Digital Set-Top Box with Free-To-Air Digitale Set-Top-Box mit Free-to-Air



User's Manual Benutzerhandbuch





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Safety

This STB has been manufactured to satisfy the international safety standards.

Please read the following safety precautions carefully.

MAINS SUPPLY : 230V AC 50/60Hz

OVERLOADING: Do not overload a wall outlet, extension cord or adapter as this may result in fire

electric shock.

LIQUIDS : The STB shall not be exposed to dripping or splashing and that no objects filled

with liquids, such as base, shall be placed on the apparatus.

CLEANING: Disconnect the STB from the wall outlet before cleaning.

Use a light damp cloth (no solvents) to dust the STB.

VENTILATION: The slots on top of the STB must be left uncovered to allow proper airflow to the

unit. Do not stand the STB on soft furnishings or carpets.

Do not expose the STB to direct sunlight or do not place it near a heater.

Do not stack electronic equipments on top of the STB.

ATTACHMENTS : Do not use any unrecommended attachments as these may cause hazard or

damage the STB.

CONNECTION TO THE SATELLITE DISH LNB

: Disconnect the STB from the mains before connecting or disconnecting the

cable from the satellite dish. FAILURE TO DO SO CAN DAMAGE THE LNB.

CONNECTION TO THE TV

: Disconnect the STB from the mains before connecting or disconnecting the $\,$

cable from the satellite dish. FAILURE TO DO SO CAN DAMAGE THE TV.

EARTHING: The LNB cable MUST BE EARTHED.

The earthing system must comply with SABS 061.

LOCATION : Place the STB indoor in order not to expose to lightening, rain or sunlight.

Give a minimum clearance of 10cm from the STB to the products,

such as TV, videotape, and floppy disk, which are susceptible to magnetic influences. Magnetic field might cause any abnormal symptoms, such as

picture distortion, discoloration to a normal TV.



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.

Warning!

Please do not insert metal or alien substance into the slots for the Modules and Smart Cards.

In doing so can cause damage to the STB and reduce its life span.

Warning & Glossary

Warning

HUMAX cannot be held responsible for any kind of problems caused by the use of unofficial software. The use of software versions other than HUMAX official software will void the manufacturer's warranty. It is advised that only the formal software released from HUMAX should be used in all HUMAX product range.

Glossary

Antenna

A device that collects and radiates electromagnetic waves. Includes a satellite dish and abroadband antenna.

Forward Error Correction (FEC)

A system of error control for data transmission.

Frequency

The number of cycles or events per one second, which is expressed in the unit of Hertz(Hz).

• Intermediate Frequency (IF)

A frequency to which a carrier frequency is shifted as an intermediate step in transmission or reception.

• Low Noise Block (LNB) Downconverter

A low noise microwave amplifier and converter which downconverts a range of frequencies to IF range.

Packet Identifier (PID)

A set of numbers that idenitifies transport stream packets containing data from a single data stream.

Polarisation

Characteristic of an electromagnetic wave determined by the orientation of the electricfield vector.

Quaternary Phase Shift Keying (QPSK)

Phase-shift keying in which four different phase angles are used.

Service

A channel to which a decoder or TV is tuned.

Transponder

An automatic device that receives, amplifies and retransmits a signal on a different frequency.

Reference

1. Connect DiSEqC 1.0

All our receivers are designed to be DiSEqC 1.0 compatible. This allows multiple antennas to be connected to the STB simultaneously.

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

- Connect the coaxial cable from the first LNB to the LNB 1 or LNB A input connector of the DiSEqC switch.
- Connect the coaxial cable from the second LNB to the LNB 2 or LNB B input connector of the DiSEqC switch.
- 3. Do the same for other LNBs.
- Connect one end of a Coaxial cable to the RF output connector of the DiSEqC switch and the other end to the LNB IN socket on the STB.

2. Connect DiSEqC 1.2

Please refer to page GB39.

3. Connect a Satellite antenna

To the digital receiver, you can connect either a single satellite antenna directly or through converter box several antennas or LNB of multi-feed equipment. You can connect a further Sat-receiver (for example analogue), with the receiver of common antenna equipment that has satellite signals.

4. Loop Through

If you have another analogue or digital STB and you wish to use the same LNB then you can connect it via the loop through. Connect one end of a Coaxial cable to the LNB OUT on the STB and connect the other end to the LNB IN on your second STB.

5. Connect a S/PDIF Fiber-Optic cable

If you are watching a programme with a Dolby Digital soundtrack (see page GB32) you can enjoy the higher quality sound of the Dolby Digital audio by connecting the STB to an external Dolby Digital television or amplifier. Do this by connecting the optical S/PDIF output of the STB to the optical S/PDIF input of the external Dolby Digital product (television, amplifier,.....).

6. Software Upgrade

HUMAX digital set-top box is a highly sophisticated product - incorporating one of the best software applications.

Whenever a problem is found with this software or, in fact, extra functions or enhanced applications are added, the software in the equipment has to be upgraded.

In order to maintain proper performance of the product, it is essential to have the most up to date software. The latest news and release of software versions may be found at HUMAX website - http://www.humaxdigital.com.

It is recommended that users register to HCSA (HUMAX Customer Service Area) and periodically check for the availability of software upgrade.

There are three methods to upgrade the software:

- (a) set-top box to set-top box download (copies the software of the main unit into slave unit);
- (b) pc to set-top box download (downloads the software directly from pc to the model requiring upgrade);
- (c) OTA (over-the-air) downloads the software where the manufacturer reserves the right to decide when and where to release through satellite system.

OTA is simply another alternative for downloading software versions.

However, the manufacturer reserves the right to decide when and where this software upgrade can take place by "beaming" latest software versions over the air via satellite systems. Note that OTA is only limited to certain geographical regions mainly due to different satellites having different footprints (area where the signal can be received).

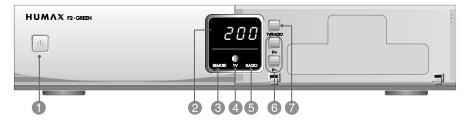
SUSS(TM) is an official trademark and logo for HUMAX loader software to perform OTA. The software upgrade via satellite system will only occur under the following circumstances:

- 1) the equipment should have appropriate loader software;
- the manufacturer decides to release software downloading via a designated satellite system;
- 3) the equipment must be "tuned" properly to the same satellite that the manufacturer uses.

STB Connections

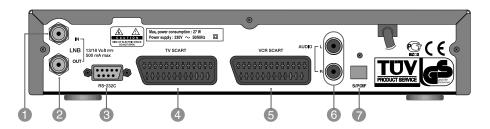
Front Panel





- **STANDBY**Press to switch between Operation and Standby modes.
- DISPLAY Shows service number, error messages and time in Standby mode.
- Remote Control Sensor
 Aim the remote control towards this spot on the STB.
- 4 TV LED (GREEN)
 The LED lights on in TV mode.
- 5 RADIO LED (GREEN)
 The LED lights on in RADIO mode.
- 6 P+/P-Use to change services up/down.
- TV/RADIO
 Press to switch between TV and Radio modes.

Rear Panel



- 1 LNB IN Use to connect an antenna.
- Use it when connecting to another STB.
- 3 RS-232C Use it when connecting to your PC.
- 4 TV SCART
 For the audio/video input of the TV.
- 5 VCR SCART For the VCR.
- 6 AUDIO OUTPUT

 Audio signal from your STB to Hi-Fi System.
- S/PDIF
 Output for connection to a digital amplifier.

STB Connections

There are several ways of connecting the STB to your existing Audio/TV system. We recommend using one of the following set-up for best results:



TV only

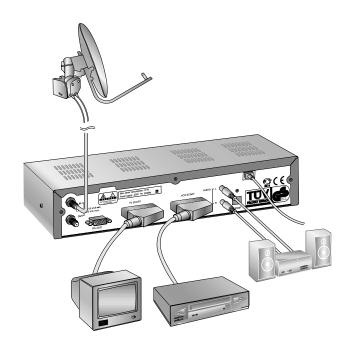
- Connect one end of a 21-pin SCART cable to the TV SCART connector on the STB and the other end to a SCART socket on your TV.
- 2. Connect the coaxial cable from the LNB to the LNB IN socket on the STB.

TV with VCR

- 1. Connect one end of a 21-pin SCART cable to the TV SCART connector on the STB and the other end to a SCART socket on your TV.
- Connect one end of a 21-pin SCART cable to the VCR SCART connector on the STB and the other end to a SCART socket on your VCR.
- 3. Connect the coaxial cable from the LNB to the LNB IN socket on the STB.

With Hi-Fi System

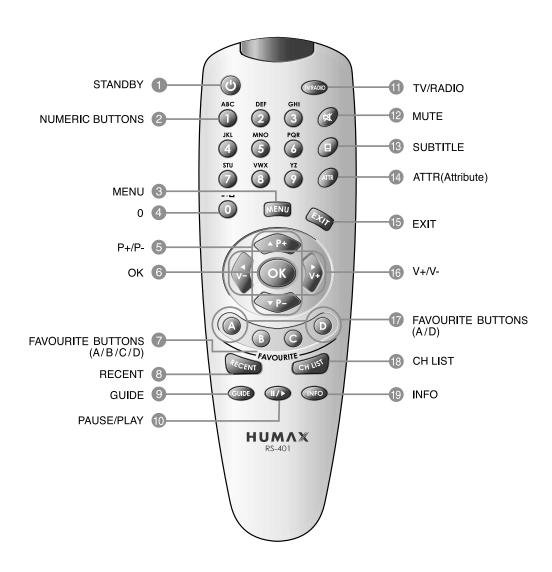
- Connect an RCA/Cinch stereo cable from the AUDIO L,R sockets on the back of the STB to the LINE, AUX, SPARE OR EXTRA input sockets on your Hi-Fi system.
- 2. Connect one end of optic cable to the S/PDIF socket on the STB and the other end of optic cable to the socket on the external Dolby digital television or amplifier.



TV with VCR and Motorised System (DiSEqC 1.2)

- 1. Connect one end of a 21-pin SCART cable to the TV SCART connector on the STB and the other end to a SCART socket on your TV.
- Connect one end of a 21-pin SCART cable to the VCR SCART connector on the STB and the other end to a SCART socket on your VCR.
- Connect the coaxial cable from the REC of your motorised system(DiSEqC 1.2 Motor) to the LNB IN socket on the STB.
- 4. Connect the coaxial cable from the LNB to the LNB connector in the DiSEqC 1.2 motor.

Remote Control Unit



STANDBY

Press to switch between Operation and Standby modes.

NUMERIC BUTTONS

Press to select a service, enter your PIN code, enter alphabet or numeric on the menu.

MENU

Press to display the Main Menu on the screen or return to the screen from a menu screen.

4 0

Present / following event of EGP.

6 P+/P- (▲/▼)

Programme up/down buttons. Press to tune to the next or previous service. Press to move the highlight bar up or down for selecting options on the menus.

6 OK

Press to display the CH LIST(Channel List) navigation menu.

This button is used to select the item on the menus.

FAVOURITE BUTTONS(A / B / C / D)

Press to display the list of the favorite services registered for each group.

RECENT

Press to display the list of the recent 10 services you have viewed.

GUIDE

Press to display the EPG mode selection window.

PAUSE/PLAY

Press to switch between playing and pause.

TV/RADIO

Press to switch between TV and Radio modes.

12 MUTE

Press to temporarily cut off the sound.

SUBTITLE

Press to display the subtitle language list for the current service.

ATTR(Attribute)

Press to display or change the attributes of the current channel, such as Fav., Lock., Skip, etc.

15 EXIT

Press to return to the screen or return to the screen from a sub menu screen.

16 V+/V- (**◄/**►)

Volume up/down buttons. Press to move the highlight bar left or right for selecting options on the menus.

FAVOURITE BUTTONS(A / D)

Press to change services up or down by the ten services.

18 CH LIST

Press to display the CH LIST(Channel List) navigation menu.

INFO

Press to display the programme information box on the screen. Press again to display the detailed event information.

Please note: The design of Remote Control Unit may be changed without notice in advance.

Function Guide







When the language setting screen is initially displayed in factory default or during first time installation, select the language you prefer to use.

- Press the ▲/▼ buttons to move the cursor to the desired language.
- 2. Press the **OK** button to set Menu language.

Information Box (I-Plate)

The details of service part and event part are automatically displayed on the I-Plate when pressing the INFO((MTO)) or changing services.

I-Plate is divided into service part and event part.

SERVICE-PART (Top of the box)

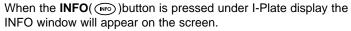
SERVICE PART consists of the following items:

- Service number, Service name.
- Subtitle, Teletext, Scrambling and Dolby service symbol. (These are automatically displayed when the broadcasting station provides appropriate information.)
- Antenna Number and Satellite Name.
- Signal quality bar.

EVENT-PART (Bottom of the box)

EVENT PART consists of the following items:

- Event name. Event duration time.
- Description text of event, State of reserved event Event Part shows the current information.
- Present / following event



The INFO window shows the current Network information, including: Satellite Name, Frequency, Polarisation, Symbol Rate, FEC and the detailed information for the event can be displayed with event data displaying mode.



Change Services

To change services, do in the following;

- 1. Press the **NUMERIC** buttons(0~9) on the remote control unit.
- 2. Press the P+/P- buttons.

Or press the RECENT(\bigcirc), CH LIST(\bigcirc), FAVOURITE Buttons(A, B, C, D).

To switch between TV and Radio services, press the TV/RADIO() button.

When the **RECENT**((**Cost*) button is pressed, the current service and the recent 10 services are listed on the left of the screen.

You can change to a desired service directly by using them.



Volume Control

To adjust the volume level, use the **V+/V-** buttons. To temporarily stop the volume, press the $\mathbf{MUTE}(\mathfrak{C})$ button. To cancel mute, press the $\mathbf{MUTE}(\mathfrak{C})$ button again or press the $\mathbf{V+/V-}$ buttons.

Teletext

Use your TV Remote Control Unit to control the Teletext service. The teletext button doesn't exist on the STB Remote Control Unit. When the service supports Teletext, the Teletext icon(\blacksquare) is displayed on the I-plate.



Subtitle

When the current broadcasting programme provides subtitle, press the **SUBTITLE**(ⓐ) button to see the current subtitle language list.

To change the subtitle language:

- 1. Press the **SUBTITLE**(ⓐ) button.
- Use the ▲/▼ buttons to select a Subtitle language you want.
- Press the **OK** button and then Subtitle language you want is displayed on the screen.

To cancel the subtitle mode

- 1. Press the **EXIT** button during showing subtitle.
- Or press the SUBTITLE(ⓐ) button.
 Use the ► buttons to move to the operation window.
 Use the ▲/▼ button to select off mode and then press the OK button.

Function Guide

Channel Attribute

The "Channel Attribute" feature allows you to display and change the attributes of the current channel. A window that shows the information about the current service is displayed on the bottom of the screen.

Favourite

To register the current service to FAV. A:

- Move the cursor and select FAV. on Category window and press the ▶ button to move to the Item window.
- Select a desired A Group using the ▲/▼ buttons, and then press the OK button.
- When you select A Group, "FAV. A" will be displayed on Category window.
- 4. You can also select multiple favourites. (Example: "FAV. A B")
- When you completed your selection(s), move to Operation window using the ► button and then move the cursor to Save and press the OK button.

To delete the current service from FAV. A:

- Select A Group on the Item window by pressing the ▲/▼ buttons and then press the OK button.
- When you completed your selection, move to Operation window using the ► button and then move the cursor to Save and press the OK button.



Lock

To lock the current service:

- Move the cursor and select Lock on Category window and press the ► button to move to the Item window.
- Select a desired Lock using the ▲/▼ buttons, and then press the OK button.
- 3. "Lock ON" will be displayed on Category window.
- 4. When you completed your selection, move to Operation window using the ► button and then move the cursor to save and press the OK button.

To unlock the current service:

- Select Unlock on the Item window by pressing the ▲/▼
 buttons and then press the OK button. "Lock OFF" will be
 displayed on Category window.
- When you completed your selection, move to Operation window using the ► button and then move the cursor to save and press the OK button.



To skip on the current service:

- Move the cursor and select Skip on Category window and press the ▶ button to move to the Item window.
- Select a desired Skip using the ▲/▼ buttons, and then press the OK button.
- 3. "Skip ON" will be displayed on Category window.
- 4. When you completed your selection, move to Operation window using the ► button and then move the cursor to save and press the OK button.

To release the skip on for the current service:

- Select No Skip on the Item window by pressing the ▲/▼ buttons and then press the OK button. "No" will be displayed on Category window.
- 2. When you completed your selection, move to Operation window using the ▶ button and then move the cursor to save and press the **OK** button.



Function Guide



Rename

To rename the current service:

- Move the cursor and select Rename on the operation window and press the **OK** button to rename current service.
 The Input Text window will appear.
- Enter the service name using the NUMERIC buttons(0~9) on the Remote Control unit.
- The Input text window will appear and you can type the Channel Name directly.

When you input the Channel Name with the remote control unit, the first press of a numeric button is recognized as a numeric input, and the next press of the same button is recognized as an alphabet input. (For example, if you press the numeric button 1 repeatedly, the input character switches in the sequence of 1→A→B→C→1.) Press the ▶ button to input the next character.

Press the ◀ button to cancel and press the OK to confirm.

Save

To save the changed attributes:

 Select Save on Operation window using the ▲/▼ buttons and then press the **OK** button.



Group Attribute

Use this window to move group marked channel at the selected category and sort.

To move, skip and lock or to register the present channel to the desired Fav or Gr.

- 1. Press several channels using the **OK** button.
- 2. Press the (ATR) button.
- 3. Select an item at the desired catagory and save.



1. Channel Edit (TV/Radio)

A service navigation system (Channel List) is provided for easier switching to the service you wish to view.

It consists of four windows: Category, Sort, Channel, and Operation windows.

2. Channel Guide (TV/Radio)

Your STB has an Electronic Programme Guide (EPG) to help you navigate through all the possible viewing options.

The TV EPG (or Radio EPG) supplies information such as programme listings and start and end times for all available services.

In addition, detailed information about the programme is often available in the EPG (the availability and amount of these programme details will vary, depending on the particular broadcaster).

3. Channel Search

The "Channel Search" feature allows you to search a desired channel with your STB. It consists of Antenna Setting, Manual Search. Auto Search and Advanced Search.

4. Parental Control

This "Parental Control" feature sets viewing restrictions and prevents unauthorized access to your STB through the PIN (Personal Identification Number), which is 4 digit number.

(The factory preset PIN code: 0000)

5. Sound Track

The "Sound Track" feature allows you to select Audio Language for the current programme.

6. Preference

The Preference mode allows you to customise, add a new service (language, time, A/V Output,.....).

Furthermore, you can recognize the states of hardware and software versions and signals from your STB.



1. Channel Edit (TV/Radio)

Channel List Menu provides a service navigation system for easier switching to the service you wish to view.

It consists of four windows: Category, Sort, Channel and Operation windows.

If a service is Scrambled service or Locked service, it is indicated with an icon displayed on the bottom right of the channel list.

To choose a service list you want to view:

- 1. Press the **MENU** (button. The Main Menu will appear.
- Select a TV or Radio service from Main Menu using the P+/P- buttons. Then, press the OK button.
- 3. Select a desired service list using the P+/P- buttons.
- 4. Use the FAVOURITE A/D buttons to move each ten services.

Press the **EXIT** button to hide the Channel List window.

You can press the **CH LIST**() button of your Remote Control Unit to display the Channel List window directly on the screen.



Service All

Service All menu consists of 7 sort lists.

- NUM: Shows the list of services sorted by service number, which is given to every service you have searched.
- A~Z : Shows the list of services sorted in ascending order by service name.
- Z~A : Shows the list of services sorted in descending order by service name
- FTA : Shows only the list of FTA services sorted by service number.
- Scrambled: Shows only the list of Scrambled services sorted by service number.
- Lock : Shows only the list of Locked services sorted by service number.
- Unlock: Shows only the list of Unlocked services sorted by service number.

To view only the list of FTA services with the Service All menu:

- 1. Move the cursor to the Sort window using the **◄/▶** buttons.
- Move the cursor to FTA using the ▲/▼buttons. Now, only FTA services are displayed on the Channel window.



Service Favourite

Service Favourite menu consists of 4 sort lists.

To display only the list of B Group services with Service Favourite menu:

- Move the cursor to the Favourite menu on the Category window using the ▲/▼/◄/► buttons.
- 2. Move the cursor to the Sort window using the ▶ button.
- Move the cursor to B Group using the ▲/▼ buttons. Now, only B Group services are displayed on the Channel window.



Service Network

The sorting list of the Network category consists of network names extracted from SI information.

- Move the cursor to the Network menu on the Category window using the ▲/▼/◄/► buttons.
- 2. Move the cursor to the Sort window using the ▶ button.
- Move the cursor to a desired network using the ▲/▼ buttons.
 Now, the services of the selected network are displayed on the Channel window.



Service Satellite

The sorting list of the Satellite category consists of the names of satellites.

- Move the cursor to the Satellite menu on the Category window using the ▲/▼/◄/▶ buttons.
- 2. Move the cursor to the Sort window using the ▶ button.
- Move the cursor to the desired satellite using the ▲/▼ buttons.
 Now, the services of the selected satellite are displayed on the Channel window.



Using Operation Window

Delete

- Move the cursor to the service you wish to delete on the Channel List window using the ▲/▼/◄/▶ buttons.
- Press the **OK** button to mark the selected service.
 The marking symbols (√) are displayed.
- 3. Mark the additional services you wish to delete by repeating the steps 1 and 2.

- 4. Move the cursor to the Operation window using the ▶ button.
- Move the cursor to Delete using the ▲/▼ buttons.
 Press the OK button to delete all the selected services.

Note: If you delete the service you are currently viewing, the current service is switched to the next service in the service list. If there is no service in the TV service list, the current service is switched to the first service in the Radio service list. If you delete all services of the TV and Radio service lists, you will be prompted with a warning message.

Unselect All

Choose Unselect All on the Operation window to clear the selection marking for the services you have selected in the service lists.

Select All

Choose Select All on the Operation window to mark all the services in the service lists as selected.

Move

- Press the **OK** buttons at the services to move, using the △/▼/◄/► buttons.
- Move the cursor at Move of the Operation window, using the ▲/▼/◄/ト buttons.

Press the **OK** button to move all the selected services. Then, the $icon(\)$ will be displayed in front of the service.

- 3. Using the ▲/▼ buttons, move the cursor to where you want.
- 4. Press the **OK** button, then the services will be arranged as you want.
- 5. You can use this functionality if the status of cursors is one of the followings

• category : All, sort : NUM

category : Favourite

• category : Network, and active cursor is on the Sort Window

Exit

Press to exit from the Channel List menu.



2. Channel Guide (TV/Radio)

You can watch a programme being shown and reserve it in the TV EPG mode.

To enter the TV EPG mode

Press the **GUIDE**(button on the remote control unit or select the TV EPG on the Main Menu.

To switch the TV/Radio EPG

Press the **TV/RADIO**() button on the remote control unit and TV EPG will be switched to the Radio EPG.

TV EPG mode includes three different modes.



Advanced EPG (TV/Radio)

The Advanced EPG mode consists of Category, Schedule & Information and Operation windows.

Category

The days of the week are listed on the Category window. They are listed sequentially in reference with today's day of the week. Today's day of the week is displayed on the last item of the list.

Schedule & Information

Press to display the schedules for the day of the week you have selected on the Category window. The playing time is displayed on the left of the window. The name of the programme is displayed on the right of the window.

Operation

Press the **OK** button to display reservations and detailed information about the service you have selected on the Schedule & Information window. Press the **EXIT** button to exit this window.



To reserve a programme you want:

- Select a programme you want to reserve by using the P+/Pbuttons in Schedule & Information window.
- And then, move the cursor to the Operation window using the ▶ button.
- Select Reserve using the ▲/▼ buttons and then press the OK button. A pop-up window will be displayed.
- Select a mode among Weekly, daily and once. Then, a clock icon () will be displayed to the left to the reserve time, which indicate the reserve was registered successfully.



To cancel reservation for a reserved programme:

- Select a programme you want to cancel reservation by using the P+/P- buttons in Schedule & Information window.
- And then, move the cursor to the Operation window using the button.
- Select Reserve using the ▲/▼ buttons and then press the OK button. A pop-up window will be displayed.
- You can view that the selected programme is added as a cancel item on the Operation window of the pop-up window.
 Move the cursor to the Operation window using the ▶ button and select Cancel, and then press the OK button.



To view the detailed information about a programme on Schedule & Information window:

- Select a programme you want by using the P+/P- buttons in Schedule & Information window.
- And then, move the cursor to the Operation window using the ▶ button.
- Select More Info using the ▲/▼ buttons and then press the OK button.





Simple EPG (TV/Radio)

Shows a Simple EPG like an Information box. This mode shows in the A/V playback mode. Black vertical line : Indicates the current time.

Black/white har : Shows the proceeding state of programme. Time range of bar : This consists of three blocks by 30 minutes

per block.



Reserved EPG

Shows the programme lists that you have already reserved on the TV EPG (or Radio EPG) or Information box.

Maximum twenty programmes can be reserved.

This programme list includes service name, date, duration time, reservation mode and event name.

To cancel a reservation, follow the same steps given in the "To cancel reservation for a reserved programme" section for the Advanced EPG mode.



3. Channel Search

Enter the PIN code to access the Channel Searching menu as you access the Parental Control menu.

Press the **OK** button to start Service Search after setting the parameters.

** The default PIN code is 0000.

Antenna Setting

Selects the antenna and LNB settings for Service search.

As you can change the settings for 22KHz Tone and DiSEqC switch, there are 32 possible Antenna Setting for use.

The values that are set in this menu will be available for selection in other channel searching menus.



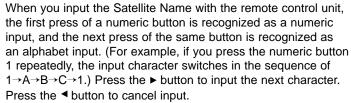
There are 32 antenna alternatives, each one can have different combinations of settings for 22KHz Tone and DiSEqC switch.



Satellite Name

Selects the Satellite Name that corresponds to the value of the Antenna Alternative.

- Press the ▶ button to display the satellite list box (Item window).
- 2. Press the ▲/▼ buttons to select the wanted Satellite Name.
- If the desired Satellite Name is not listed then select User Defined and OK button.
- The Input text window will appear and you can type the Satellite Name directly.



The selected Satellite Name can help you select the Antenna Alternative in the searching menu, but it is possible to change or select the Satellite Name only in the Antenna Setting menu.



Note: In case the selected satellite is used as OTA target satellite, automatic detection of the OTA target satellite might not work properly if you change or edit the name of the satellite.

5. When inputting the Satellite Name, there is a 14 character limit.



LNB Frequency

- 1. Select the L.O. Frequency that is set to antenna.
- Press the ► button to display the LNB Frequency list box (Item window).
- Press the ▲/▼ buttons to select the LNB frequency (Universal, 5150, 9750, 10600, 10750, 11475MHz, User Defined).
- 4. If the required LNB Frequency is not available then select User Defined and press the **OK** button.
- The Input text window will appear and you can enter the frequency manually using the NUMERIC buttons(0~9).
- When you select Universal, both 9750 and 10600MHz are supported at the same time.
 The 22KHz Tone setting is unnecessary. (Disabled)



22KHz Tone

When you use a dual LNB or two antennas connected to a 22KHz Tone switch box, make 22KHz Tone switch Enable or Disable to select LNB or antenna.

DiSEqC Input

According to the option and position of DiSEqC switch, select Disabled, Tone Burst A to B and DiSEqC A to D.

After setting the above mentioned value, press the **OK** button

to move to the Manual Search menu.



Motorised System

The Motorised System is used to set the DiSEqC 1.2 motor by Eutelsat specification.

If you wish to use this system, please refer to page GB39.



Manual Search

Set the search parameters (Frequency, Polarisation, Symbol Rate, etc.) to manually find the services that you have selected in the transponder.

The bar on bottom of the submenu shows the signal level and the signal quality (BER) of the entered parameters.

Antenna Alternative

Select the target antenna for Manual Search.
The Satellite Name helps you select Antenna Alternatives.
This is only for reference and cannot be changed on this menu.
Antenna alternative 16 is fixed for SMATV.



Frequency

- Press the ► button to select the User Defined and OK button.
 The Frequenct Input window will appear.
- Use the NUMERIC buttons(0~9) to enter frequency the remote control unit.

Polarisation

- Press the ▶ button to move to the Item window.
- Use the ▲/▼ buttons to select the Polarisation of the transponder.

(Auto, Horizontal, Vertical)

Horizontal: 18 V is output through LNB line
Vertical: 13.5 V is output through LNB line

Symbol Rate

- 1. Press the ▶ button to move to the Item window
- Select the desired Symbol Rate on the Item window using the ▲/▼ buttons. If the desired Symbol Rate is not listed then select User Defined and OK button. The Input text window will appear and you can type the Symbol Rate directly.



FEC (Forward Error Correction)

- 1. Press the ▶ button to move the Item window.
- Use the ▲/▼ buttons to select the Forward Error Correction of the transponder.

You can select the value of Auto, 1/2, 2/3, 3/4, 5/6, 7/8 and Auto.

Network Search

- 1. Press the ▶ button to move to the item window
- 2. You can select Yes or No. When you select "Yes" you can find more transponders using the home network. As it refers to NIT during searching, if there is the frequency information of other transponder, it searches the other transponder besides the transponder that the user inputs.

Automatic Skip

- Press the ▶ button to move to the item window
- 2. You can select Yes or No. When you select "Yes" the search will skip all scrambled services.

When the found services are scrambled during searching, they are not listed up.

Refer to descriptor of PMT whether it is scrambled or not.



Auto Search

When you enter the Satellite Name that is set in Antenna Setting menu, search all of the selected satellite without inputting the extra frequency.

Antenna Alternative

- 1. Press the ▶ button to move to the item window
- 2. Use the ▲/▼ buttons to select the target antenna for Automatic Service Search. The attribute of this antenna alternative number is already set in Antenna Setting menu and the Satellite Name is helpful in the selection of the antenna, but in this menu you cannot change the Satellite Name.

Automatic Skip

Option to search only Free- to-Air services. The picture on the left tries to search with varying Frequency, Symbol Rate and FEC etc.

- 1. Press ▶ button to move to the item window.
- 2. Use the ▲/▼ buttons to select Yes or No.





Advanced Search

Performs a manual search with the ability to enter PID (Video/Audio/PCR) values. This mode is necessary when you search for the signal that has abnormal service Information tables.

Video PID/Audio PID/PCR PID

You can set PID to search for services.

- 1. Use the ▶ or **OK** buttons to move the Item window.
- Press the ▲/▼ buttons to select User Defined and press the OK button. The Input PID window will appear.
- 3. Press the ▲/▼ buttons to select Decimal or Hexa.
- 4. Use the **NUMERIC** buttons(0~9) on the remote control unit to enter a decimal PID value.
- 5. In the hexadecimal input mode, press one of the **NUMERIC** buttons(0~9) to display a hexadecimal keyboard.
- 6. Enter a hexadecimal PID value.

Note: If no PID is input (Auto is displayed), the PID Search function is same as Manual Search.

7. After the above mentioned value is set, select Search on Operation window.

Note: The picture and the found service list during Advanced Search are identical with the ones during Manual Search.

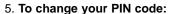




You can set a parental guidance rating to each programme in this mode.

- When the **OK** button is pressed after selecting the highlighted parental control on the initial menu screen, a display window for entering the PIN code will appear on the centre of screen.
 - ** The default PIN code is 0000.
- Enter the PIN code on the display window.(If any problem occurs when entering a PIN code, you cannot switch to the next mode.)
- 3. Set the parental guidance rating of highlighted Censorship classification.
- Press the **OK** or ► buttons to move the Item window and ▲/▼ buttons to select the parental level.

The parental level is given as age-based numbers: no block, 6, 10, 14, 18 and total block. Enter the PIN code to unlock or lock programmes.



- Select the highlighted Old PIN code using the ▲/▼ buttons and then enter your Old PIN code.
- Enter a New PIN code in the highlighted New PIN code using the ▲/▼ buttons.
- To verify the New PIN code, re-enter a New PIN code in the highlighted Verify Changed PIN code.
- When the entered PIN code is correct, then all settings are completed.

(If the PIN code is wrong, the message "PIN code mismatch" will be displayed on the display window. When the **OK** button is pressed at this time, the Old PIN code is valid and the cursor is located in the first position of this menu.)





5. Sound Track

When you want to change the audio language of current service, press **MENU**() button firstly.

Use the ▲/▼ buttons to select Sound Track and press the **OK** button. The soundtrack menu is displayed on the top to left side of the screen.

To change the audio language:

- Move the cursor to the desired language on the Category window using the ▲/▼ buttons.
- 2. Press the ▶ button to move to Operation window, and then select one among Both, Left and Right from the Audio output item.
- EXIT button: When this button is pressed, the Soundtrack OSD will disappear keeping the selected Soundtrack language constant.

When the current service is switched, the audio language returns to the audio language that was selected in previous service. If the returned audio language is invalid, the audio language that you selected from the audio language menu has the priority of playback.

Soundtracks broadcast in Dolby Digital are indicated by Dolby Digital symbols either side of the respective language selection in the menu. By selecting such a soundtrack the Dolby Digital audio will be output by the optical S/PDIF on the STB.

This can be decoded by an external Dolby Digital television or amplifier, for example.

Note: When Dolby Digital is selected and actually broadcast, Dolby Digital will be output prior to MPEG. Dolby Digital will be output only through the optical S/PDIF on the STB.



6. Preference

The Preference mode supports the STB internal settings according to the connection of the receiver and external units. This mode includes Language Setting, Time Setting, A/V Output Setting, Status, Default, Others and STB Upgrade.

Language Setting

Select the language for menu, audio or subtitle.

- Select the Preference using the ▲/▼ buttons in the Main Menu and then press the OK button.
- Press the **OK** button again and the language setting menu will be displayed.
- 3. Select the highlighted Menu(or Audio, Subtitle) language using the ▲/▼ buttons and then press the **OK** button.
- Use the ▲/▼ buttons to move to a language you want and then press the OK button to flnish setting.



Menu Language

Select a language for the menu or banner OSD in the mode. You can choose the language from a selection of English, German, French, Italian, Swedish, hungarian, Polish and more. When a broadcasting information(event) is transmitted, the selected Menu Language will be applied.





Select the default language for audio when changing services. If you change the current service, your STB will initially select the previously memorised Audio Language. If the Audio Language of current service is not provided, at this time, you should reselect a language on the Audio Language menu.

Languages provided:

English, German, French, Italian, Spanish, Portuguese, Hungarian, Finnish, Dutch, Danish, Swedish, Russian, Turkish, Czech, Rumanian, Norwegian, Greek and more.

If no language is provided, then the default language of current service will be automatically selected.



Subtitle Language

Select the default language for subtitle when changing services. Language provided:English, French, German, Italian, Spanish, Portuguese, Hungarian, Finnish, Danish, Swedish, Norwegian, Greek and more..

Time Setting

You can set the Current Time and Wakeup Time in this mode. Furthermore, the Service Number in the Wakeup mode and Sleep Time (standby mode) can be set. When a VCR is connected, recording can be automatically done according to Wakeup/Sleep Time Setting.



Current Time

To set the Current Time, enter the Offset value using the standardised information of current service area. The time setting will be used as the standardised time for the I-Plate, TV EPG, Radio EPG, Wakeup and Sleep Timer.

To change the Current Time:

- 1. Press the ▶ button to move to the Item window.
- Use ▲/▼ buttons to select time, the unit is half an hour in the item window.

Time Offset

Current Time is based on TDT (Time and Data Table) at the stream of the current service.



Wakeup Time

- Move the Category cursor to Wakeup Time and then move to the Item window using the OK or ► buttons.
- Select Enabled using the **OK** button. The Time Input window will appear.
- 3. Enter the time in the order of hour and minute using the **NUMERIC** buttons(0~9).
- 4. Press the **OK** button to complete Wakeup Time setting.



Wakeup Service No.

- Move the Category cursor to Wakeup Service No., and then move to the Item window using the OK or ▶ buttons.
- Select the desired service using the ▲/▼ buttons and press the OK button.
 - Use the $\textbf{TV/RADIO}(\text{\tiny TORAGO})$ button on the remote control unit to toggle TV/Radio service.



Sleep Time

Depending on Time Setting, select the time when STB is turned off.

- 1. Move the Category cursor to Sleep Time, and then move to the Item window using the **OK** or ▶ buttons.
- Select Enabled using the **OK** button. The Time Input window will appear.
- Enter the time in the order of hour and minute using the NUMERIC buttons.
- Press the **OK** button to complete Sleep Time setting.



A/V Output Setting

Video Output(CVBS/S-Video/RGB)

Set the video mode for the TV SCART output.

Audio Output

Set the audio mode which is output from the TV RCA/Cinch Jack. (Stereo/Mono).

- Move the Category cursor to Audio Output, and then move to the Item window using the OK or ▶ buttons.
- 2. Select STEREO or MONO using the ▲/▼ buttons and press the **OK** button.

Main Menu Guide



Dolby Digital

If Dolby Digital option is ON and the broadcaster provides the Dolby Digital stream, the Dolby Digital audio language is firstly selected when changing the service.

- Move the Category cursor to Dolby Digital, and then move to the Item window using the OK or ▶ buttons.
- Select ON or OFF using the ▲/▼ buttons and press the OK button.

Screen Mode

- 1. Press the ▶ button to move to the Item window.
- Use the ▲/▼ buttons to Select the aspect ratio of TV which is connected to STB (4:3 or 16:9).

Display Format

Select the format which the video is to be displayed on screen. When your TV set is 4:3 and video source is 16:9, STB will display in Letter-box or Centre mode as selected. When your TV set is 16:9 and video source is 4:3, STB will display in the Pillar-box or Full mode as selected.



Status

Displays the information of H/W Version, S/W Version, Loader Version and System ID and so on.



Default

- Select Default using the ▲/▼ buttons and press the OK button.
 The PIN code Input window will appear.
- 2. When you a PIN code, the message, "The default values are restored.", will prompted.
- 3. Select OK and press the **OK** button to save all services as Free-To-Air service of ASTRA1. (Factory default mode)
- 4. Select EXIT to cancel the operation and to exit the menu.



Other Setting

Select the OSD Transparency and Information Box Display Time.

OSD Transparency

Select the OSD Transparent type. It affects Information box, Soundtrack, Subtitle, Service list, Time and Quick mode of TV Guide. Use the ▲/▼ buttons to toggle transparent and opaque.

Info. Box Display Time

Set the display duration of Information box displayed on the screen after changing services.

The time ranges from 0 to 20 seconds.

- Move the Category cursor to Info. Box Display Time, and then move to the Item window using the OK or ▶ buttons.
- Select Duration time using the ▲/▼ buttons and press the OK button.

Main Menu Guide



STB Upgrade

You can download and upgrade the software of this STB via a satellite when the software of new version is released.

Do not turn off the STB during downloading.

When the power is switched OFF, turn on the STB and the process will be continued.

Antenna Alternative

Select the target antenna for Manual Search.

The Satellite Name helps you select Antenna Alternatives.

This is only for reference and cannot be changed on this menu. Antenna alternative 16 is fixed for SMATV.

Frequency

- Press the ► button to select the User Defined and OK button.
 The Frequenct Input window will appear.
- 2. Use the **NUMERIC** buttons(0~9) on the remote control unit.

Polarisation

- Press the ▶ button to move to the Item window.
- Use the ▲/▼ buttons to select the Polarisation of the transponder.

(Auto, Horizontal, Vertical)

- Horizontal : 18 V is output through LNB line
 10.5 V is output through LNB line
- Vertical : 13.5 V is output through LNB line

Symbol Rate

- 1. Press the ▶ button to move to the Item window
- Select the desired Symbol Rate on the Item window using the ▲/▼ buttons. If the desired Symbol Rate is not listed then select User Defined and OK button. The Input text window will appear and you can type the Symbol Rate directly.

FEC (Forward Error Correction)

- Press the ▶ button to move the Item window.
- Use the ▲/▼ buttons to select the Forward Error Correction of the transponder.

You can select the value of Auto, 1/2, 2/3, 3/4, 5/6, 7/8 and Auto.

Motorised System

DiSEqC 1.2 User Instructions

If you have a Motorised System for DiSEqC1.2, you can set the Motorised System item to



Enable on Category window and add necessary functions. When a Motorised System is set to Enable, you cannot select DiSEqC Input items but, instead, you can use new menus (Satellite Name, DiSEqC Command Mode, Movement and Limit Setting) on Category window and the Goto/Store items are added to Operation window(User mode).

In case that a Motorised System is Enabled, if you have defined Satellite Name on



Category Window and also created the location information about the satellite, you can drive the motor which corresponds to the Satellite Name by moving the cursor and selecting 'Goto'. Otherwise, you need to move to the Item window by using the **OK** and ▶ buttons in the DiSEqC Command mode of Category window and select Installer. Then, you will find that the Reset command is added as Motor Control Command on Operation window, which is different from the User mode.

After selecting your Motorised System as Installer, move to and select the Movement item



on Category window, and move the cursor to Item window by using the **OK** and **▶** buttons and then select East or West by using the **△**/▼ and **OK** buttons. Now, the motor will start to be driven.

When it starts to be driven, move East/West until you find the location at which signal quality is best. If multiple locations are found, you should select other frequency and drive the motor again until only a single location is found.

You can select Stop at the best location by using the signal level and signal quality bar on the bottom of the window and then move the cursor to Operation window and select Store the item to save the current location information. Be careful that if you exit the menu without saving this location information, the current Satellite location information will be lost. Repeat the above steps for other Satellites to use your Motorised System for them. Once you have set the location information for a satellite, you can perform fine-tuning for its location information when you start to search services from the location information previously saved.

Motorised System

To perform East/West fine-tuning for a satellite, set the Motorised System to Enable on Category window and select the Satellite Name, and then select User instead of Installer on the DiSEqC Command Mode item. Now, you can perform East/West fine-tuning for the selected satellite.

To drive the motor, move to and select the Movement item on Category window, and move the cursor to Item window by using the **OK** and ▶ buttons like the case of Installer. Then select '(E) +1 move' or '(W) +1 move' by using the ▲/▼ and **OK** buttons. Now, the motor will start to be driven. When it starts to be driven, move the motor until you find the location at which signal quality is best. When the best location is found, save the location information using the Store command on Operation window.

Motor Limit Setting



Use this option to set the East and West limits of the motor. This should be used to prevent your dish from hitting anything that may be absoluting the path of the dish. Set the Motorised System item to Enable on "Antenna setting" menu and move to the "Limit Setting" item. Then, move the active cursor to Item window.

To set the East (or West) Limit

- 1. Move the cursor to East (West) on Movement item and press the ◄/▶ button.
- When the motor is reaches the position you want to set as the East(West) Limit, press the ◄/➤ or ▲/▼ buttons or to stop the motor.
- In order to save the position, move the cursor to Store East(West) Limit on the current window.
- 4. Then press store on operation window.

Once Antenna and DiSEqC-related information are set, you can search the services for a specific satellite you want. The followings describe how to search services with classifications of Manual Search, Auto search, and PID search.

To exit a window when there is no change or after you have changed any setting, use the **EXIT** button, or move to Operation window and select EXIT.

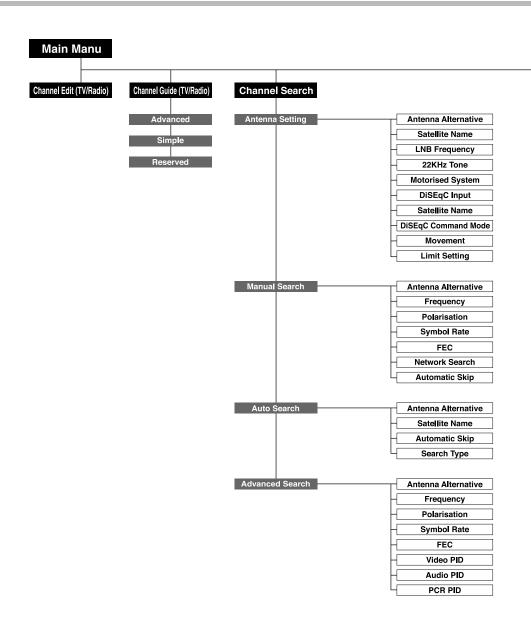
Troubleshooting Guide

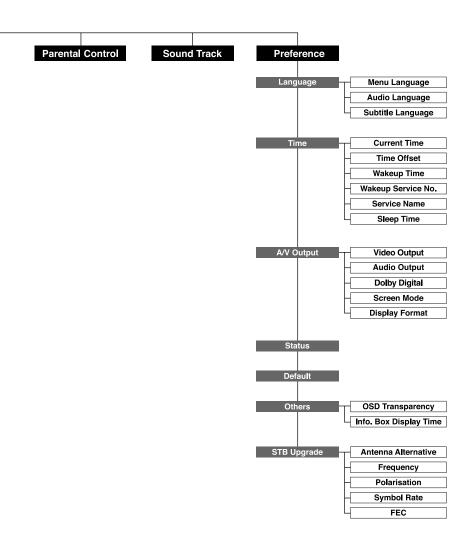
Problem	Solution
About STB	
Does not display any LED on the front panel or STB has no power.	Check the main power cable and check that it is plugged into a suitable power outlet.
No Picture	Check whether STB is in Standby mode. Check the video output port(SCART) is firmly connected to the TV or VCR. Check that you have selected the correct channel or Video Output on your TV. Check the brightness level of the TV.
Poor picture quality	See "No Picture" above. Check the signal level, if this is low then try adjusting the alignment of your dish.
No Sound	See "No Picture" above. Check the volume level of the TV and STB. Check the Mute status of the TV and STB.
Remote Control does not operate	Point remote control directly towards the STB. Check and replace batteries.
On-Screen Error Messages	
No or Bad Signal	Check the LNB - replace LNB if necessary. Check the cable from the LNB. Check the position of the dish - realign dish if necessary. If you are using a DiSEqC 1.0 switch, check that you have connected the LNBs to the correct connections on the switch. Check the "Signal Level" and the "Signal Quality" in the Signal Status menu.
Service Search	
"No Signal" in Manual Search	Check the "Signal Level" and the "Signal Quality" in the Signal Status menu. Check the LNB - replace LNB if necessary. Check the cable from the LNB. Check the position of the dish - realign dish if necessary.
	DiSEqC 1.0 Check that you have connected the LNBs to the correct connections on the switch. Check that you have set the connected setting in the Antenna Setting menu.
	DiSEqC 1.2 Check that you have selected this in the Antenna Setting menu. Check that the dish is aimed at the correct satellite.

• If you can't solve the problem even referring this Troubleshooting Guide, contact us via our homepage.

Homepage: http://www.humaxdigital.com

Menu Map





Specification

Tuner & Channel

Input Connector	E type JEC 160 24 Female
•	F-type, IEC 169-24, Female
Frequency Range	950 MHz to 2150 MHz
Input Impedance	75Ω unbalanced
Signal Level	-25 to -75 dBm
IF & Bandwidth	Zero-IF
LNB Power &	Vertical: +13.5 V
Polarisation	Horizontal : +18 V
	Current: 500 mA Max. Overload / Short Protection
22 KHz Tone	Frequency: 22 ± 2 KHz Amplitude: 0.6 ± 0.2 V
DiSEqC Control	Version 1.0/1.2 Compatible
Demodulation	QPSK
Input Symbol Rate	1-45 Ms/s
FEC Decode	Convolutional Code Rate 1/2, 2/3, 3/4, 5/6 and 7/8 with Constraint Length K=7

MPEG Transport Stream A/V Decoding

Transport Stream	MPEG-2 ISO/IEC 13818
	Transport stream specification
Profile Level	MPEG-2 MP@ML
Input Rate	15 Mbit/s Max
Aspect Ratio	4:3, 16:9
Video Resolution	720 x 576(PAL standard)
Audio Decoding	MPEG/MusiCam Layer I & II
Audio Mode	Single channel/Dual channel/Joint stereo/Stereo
Sampling	32, 44.1 and 48 KHz

Memory

Main Processor	ST ST20C2 + (81 MHz)
Flash Memory	2 Mbyte
Graphic(MPEG) &	8 Mbyte
System DRAM	·

• *Please note*: The specification of the STB may be changed without notice in advance.

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A/V & Data In/Out

TV SCART	Video Output(CVBS, S-Video, RGB)
	Audio Output
	(Resolution : 20 bits DAC, Max. 2 Vrms)
VCR SCART	Video Output(CVBS)
	Video Input(CVBS, S-Video, RGB)
	Audio Output(Resolution : 20 bits DAC, Max. 2 Vrms(fixed)
AUDIO R/L	RCA/Cinch Volume and Mute Control
	(Resolution : 20 bits DAC, Max. 2 Vrms)
Digital Audio Output	1-CH S/PDIF, Optical Type
RS-232C	Transfer rate 115,200 bps, 9pin D-sub Type

Power Supply

Input Voltage	230V AC, 50/60 Hz
Туре	DC-DC Converter with PWM
Power Consumption	Max. 27W
Standby Power	≤ 3 W
Protection	Separate internal fuse. The input shall have lightening Protection

Physical Specification

Size (W x H x D)	260 x 50 x 180 mm
Weight (Net)	Around 1.9 kg
Operating Temp	0°C to + 45°C
Storage Temp	-10°C to + 70°C
Storage Humidity	5% ~ 95% RH(Non-Condensing)

Data rate decides the picture quality of digital TV programmes.
 Data rate of about 5-6 Mbit/s coincides with the picture quality of a analog TV programme.

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