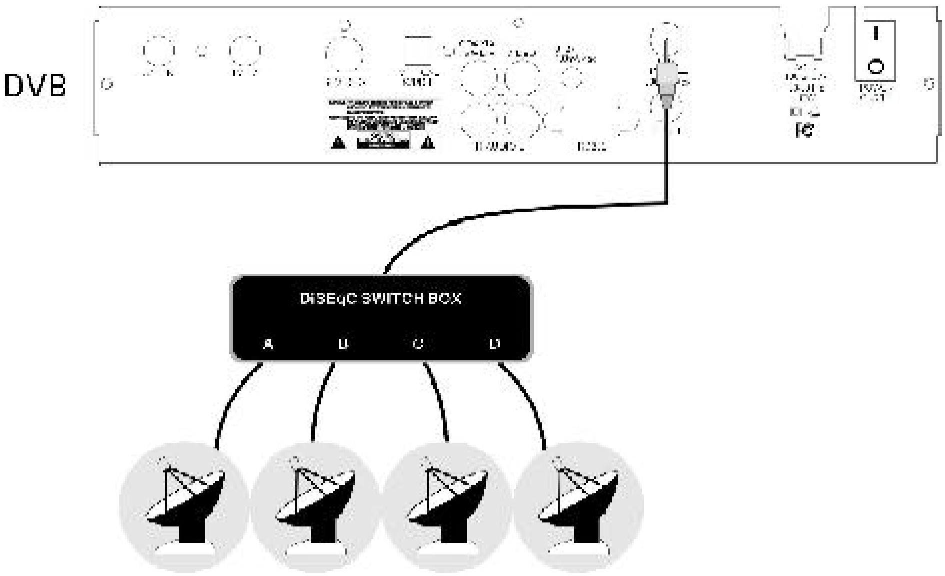
Connecting to TV using RF Support


TV antenna
VCR
IN FROM ANT
OUT TO ANT
DVB
TV
RF IN

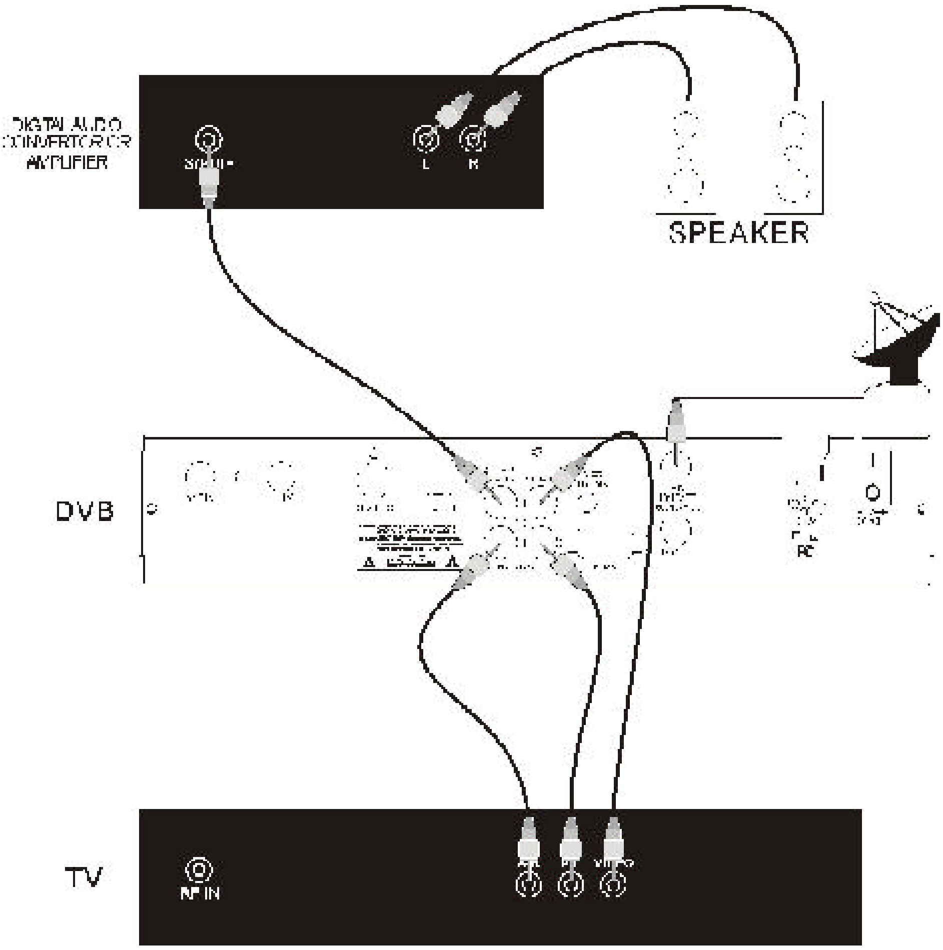
Connecting to another DVB


TV antenna
Another DVB
IN FROM ANT
LNB IN
OUT TO ANT
LNB OUT
DVB
TV
RF IN

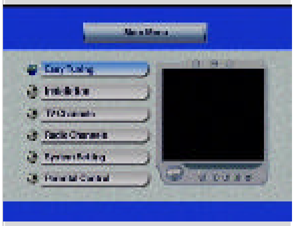
Connecting DiSEqC switch box


DVB
DiSEqC SWITCH BOX
A
B
C
D

Connecting to TV using S/PDIF(COAXIAL) Support


DIGITAL AUDIO
CONVERTOR OR
AMPLIFIER
S/PDIF
L
R
SPEAKER
DVB
TV
RF IN
VIDEO

Main Menu



Once you have installed and connected the cables, the menu will be displayed.

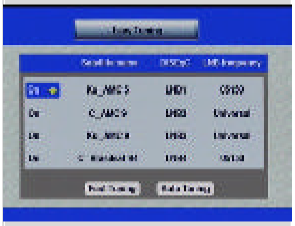
This menu consists of **6** main menus as shown below.

- **Easy Tuning**
- **Installation**
- **TV Channels**
- **Radio Channels**
- **System Setting**
- **Parental Control**

During the **Installation** the **OK** key confirms a selection. Use the **CH+/-** key to move up or down from one line to another line.

To escape the menu system at anytime, press **EXIT** key on the RCU.

1. Easy Tuning



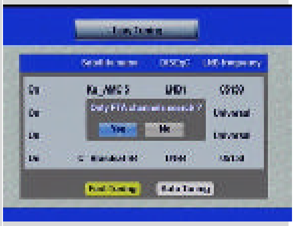
With its DiSEqC1.0, the STB can drive four individual LNB's.So, this feature allows you to search up to four satellites at one time.

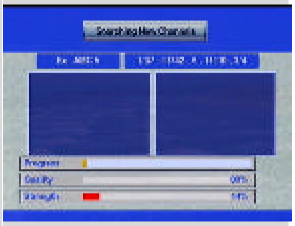
If you want to search the selected satellite, set the corresponding status to be **ON** by using **VOL+/-** key.

Satellite name: Select one item in the first column by using **CH+/-** key and press **VOL+/-** key to pop up a list box which lets you to select the desired satellite name. Use **CH+/-** key to select and press **OK** key to confirm. Please make sure that the antenna of the selected satellite has been connected to one of LNB's input ports.

DiSEqC: Press **VOL+/-** key to select the proper LNB's input port according to your satellite antenna connection.

LNB Frequency: ALL of the standard typical local oscillation frequency values are user spendable. Press **VOL+/-** key to select the desired one. If Universal is selected, both 9750 and 10600MHz are supported at the same time.



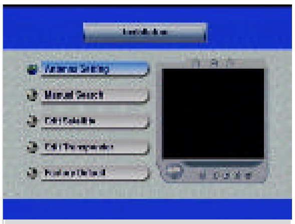


- **Fast Tuning/Auto Tuning**

After the above mentioned ones are set correctly, Select **Fast Tuning**, search all channels. Select **Auto Tuning**, search not only all channels , but also it can download new channels, the searching speed is slower than **Fast Tuning**, press **OK** key, then the message"FTA channels only?" will be displayed. So, one decision needs to be made before proceeding to search.If **YES** is selected, only free to air channels can be searched. Otherwise, system will search all the channels. Once you make a decision, **Searching new channels** window will display on the screen, If more than one satellite are set to be **ON**, then each satellite will be searched one after the other. During searching, the searched channels are automatically sorted into two category: TV and Radio. Two dynamic bars at the bottom of the window reflect the signal strength and signal quality. If you want to stop searching, please press **EXIT** key during this procedure. New searched channels will be added to channel list displayed by pressing **OK** key at the no menu mode automatically.

2. Installation

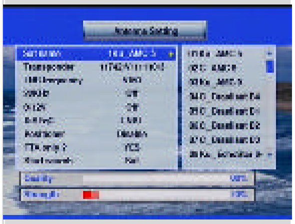
Select **Installation** in **Main Menu** by using **CH+/-** key, press **OK** key, you will see the sub-menu as shown. It has **5** items:


Installation
Antenna Setting
Manual Search
Edit Satellite
Edit Transponder
Factory Default

- Antenna Setting
- Manual Search
- Edit Satellite
- Edit Transponder
- Factory Default

Select the item you want to operate by using **CH+/-** key and press **OK** key to enter the corresponding sub-menu.

2.1 Antenna Setting


Antenna Setting
Sat name
Transponder
LNB frequency
22KHz
0/12V
DiSEqC
Positioner
FTA only ?
Start search
Quality
Strength

You should set the appropriate parameter values with which you can search channels here.

Sat name: Select the name of the satellite by using **VOL+/-** key which needs to be searched.

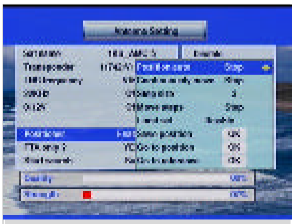
Transponder: Switch among all the transponders carried on the satellite shown in the first item.

LNB frequency: All of the standard typical local oscillator frequencies are available and any unusual values can simply be manually entered. Select the desired one from the preprogrammed options by using **VOL+/-** key or use numeric keys on the RCU to enter your required LNB frequency. If Universal is selected, both 9750 and 10600 MHz are supported at the same time.

22KHz: In case you need to supply 22K tone to your LNB or antenna switch, set 22KHz to be **ON** by using **VOL+/-** key. If the LNB frequency is set universal, the 22KHz will operate automatically.

If there is signal under the selected satellite, two dynamic bars at the bottom of the menu will reflect the signal strength and signal quality.

DiSEqC: If DiSEqC box is DiSEqC1.0, positioner should be set disable. Since the STB is integrated with DiSEqC



1.2, it is possible to control an appropriate motor to driver multiple antennas. Although you have entered correct values in Antenna setting menu, if your antenna is positioned incorrectly, you will not receive signal from the satellite. So, the STB provides motorised setup in order to let you adjust the antenna more accurately to direct it toward a satellite. Set **Positioner** to be **Enable** and press **OK** key, the **Positioner** setup menu will be displayed on the screen.

➢ **Position auto:** Select **Position auto**, select the direction by using **VOL+/-** key. During moving, Press any key to stop if you want. If find the signal, it will stop automatically. After finding the signal, you can use **Move steps** to find the best position. When you have the best position of the dish, select **Save position** to save.

➢ **Continuously Move:** Please select this item and then keep pressing **VOL**+/- key on the RCU to move your antenna east or west. Use the signal strength and signal quality bars at the bottom of the screen to judge the best position of the antenna.

➢ **Step Size:** The setting range is from 1 to 10. Use **VOL+/-** key to switch among them.

➢ **Move Steps:** Use **VOL+/-** key to select the required move steps.

➢ **Limit Set:** Use this item to set the **East** and **West** limits of the motor. This should be used to prevent your dish from hitting anything that may obstruct the path of the dish. Highight this item and press **VOL+/-** key to move your motor east or west limit, then press **OK** key on the RCU to save.

To set the **West Limit**, follow the same steps as **East Limit**.

Warning: If this item is disabled, your motor will be able

to move beyond any limits. Please take care in case there are anything obstructing the path of your dish.

- **Save position:** Save the position of the satellite.
- **Go to position:** Press **OK** key, the motor will return to the last position of the satellite.
- **Go to reference:** The motorised system of factory.

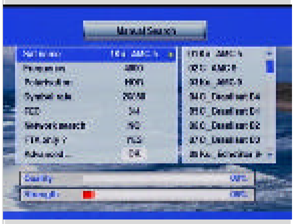
FTA Only: FTA Only **Yes**, Search only free to air channels. FTA Only **No**, Search all channels.

Start search: Select **Start search** by using **CH+/-** key. Select Sat/Network/TP by using **VOL+/-** key. Select **Sat**, search satellite channels. Select **Network**, search some new channels from some transponders. Select **TP**, search transponder channels.

Searching New Channels

Once **OK** key is pressed, **Searching New Channels** window will appear on the screen. During searching, you can see the parameter information of the searched transponder. When searching is finished, the Antenna Setting menu will appear instead of the **Searching New Channels** window. The searched channels will be added to the channel list displayed by using **OK** key at the non-menu mode.

2.2 Manual Search



You should set the various parameter values beforehand. Two dynamic bars at the bottom of the window reflect the signal strength and signal quality of the current parameters.

Select **Manual Search** by using **CH+/-** key, press **OK** key, you will see the sub-menu as shown.

Sat name: Select the name of the satellite by using **VOL+/-** key which needs to be searched.

Frequency: Select a valid transponder in the satellite or input the frequency (0~20000) MHz.

Polarisation: Select the polarisation of transponder between **HOR** and **VER** by using **VOL+/-** key.

Symbol rate: Press **numeric** keys to enter your required value manually. Input the correct symbol rate (0~45000).

FEC (Forward Error Correction): Select the **FEC** of transponder by using **VOL+/-** key. Available option are Auto, 1/2, 2/3, 3/4, 5/6 and 7/8.

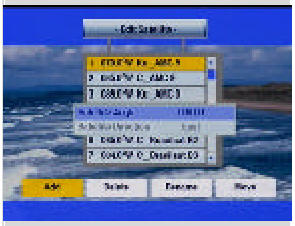
Network search: Select **YES**, Search some new channels from some transponders. Select **NO**, Only search the transponder channels.

FTA Only: FTA Only **Yes**, Search only free to air channels.

FTA Only **No**, Search all channels.

Advanced: Manual PID entry are possible here. Pressing **OK** key on the RCU will display **Advanced Search** menu. Use **CH+/-** key to activate the PID item you want to modify and input the appropriate value by using **numeric** keys on the RCU. After finishing the input, press **OK** key to confirm or press **EXIT** key to return **Manual Search** menu.

2.3 Edit Satellite



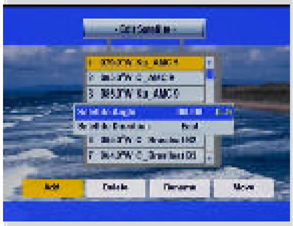
This menu consists of two parts, the upper part showing a list of the satellite name and the lower part listing four command options which are used to **add**, **delete**, **rename** and **move** the satellite shown in the upper list. To scroll the displayed satellite name, move the scroll bar on right edge of the list box by using **CH+/-** key or **PGUP/PGDW** key. Select some command options and press **OK** to execute the corresponding command.
Select **Edit Satellite** command by using **CH+/-** key, press

OK key, you will see the sub-menu as shown.

Add

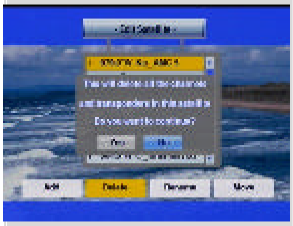
If your required satellite isn't listed, the adding command enables you to add the new satellite to the list.

Select **Add** by using **VOL+/-** key, and press **OK** key, the screen will display. After you input data, press **OK** key, then a new satellite item will be displayed next to the last satellite item, you should rename it by using **Rename** command explained below.



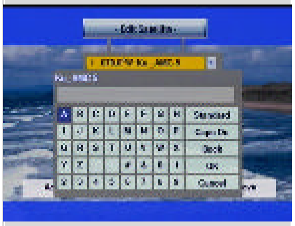
Delete

This command allows you to delete one or more satellites from the satellite list. Select **Delete** by using **VOL+/-**key, select a satellite you want to delete by using **CH+/-** key or **PGUP/PGDW** key. Press **OK** key, you will see the sub-menu. If select **Yes** by using **VOL+/-** key, press **OK** key, then delete the satellite, else cancel operation.



Rename

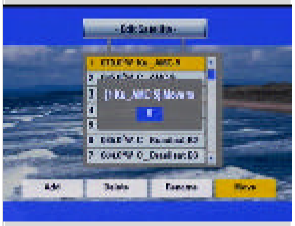
The command allows you to modify satellite name. selected **Rename** command by using **VOL+/-** key, select a satellite by using **CH+/-** key, and press **OK** key, you will see the sub-menu as shown. The operation for rename satellite is the same as **Rename Channel**.



Move

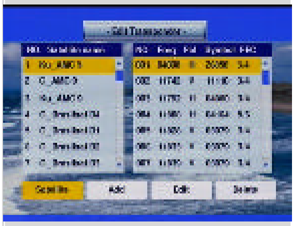
After selecting this command, a small input box will appear on the screen. you need to input a number within the rang from 1 to the total number of the existing satellites by using **numeric** keys on the RCU. After pressing **OK** key, the selected satellite will be moved to the new location specified by your input.

Select **Move** command by using **VOL+/-** key, select a satellite you want by using **CH+/-** key, Press **OK** key,



you will see the sub-menu as shown.

2.4 Edit Transponder



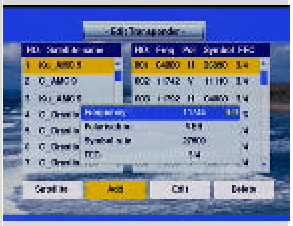
Select **Edit Transponder** item on the **Installation** menu by using **CH+/-** key and press **OK** key to display **Edit Transponder** menu.

As soon as a satellite name is selected by using **CH+/-** key in the left satellite list, all the transponders which are carried on the selected satellite are shown in the right list.

➢ Satellite

This command gives you the access to **Edit Satellite** menu.

➢ Add



The adding command allows you to add one or more transponders for the selected satellite.

First Select a satellite by using **CH+/-** key, then select Add command by using **VOL+/-** key and press **OK** key to display the **Add Transponder** menu. This menu lets you to set relevant parameters of the added transponder. Please operate as per the following specification.

1. Frequency: First use **CH+/-** key to highlight this item. Use numeric on the RCU to input frequency. After finishing the input, press **OK** key for comfirmation, then you will exit from the edit mode.

2. Polarisation: Select the polarisation of the transponder by using **VOL+/-** key between **HOR** or **VER**.

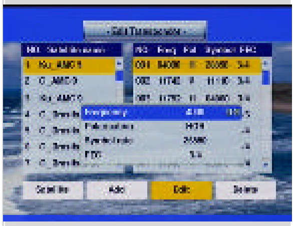
3. Symbol rate: The operating methods are the same as **Frequency**.

4. FEC: Select the appropriate **FEC** from the preprogrammed options, including Auto, 1/2, 2/3, 3/4, 5/6, 7/8.

After the above parameters are set, press **OK** key to return **Edit Transponder** menu. Then you can see the parameters which are set by you in the right list.

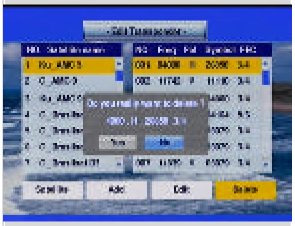
- **Edit**

Select the transponder item you want to modify from the right list, and use **VOL+/-** key to select **Edit** command. The **Edit Transponder** window will appear on the screen after pressing **OK** key. The operating methods are the same as **Add** command.



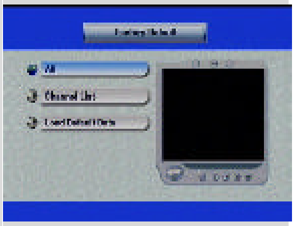
- **Delete**

This command allows you to delete the existing transponders of the selected satellite.



By using **CH+/-** key, select the unwanted transponder item from the right list, then press **VOL+/-** key to select **Delete** command. Once **OK** key is pressed, a dialog box which requires you to decide whether to delete the selected item will appear on the screen. Choose **Yes** and press **OK** key to delete, else cancel the operation.

2.5 Factory Default



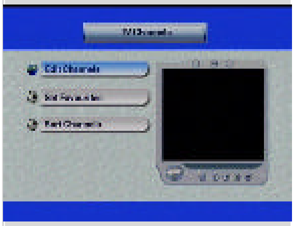
This menu consists of the **All**, **Channel List** and **Load Default Data**. Use **CH+/-** key to select one item and press **OK** key to enter the corresponding sub-menu.

Select **All**, all your settings and stored data are deleted. The receiver is reset to original settings.

Select **Channel list**, your personal channel list is deleted.

Select **Load Default Data**, if you have deleted a personal channel list, you must load company settings of the channel list using **Load default settings** subsequently.

3 TV Channels

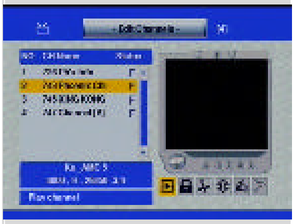


Select **TV Channels** in **Main Menu** by using **CH+/-** key, press **OK** key, you will see the sub-menu as shown. It has **3** items:

- **Edit Channels**
- **Set Favourites**
- **Sort Channels**

This menu gives you access to options which allow you to edit channels, set favourites and sort channels. Move cursor to the desired option by using **CH+/-** key and press **OK** key to enter the corresponding sub-menu.

3.1 Edit Channels

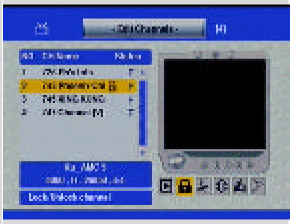


In the lower-right corner of the Edit Channels menu, you can see a series of icons and a title bar showing the meaning to the highlighted icon. First press **CH+/-** key to select one channel from the channel list at the left side of the menu, then select some icon by using **VOL+/-** key and press **OK** key to execute the corresponding command.

- **Play Channel**

You can watch the selected channel in Graphic(PIG)mode via the window at the left side of the menu.

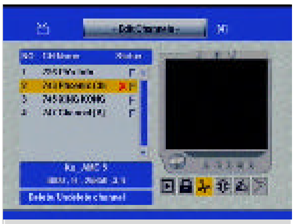
- **Lock Channel**



First select one channel from the channel list, then select the second icon and press **OK** key, a password is required, the default value is “0000”, then the selected channel will be marked with 🔒. Please note that you can’t view the locked channel unless you input a right password.

- **Delete Channel**

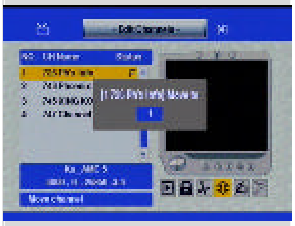
This command allows you delete one or more channels permanently. First select the unwanted channel item,



then use **VOL+/-** key to select the third icon. ✈ symbol will appear on the selected channel item after pressing **OK** key.

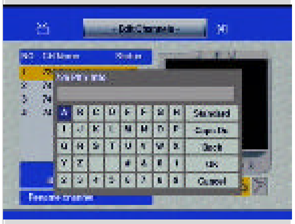
Note: The deleted channel can't be watched unless you search it again.

Move Channel



After selecting this command, a small input box will appear on the screen. You need to input a number within the range from 1 to the total number of the existing channels by using **numeric** key on the RCU. After pressing **OK** key, the selected channel will be moved to the new location specified by your input.

Rename Channel



Select the channel whose name needs to be modified as you like, then selected **Rename** icon and press **OK** key. a keypad dialog consisting of a title bar, a alphabet and five function will appear on the screen.

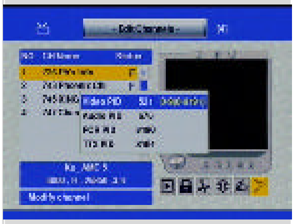
Caps on: Switch capital and lowercase.

Back: Delete character one by one.

Cancel: Delete all characters.

Select character by using **CH+/-**, **VOL+/-** or **OK** key to rename channel. Press **OK** command to confirm it.

Modify Channel



This command allows you to modify the PID values of the selected channel. First select one channel from the channel list, then select the last icon and press **OK** key to display **Modify Channel** window.

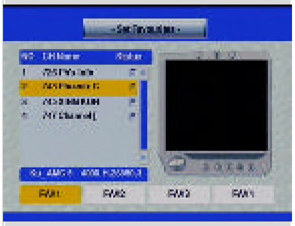
Modify various PID values as per the following steps:

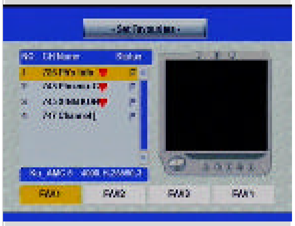
1. Move cursor to highlight the item you want to modify by using **CH+/-** key.
2. Select **Modify** command by using **VOL+/-** key.
3. Use **numeric** key to input.

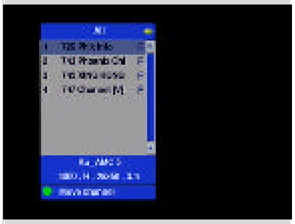
4. After the whole PID value is set, press **OK** key for confirmation, then you will exit from the edit mode.

5. Move cursor to next item by using **CH+/-** key.

3.2 Set Favourites







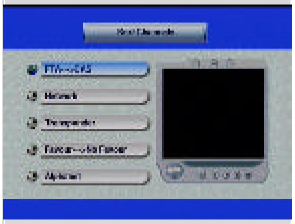
In Set Favourites menu, popular programs can be added to one of eight different favourite lists labeled them **FAV1**, **FAV2**, **FAV3**, **FAV4**, **FAV5**, **FAV6**, **FAV7** and **FAV8**.

- **FAV1**

First use **VOL+/-** key to select the name of the favourite groups **FAV1**, press **green** key, you can rename favourite group. Move cursor to highlight your favourite channel and press **OK** key, the selected channel will be marked with ♥. To cancel your selection, press **OK** key again. After finished, exit all menus, press **FAV**, you will see favourite channels of **FAV1** group.

The operation for the **FAV2**, **FAV3**, **FAV4**, **FAV5**, **FAV6**, **FAV7** and **FAV8** are the same as **FAV1**.

3.3 Sort Channels



This feature allows you to sort channels as you like. In **Sort Channels** menu, select the sort order you want by using **CH+/-** key and press **OK** key to confirm. Meanwhile, **Edit Channel** window where all the channels are arranged according to your choice appears on the screen.

- **FTA--->CAS**

Free to air channels will be listed ahead of the scrambled channels.

- **Network**

All the programs will be arranged according to the satellites' sequence.

- **Transponder**

All the programs will be arranged according to the transponders' sequence.

- **Favour--->No Favour**

Favourite channels will be listed ahead of the others.

- **Alphabet**

All the channels will be sorted in alphabetical order. in other words, sort the channels from A(a)~Z(z).

4 Radio Channels

Select **Radio channel** by using **CH+/-** key in **Main Menu**, you will see the sub-menu as shown. The operation for the **Radio Channels** is the same as **TV Channels**. while watching the channel, to switch between TV and radio modes press **TV/RADIO** on the RCU. To increase or decrease the volume, by using **VOL+/-** key either on the RCU when watching TV or listening radio. When watching a channel, the video from the current channel is frozen as soon as **PAUSE** key is pressed. Press **PAUSE** key again to continue watching.

5 System Setting

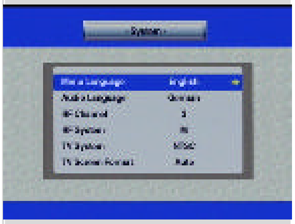
Select **System Setting** in **Main Menu** by using **CH+/-** key, press **OK** key, you will see the sub-menu as shown. It has **6** items:

- **System**
- **OSD**
- **Select Time Zone**

- **Timer**
- **About STB**
- **Common Interface**

Select the item you want to operate by using **CH+/-** key and press **OK** key to enter the corresponding sub-menu.

5.1 System



This menu consists of the following items:

Menu Language: System supports English, German, French, Spanish, Portugal and Italian. Press **VOL+/-** key to select the desired language for menu.

Audio Language: Select the first language to listen if this language is supported by current program. This depends on the transmission of audio signal.

RF Channel

In case your TV is connect through RF modulator (VHF), select output channel number you want.

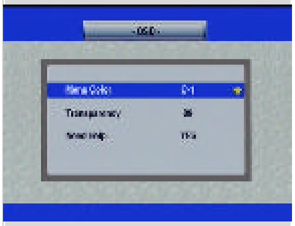
RF System

NTSC M.

TV System: Select your TV type between PAL, NTSC and SECAM by using **VOL+/-** key.

TV Screen Format: Select your TV aspect ratio of output video either 4:3, 16:9, Auto or 4:3 pan by using **VOL+/-** key.

5.2 OSD

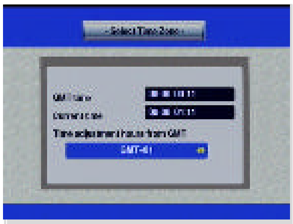


Menu Color: Select your favourite color of menu by using **VOL+/-** key.

Transparency: You can adjust the transparency of the menu from 1 to 10 by using **VOL+/-** key.

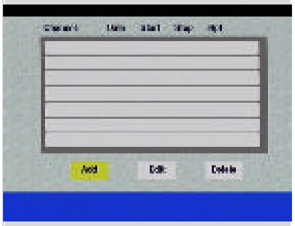
Need Help: As soon as **YES** is selected, usable keys and relevant specification are displayed at the bottom of the menu.

5.3 Select Time Zone

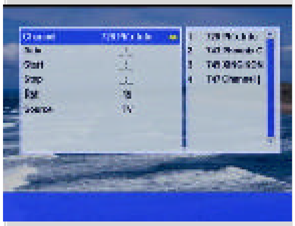


In order to display the local time correctly, it may be necessary to set a time offset indicating the difference between local time and GMT. press **VOL+/-** key to select your required from the preprogrammed options.

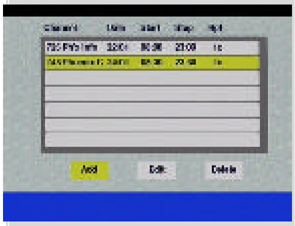
5.4 Timer

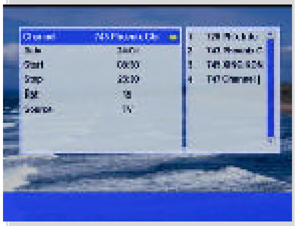


The timer automatically turns on the receiver for certain favour channel and adjusts the desired channel. Here you can control the records for different datas and from different channels.

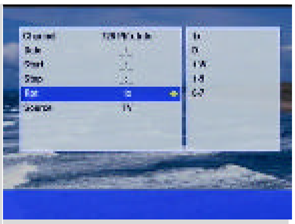


Add you wanted channel to set timer, select **Timer** in **System Setting** menu, press **OK** key, a timer list is displayed. Mark **Add**, **Edit** and **Delete** field by using **VOL+/-** key depending on whether you want to carry out timer setting. First select you wanted to add channel, press **VOL+/-** key to switch channel, press **OK** key to confirm it, input Data, Start, Stop, Rpt and Source with **CH+/-**, **VOL+/-** and **numeric** keys. then input the desired values using **numerical** keys, press **OK** key to confirm the timer setting, the timer setting is displayed. The new timer setting is included in the list. Carry out further timer settings if you wish to do so. Press **EXIT** key to exit the menu.





Notes: Select **Rpt** by using **CH+/-**, press **VOL+/-** to switch it. It has 5 kinds instance.



1x: Repeat once per day. D: Repeat on the set day.

1W: Repeat once from monday to Sunday.

1~5: Repeat once on each day from Monday to Friday.

6~7: Repeat once on each day from Saturday to Sunday.

Information
Hardware :
Flash:
Company:

5.5 About STB

From here, you get not only the information about the hardware and the software, but also the manufacture name.

5.6 Common Interface

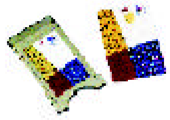
1. Preparing

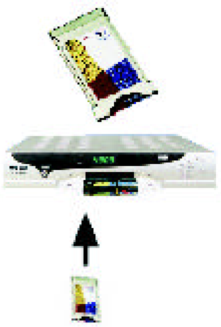
To be able to receive scrambled digital satellite channels you need a Smartcard and a Common Interface CA (Conditional Access) module from the Service Provider of your choice.

The Smartcard and the PCMCIA module may also provide access to special menus not described in this manual. If so, please follow the instructions from the Service Provider.

Only free to air channels are available without the Smartcard and PCMCIA Module.

Insert the PCMCIA Module in the slot of Receiver and insert the Smartcard to the PCMCIA module. This will





give you access to scrambled channels.

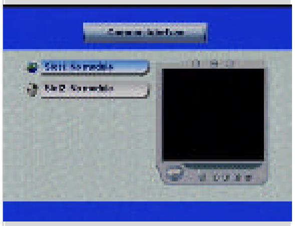
Note: Receiver has 2 slots for PCMCIA Module.

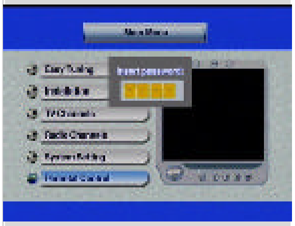
2. Check Manager

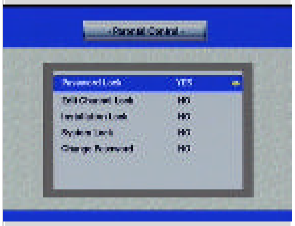
Select **Common Interface** menu in the **Main Menu** page. Then Receiver detects and shows the PCMCIA Module names which you have inserted in the slots. Then select slot1 or slot2.

You will then see the information provided by the Program provider.

Note: This information may be different for each Program Provider.




Main Menu
Easy Tuning
Installation
TV Channels
Radio Channels
System Setting
Parental Control
Insert password


Parental Control

Password Lock YES
Edit Channel Lock NO
Installation Lock NO
System Lock NO
Change Password NO

6 Parental Control

The STB provides an active parental lock function, allowing you to block specific menu setting by means of a four-digit security code. Accessing the parental Control menu is controlled by a password. The default value is **0000**. If necessary, you can change it.

Highlight the item you want to operate and press **VOL+/-** key to select **YES** or **NO**. A password is required for the menu which its corresponding item has been set to **YES**. For example, if you set **Installation Lock** to be **YES**, the **Installation** menu is accessible only when a password is entered. The password is **0000**. You can change it as per the following steps.

1. Set **Change Password** to be **YES** by using **VOL+/-** key.
2. To enter the new password in the input box of **Input New Password**, press **numeric** keys on the RCU directly.
3. Enter the new password again in the input box of **Confirm Password**. After finishing hereinbefore settings, press **EXIT** key to exit from this menu.

7 General View Function

The following describes the basic functions of your STB while watching satellite TV or listening radio.

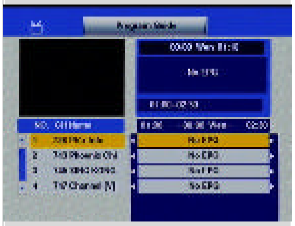
7.1 VOLUME

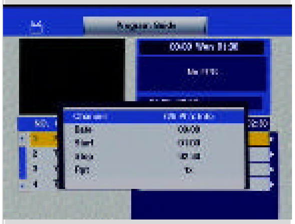
To increase or decrease the volume, use **VOL+/-** key either on the RCU when watching TV or listening radio.

7.2 PAUSE

When watching a channel, the video from the current channel is frozen as soon as **PAUSE** is pressed. Press **PAUSE** again to continue watching.

7.3 EPG



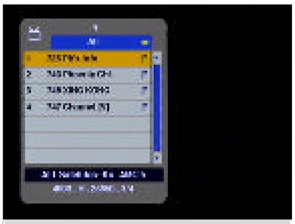


The STB provides EPG function for you to get access to the TV Guide that shows the necessary information of the current and future programs on different channels. The information is only available from the network to which the channel you are watching. Press **green** key, you can setup the timer.

To see the **EPG** data, press **EPG** key on your RCU when watching a channel. The **Program Guide** window will be displayed. You can see the channel list on the left side and program schedule for each channel next to the channel name. The time related to the program schedule for each channel next to the channel name. The time related to the program schedule is also displayed. Press **OK** key, you will see detail of the **EPG**.

7.4 TV/RADIO

While watching the channel, to switch between TV and radio modes by using **TV/RADIO** key on the RCU.

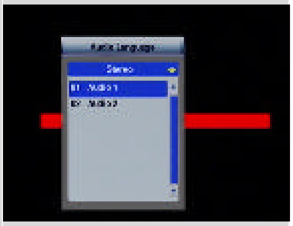


7.5 SAT

If you searched channels from more than one satellite and want to have a channel list for each satellite, pressing **SAT** key for many times, then the channel list of each satellite will be loop displayed.

7.6 ZOOM

Sometimes in order to watch TV clarity even more, press **ZOOM** key, the picture will be enlarged.



7.7 AUDIO

If a program is broadcast in more than one language, the desired language can be selected directly by using **AUDIO** key on the RCU. The **AUDIO Setting** menu lets you to select the appropriate audio language and audio mode. **VOL+/-** key can also be used to switch among the options.

The switching is made with the **AUDIO** button. If the channels provider offers different Audio signals(e.g. stereo & AC3), then you can chose the mode in the **Audo** window.

Note: This setting depends on the transmission of audio signal.

7.8 INFO

While watching the channel, press **INFO** key on the RCU and not only does the channel name appear, but also the satellite name as well as two dynamic bars reflecting signal strength and signal quality of the current channel.

7.9 OK

Exit all menus, press **OK** key, you can see all TV progrmas.

8 Update Software

➢ Update Software (receiver to receiver)

1. Connect master and slave receivers with twisted RS-232C cable.
2. Power on the master receiver and make it in standby mode.
3. After start successfully, turn on slave receiver to begin update.
4. The panel of master receiver will display "H" and blink it.
5. Input the password "123" by remote control to update the software.
6. After update, it will display "-End" and "OK" on each panel.
7. Turn off slave receiver, disconnect twisted RS-232C cable and restart it.

Notes: Input the password "123" to update the software.
Input the password "456" to update the data.
Input the password "789" to update the software and data.
Input the password "369" to copy the whole flash.

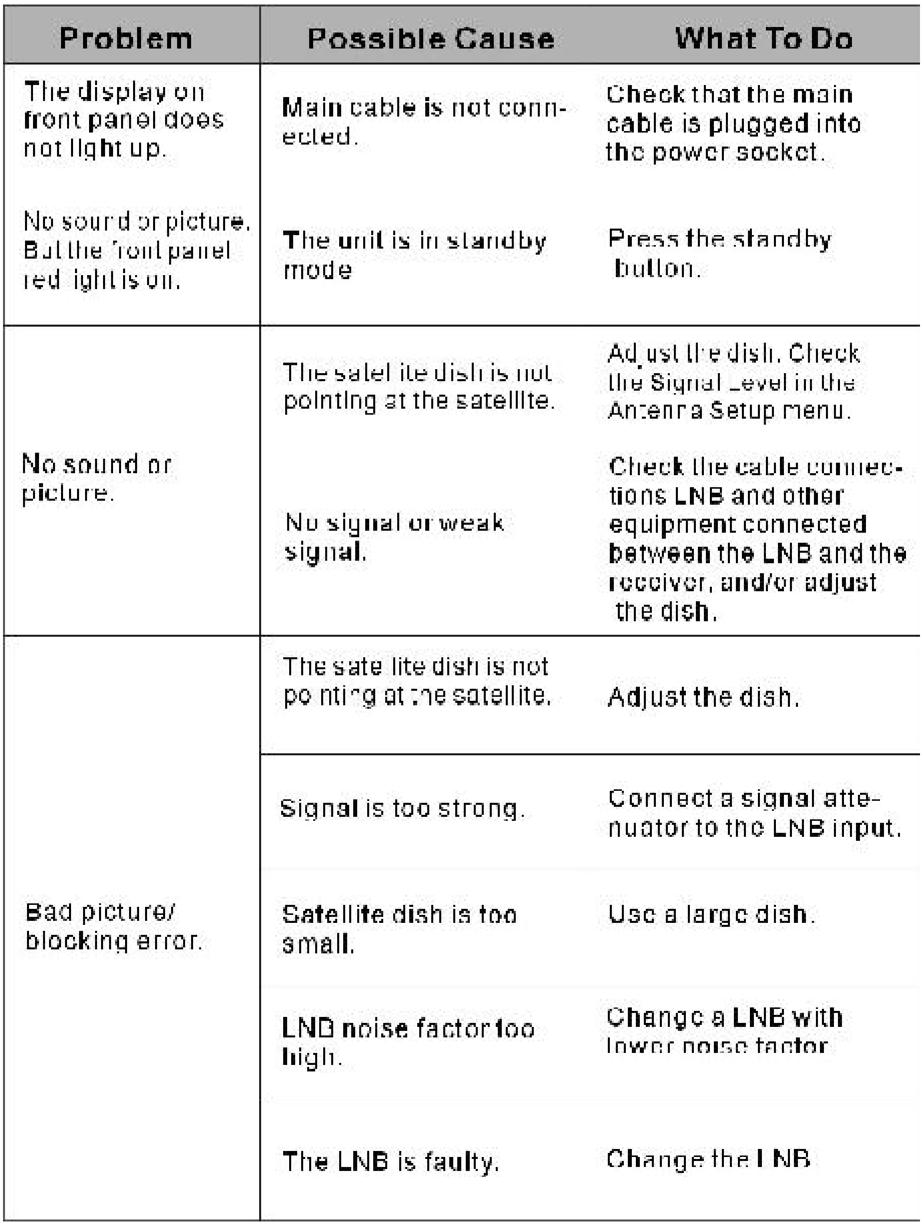
➢ Update Software (Computer to receiver)

1. Connect your PC and receiver with twisted RS-232C cable.
2. Turn on the receiver and make it in standby mode.
3. Startup the software of "STB5518.exe" on your PC, press "Select" key and select "*.bin", then select port. Press "start" on your PC. Upgrade will begin.
4. After upgrade, the receiver will display "-End" on panel.
5. Turn off the receiver, disconnect twisted RS-232C Cable and restart it.

Notes: You need a 9-pin twisted RS-232C cable(pin-2 to pin-3, pin-3 to pin-2, pin-5 to pin-5).
You can not turn off the slave receiver until it display "-End" and "OK" on the panel.

Important note: Due to new modification of flash to 16M, you need to press **POWER** button to make receiver in standby mode before you update the software from computer or receiver (master receiver only).

9 Trouble Shooting



Problem	Possible Cause	What To Do
The display on 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 red light is on.	The unit is in standby mode	Press the standby button.
No sound or picture.	The satellite dish is not pointing at the satellite.	Adjust the dish. Check the Signal Level in the Antenna Setup menu.
	No signal or weak signal.	Check the cable connections LNB and other equipment connected between the LNB and the receiver, and/or adjust the dish.
Bad picture/ blocking error.	The satellite dish is not pointing at the satellite.	Adjust the dish.
	Signal is too strong.	Connect a signal attenuator to the LNB input.
	Satellite dish is too small.	Use a large dish.
	LNB noise factor too high.	Change a LNB with lower noise factor
	The LNB is faulty.	Change the LNB

Problem	Possible Cause	What To Do
No picture appears on the TV screen.	The system is connected by SCART leads or RCA leads and TV is not in AV/EXIT mode.	If the system is connected by SCART leads or RCA leads, switch the TV to the appropriate AV input.
	The system is connected using RF cable.	Check the UHF channel fixed in your system and tune the UHF channel properly.
There is interference on your digital satellite channels	The system is connected using RF leads and the output channel of the receiver interferes with an existing terrestrial channel or Video signal.	Change the receiver output channel to a more suitable channel, or connect the system using SCART leads.
The RCU is not working	Battery exhausted.	Change the battery.
	RCU is incorrectly aimed.	Aim the RCU at the unit, or check that nothing blocks the front panel.

10 Glossary of terms

Access

Authorisation to use the coding system to purchase/order TV programmes.

AGC

Automatic Gain Control.

Audio system

with digital satellite reception, the sound is transmitted in packages and is selected either in a special audio mode or pre-selected by using the installation set-up. This makes it possible to select between several different languages in a film. The number of choices is dependent on what is available in the signal.

DVB

The Digital Video Broadcast group was created to establish a technical framework for the introduction of digital video broadcasting systems.

EPG

Electronic Programme Guide. A software that enables viewers to navigate easily among the large number of channels provided by digital technology, in order to select the service they desire.

FEC

Forward Error Correction. Correction of faulty bits in the received signal.

GHz

The prefix giga means billion, and Hertz means cycles per second. Signals in the GHz range are often called microwaves.

LNB (low-noise block converter) or LNBF

An electronic unit mounted on the satellite dish. It receives the signals reflected by the dish and converts them to signals that can be used by the Receiver.

L.O.

Local oscillator part of the LNB. It converts from the satellite frequency down to a frequency acceptable for the Receiver.

MHz

The prefix mega means million, and Hertz means cycles per second.

MPEG

Moving Picture Experts Group. Body established by the International Standards Organisation to provide the basis for a picture coding and compression system.

Network

A number of digital channels transmitted from one source. Grouped under separate headings in the channel list.

Parental control

A feature that allows parents to “Lock” programmes that they consider unsuitable for children. A “Locked” channel or programme can only be “unlock” with the special parental access code.

PCR

Program Clock Reference.

Polarization

Polarization allows several programmes to be fit into the same frequency band. The signals from a satellite are transmitted either with linear (vertical or horizontal) polarization or circular (right or left) polarization.

RF

Radio frequency (known as HF in some countries).

SERIAL RS 232

A serial communication standard data port.

Satellite dish

A dish-shaped antenna (reflector) to receive signals from a satellite. The dish focuses the signals into the LNB.

SCART

A 21-pin connector used for connection of the Receiver, VCR and TV. Also named Euroconnector or Peritel connector.

Scrambled satellite TV programme

Some satellite TV programmes are transmitted in scrambled form. A Smartc-ard, and possibly a CA module will be needed to view such programmes.

Service provider

Is a company theat collects a number of programms/services and distributes them to customers.

SNR

Signal to Noice Ratio. Signal quality measure.

Symbol rate

Size of the digital package transmission.

SW

Software.

TS

Transport stream.

VCR

Video Cassette Recorder.

11 Technical Specification

COMMON INTERFACE

PCMCIA	2 Slot(Type1 or Type2) DVB common(Interface standard)

VIDEO

Decoding	MPEG-2 & MEPG-1 compatible
Bit rate	Max 15Mbps
Output	PAL/NTSC/SECAM/AUTO
Aspect ratio	4:3, 16:9, Auto or 4:3 Pan
Active pixel	720x480 @ 30fps; 720x576 @25fps
Output connector	RCA, S-VIDEO

AUDIO

Decoding	MPEG-2/MPEG-1 layer I & II
Mode	Mono, Dual, Stereo, Joint stereo
Bit rate	Max 384Kbps
Output connector	RCA, S/PDIF(Optical)

DEMODULATOR

Demodulation	QPSK
Symbol rate	SCPC/MCPC
Outer code	RS (204, 188, 8)
Inner code	ALL DVB rates
Energy dispersion	DVB-S recommendation

INPUT SIGNAL

Frequency	950MHz ~ 2150MHz
Input level	-65dBm ~ -25dBm
Channel bandwidth	36MHz
Input socked	F-type connector

RF MODULATOR

Input	F-type connector
Output	F-type connector

Band	VHF
TV Standard	NTSC M
Output Channel	3~4(NTSC M)

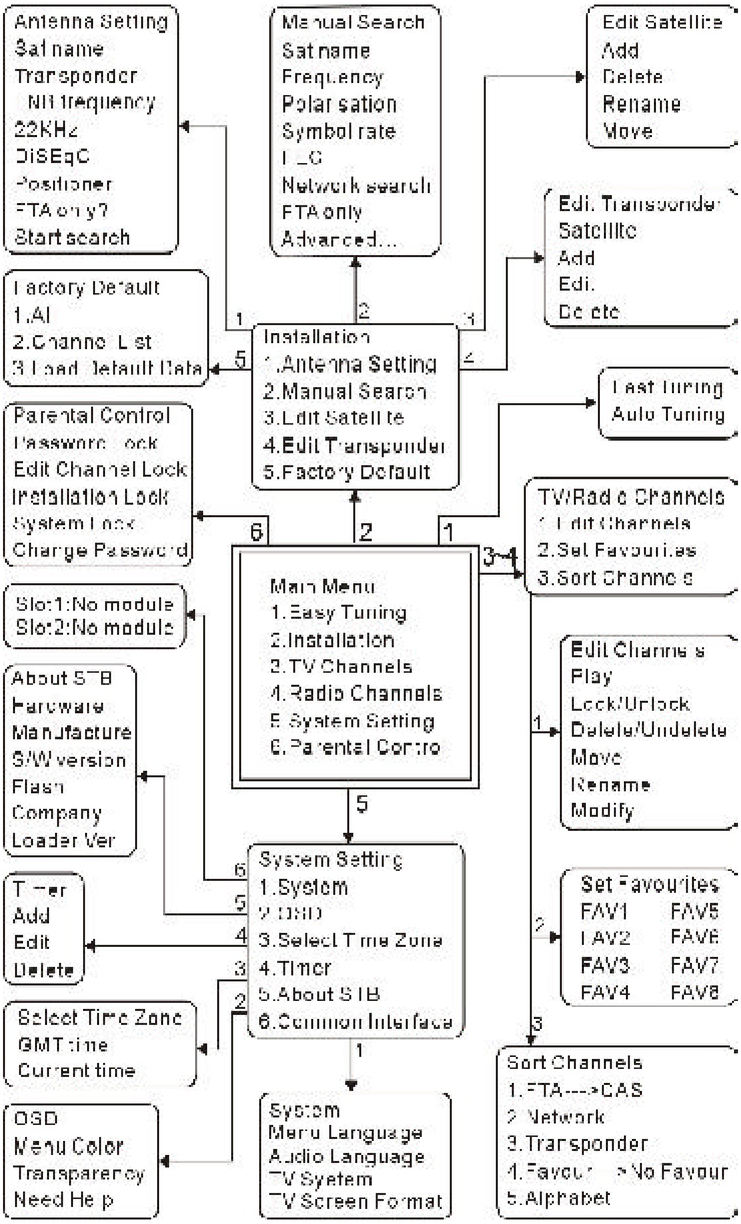
LNB CONTROL

Power supply	13/18V(500mA max) polarization with short circuit protection
Polarized control	13/18V polarization (vertical/horizontal)
DiSEqC control	DiSEqC 1.0 and DiSEqC 1.2

MISCELLANEOUS

Supply voltage	100~240VAC, 50/60Hz
Power consumption	30 watts max
Operation temperature	+5°C to +40°C
Storage temperature	-20°C to +70°C
Dimension(WxDxH)	280x207x55 mm^3
Weight	2.3Kg

12 Menu Structure


Antenna Setting
Sat name
Transponder
LNB frequency
22KHz
DiSEqC
Positioner
FTA only?
Start search
Manual Search
Sat name
Frequency
Polarisation
Symbol rate
PID
Network search
FTA only
Advanced...
Edit Satellite
Add
Delete
Rename
Move
Factory Default
1.All
2.Channel List
3.Load Default Data
Installation
1.Antenna Setting
2.Manual Search
3.Edit Satellite
4.Edit Transponder
5.Factory Default
Edit Transponder
Satellite
Add
Edit
Delete
Fast Tuning
Auto Tuning
Parental Control
Password Lock
Edit Channel Lock
Installation Lock
System Lock
Change Password
TV/Radio Channels
1.Edit Channels
2.Set Favourites
3.Sort Channels
Main Menu
1.Easy Tuning
2.Installation
3.TV Channels
4.Radio Channels
5.System Setting
6.Parental Control
Slot1:No module
Slot2:No module
About STB
Hardware
Manufacture
S/W version
Flash
Company
Loader Ver
Edit Channels
Play
Lock/Unlock
Delete/Undelete
Move
Rename
Modify
System Setting
1.System
2.OSD
3.Select Time Zone
4.Timer
5.About STB
6.Common Interface
Timer
Add
Edit
Delete
Set Favourites
FAV1 FAV5
FAV2 FAV6
FAV3 FAV7
FAV4 FAV8
Select Time Zone
GMT time
Current time
Sort Channels
1.FTA--->CAS
2.Network
3.Transponder
4.Favour--->No Favour
5.Alphabet
OSD
Menu Color
Transparency
Need Help
System
Menu Language
Audio Language
TV System
TV Screen Format
1
2
3
4
5
6
3~4