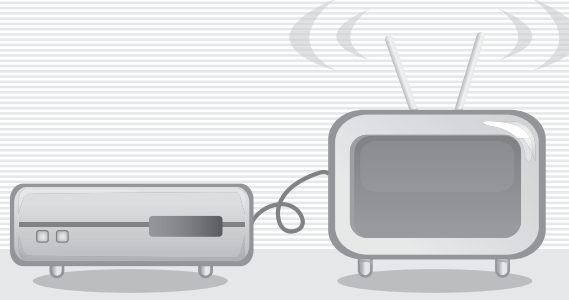
HD Satellite Set-Top BOX

www.humaxdigital.com



The predefined channel list may return to default setting after OTA has been performed.
The default password is 0000. If you have forgotten your password, please contact your local product distributor.

User's Manual

HDCI-2000

HUMV-HDCI2000.200GBAR

20000-5720

Notice

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Notice

Read this manual carefully and make sure you understand the instructions provided. For your safety, be aware of the following precautions.

Warnings, Cautions and Notes

Throughout the whole manual, pay special attention to the following marks that indicate hazardous situations.

- **Warning**
  Indicates a hazardous situation which could result in serious injury.
- **Caution**
  Indicates a situation which could damage the equipment or other apparatus.
- **Note**
  Indicates additional information to make the user aware of possible problems and information of any importance to help understand, use, and maintain the installation.

Meaning of Symbols



To reduce the risk of electric shock, do not remove cover(or back). No user serviceable parts inside. Refer servicing to qualified service personnel.



This symbol indicates **dangerous voltage** inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

Instruction about the 'WEEE' Symbol



This product should not be disposed with other household wastes at the end of its working life. Please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. This will prevent possible harm to the environment or human health from uncontrolled waste disposal.

Domestic users: Please contact either the retailer where you purchased this product or their local government office for details of where and how they can take this item for environmentally safe recycling. Business users: Contact your supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Business users: Contact your supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Safety and Warning

This product has been manufactured to comply with international safety standards. Please read the following safety precautions carefully.

Safety Instructions and Precautions

1. **MAINS SUPPLY**

   90 - 250V AC 50/60Hz
   - Operate this product only from the type of power supply indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your local power company.
   - Disconnect the product from the mains before you start any maintenance or installation procedures.

2. **OVERLOADING**
   - Do not overload a wall outlet, extension cord or adapter as this may result in electric fire or shock.

3. **LIQUIDS**
   - The product should not be exposed to liquid of any kind. In addition, no objects filled with liquid should be placed on the apparatus.

4. **CLEANING**
   - Disconnect the product from the wall outlet before cleaning.
   - Use a light damp cloth (no solvents) to dust the product.

5. **VENTILATION**
   - The slots on top of the product must be left uncovered to allow proper airflow into the unit.
   - Do not stand the product on soft furnishings or carpets.
   - Do not stack electronic equipments on top of the product.

6. **ATTACHMENTS**
   - Do not use any unsupported attachments as these may be hazardous or cause damage to the product.

7. **CONNECTION TO THE SATELLITE DISH LNB**
   - Disconnect the product from the mains before connecting or disconnecting the cable from the satellite dish. Failure to do so can damage the LNB.

8. **CONNECTION TO THE TV**
   - Disconnect the product from the mains before connecting or disconnecting the cable from the TV. Failure to do so can damage the TV.

9. **EARTHING**
   - The LNB cable must be earthed to the system earth for the satellite dish.

10.LOCATION

- Place the product indoors to avoid exposing it to lightning, rain or sun.
- Do not place it near a radiator or heat register.
- Make sure it has more than 10 cm clearance from any appliances susceptible to electromagnetic influences, such as a TV or a VCR.
- Do not block the openings with any object, and do not place the product on a bed, sofa, rug, or other similar surface.
- If you place the product on a rack or a bookcase, ensure that there is adequate ventilation and that you have followed the manufacturer's instructions for mounting.
- Do not place the product on an unstable cart, stand, tripod, bracket, or table where it can fall.
- A falling product can cause serious injury to a child or adult, and serious damage to the appliance.

11.LIGHTNING, STORM, or NOT IN USE

- Unplug the product from the wall outlet and disconnect the antenna during a thunderstorm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-surges.

12.EXTRANEOUS OBJECTS

- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts.

13.REPLACEMENT of PARTS

- When replacement of parts is required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitution may result in additional damage to the unit.

Warning

1. **To avoid damage of the power cord or plug;**
   - Do not modify or process the power cord or plug arbitrarily.
   - Do not bend or twist the power cord.
   - Make sure to disconnect the power cord holding the plug.
   - Keep heating appliances as far as possible from the power cord in order to prevent the cover vinyl from melting.
   - The mains plug, as a disconnection device, shall remain readily accessible by the user.
2. **To avoid electrical shock;**
   - Do not open the main body.
   - Do not insert metal or inflammable objects inside the product.
   - Do not touch the power plug with wet hands.
   - Disconnect the power cord in case of lightning.
3. **To avoid damage of product;**
   - Do not use the product when it is out of order. If you continue to use the product when defective, serious damage can be caused to it. Make sure to contact your local product distributor if the product is out of order.
   - Do not insert metal or alien substance into the slots for the modules or Smartcards. It may cause damage to the product and reduce its life span.

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1. Before Using the Product

This chapter provides detailed instructions on the product and its accessories.

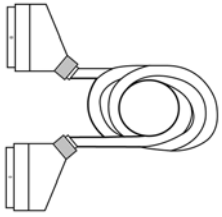
1.1 Package Contents

Please check all package contents before using your product.





Remote Control



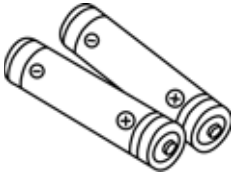
SCART-Cable



User's Manual



HDMI-Cable

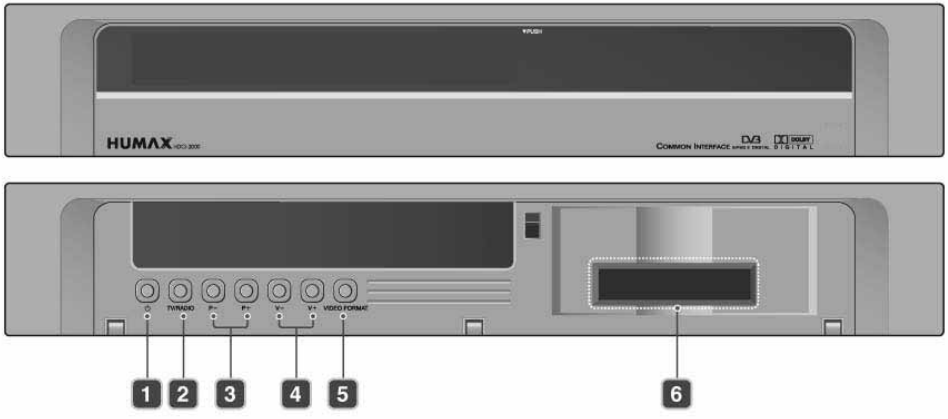


Batteries

Note:

- Faults may occur if the remote control is left without battery for a long time. Always keep the battery inserted in the remote control.
- Package contents may vary according to area.

1.2 Front Panel



1. **STANDBY BUTTON**
   Switches between operation and standby modes.
2. **TV/RADIO BUTTON**
   Switches between TV and radio modes.
3. **P-/P + BUTTON**
   Moves the TV/radio channel up or down.
4. **VOL-/VOL+ BUTTON**
   Adjusts the audio volume.
5. **VIDEO FORMAT**
   Changes the resolution of video.
6. **CI-MODULE SLOT**
   A slot for two CI modules

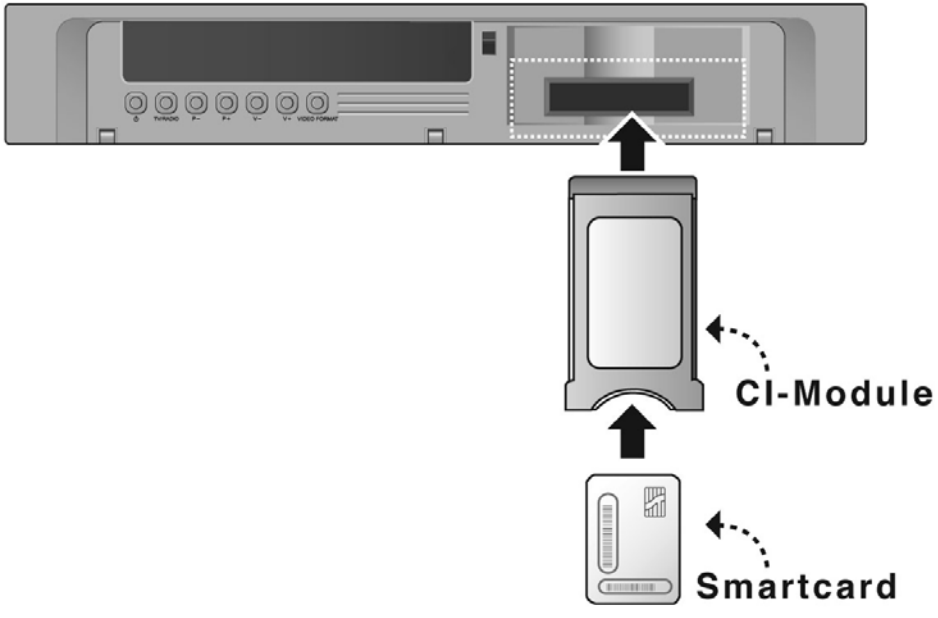
1.3 Conditional Access

Although some TV and radio channels are free to air, most TV and radio/music channels are available on a subscription basis and can only be enjoyed via a Conditional Access component.

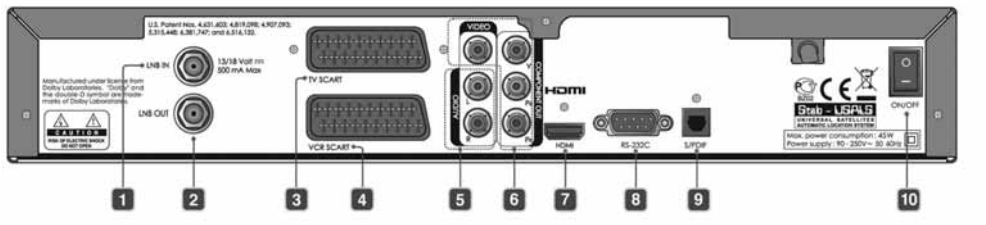
1. Inserting a CI (with Smartcard)

A CI module looks like a PC map (PCMCIA) for laptops. There are different kinds of CI Modules, suitable for different coding systems; Irdeto, Conax and more. Additionally to the CI module, a Smartcard is needed to decode the channels.

1. Open the right-hand flap on the front of the product.
2. Follow the instructions of the module and insert the Smartcard into the CI module.
3. Keep the CI module (with the Smartcard) horizontal.
4. Insert the CI module into the slot.

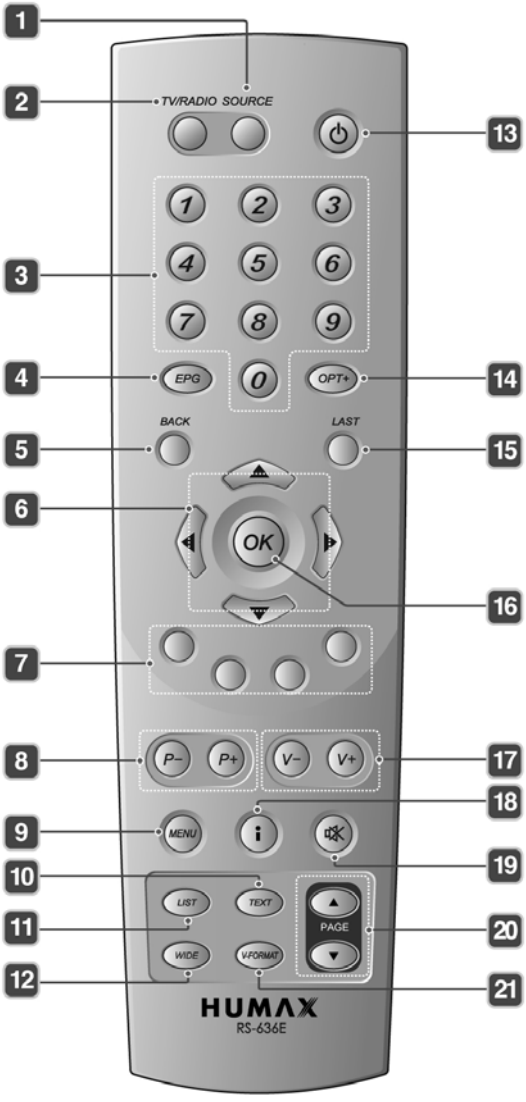


1.4 Rear Panel



1. **LNB IN**
   Connects a satellite antenna cable.
2. **LNB OUT**
   Connects to another digital satellite receiver.
3. **TV SCART**
   Connects to the TV set using a TV SCART cable.
4. **VCR SCART**
   Connects to the VCR/DVD using a VCR SCART cable.
5. **AUDIO L/R**
   Connects to the TV or VCR and outputs audio signals.
6. **VIDEO**
   Connects to the TV or VCR and outputs video signals.
7. **HDMI**
   Connects to the TV using HDMI connector.
8. **RS-232C**
   Connects to the PC to update software.
9. **S/PDIF**
   Outputs the digital audio signals.
10. **ON/OFF**
    Powers on/off.

1.5 Remote Control



1. **SOURCE**

   Controls the input of TV.

2. **TV/RADIO**

   Switches between TV and radio modes.

3. **NUMERIC(0-9) BUTTONS**

   Enters a TV/radio channel number or menu option number.

4. **EPG**

   Displays the EPG. (electronic programme guide)

5. **BACK**

   Closes and returns to the previous menu and screen.

6. **ARROW BUTTONS**

   Changes the channel or moves the cursor up, down, left or right.

7. **COLOUR BUTTONS (R/G/Y/B)**

   Select colour keys for interactive applications.

8. **P- / P+**

   Changes the channel.

9. **MENU**

   Displays the main menu.

10. **TEXT**

    Enters the digital text service.

11. **LIST**

    Displays the channel list.

12. **WIDE**

    Sets the display format.

13. **STANDBY**

    Switches between operation and standby modes.

14. **OPT+ (OPTION)**

    Displays the audio, teletext and subtitle language services.

15. **LAST**

    Returns to the previous channel.

16. **OK**

    Selects a menu, or confirms the selected operation. Also displays the channel list while watching a programme.

17. **V- / V+**

    Adjusts the audio volume.

18. **i (INFORMATION)**

    Displays the channel and programme information.

19. **MUTE**

    Mutes or unmutes the audio temporarily.

20. **PAGE ▲/▼**

    Changes the page.

21. **V-FORMAT**

    Change the resolution of video.

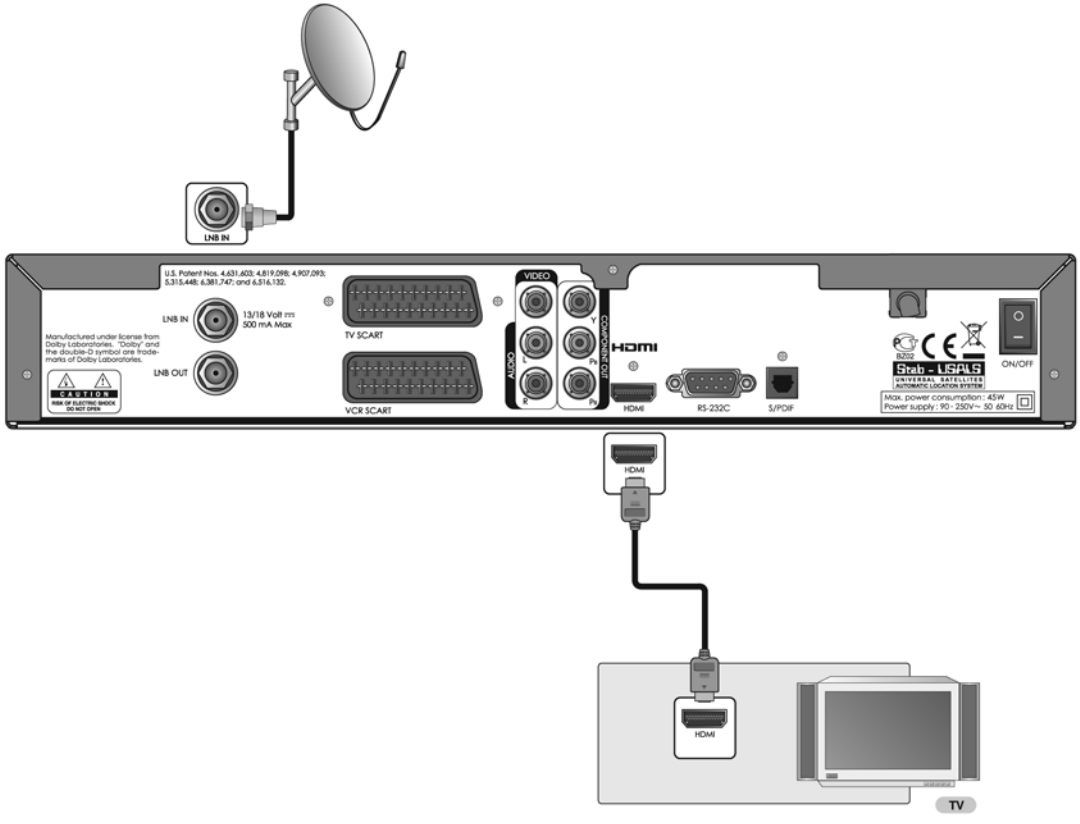
2. Setup

This chapter describes how to connect your product to the TV with the particular equipments for gaining optimum signal quality. The product provides various interfaces to connect to the TV, VCR or other devices. Select the most appropriate procedure depending on the equipment you have.

Note: If you encounter any problems setting up your product, please contact your local product distributor.

2.1 Using HDMI Connector

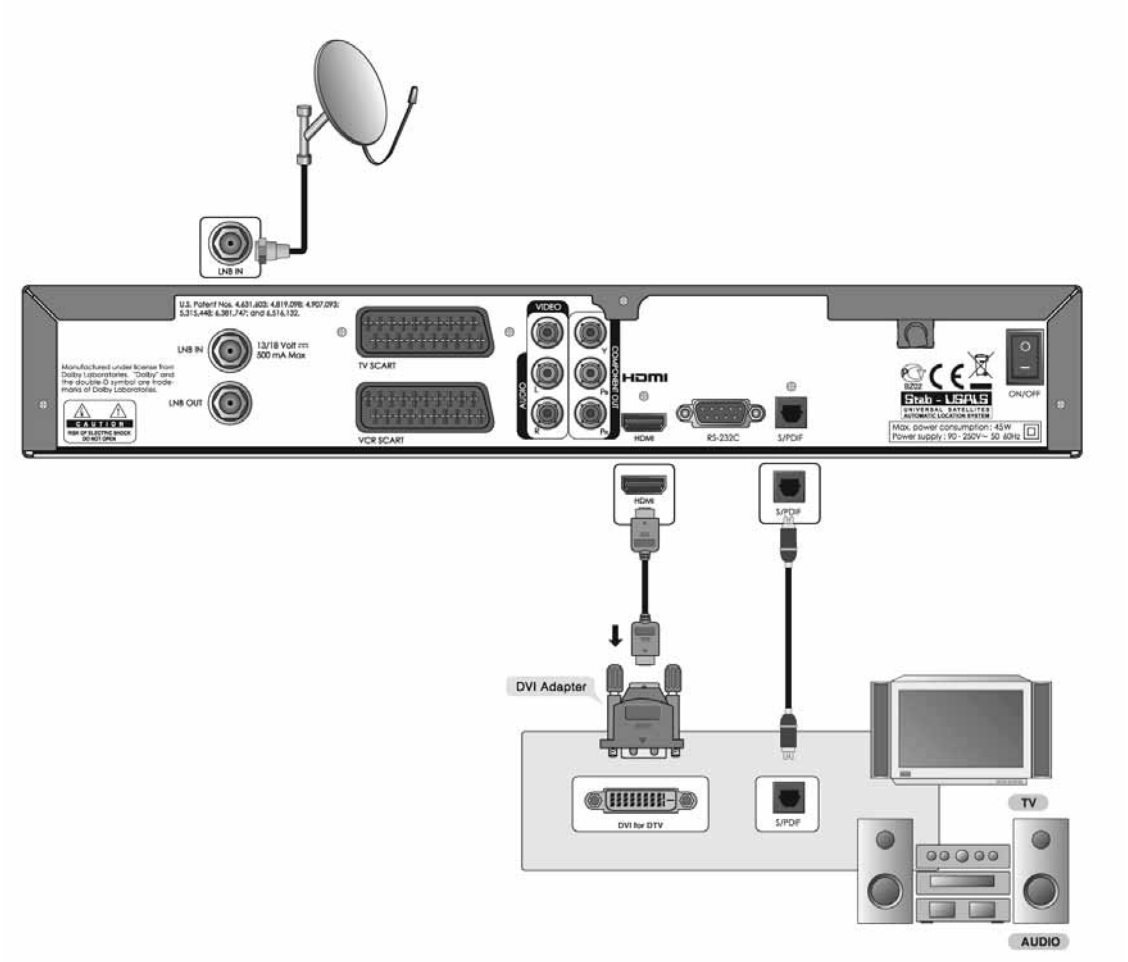
The HDMI connection is recommended for Digital TV. In case the TV has a HDMI input connector, a special all-digital interface that provides the highest picture quality, connect the product to the TV with the HDMI cable as follows.



2.2 Using DVI Connector

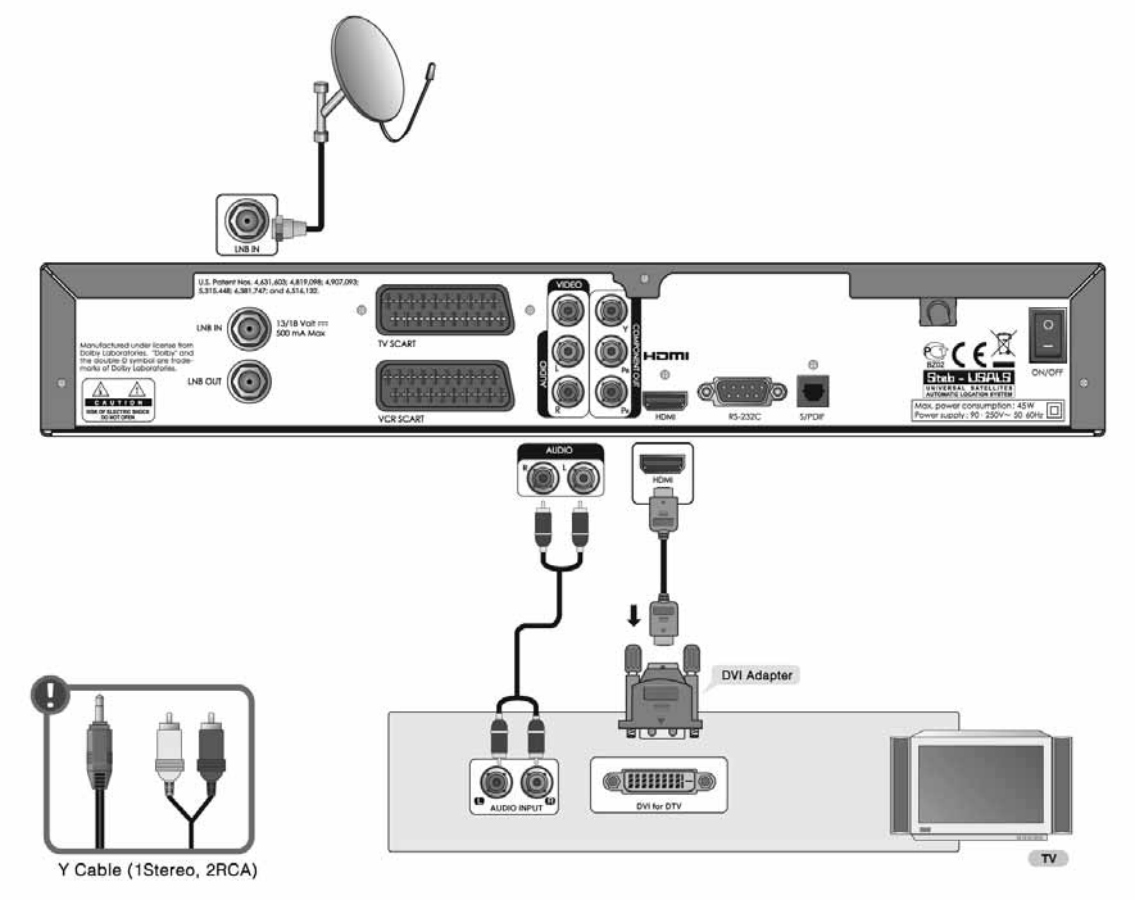
The DVI connection using a HDMI to DVI converter is recommended for Digital TV. In case the TV has a DVI input connector, connect the product to the TV with the HDMI cable using a HDMI to DVI converter as follows.

1. When equipped with an A/V receiver



2. When there is no A/V receiver available

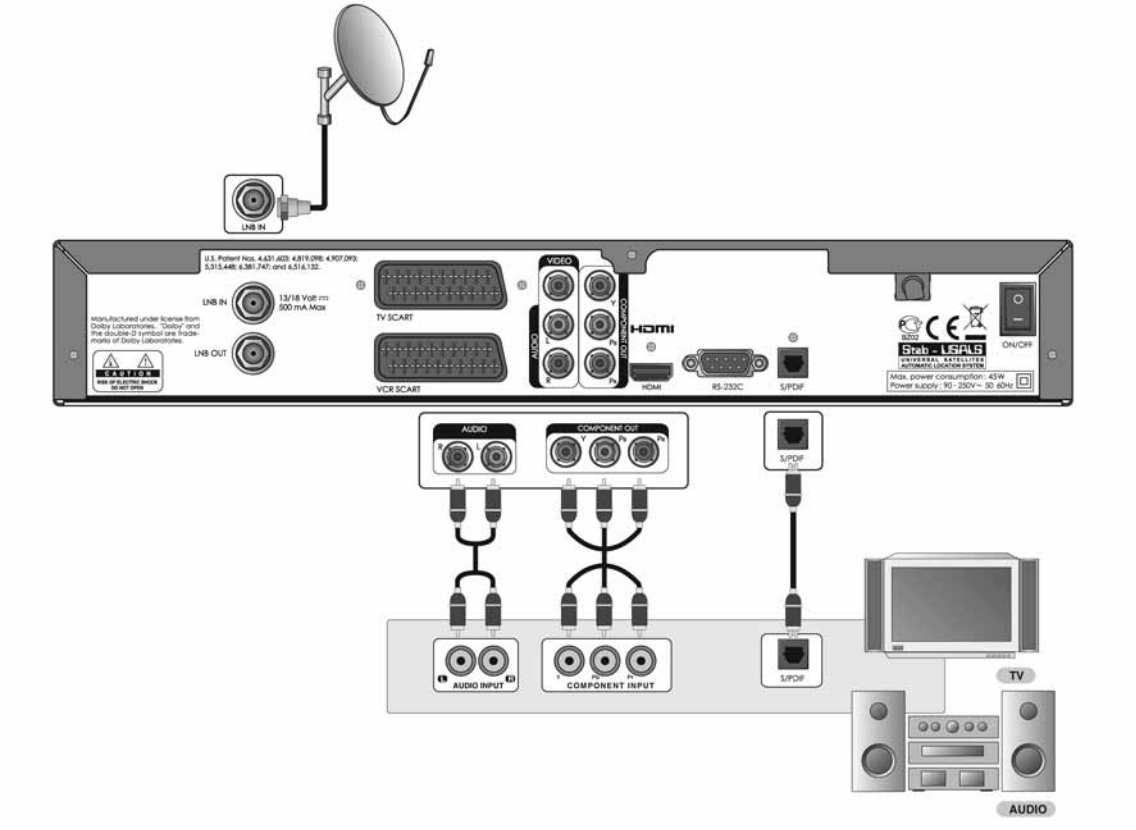
In case you are not equipped with an A/V receiver, connect the product to the TV using the audio cable as follows.



Note: You can also connect the product to the audio input jack of your TV set using the ***3.5 Stereo Jack Cable to 2 RCA Y Cable***.

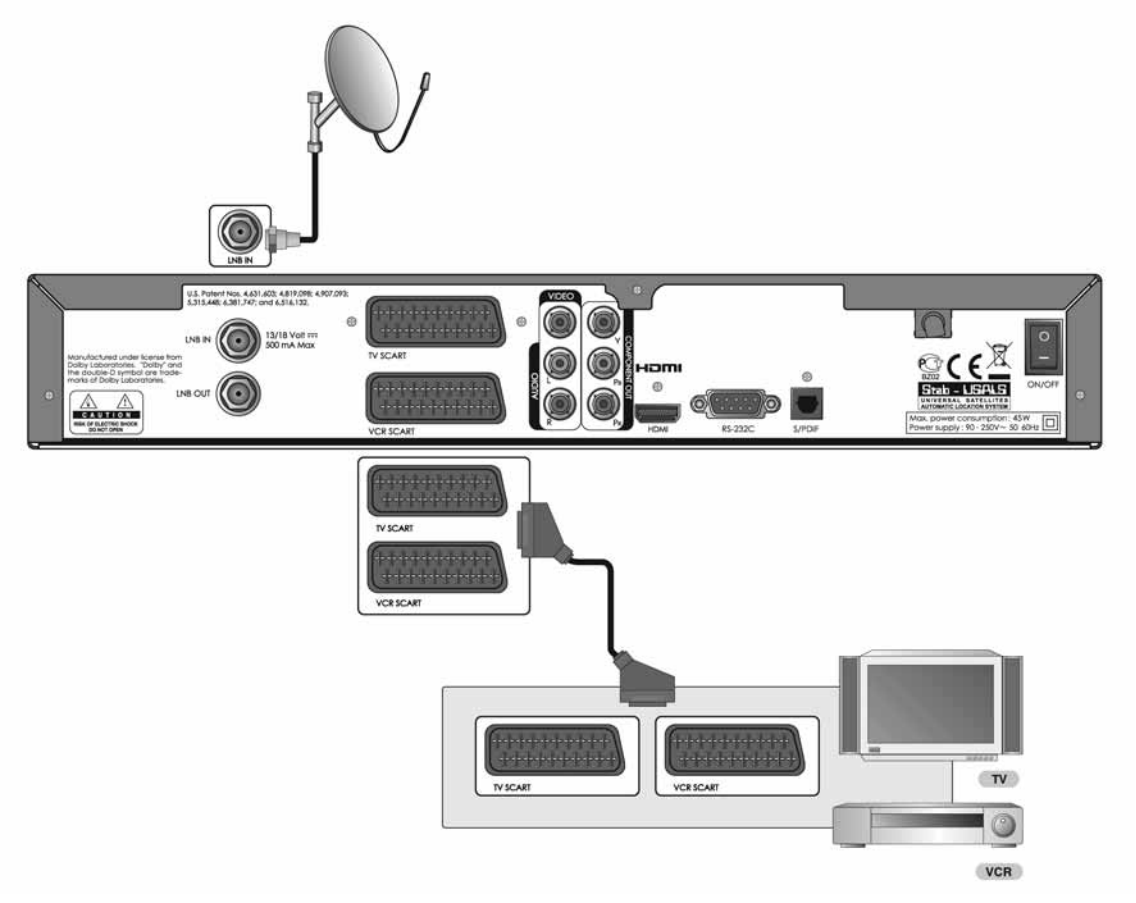
2.3 Using Component Cable

The Component connection is recommended for Digital TV. Connect the product to the TV with the Component cable as follows.



2.4 Using SCART Cable

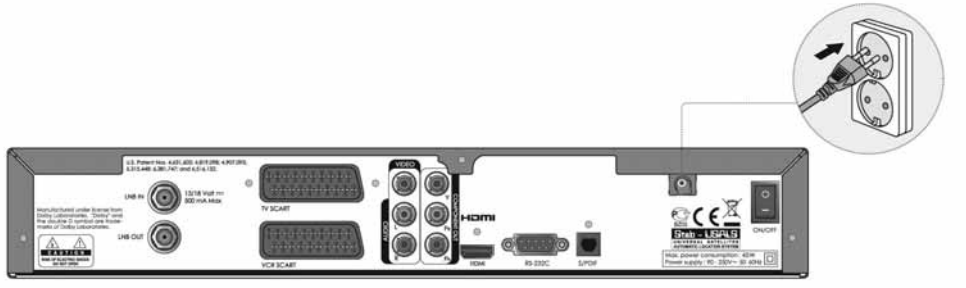
The SCART cable connection is recommended for Analog TV or VCR. Connect the product to the TV with the SCART cable as follows.



Note: Connecting your TV directly to the Audio/Video output of the product will assure a more vivid picture and enhance your viewing enjoyment.

2.5 Powering On

1. Connect the power cord of the product to a wall outlet.
2. Turn on the power switch located at the left side on the back of the product.



3. Power on by pressing the **STANDBY** button of the remote control or the **STANDBY** button at the front of the product.



3. Installation Wizard

When powering on your product for the first time after purchase, the installation wizard will operate automatically. This chapter includes the first time setup of the language, time, search channel and software update which will show you how to start the initial installation.

Note:

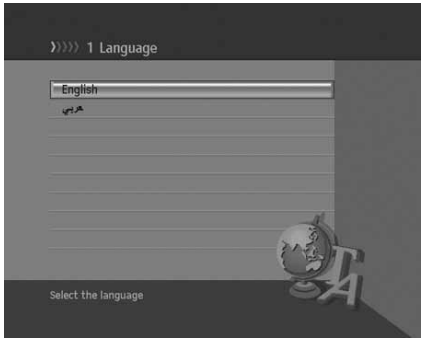
- The default password is **0000**.
- If you have forgotten your password, please contact your local product distributor.

3.1 Language

Language allows you to select the main language.

Select the appropriate language from the list using the **OK** or ◀/▶ button. Select ***Next*** and press the **OK** button to save the selected language as default language.

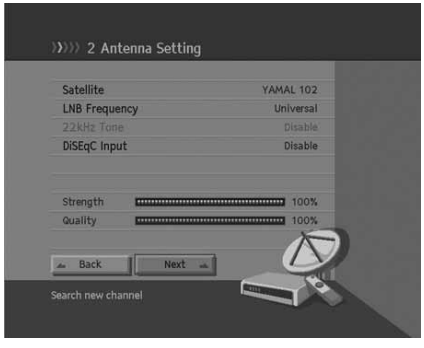
Note: The display language may differ according to country.



3.2 Search Channel

Search Channel enables you to enter the values such as ***Satellite, LNB Frequency, 22kHz Tone*** and ***DiSEqC Input*** of each item and start channel search.

1. ***Satellite:***
   Select the required satellite using the **OK** or ◀/▶ button and press the **OK** button.
2. ***LNB Frequency:***
   Select the required LNB frequency using the **OK** or ◀/▶ button and press the **OK** button.
3. ***22kHz Tone:***
   Select ***Enable/Disable*** using the **OK** or ◀/▶ button and press the **OK** button.
4. ***DiSEqC Input:***
   Select the required DiSEqC input using the **OK** or ◀/▶ button and press the **OK** button.
5. Select ***Next*** and press the **OK** button to proceed.

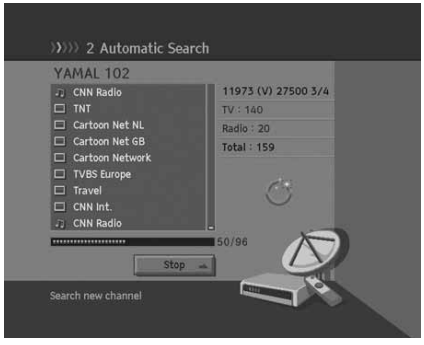


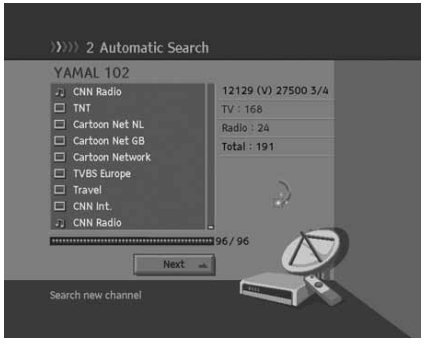
6. Select ***Add another satellite of dish*** and press the **OK** button to add another satellite. You can add up to four satellites.
7. Select ***Next*** and press the **OK** button to start channel search.
8. Please wait while the search continues. If you want to stop the search, press the **OK** button.
9. When channel search is complete, the results will appear. Press the **OK** button to proceed to the next step.

Note:

- If you cannot find the required LNB frequency from the list, select ***User Define*** and manually enter the frequency using the **NUMERIC(0-9)** buttons and press the **OK** button.
- When using universal LNB, select ***Universal***. The 22kHz tone value will be disabled.







3.3 Time

You can set the current time.

Select ***GMT Offset*** and press the **OK** or ◀/▶ button to display the values for GMT offset.

Select the appropriate GMT offset value using the ▲/▼ button and press the **OK** button to set the current time. Then select ***Next*** and press the **OK** button.

Note: If GMT offset is ***Auto***, it is automatically set depending on your country. However, if the time is not set properly, you can change GMT offset to fit your local time.



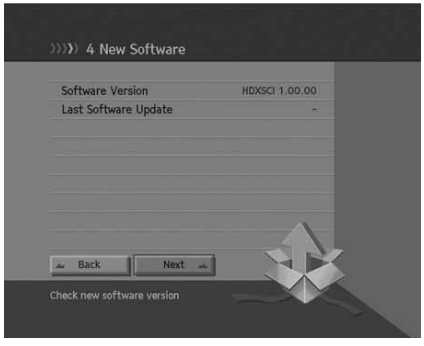
3.4 Software Update

Software Update displays the software version and lets you choose to update the new software.

When new software is detected, you can choose to download the software immediately or save for later. You can refuse software update if not needed. In case there is no software currently available, select ***Next*** and press the **OK** button to proceed to the next step.

Note:

- When there is no new software to update, a pop-up will appear.
- For more information about software update, refer to ***11. Software Update***.



After all setting is complete, you can view the result screen. Select ***Finish*** and press the **OK** button to complete the installation wizard.

4. Basic Operation

This chapter describes the basic functions of the product such as switching channel, volume control, lip-sync, option list and programme information. You can check or change the settings.

4.1 Switching Channel

Switching Channel allows you to switch the current channel using one of the following methods.

1. Press the **P-/P+** (/) button.
2. Enter the channel number using the **NUMERIC(0-9)** buttons to move to the channel directly.
3. Press the **TV/RADIO** ( ) button to switch between TV channels and radio channels.

Note: You can switch channels using the channel list or EPG.

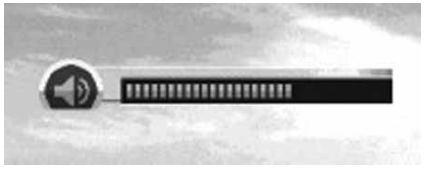
To return to the previous channel, press the **LAST** ( ) button.

4.2 Volume Control

Volume Control allows you to adjust the audio volume.

1. Press the **V-/V+**(/) button to adjust the audio volume.
2. Press the **MUTE** ( ) button to stop the audio temporarily.

Note: The mute function remains set while you switch channels.

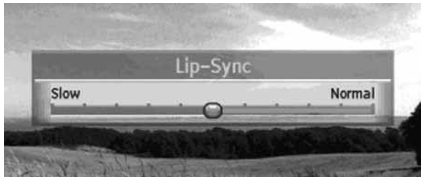


4.3 Lip-Sync

Lip-Sync allows you to adjust the sound difference of video and audio.

1. Press the **MUTE** ( ) button for 3 seconds.
2. Adjust the Lip-Sync and save the setting for each channel.

Note: Lip-Sync is activated only when the programme is broadcast in Dolby Digital .



4.4 Resolution

Resolution allows you to set the resolution of the screen.

1. Press the **V-FORMAT** (V-FORMAT) button.
2. The current resolution will be displayed.
3. Each time you press the **V-FORMAT** (V-FORMAT) button, the resolution changes in the following sequence: 576p -> 720p -> 1080i.



4.5 Option List

Option List allows you to set options such as audio, teletext and subtitle language.

1. Audio

You can select the language you prefer in ***Audio*** if the current programme is available in multiple audio languages.

1. Press the **OPT+** (OPT+) button.
2. Select ***Audio*** using the ▲/▼ button and press the ▶ button.
3. Select the audio language you prefer using the ▲/▼ button and press the **OK** (OK) button.
4. Select audio direction (left, right, stereo) using the ▶ button.



Note:

- You can select the required audio language in ***8.2 Language Setting.***
- If the programme is broadcast in Dolby Digital, you cannot set the audio direction.

2. Teletext

You can use your TV remote control unit to control the teletext service. All teletext supporting channels have the teletext icon on the i-plate.

1. Press the **OPT+** (OPT+) button.
2. Select ***Teletext*** using the ▲/▼ button and press the the ▶ button.

Note: You can also use the **TEXT** (TEXT) button on your remote control to view teletext.

3. Subtitle

You can select the language for the subtitle if the programme provides subtitle information.

1. Press the **OPT+** (OPT+) button.
2. Select ***Subtitle*** using the ▲/▼ button and press the ▶ button.
3. Select the required subtitle language using the ▲/▼ button and press the **OK** (OK) button. The subtitle will be displayed in the selected language at the bottom of the screen.
4. Select ***Off*** from the subtitle language list to hide subtitle from the screen.



4.6 Programme Information (i- plate)

Programme information is always displayed for a certain period of time whenever you switch channels. You can view the programme information by pressing the **i** (ⓘ) button while watching a programme. Press the **BACK** ( ) button to hide the i-plate.

1. General Information

The general information is displayed on the screen as the following.



1. Channel number and name
2. Icons

	Displayed only when the channel is a scrambled channel.
HD	Displayed only when the channel provides HD programmes.
576i25	Displays the resolution of the current programme.
	Displayed only when subtitle information is available.
	Displayed only when there is any teletext information.
DD	Displayed only when the programme is broadcast in Dolby Digital.
	Displayed only if this programme is reserved.
12	Represents parental level. Indicates the minimum level of age for viewing the programme.
	Displayed only when the channel is a locked channel.

3. Programme name.
4. Current time & date
5. Next programme information: Displayed if next programme information is provided. Press the ▶ button to display next programme information.
6. Programme broadcasting time and progress bar: Displays programme playing time and progress bar.
7. Detailed programme information: Displayed if detailed programme information is provided.

Note: If there is no programme information available, programme information is not displayed.

2. Detailed Programme Information

You can see the detailed information about the current programme. Press the **i** (ⓘ) button where the i-plate is displayed to view detailed information.



Note:

- Press the **i** (ⓘ) button again to hide the information box.
- If the detailed programme information is over one page, use the **PAGE** ▲/▼ (PAGE ▲/PAGE ▼) button to move to the previous or next page.

5. Channel List

This chapter will help you display the channel list using the **LIST** (LIST) button and switch to another channel in the channel list.

Seven types of channel lists are provided for quick and easy channel search.

TV	The list of all TV channels
Radio	The list of all radio channels
HD Channels	The list of all HD TV channels.
Recent Channels	The list of the recently viewed channels
Favourite	The list of the favourite channels in five groups
Satellite	The lists of channels classified by satellites
Scramble	The lists of channels classified by CAS types

Note:

- Press the **BACK** (BACK) button to exit the ***Channel List***.
- The channel list is updated automatically when changes occur.
- The predefined channel list may return to default setting after OTA has been performed.
- ***HD Channels*** may or may not be available depending on the version of the software.

5.1 All Channel List

All Channels List allows you to delete, rename or include the channels in ***Favourite***. You can also use lock/unlock functions or configure the menu.

1. Press the **LIST** (LIST) button while watching a programme.
2. Press the **RED** (◯) button on the remote control while the channel list is displayed.
3. Select the channel you wish to view using the ▲/▼ button and press the **OK** (OK) button.
4. You can also enter the channel number using the **NUMERIC(0-9)** buttons and press the **OK** (OK) button to change to a certain channel.
5. Press the **LIST** (LIST) button again and select one option among ***TV, Radio, HD Channels*** and ***Recent Channels***, and press the **OK** (OK) button.
6. To switch to ***TV, Radio, HD Channels*** or ***Recent Channels***, press the **RED** (◯) button again.



Note: You can switch between TV/radio by simply pressing the **TV/RADIO** (TV/RADIO) button on the remote control.

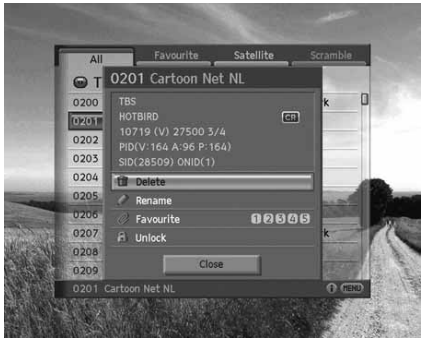
5. Channel List

1. Deleting Channels

1. Select a channel to delete and press the **i** button.
2. Select ***Delete*** using the ▲/▼ button and press the **OK** button.
3. A pop-up will appear. Select ***Yes*** and press the **OK** button.
4. You will be prompted to enter your password. Enter your password and press the **OK** button.

Note:

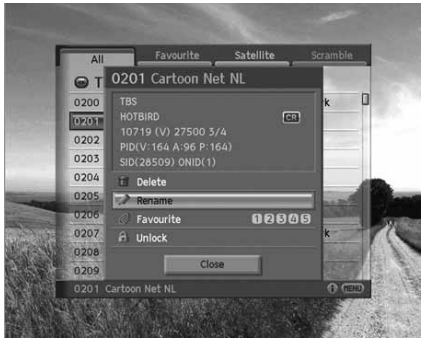
- You cannot delete items from ***Recent*** channel list or ***Favourite*** channel list.
- The default password is **0000**.





2. Renaming Channels

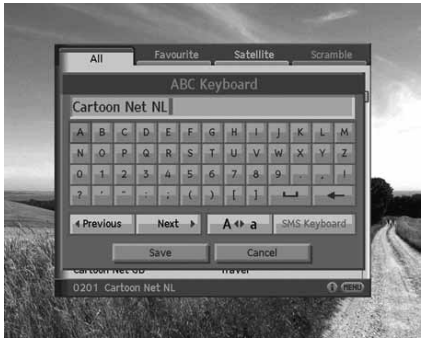
1. Select a channel to rename and press the **i** button.
2. Select ***Rename*** using the ▲/▼ button and press the **OK** button.



3. A keyboard will appear. Enter the name of the channel you wish to rename.

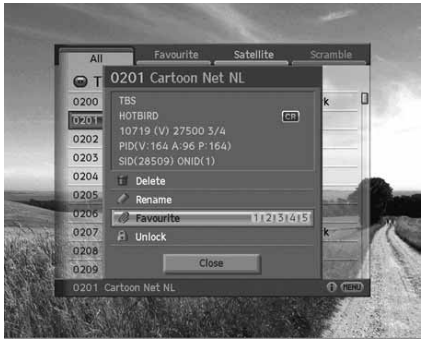
◂ Previous	Switch to the previous keyboard.
▸ Next	Switch to the next keyboard.
A ◂▸ a	Change to upper case/lower case keyboard.

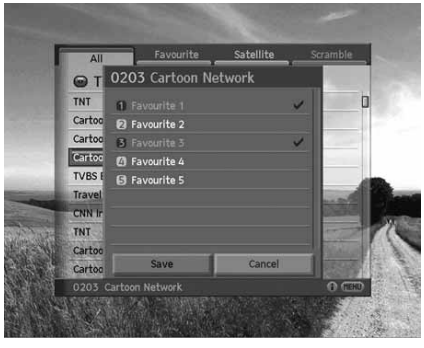
4. Select ***Save*** and press the **OK** button to confirm your choice.



3. Including Channels in Favourite Group

1. Select a channel to put into the favourite channel list and press the **i** button.
2. Select **Favourite** using the ▲/▼ button and press the **OK** button.
3. Select one or more groups from the five favourite groups and press the **OK** button.
4. Select ***Save*** and press the **OK** button.

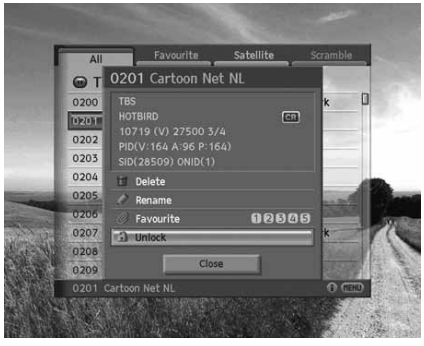




4. Using Lock/Unlock

1. Select a channel to lock/unlock and press the **i** (ⓘ) button.
2. When locking an unlocked channel, select ***Unlock*** and press the **OK** (⊙) button. ***Unlock*** will become ***Lock***.
3. When unlocking a locked channel, select ***Lock*** and press the **OK** (⊙) button. A pop-up requiring your password will appear. Enter your password and ***Lock*** will become ***Unlock***.

Note: The default password is **0000**.



5. Configuring Menu

1. Press the **MENU** (MENU) button on the remote control while the channel list is displayed.
2. A list of options will show. Mark the required items and select ***Save*** and press the **OK** (⊙) button.



5.2 Favourite List

Favourite List is the list of the favourite channels the user has selected. There are five favourite groups in total.

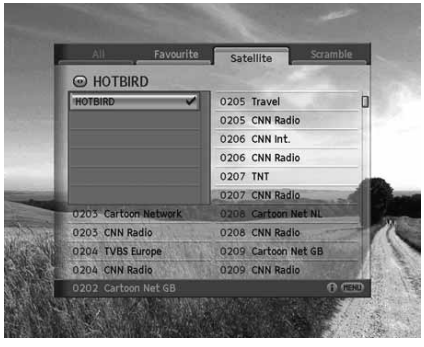
1. Press the **LIST** (LIST) button while watching a programme.
2. Press the **GREEN** (◯) button on the remote control.
3. Press the **LIST** (LIST) button again and select a favourite group to view, and press the **OK** (⊙) button.
4. To change the favourite group displayed, press the **GREEN** (◯) button again.



5.3 Satellite List

Satellite List displays the list of channels included in the satellite the user selects.

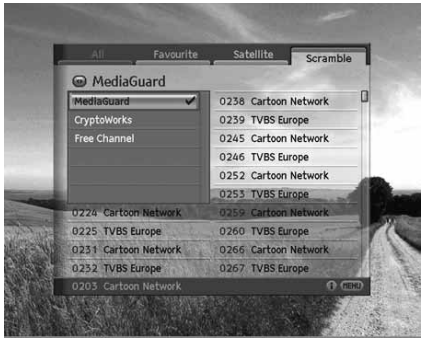
1. Press the **LIST** (LIST) button while watching a programme.
2. Press the **YELLOW** (◯) button on the remote control.
3. Press the **LIST** (LIST) button again and select a satellite to view, and press the **OK** (OK) button.
4. To change the satellite list displayed, press the **YELLOW** (◯) button again.



5.4 Scramble List

Scramble List is the list of channels included in the CAS the user selects.

1. Press the **LIST** (LIST) button while watching a programme.
2. Press the **BLUE** (◯) button on the remote control.
3. Press the **LIST** (LIST) button again and select a CAS to view, and press the **OK** (OK) button.
4. To change the CAS displayed, press the **BLUE** (◯) button again.



6. EPG

The ***EPG (Electronic Programme Guide)*** displays the detailed programme information of each channel, in time and date order. You can customize your own programme guide to list the channels or programmes of interest to you and schedule your viewing using the programme information.

Note: Press the **EPG** (EPG) or **BACK** ( ) button to exit the EPG screen.

6.1 EPG Main

EPG Main enables you to view the programme information of a certain channel in time and date order. You can reserve programmes, view contents information or view the channel list by date.

1. Press the **EPG** (EPG) button.
2. Press the **RED** ( ) button on the remote control.

1. Using EPG

1. To view all programmes of a certain day, press the ◀/▶ button. To return, press the ◀/▶ button.
2. To move to previous/next programmes use the ▲/▼ button. If the contents are more than one page, use the **PAGE** ▲/▼ (PAGE/PAGE) button to skip to the next page.
3. You can enter the number of the channel using the **NUMERIC(0-9)** buttons on the remote control to switch to a certain channel.
4. Select the programme you wish to view and press the **OK** (OK) button. You can watch the programme if it is currently on air or reserve it if it is a future programme.
5. Press the **i** (i) button to view detailed information of the chosen programme.





Note:

- You can reserve the programme after viewing the programme information. When the programme is currently on air, ***Reservation*** is replaced by ***Watch***.
- The icon indicates reserved programmes.
- You can also use the **P-/P+** (P-/P+) button or the channel list to switch channels.

2. Reserving Programmes

You can make reservations for the future programmes you wish to watch automatically.

1. Select the programme you want to reserve and press the **OK** button. A pop-up will appear.
2. To change ***Channel***, press the ◀/▶ button. You can also enter the channel number using the **NUMERIC(0-9)** buttons.
3. To change ***Start Time*** and ***End Time***, enter the time using the **NUMERIC(0-9)** buttons.
4. To change ***Date***, press the ◀/▶ button. You can also enter the date using the **NUMERIC(0-9)** buttons.
5. To change ***Repeat*** frequency, press the ◀/▶ button to choose from ***Once, Daily*** and ***Weekly***.
6. To change ***Programme Name***, enter the name of the programme in the screen keyboard. Select ***Save*** and press the **OK** button.





Note: The default password is **0000**.

3. Channel List

You can change the channel using the channel list.

1. Press the **LIST** (LIST) button to view the channel list.
2. Select the channel you want using the ▲/▼ button and press the **OK** button. If the contents are more than one page, use **PAGE** ▲/▼ (PAGE) button to skip to the next page.
3. The EPG for the selected channel is displayed.

Note: You can switch between TV/radio by simply pressing the **TV/RADIO** (TV/RADIO) button on the remote control.



6.2 EPG Table

EPG Table displays the programme information of each channel based on the date and time. You can look up the programmes and make reservations.

1. Press the **EPG** (EPG) button.
2. Press the **GREEN** (◯) button to display EGP table.
3. Move to the previous/next programme within the same channel using the ◀/▶ button.
4. Move to another channel using the ▲/▼ button. If the contents are more than one page, use **PAGE** ▲/▼ (PAGE ▲ / PAGE ▼) button to skip to the next page. You can enter the channel number you wish to view using the **NUMERIC(0-9)** buttons.
5. Press the **OK** (OK) button to view the programme now or reserve if it is a future programme.



6.3 Schedule List

Schedule List displays the list of the programmes reserved. You can modify, delete or make new reservations.

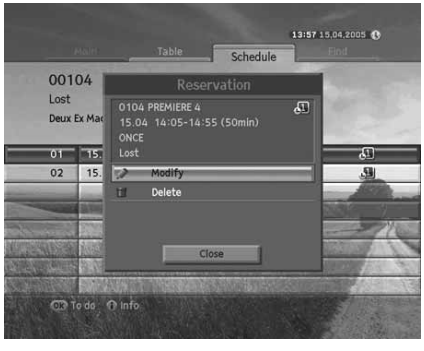
1. Press the **EPG** (EPG) button.
2. Press the **YELLOW** (◯) button to display the schedule list.
3. The reserved programmes will be displayed in time order.
4. Select the programme you want to edit using the ▲/▼ button and press the **OK** (OK) button.

Note: Press the **i** (i) button to view detailed programme information.



1. Modifying Schedule

1. Select ***Modify*** using the ▲/▼ button and press the **OK** (OK) button.
2. Reservation pop-up will appear. Enter the modified values and press the **OK** (OK) button.



2. Deleting Schedule

1. Select ***Delete*** using the ▲/▼ button and press the **OK** (⊙) button.
2. A pop-up will appear. Select ***Yes*** and press the **OK** (⊙) button.

3. New Reservation

1. Select a blank space using the ▲/▼ button and press the **OK** (⊙) button.
2. Reservation pop-up will appear. Enter the channel number, start/end time, date, repeat frequency and programme name and press the **OK** (⊙) button. (Refer to ***2. Reserving Programmes*** in ***EPG Main***.)

Note:

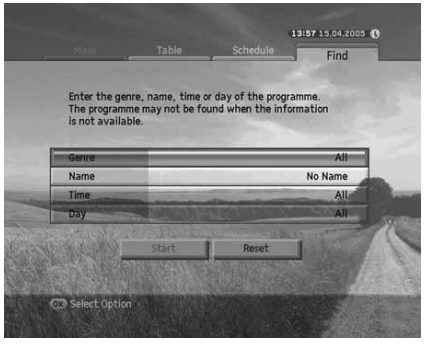
- Reservations for deleted channels or past programmes are automatically deleted.
- In case the channel number has changed, reservation has to be done again.

6.4 Find Programme

Find Programme enables you to find the programme you want by entering the genre, name, time and the day of the programme.

1. Press the **EPG** (EPG) button.
2. Press the **BLUE** (◯) button to find programme.
3. Enter the genre, name, time and day of the programme.

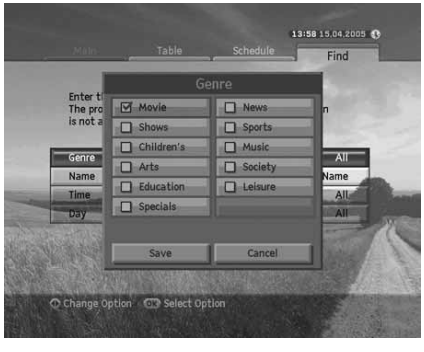
Note: If you select ***Reset*** and press the **OK** (⊙) button, the default value will appear.



1. Choosing Genre

1. Select ***Genre*** using the ▲/▼ button and press the **OK** (⊙) button.
2. Select the applicable genre using ▲/▼/◀/▶ button and press the **OK** (⊙) button.
3. Select ***Save*** and press the **OK** (⊙) button to complete.

Note: You can select up to three types of genres.



2. Entering Programme Name

1. Select ***Name*** using the ▲/▼ button and press the **OK** (⊙) button.
2. Keyboard will appear. Enter the programme name on the keyboard screen.

◂ Previous	Switch to the previous keyboard.
▸ Next	Switch to the next keyboard.
A ◂▸ a	Change to upper case/lower case keyboard.

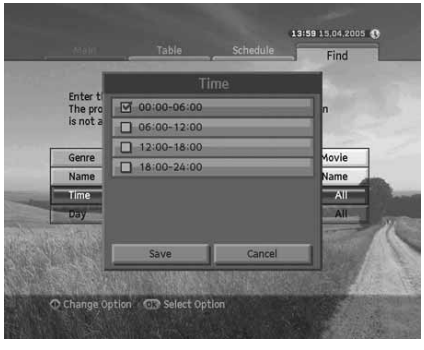
3. Select ***Save*** and the **OK** (⊙) button to complete.



Note: You have to enter more than three letters. However, entering too many letters may cause error.

3. Search by Time

1. Select ***Time*** using the ▲/▼ button and press the **OK** (⊙) button.
2. Select the specific time using the ▲/▼ button and press the **OK** (⊙) button.
3. Select ***Save*** and the **OK** (⊙) button to complete.



4. Search by Day of Week

1. Select ***Day*** using the ▲/▼ button and press the **OK** (⊙) button.
2. Select the specific day of week using the ▲/▼ button and press the **OK** (⊙) button.
3. Select ***Save*** and the **OK** (⊙) button to complete.



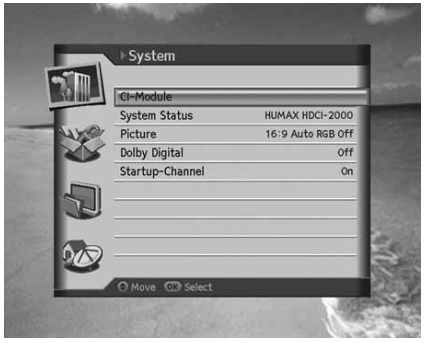
5. Search Result

1. After setting more than one required value, select ***Start*** and press the **OK** (OK) button to proceed.
2. The search result of the entered values will appear.
3. To reserve a programme, select a future programme and press the **OK** (OK) button.
4. To search again, press the **BLUE** (◯) button.



7. System

In this chapter you can easily access the service features of the product. options such as CI-Module, system status, picture, Dolby Digital and startup-channel are included in ***System***.



Note: Press the **BACK** ( ) button to save the changes and return to the previous menu. Press the **MENU** ( ) button to exit the Menu screen.

7.1 CI-Module

CI-Module shows you the current status of the Common Interface module.

1. Press the **MENU** ( ) button.
2. Select ***System*** using the ▲/▼ button and press the **OK** ( ) button.
3. Select ***CI-Module*** using the ▲/▼ button and press the **OK** ( ) button.
4. The ***CI-Module*** information will be displayed.

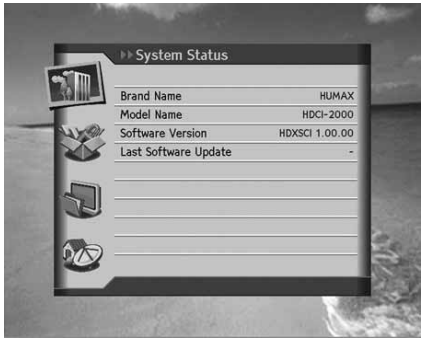


Note: The displayed information about each Common Interface may differ depending on the type of Common Interface.

7.2 System Status

System Status allows you to view the system information of the product.

1. Press the **MENU** ( ) button.
2. Select ***System*** using the ▲/▼ button and press the **OK** ( ) button.
3. Select ***System Status*** using the ▲/▼ button and press the **OK** ( ) button.
4. The system information of the product will be displayed.



Note: The information displayed may differ.

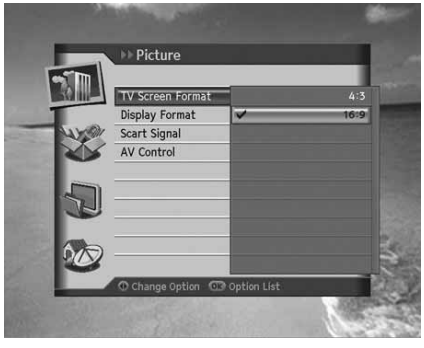
7.3 Picture

1. Press the **MENU** button.
2. Select ***System*** using the ▲/▼ button and press the **OK** button.
3. Select ***Picture*** using the ▲/▼ button and press the **OK** button.



1. TV Screen Format

1. Select ***TV Screen Format*** using the ▲/▼ button.
2. Select one option from ***4:3*** and ***16:9*** using the **OK** or ◀/▶ button.



2. Display Format

1. Select ***Display Format*** using the ▲/▼ button.
2. When choosing ***4:3*** as picture format, select one option among ***Auto, Letter Box*** and ***Center Mode*** using the **OK** or ◀/▶ button.
3. When choosing ***16:9*** as picture format, select one option among ***Auto, Pillar Box*** and ***Full Mode*** using the **OK** or ◀/▶ button.

3. Scart Signal

1. Select ***Scart Signal*** using the ▲/▼ button.
2. Select one option among ***CVBS, RGB*** and ***S-Video*** using the **OK** (●) or ◀/▶ button.

4. AV Control

1. Select ***AV Control*** using the ▲/▼ button.
2. Select ***On/Off*** using the **OK** (●) or ◀/▶ button.
3. When you select ***Off***, a notice will appear. Read carefully and select ***Yes***.

7.4 Dolby Digital

1. Press the **MENU** (MENU) button.
2. Select ***System*** using the ▲/▼ button and press the **OK** (●) button.
3. Select ***Dolby Digital*** using the ▲/▼ button and press the **OK** (●) button.
4. ***Automatic Selection*** will appear. Select ***On/Off*** using the **OK** (●) or ◀/▶ button and press the **BACK** (BACK) button to set the value.



7.5 Startup-Channel

You can assign a certain channel to be displayed when the product is turned on.

1. Press the **MENU** button.
2. Select ***System*** using the ▲/▼ button and press the **OK** button.
3. Select ***Startup-Channel*** using the ▲/▼ button and press the **OK** button.



1. Setting the Startup-Channel

You can choose to assign a certain channel to be displayed when powering on.

1. ***Setting the Startup-Channel*** using the ▲/▼ button.
2. Select one option from ***On/Off*** using the **OK** or ▶ button.

On The assigned channel will be displayed when powering on.

Off The last channel you have watched will be displayed when powering on.

2. Startup-Channel

You can assign a preferred channel as the start channel.

1. Select ***Startup-Channel*** using the ▲/▼ button.
2. Select one option from ***100*** or ***User preference*** using the **OK** or ▶ button.
3. When you have selected ***User preference***, enter the channel number using the **NUMERIC(0-9)** buttons and press the **OK** button.



Note: When ***Off*** is selected, ***Start Channel Number*** is inactivated. You can switch to TV/radio by pressing the **TV/RADIO** button on the remote control.

8. Setting

In this chapter you can set parental control, language setting, time setting, A/V setting and other configuration items to keep limitations where you want them for the viewers.

Note: Press the **BACK** ( ) button to save the changes and return to the previous menu. Press the **MENU** ( ) button to exit the menu screen.

8.1 Parental Control

Parental Control allows you to set rating limits for each programme according to the age of the viewer or change your previous password. You can also lock the changes you have made by operating installation lock.

1. Press the **MENU** ( ) button.
2. Select ***Setting*** using the ▲/▼ button and press the **OK** ( ) button.
3. Select ***Parental Control*** using the ▲/▼ button and press the **OK** ( ) button.
4. You will be prompted to enter a password. Enter the password using the **NUMERIC(0-9)** buttons.



Note: The default password is **0000**.

1. Censorship Classification

Censorship Classification enables you to place certain restrictions on the viewers by setting age limits and require a password to view the blocked programmes.

1. Select the ***Censorship Classification*** using the ▲/▼ button.
2. Select the ***Age Level*** you wish to set using the **OK** ( ) or ◀/▶ button.

View All	All programmes can be watched because there is no age limitation.
7	Programmes are blocked for those under the age 7.
12	Programmes are blocked for those under the age 12.
15	Programmes are blocked for those under the age 15.
18	Programmes are blocked for those under the age 18.
Lock All	All Programmes are blocked.



Note:

- You have to enter your password to watch the programme blocked by the age restriction.
- The default password is **0000**.

2. Change Password

Change Password allows you to change the current password.

1. Select the ***Change Password*** using the ▲/▼ button and press the **OK** button.
2. Enter ***New Password*** using the **NUMERIC(0-9)** buttons.
3. Enter ***New Password*** again to confirm ***Verify Password***.

Note: The default password is **0000**.



3. Installation Lock

Installation Lock allows you to block access to the installation menu settings you have previously made.

1. Select ***Installation Lock*** using the ▲/▼ button.
2. Select ***Enable/Disable*** using the **OK** or ◀/▶ button.

Enable	Password is necessary when accessing installation menu.
Disable	Access to installation menu is permitted without password.



8.2 Language Setting

Language Setting enables you to set the basic language options such as menu language, subtitle display and subtitle font.

1. Press the **MENU** button.
2. Select ***Setting*** using the ▲/▼ button and press the **OK** button.
3. Select ***Language Setting*** using the ▲/▼ button and press the **OK** button.



1. Menu Language

Menu Language allows you to choose from the given language options and set the language for the menu.

1. Select ***Menu Language*** using the ▲/▼ button.
2. Select the language you require using the **OK** or ◀/▶ button.



2. Subtitle Display

Subtitle Display allows you to show the subtitles automatically. This service is provided when subtitles are available.

1. Select ***Subtitle Display*** using the ▲/▼ button.
2. Select one option from ***Auto*** and ***Manual*** using the **OK** or ◀/▶ button.

Auto	Subtitles are displayed automatically in the predefined subtitle language.
Manual	Subtitles are displayed when you press the **OPT+** button on the remote control and set subtitle.

3. Subtitle Font

Subtitle Font enables you to select the font of the subtitle.

1. Select ***Subtitle Font*** using the ▲/▼ button.
2. Select one option from ***Variable*** and ***Fixed*** using the **OK** (●) or ◀/▶ button.

Variable	Uses the horizontally variable subtitle font.
Fixed	Uses the fixed subtitle font.

8.3 Time Setting

Time Setting allows you to set the current time or set the time you want to turn on/off the product.

1. Press the **MENU** (MENU) button.
2. Select ***Setting*** using the ▲/▼ button and press the **OK** (●) button.
3. Select ***Time Setting*** using the ▲/▼ button and press the **OK** (●) button.



1. GMT Offset

You can set the current time using ***GMT Offset***.

1. Select ***GMT Offset*** using the ▲/▼ button.
2. Select your GMT offset using the **OK** (●) or ◀/▶ button.
3. A pop-up will appear. Select ***Yes*** and press the **OK** (●) button.

Note:

- The current time is set automatically whenever GMT offset changes.
- GMT can be changed in 30 minutes/1 hour units.



2. Power On

You can set the time you want the product to be automatically turned on.

1. Select ***Power On*** using the ▲/▼ button.
2. Select ***Enable/Disable*** using the **OK** (⊙) or ◀/▶ button.

   Enable Uses Power On and sets the time the product should be turned on.

   Disable Does not use Power On.

3. When you select ***Enable***, enter the ***Channel No***. and ***Time*** using the **OK** (⊙) , ◀/▶ or **NUMERIC(0-9)** buttons. Then, select ***OK*** and press the **OK** (⊙) button.



Note: To enter a radio channel in ***Channel No.***, press the **TV/RADIO** ( ) button to switch to radio.

3. Power Off

You can set the time you want the product to be automatically turned off.

1. Select ***Power Off*** using the ▲/▼ button.
2. Select **Enable/Disable** using the **OK** (⊙) or ◀/▶ button.

   Enable Uses Power Off and sets the time the product should be turned off.

   Disable Does not use Power Off.

3. When you select ***Enable***, enter the ***Time*** using the ◀/▶ or **NUMERIC(0-9)** buttons. Then, select ***OK*** and press the **OK** (⊙) button.

Note: Once Power On/Off has been set, it is repeated everyday.



8.4 A/V Setting

You can set the output of the audio or video.

1. Press the **MENU** button.
2. Select ***Setting*** using the ▲/▼ button and press the **OK** button.
3. Select ***A/V Setting*** using the ▲/▼ button and press the **OK** button.



1. TV-SCART

1. Select ***TV-SCART*** using the ▲/▼ button.
2. Select one option among ***CVBS, RGB*** and ***S-Video*** using the **OK** or ◀/▶ button.



2. VCR-SCART

1. Select ***VCR-SCART*** using the ▲/▼ button.
2. Select one option from ***CVBS*** and ***S-Video*** using the **OK** or ◀/▶ button.

3. Audio Output

1. Select ***Audio Output*** using the ▲/▼ button.
2. Select one option from ***Mono*** and ***Stereo*** using the **OK** or ◀/▶ button.

8.5 Other Settings

You can configure other settings.

1. Press the **MENU** button.
2. Select ***Setting*** using the ▲/▼ button and press the **OK** button.
3. Select ***Other Settings*** using the ▲/▼ button and press the **OK** button.



1. i Display Time

You can set the automatic display time of the information box when the channel is switched.

1. Select ***i Display Time*** using the ▲/▼ button.
2. Select a value between ***Disable*** , ***1~ 20*** seconds using the **OK** or ◀/▶ button.

Note: When set to ***Disable***, the ***i-plate*** will not be displayed when you switch the channel.



2. OSD Transparency

You can set the transparency of On Screen Display.

1. Select ***OSD Transparency*** using the ▲/▼ button.
2. Select one option among ***Disable, 25, 50*** and ***75*** using the **OK** or ◀/▶ button.

Disable Fully opaque screen

25, 50, 75 The bigger the number, the more transparent the screen.

9. Edit Channels

In this chapter you can edit all channels or make changes to the favourite lists of the channels you have chosen.

Note:

- Press the **BACK** ( ) button to save the changes and return to the previous menu. Press the **MENU** ( ) button to exit the menu screen.
- Press the **TV/RADIO** ( ) button on the remote to move to TV or radio channel list directly.

9.1 Edit Channels

Edit Channels enables you to rename, lock/unlock, move the channels and select channel group, select all or delete the channels.

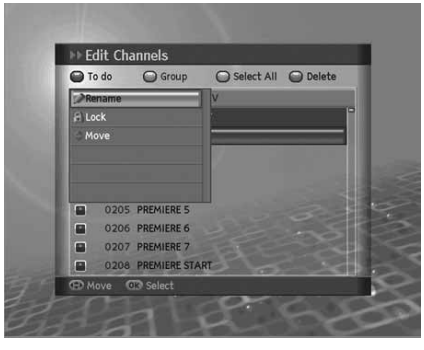
1. Press the **MENU** ( ) button.
2. Select ***Edit Channels*** using the ▲/▼ button and press the **OK** ( ) button.
3. Select ***Edit Channels*** using the ▲/▼ button and press the **OK** ( ) button.



Note: The default password is **0000**.

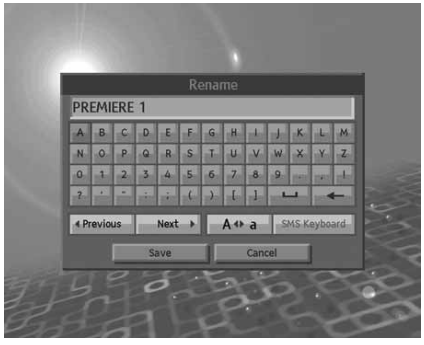
1. Renaming Channels

1. Select the channel you wish to rename and press the **RED** ( ) button on the remote control. You can select one channel at a time.
2. Select ***Rename*** using the ▲/▼ button and press the **OK** ( ) button.



3. Enter a channel name directly using the keyboard displayed on the screen.
4. When entering channel name is complete, select ***Save*** and press the **OK** button.

Note: For detailed information on using the keyboard, refer to ***5.1.2 Renaming Channels***.

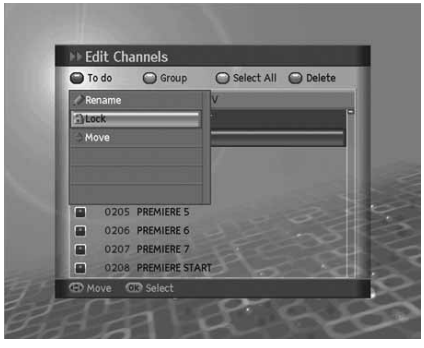


2. Locking/Unlocking Channels

1. Select the channel you want to lock and press the **RED** button on the remote control. You can select more than one channel.
2. Select ***Lock*** using the ▲/▼ button and press the **OK** button.

Note:

- When all selected channels are locked, ***Lock*** is switched into ***Unlock***. When you press ***Unlock***, the locked channel is switched into an unlocked channel.
- To watch locked channels, you must enter the password using the **NUMERIC(0-9)** buttons.
- The default password is **0000**.



3. Moving Channels

1. Select the channel you want to move and press the **RED** button on the remote control. You can select more than one channel.
2. Select ***Move*** using the ▲/▼ button, and press the **OK** button. The selected channel disappears from the channel list temporarily.
3. Move the cursor to the destination in the channel list using the ▲/▼ button, and press the **OK** button.
4. The selected channel(s) is moved to the selected location in the given order.

Note:

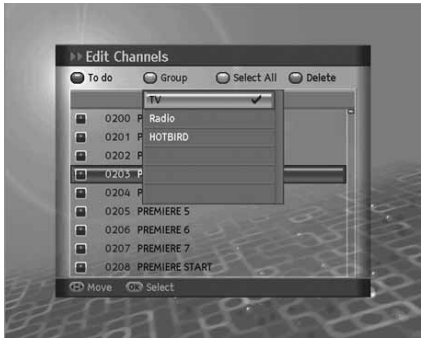
- ***Move*** is available only for TV or radio channel lists.
- The channel number is changed by using ***Move*** function.



4. Selecting a Channel Group

You can select the channel list group to edit.

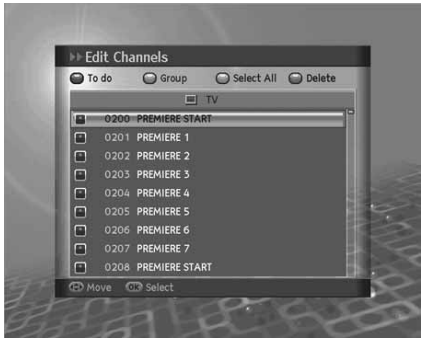
1. Press the **GREEN** ( ) button on the remote control to display the group of channel lists.
2. Select the group you want using the ▲/▼ button and press the **OK** ( ) button.



5. Select/Unselect All Channels

1. Press the **YELLOW** ( ) button on the remote control to select all channels.
2. To release one or more channels from select all, press the **OK** ( ) button while the cursor is on the selected channel.

Note: Up to 100 channels can be saved in Favourite group.



6. Deleting Channels

1. Select the channels you want to delete and press the **BLUE** ( ) button on the remote control. You can select more than one channel.
2. The chosen channel(s) will be deleted.

9.2 Edit Favourite List

You can rename favourite groups, move favourite channels, select favourite groups, select/unselect all channels, add or remove channels from the favourite channel list.

1. Press the **MENU** button.
2. Select ***Edit Channels*** using the ▲/▼ button and press the **OK** button.
3. Select ***Edit Favourite List*** using the ▲/▼ button and press the **OK** button.

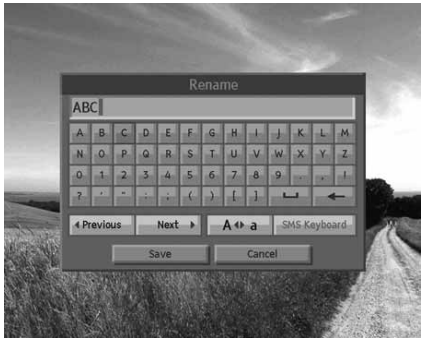


1. Renaming Favourite Groups

You can rename your favourite group.

1. Press the **GREEN** button and select the favourite group to rename. Press the **OK** button.
2. Press the **RED** button and select ***Rename Group*** and then, press the **OK** button.
3. Keyboard will appear. Enter the name of the favourite group using the keyboard.
4. Select ***Save*** and press the **OK** button to complete.





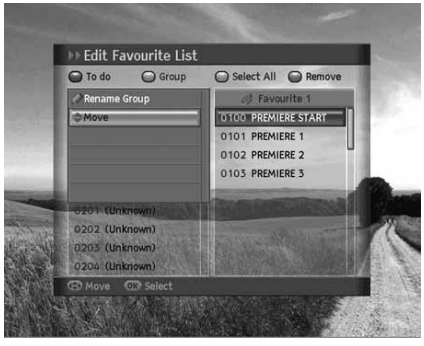
Note:

- ***Rename Group*** becomes activated only when the cursor is placed on the right column.
- For detailed information on using the keyboard, refer to ***6.1.2 Renaming Channels***.

2. Moving Favourite Channels

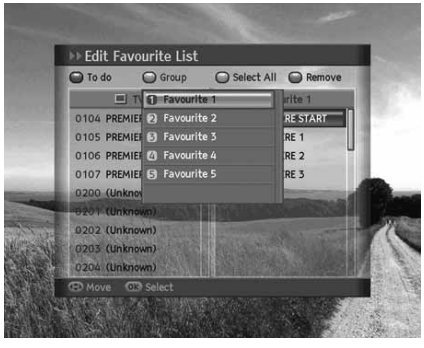
You can move the favourite channels to a different location within the favourite channel list. This function changes the location only and does not affect the number of the channel.

1. Select the favourite channels to move within the favourite channel list and press the **RED** button on the remote control.
2. Select ***Move*** and press the **OK** button.
3. Move the cursor to the destination using the ▲/▼ button, and press the **OK** button.
4. The selected channel is moved to the new location.



3. Selecting Favourite Groups

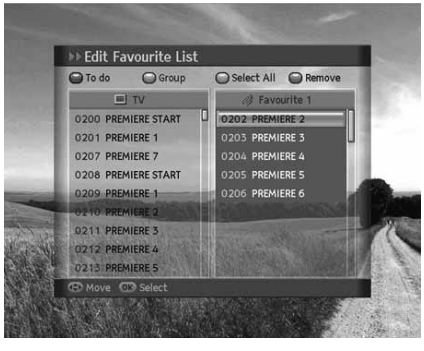
1. Press the **GREEN** button on the remote control to display the group of favourite channels.
2. Select the favourite group you want using the ▲/▼ button and press the **OK** button.



4. Selecting/Unselecting All Channels

1. Press the **YELLOW** button on the remote control to select all channels.
2. To release one or more channels from select all, press the **OK** button while the cursor is on the selected channel.

Note: Up to 100 channels can be saved in favourite group.



5. Adding/Removing Channels

You can add a channel to the favourite group or remove a channel from the list.

1. Select the channels you want to add to the favourite channel list using the ▲/▼ button.
2. Press the **BLUE** (◯) button on the remote control to add the channels to the favourite list you have chosen.
3. To remove channels from the favourite list, select the channels from the list and press the **BLUE** (◯) button on the remote control.



Note: When the cursor is on the left column, the blue button is marked ***Add***; when the cursor moves to the right column, it becomes ***Remove***.

10. Installation

In this chapter you can configure installation settings such as search channels, advanced search, SMATV search, software update and default setting.

Note: Press the **BACK** ( ) button to save the changes and return to the previous menu. Press the **MENU** ( ) button to exit the menu screen.

10.1 Search Channels

Search Channels enables you to configure the installation settings.

1. Press the **MENU** ( ) button.
2. Select ***Installation*** using the ▲/▼ button, and press the **OK** ( ) button.
3. Select ***Search Channels*** using the ▲/▼ button and press the **OK** ( ) button.

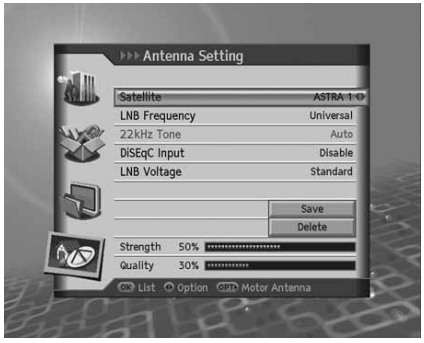


1. Fixed Antenna

You can set the antenna and LNB information for channel search. If the antenna is not properly set, channel search cannot be activated which means you cannot watch any of the programmes on air.

1. Select ***Antenna*** and press the **OK** ( ) button to view the list of antennas.
2. Select a value for ***Antenna*** using the **OK** ( ) or ◀/▶ button.
3. Enter the value for ***Satellite, LNB Frequency, 22kHz Tone, DiSEqC Input*** and ***LNB Voltage***.
4. Select ***Save*** and press the **OK** ( ) button to complete.





Satellite

1. Select ***Satellite*** using the ▲/▼ button.
2. Select the satellite the antenna is pointing to from the options using the **OK** (⊙) or ◀/▶ button.
3. If the required satellite is not available in the list, select ***User Define***. When pop up appears, select ***Yes*** and press the **OK** (⊙) button to view keyboard. Enter the name of the satellite and select ***Save***. Press the **OK** (⊙) button to complete.

LNB Frequency

1. Select ***LNB Frequency*** using the ▲/▼ button.
2. Select one option among ***Universal***, ***9750***, ***10600***, ***5150***, ***11475*** and ***User Define*** using the **OK** (⊙) or ◀/▶ button.
   If the required value does not exist, select ***User Define*** and enter the LNB frequency directly.

Note: If you select ***Universal***, the ***22KHz Tone*** value is set to ***Disabled***.

22KHz Tone

1. Select **22KHz Tone** using the ▲/▼ button.
2. Select ***Enable/Disable*** using the **OK** (⊙) or ◀/▶ button.

Enable	Dual LNB is used or two antennas are connected to the 22KHz tone switch box.
Disable	22KHz is not in use.

DiSEqC Input

1. Select ***DiSEqC Input*** using the ▲/▼ button.
2. Select one option among ***Disable***, ***DiSEqC A~D*** and ***Tone Burst A, B*** using the **OK** (⊙) or ◀/▶ button.

LNB Voltage

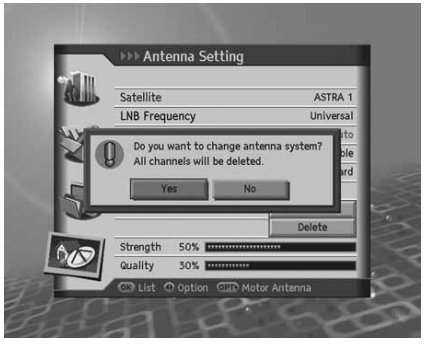
1. Select ***LNB Voltage*** using the ▲/▼ button.
2. Select one option from ***Standard*** and ***High*** using the **OK** (⊙) or ◀/▶ button.

Note: When LNB Voltage is set as ***High***, a pop-up appears. "Only for LNB cable over 60m, Set LNB power ***High***."

2. Motor Antenna

When using a motor antenna, set the antenna to ***Motor*** before performing channel search.

1. Press the **OPT+** (OPT+) button to switch to motor antenna in ***Antenna Setting*** mode.
2. A pop-up message will appear. Select **Yes** and press the **OK** (OK) button.



Motor Type

You should set the motor type before motor antenna setting.

- **LNB Frequency**

  1. Select ***LNB Frequency*** using the ▲/▼ button.
  2. Select one option among ***Universal, 9750, 10600, 5150, 11475*** and ***User Define*** using the **OK** (OK) or ◀/▶ button. If the required value does not exist, select ***User Define*** and enter the LNB frequency directly.

- **LNB Voltage**

  1. Select ***LNB Voltage*** using the ▲/▼ button.
  2. Select one option from ***Standard*** and ***High*** using the **OK** (OK) or ◀/▶ button.

  Note: When LNB Voltage is set as ***High***, a pop-up appears. "Only for LNB cable over 30m, Set LNB power ***High***."





- **Motor Type**
  1. Select ***Motor Type*** using the ▲/▼ button.
  2. Select one option from ***DiSEqC1.2*** and ***USALS*** using the **OK** (⊙) or ◀/▶ button.

     DiSEqC1.2 General motor antenna using DiSEqC1.2
     USALS Motor antenna using USALS

  Note: When ***Motor Type*** is set as ***DiSEqC 1.2***, both ***My Longitude*** and ***My Latitude*** are set to ***Disabled***.

- **My Longitude**
  1. Select ***My Longitude*** using the ▲/▼ button.
  2. Enter my longitude value using the **NUMERIC(0-9)** buttons.
  3. Select from ***East/West*** using the **OK** (⊙) or ◀/▶ button.
  4. Press the **OK** (⊙) button to complete.

- **My Latitude**
  1. Select ***My Latitude*** using the ▲/▼ button.
  2. Enter my latitude value using the **NUMERIC(0-9)** buttons.
  3. Select from ***North/South*** using the **OK** (⊙) or ◀/▶ button.
  4. Press the **OK** (⊙) button to complete.

Edit Satellite Data

You can set the position of the satellite, which the motor antenna heads for, and decide whether or not to use the satellite.

1. Select ***Edit Satellite Data*** from ***Motor Antenna Setting*** using the ▲/▼ button and press the **OK** (●) button.
2. Enter the appropriate value for ***Satellite, Activate Satellite*** and ***Satellite Longitude***.



- **Satellite**
  1. Select ***Satellite*** using the ▲/▼ button.
  2. Select a satellite to edit using the **OK** (●) or ◀/▶ button.

- **Activate Satellite**
  1. Select ***Activate Satellite*** using the ▲/▼ button and press the **OK** (●) button.
  2. Select ***Enable/Disable*** using the **OK** (●) or ◀/▶ button.

  Enable Channel search is available.

  Disable Current channel does not exist. Channel search unavailable.

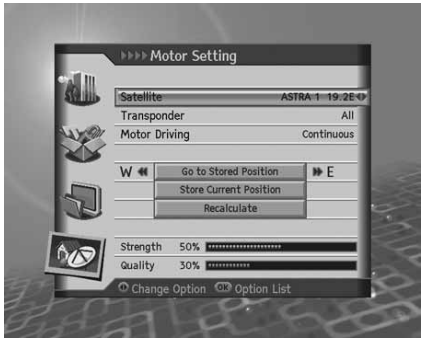
- **Satellite Longitude**
  1. Select ***Satellite Longitude*** using the ▲/▼ button.
  2. Enter satellite longitude value using the **NUMERIC(0-9)** buttons.
  3. Set ***East/West*** using the **OK** (●) or ◀/▶ button.
  4. Press the **OK** (●) button to complete.

  Note: ***Satellite Longitude*** is editable for ***User Define Satellite*** only.

Motor Setting

You can set the motor antenna for more efficient channel search.

Select ***Motor Setting*** from ***Motor Antenna Setting*** using the ▲/▼ button and press the **OK** button.



- **Satellite**
  1. Select ***Satellite*** using the ▲/▼ button.
  2. Select the satellite the antenna is pointing to from the options using the **OK** or ◀/▶ button.

- **Transponder**

  Note: Go to ***10.1.3 Transponder*** for detailed information.

- **Motor Driving**
  1. Select ***Motor Driving*** using the ▲/▼ button.
  2. Select one option among ***Continuous, Step*** and ***Time*** and press the **OK** or ◀/▶ button.
  3. When motor driving is set as ***Step*** or ***Time***, a pop up will appear to set the driving size. Select the driving size using the ◀/▶ button. Select ***Save*** and press the **OK** button.



Continuous	Motor moves continuously.
Step	Motor moves by specified unit.
Time	Motor moves during specified time.

- **Go to Stored Position**

  Move the antenna to the position of the selected satellite.

  1. Select ***Go to Stored Position*** using the ▲/▼ button and press the **OK** (⊙) button.
  2. Wait till the antenna moves to the position of the satellite.
  3. Confirm signal strength and quality level and fine-tune the antenna direction. Select ***Go to Stored Position*** using the ▲/▼ button. Move the antenna East/West by pressing the button. Adjust ***Signal Level*** to maximum.

- **Store Current Position**

  Save the adjusted position of the satellite.

  1. Select ***Store Current Position*** using the ▲/▼ button and press the **OK** (⊙) button.
  2. The position of the antenna headed for the certain satellite will be saved.

  Note: You can set the antenna position by repeating the procedure above.

- **Recalculate**

  You can recalculate the position of all satellites based on one satellite. Adjust the antenna position of a certain satellite.

  1. Select ***Recalculate*** using the ▲/▼ button and press the **OK** (⊙) button.
  2. To readjust all positions, select ***Yes*** and press the **OK** button.

  Note: When ***Motor Type*** is set as ***USALS, Motor Driving, Store Current Position, Recalculate*** is set to ***Disabled***.

Installer Menu

You can set default setting and operation limit for motor antenna.

1. Select ***Installer Menu*** from ***Motor Antenna Setting*** and press the **OK** button.
2. To save the present location, change the ***Motor Limit*** to ***Enable***.

Note: When ***Motor Limit*** is set to ***Enable, Limit Position*** and ***Set Limits*** are set to ***Disabled***.



- **Motor Limit**

  You can set the maximum motor limit both East and West to prevent damage to the antenna.

  1. Select ***Motor Limit*** using the ▲/▼ button.
  2. Select ***Enable/Disable*** using the **OK** or ◀/▶ button.

  Enable Motor limit is set. motor does not exceed the limit.

  Disable Setting is released.

  Note: When setting new motor limit, set to ***Disable***.

- **Limit Position**

  You can set the maximum motor limit both East and West to prevent damage to the antenna.

  1. Select ***Limit Position*** using the ▲/▼ button and press the **OK** button.
  2. Select from ***East/West*** using the **OK** or ◀/▶ button.

  East Sets East limit.

  West Sets West limit.

- **Set Limit**

  1. Select ***Set Limit*** using the ▲/▼ button and press the **OK** button.
  2. Move the antenna to the ***Limit Position*** to set using the **OK** or ◀/▶ button.

  Note: When limit is set, ***Motor Limit*** is automatically set to ***Enable***.

- **Reset Position**

  You can restore the position saved at motor antenna to the default setting.

  1. Select ***Reset Position*** using the ▲/▼ button and press the **OK** button.
  2. Pop-up will appear. Select ***OK*** and press the **OK** button to restore all values saved at motor antenna to default setting.
  3. Please wait during the motor antenna is restored.

  Note: Reset may not be activated depending on the condition of the antenna. Repeat the procedure above if necessary.

3. Transponder

1. Select ***Transponder*** in ***Search Channel*** using the ▲/▼ button and press the **OK** button.
2. Select an option for ***Transponder*** using the **OK** or ◀/▶ button.
3. To add another transponder, select ***User Define*** from the list.
4. ***Add Transponder*** screen will appear. Enter the values for ***Frequency, Polarization, Symbol Rate, Transmission, FEC*** and ***Modulation***.
5. Select ***Save*** and press the **OK** button to complete.

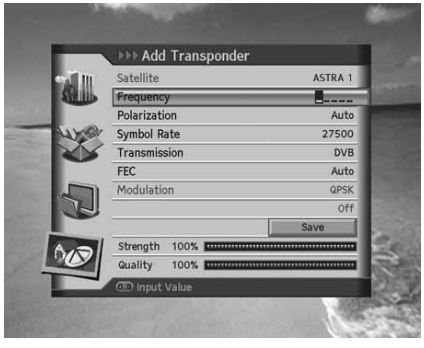


Frequency

1. Select ***Frequency*** using the ▲/▼ button.
2. Enter the frequency using the **NUMERIC(0-9)** buttons.

Polarization

1. Select ***Polarization*** using the ▲/▼ button.
2. Select one option among ***Auto***, ***Horizontal*** and ***Vertical*** using the **OK** or ◀/▶ button.



Symbol Rate

1. Select ***Symbol Rate*** using the ▲/▼ button.
2. Enter the symbol rate from 2 to 45 Ms/s in ***DVB-S*** (Transmission) setting.
3. Enter the symbol rate from 10 to 30 Ms/s in ***DVB-S2***(Transmission) and ***QPSK***(Modulation) setting.
4. Enter the symbol rate from 10 to 31 Ms/s in ***DVB-S2***(Transmission) and ***8PSK***(Modulation) setting.

Transmission

1. Select ***Transmission*** using the ▲/▼ button.
2. Select one option form ***DVB-S*** and ***DVB-S2*** using the **OK** (⊖) or ◀/▶ button.

FEC

1. Select ***FEC*** using the ▲/▼ button.
2. Select one option among ***Auto, 1/2, 2/3, 3/4, 5/6*** and ***7/8*** using the **OK** (⊖) or ◀/▶ button in ***DVB-S***(Transmission) setting.
3. Select one option among ***Auto, 1/2, 2/3, 3/4, 3/5, 4/5, 5/6, 8/9*** and ***9/10*** using the **OK** (⊖) or ◀/▶ button in **DVB-S2**(Transmission) and **QPSK**(Modulation) setting.
4. Select one option among ***Auto, 3/5, 2/3, 3/4, 5/6, 8/9*** and ***9/10*** using the **OK** (⊖) or ◀/▶ button in ***DVB-S2***(Transmission) and ***8PSK***(Modulation) setting.

Modulation

1. Select ***Modulation*** using the ▲/▼ button.
2. Select one option form ***QPSK*** and ***8PSK*** using the **OK** (⊖) or ◀/▶ button.

Note: When ***Transmission*** is set to ***DVB-S, Modulation*** is disabled. The values for ***Symbol Rate*** and ***FEC*** differ depending on the value of ***Modulation***.

Refer to the table below.

Parameter	Value		
Transmission	**DVB-S**	**DVB-S2**	
Modulation	Disabled	**QPSK**	**8PSK**
Symbol Rate	2-45 Ms/s	10-30 Ms/s	10-31 Ms/s
FEC	Auto, 1/2, 2/3, 3/4, 5/6, 7/8	Auto, 1/2, 2/3, 3/4, 3/5, 4/5, 5/6, 8/9, 9/10	Auto, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10

4. Network Search

1. Select ***Network Search*** using the ▲/▼ button.
2. Select ***Enable/Disable*** using the **OK** (⊙) or ◀/▶ button.



5. Scrambled Type

1. Select ***Scrambled Type*** using the ▲/▼ button.
2. Select one option among ***All, FTA*** and ***CAS*** using the **OK** (⊙) or ◀/▶ button.



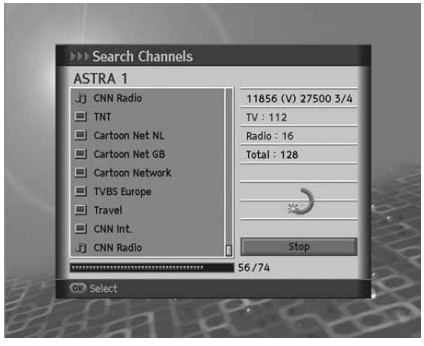
6. Channel Type

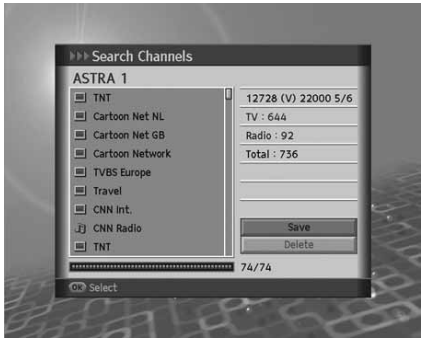
1. Select ***Channel Type*** using the ▲/▼ button and press the **OK** (⊙) button.
2. Select one option among ***All***, ***TV*** and ***Radio*** using the **OK** (⊙) or ◀/▶ button.



7. Search Result

1. Select ***Search*** and press the **OK** button.
2. Channel search will activate.
3. To delete search results, select the channels you wish to delete using the ▲/▼ button. Select ***Delete*** and press the **OK** button.
4. To save search results, select ***Save*** and press the **OK** button.





Note:

- When you select ***Stop*** during channel search, the search will be discontinued and the accumulated search results will show.
- If there are no channels available, a message indicating the result will pop up.

10.2 Advanced Search

Advanced Search allows you to search channels using the PID information.

1. Press the **MENU** button.
2. Select ***Installation*** using the ▲/▼ button and press the **OK** button.
3. Select ***Advanced Search using the*** using the ▲/▼ button, and press the **OK** button.



1. Antenna

1. Select ***Antenna*** using the ▲/▼ button.
2. Select an option for ***Antenna*** using the **OK** or ◀/▶ button.



2. Transponder

1. Select ***Transponder*** using the ▲/▼ button.
2. Select an option for ***Transponder*** using the **OK** or ◀/▶ button.

3. Video PID

1. Select ***Video PID*** using the ▲/▼ button.
2. Select and option from ***Auto, Hexadecimal*** and ***Decimal*** using the **OK** (⊙) or ◀/▶ button.



4. Audio PID

1. Select ***Audio PID*** using the ▲/▼ button.
2. Select and option from ***Auto, Hexadecimal*** and ***Decimal*** using the **OK** (⊙) or ◀/▶ button.



5. PCR PID

1. Select ***PCR PID*** using the ▲/▼ button.
2. Select and option from ***Auto, Hexadecimal*** and ***Decimal*** using the **OK** (⊙) or ◀/▶ button.



10.3 SMATV Search

SMATV Search allows you to perform channel search regardless of the setting value in antenna setting.

1. Press the **MENU** button.
2. Select **Installation** using the ▲/▼ button and press the **OK** button.
3. Select ***SMATV Search*** using the ▲/▼ button, and press the **OK** button.
4. Select ***Search Type*** using the ▲/▼ button.
5. Select one option from ***Auto*** and ***Manual*** using the **OK** or ◀/▶ button.

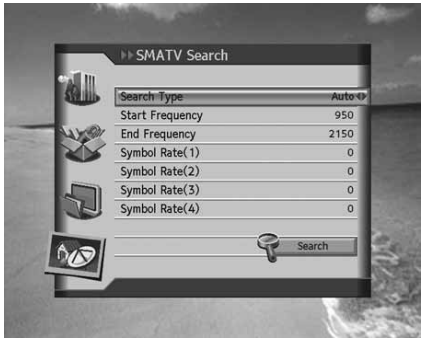


1. SMATV Automatic Search

Start/End Frequency

1. Select ***Start/End Frequency*** using the ▲/▼ button.
2. Enter the frequency using the **NUMERIC(0-9)** buttons.

Note: Enter the frequency from 950 to 2150 MHz.



Symbol Rate

1. Select ***Symbol Rate*** using the ▲/▼ button.
2. Select one option among ***27500, 26000*** and ***22000*** using the **OK** or ◀/▶ button. If the required value does not exist, select ***User Define*** and enter the symbol rate directly.

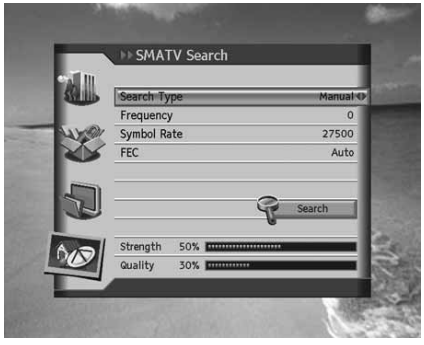
Note: You can enter up to four symbol rates.

Select ***Search*** and press the **OK** button.

2. SMATV Manual Search

Frequency

1. Select ***Frequency*** using the ▲/▼ button and press the **OK** button.
2. Enter the frequency using the **NUMERIC(0-9)** buttons.



Note: Enter the frequency from 950 to 2150 MHz.

Symbol Rate

1. Select ***Symbol Rate*** using the ▲/▼ button.
2. Select one option among **27500, 26000** and **22000** using the **OK** or ◀/▶ button. If the required value does not exist, select ***User Define*** and enter the symbol rate directly.

FEC

1. Select ***FEC*** using the ▲/▼ button.
2. Select one option among ***Auto, 1/2, 2/3, 3/4, 5/6*** and ***7/8*** using the **OK** or ◀/▶ button.

10.4 Software Update

Software Update allows you to update the system software.

1. Press the **MENU** button.
2. Select ***Installation*** using the ▲/▼ button and press the **OK** button.
3. Select ***Software Update*** using the ▲/▼ button and press the **OK** button.



1. Automatic Update

1. Select ***Automatic Update*** and press the **OK** button.
2. When new software is detected, you can choose to download the software immediately or save for later. You can refuse software update if not needed.
3. When there is no new software to update, a pop-up will appear.



2. Manual Update

1. Select ***Manual Update*** and press the **OK** button.
2. Enter the values for ***Satellite, Frequency, Polarisation, Symbol Rate*** and ***FEC***.
3. Select ***Search*** and press the **OK** button.
4. When new software is detected, you can choose to download the software immediately or save for later. You can refuse software update if not needed.
5. When there is no new software to update, a pop-up will appear.



Satellite

1. Select ***Satellite*** using the ▲/▼ button.
2. Select the satellite the antenna is pointing to from the options using the **OK** (⊙) or ◀/▶ button.

Frequency

1. Select ***Frequency*** using the ▲/▼ button.
2. Enter the frequency using the **NUMERIC(0-9)** buttons.

Polarisation

1. Select ***Polarisation*** using the ▲/▼ button.
2. Select one option among ***Auto, Horizontal*** and ***Vertical*** using the **OK** (⊙) or ◀/▶ button.

Symbol Rate

1. Select ***Symbol Rate*** using the ▲/▼ button.
2. Select one option among ***27500, 26000*** and ***22000*** using the **OK** (⊙) or ◀/▶ button. If the required value does not exist, select ***User Define*** and enter the symbol rate directly.

FEC

1. Select ***FEC*** using the ▲/▼ button.
2. Select one option among ***Auto, 1/2, 2/3, 3/4, 5/6*** and ***7/8*** using the **OK** (⊙) or ◀/▶ button.

10.5 Default Setting

Default Setting enables you to restore the product to the factory default.

Warning: Please note that once you perform ***Default Setting***, all data such as antenna setting information, channel list, and all user configured data will be deleted.

1. Press the **MENU** button.
2. Select ***Installation*** using the ▲/▼ button, and press the **OK** button.
3. Select ***Default Setting*** using the ▲/▼ button and press the **OK** button.
4. Select ***Yes*** and press the **OK** button to restore all setting to factory default. To return to the previous menu, select ***No*** and press the **OK** or **BACK** button.
5. You will be prompted to enter your password again before starting to load default setting. Enter the password to proceed.
6. When default setting is completed, installation wizard pops up automatically and assists channel search. For detailed information about installation wizard, refer to **Chapter 3**.

Note: The default password is **0000**.







11. Software Update

In order to maintain proper performance of the product, it is essential to have the most up-to-date software. Visit the Humax website to check the latest news and newly released software versions.

http://www.humaxdigital.com.

It is recommended that you periodically check for the availability of software update.

11.1 OTA (Over the Air)

OTA, an abbreviation of ***Over–the-Air***, is a standard for the transmission of software for equipment through a broadcast system. OTA is simply an alternative method for downloading software versions. However, the manufacturers reserve the right for deciding the release of the software for their products by beaming the latest software versions over the air via satellite. Note that OTA is only limited to certain geographical regions mainly due to different antennas having different footprints(area where the signal can be received). The software update via satellite system will only occur under the following circumstances.

1. The equipment should have appropriate loader software.

   Caution Please note that if normal loader software is not equipped, the product may not be updated or operate properly after software update.

2. The manufacturer decides to release the software via a designated antenna system.
3. The equipment must be tuned properly to the same antenna equivalent to that of the manufacturer.
4. Update software when the signal strength quality is high. If the weather is not favorable and the signal strength quality is not recommendable, perform the software update later.

   Caution:

   - Please be careful to keep the power on and the power cord plugged in during software update. If the power is off during software update, fatal damage may be caused to the product.
   - Please be careful not to pull out the signal line (LNB cable) during software update. Update may be interrupted and the product may not operate.

   Note:

   - The predefined channel list may return to default setting after OTA has been performed.
   - Other functions will not activate while software update takes place.
   - It may take 5 ~10 minutes to update software.
   - Scheduling operation cannot work during software update.

1. New software is found when powering on

1. A message will pop up to notify that a new software is found.
2. Select ***Immediate*** and press the **OK** button to start updating immediately. Select ***Later*** and press the **OK** button to update later(stand-by). Select ***Refuse*** and press the **OK** button to return to the previous menu without updating.
3. Software download starts. Please wait until the update is completed.
4. When software update is complete, the equipment is automatically powered off and on again.

Note: You can delay the software update up to 10 times when you select **Refuse**.

2. Mandatory Update

1. A message will pop up to notify updating.
2. Press the **OK** button to start updating immediately.

Note: You cannot operate any buttons except for the **OK** button.

12. Menu Map



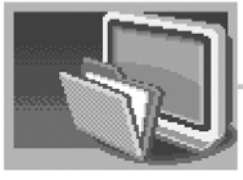
System

- 1. CI-Module
- 2. System Status
- 3. Picture
- 4. Dolby Digital
- 5. Startup-Channel



Setting

- 1. Parental Control
- 2. Language Setting
- 3. Time Setting
- 4. A/V Setting
- 5. Other Settings



Edit Channel

- 1. Edit Channels
- 2. Edit Favourite List



Installation

- 1. Search Channels
- 2. SMATV Search
- 3. Software Update
- 4. Default Setting

13. Trouble Shooting

13.1 Trouble Shooting

Before contacting your local service centre, please read the tips below carefully. If the problem persists after completing the following procedure, please contact your local product distributor or service centre for further instructions.

1. **No message displayed on the front panel. (The product will not switch on.)**
   - Check the main power cable and make sure it is plugged into a suitable power outlet.
   - Check that the mains supply is switched on.
   - Check that the power switch is on at the rear of the product. (where applicable)
   - Connect the power cable to a different power outlet.

2. **No picture on TV set**
   - Make sure that the product is powered on and in operation mode. (Press the STANDBY button)
   - Make sure that the AV cable is firmly connected to the TV.
   - Make sure that the antenna cable is properly connected to the product.
   - Make sure that the antenna setting in the menu is correct.
   - Check the brightness level of the TV.
   - Check if the channel is currently on air. Contact the broadcaster to ensure that the channel is running.
   - Press the SOURCE button if the product is in external input mode.

3. **Poor picture/sound quality**
   - Install the antenna in an obstacle-free place.
   - Make sure there is no mobile phone or microwave oven near the product.
   - Keep the power and the antenna cable for the satellite apart from each other.
   - Check the signal levels and adjust your antenna if the level is too low. The signal level may be effected by weather conditions.

   Note: If the antenna is covered with snow or the RF is weakened by heavy rain, the condition of the sound and picture may temporarily be poor. However, the poor sound and picture quality due to weather conditions cannot be accepted as a malfunction of product.

   - Check that your dish alignment is correct.
   - Change the satellite dish for a larger one as this will increase the signal levels received.
   - Replace the LNB with a lower noise factor in cases where the noise factor is too high.
   - Replace the LNB with a new one in case it is damaged or out of order.

4. **No or poor sound**
   - Check that your AV cable is connected correctly.
   - Check the volume levels of your TV set and the product.
   - Check if the product or TV is on mute.
   - Check audio type or soundtrack option in the AV menu.

5. **Remote control does not operate.**
   - To control the product, the top end of the remote control should point directly towards the receiving part of the product.
   - Remove and reinsert the batteries in the remote control.
   - Replace the batteries in the remote control for a new set.

6. **Cannot make reservations.**
   - Check that no previous reservations are conflicting with the new reservation.
   - Check that the product is switched on at the time of the reservation.

7. **No password information is given.**
   - The default password is always **0000**.

8. **Channel search does not work.**
   - Make sure that the antenna setting in the menu is correct.

9. **Cannot update new software.**
   - You can get an update. If the product does not show a message requesting update, that means no software is available.

10. **Cannot watch scrambled channels.**
   - Check that you have the appropriate Smartcard and CI-Module. Reinsert the Smartcard and CI-Module and make sure it initializes correctly.
   - Check in the menu that the product is detecting the Smartcard and CI-Module.
   - Check in the menu that you have a valid and working subscription to the channels you wish to view.
   - Ensure that the Smartcard or CI-Module is not damaged.

11. **Cannot watch pay channels.**
   - Check in the menu that you have a valid and working subscription to the channels you wish to view.
   - Contact your network operator for more information.

13.2 Error Message

Error message	Possible causes	What to do
No or bad signal	The satellite dish is not pointing at the satellite.	Adjust dish alignment.
	Signal is too weak.	Increase the LNB voltage or connect a signal amplifier.
	Satellite dish is too small.	Change to a larger dish.
	Problem with LNB.	Change the LNB.
	Wrong antenna setting.	Set the antenna correctly.
The channel is scrambled or not available.	The channel has a signal, but no audio or video is provided.	Confirm if the channel is currently on air.
	The channel has not been deleted by broadcasting company.	Remove the channel from the channel list and check for new transponder details.
	The channel is for data broadcasting.	The channel cannot be viewed with the appropriate model that supports data channels.
Audio not available.	The channel has a video signal, but no audio is provided.	Press the audio button on your remote control to confirm that the channel has audio options.
CI module not installed.	CI module is not installed.	Insert CI module.
	CI module is not inserted correctly.	Reinsert CI module.
	CI module is not recognized.	Insert a different CI module to check if your existing module is working.
Invalid CI module	Wrong CI module.	Insert the correct CI module.
	CI module is not inserted correctly.	Remove and reinsert the CI module.
	CI module is damaged.	Replace CI module.
Short LNB	LNB cable is short.	Replace LNB Cable.
	LNB is internally short.	Replace LNB.
	Alien substance is inserted in LNB IN port and port may be damaged.	Remove the alien substance and contact local service center in case damaged has occurred.

14. Specification

Tuner & Channel	
Input Connector	F-Type, IEC 169-24, Female
Frequency Range	950MHz to 2150MHz
Signal Level	-25 to 75dBm
LNB Power & Polarisation	Vertical: +13.5V (+14.5V at high voltage) Horizontal: +18V (+18.5V at high voltage) Current: Max. 500mA (Overload protection)
22KHz Tone	Frequency: 22 ± 4KHz Amplitude: 0.7 ± 0.2V
DiSEqC Control	Version 1.0, 1.2, USALS compatible
Demodulation	QPSK, 8PSK
Input Symbol Rate	DVB-S : 2–45 Ms/s DVB-S2 : 10-30 Ms/s (QPSK), 10-31 Ms/s (8PSK)
FEC mode	DVB-S : Auto, 1/2, 2/3, 3/4, 5/6, 7/8 DVB-S2 : Auto, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK) Auto, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK)

MPEG Transport Stream A/V Decoding	
Transport Stream	MPEG-2 ISO/IEC 13818 Transport Stream Specification
Profile Level	MPEG-2MP@ML, MPEG-2 MP@HL, MPEG-4 AVC/H.264 HP@L4
Input Rate	15 MB/s Max
Aspect Ratio	4:3, 16:9 Letter Box
Video Resolution	720x576, 1920x1080i, 1280x720P
Audio Decoding	MPEG/MusiCam Layer I & II
Audio Mode	Single channel/Dual channel/Joint Stereo/Stereo

14. Specification

Audio/Video/Data In/Out	
Video	TV-SCART (FBAS, S-Video, RGB) VCR-SCART (FBAS, S-Video) RCA-Typ (FBAS) , Component (YPbPr), HDMI
Audio	TV-SCART, VCR-SCART, Audio L/R, SPDIF (Digital Audio Output)
Data	RS-232C(9pin plug)

Power Supply	
Input Voltage	AC 90~ 250 V, 50/60 Hz
Type	SMPS
Power Consumption	Max 45W
Protection	Separate internal fuse. The input should be protected against lighting.

Physical Specification	
Size	370mm x 60mmx262mm (W x H x D)
Weight (Net)	2.5kg
Operating Temperature	0 ℃ to +45 ℃
Storage Temperature	-10 ℃ to +70 ℃

15. Glossary

DiSEqC (Digital Satellite Equipment Control)

A DiSEqC compatible product relies on a switching box which detects the 22kHz tone pulsing rapidly on and off. In this way, a specially designed product can control numerous LNBs through a DiSEqC switching box.

EPG(Electronic Programme Guide)

An electronic equivalent to a printed television listings magazine; it is an application used with digital receivers and digital television sets to list current and scheduled programs that are or will be available on each channel, including a short summary or commentary for each program. The information supplied in the EPG is sent and updated by the channel broadcaster.

FEC (Forward Error Correction)

A technique for error control of data transmission.

Frequency

The property of a signal measured in cycles per second (=Hz).

FTA (Free- To-Air)

An unscrambled broadcaster allowing customers to view channels or services without paying any subscription.

HDMI (High-Definition Multimedia Interface)

An all-digital audio/video interface that supports standard, enhanced, or high-definition video, plus multi-channel digital audio on a single cable. It transmits all ATSC HDTV standards and supports 8-channel digital audio.

Hi-Fi (High Fidelity)

The characteristics of audio devices that can play back all the audio frequencies a person can detect, which is the range of 16Hz and 20KHz. Sometimes it is used to indicate good quality of audio devices such as stereo tape products.

LNB (Low Noise Block)

A device that is mounted on an arm facing your satellite dish, focusing on satellite signals. A LNB converts signals received from satellite to a lower frequency and sends them to a satellite product via coaxial cable.

OSD (On Screen Display)

OSD displays the basic information necessary for the users to configure monitor or TV settings. OSD information may include brightness, contrast, tuning, RGB adjustment, and screen size and position.

OTA (Over The Air)

A standard for the transmission of software for equipment, through a broadcast system. Manufacturers reserve the right for deciding the release of the software for their products.

Polarization

The direction of the electrical and magnetic fields of a signal. Satellites use both vertical and horizontal polarisation. Means that a frequency can be used twice.

PID (Packet Identifier)

A set of numbers identifying stream packets contained within a single data stream.

QPSK (Quaternary Phase Shift Keying)

Digital modulation technique in which the carrier phase can have one of four possible values.

SCART

A 21-pin connector standard to connect two pieces of Audio-Visual equipment such as a TV and a VCR. Each device will have a 21-pin female connection; a cable with male connection at both ends is used for connecting the devices.

Smartcard

A chipcard the same size as a credit card which must be inserted into the digital receiver in order to descramble the TV signals.

S/PDIF (Sony/Philips Digital Interface format)

A standard format for the transfer of digital audio signals. It allows the transfer of digital audio between two devices without any conversion to and from analogue, which could degrade the signal quality.

S-Video (Super-Video)

Sometimes referred to as Y/C video; a technology for transmitting video signals via a cable. It is a video signal transmission in which the luminance (brightness) and the chrominance (colour) signals are transmitted separately to achieve superior picture clarity.

Transponder

A satellite is divided up in parts called transponders. A transponder is one distribution section of the satellite. Each transponder can be used for distribution of several channels or services.

16. Service and Support

Information concerning troubleshooting, software upgrade and product support is provided in the following websites and call centers. Should your product require warranty service, please contact HUMAX to obtain the appropriate authorization.

Germany	
Tel:	01805-778870 (€0,12/min)
Opening Hours:	Mon-Sat 8:00-20:00
E-mail:	techinfo@humax-digital.de
Website:	www.humax-digital.de
Language:	Deutsch/English/Turkish

UK	
Tel:	0870 247 8800
Opening Hours:	Mon-Fri 8:30-18:00
E-mail:	uksupport@humax-digital.co.uk
Website:	www.humax-digital.co.uk
Language:	English

Middle East (Dubai, UAE)	
Tel:	+971 (0)4 359 2323
Opening Hours:	Sat-Thurs 9:00-20:00(Closed on Fri)
E-mail:	callcenterME@humaxdigital.com
Website:	www.humaxarabia.com
Language:	Arabic/English

Australia	
Tel:	1800 613 011
Opening Hours:	Mon- Fri 9:00- 17:30
E-mail:	techinfoau@humaxdigital.com
Website:	www.humaxdigital.com/australia
Language:	English

Italy	
Tel:	899 100 080 (€1+ VAT/min)
Opening Hours:	Mon- Fri 8:00 – 18:00
	Local time in Italy (GMT+1)
Language:	Italian
Sweden	
Tel:	+46 (0)550 85527
Opening Hours:	Mon-Fri 8:00-16:30
Language:	Swedish/English
Finland	
Tel:	09 56186366
Opening Hours:	Mon-Fri 8:00-16:00
Language:	Finnish/English
Austria	
Tel:	01805-778870 (€0,12/min)
Opening Hours:	Mon-Sun 8:00-23:00
E-mail:	support@humax-digital.de
Website:	www.humax-digital.de
Language:	Deutsch/English/Turkish

Note: For hardware repair, please visit our website.