

VA-5200C

Digital Cable Set-Top Box

for **Viaccess Embedded**

HUMAX

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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 : 190 - 250V 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 CABLE TV SIGNAL AND TV

: Connect all components before plugging any power cords into the wall outlet. Always turn off the STB, TV and other components before you connect or disconnect any cables.

EARTHING : CATV 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.



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.

Copyright & Glossary

Copyright

- VIACCESS™ is a trademark of France Telecom.
- CryptoWorks(TM) is a trademark of Philips Electronics N.V.
- Irdeto is a trademark of Mindport BV.
- Nagravision is a registered trademark of KUNDELSKI S.A.
- Conax is a trademark of Telenor Conax AS.
- “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

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.

Frequency

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

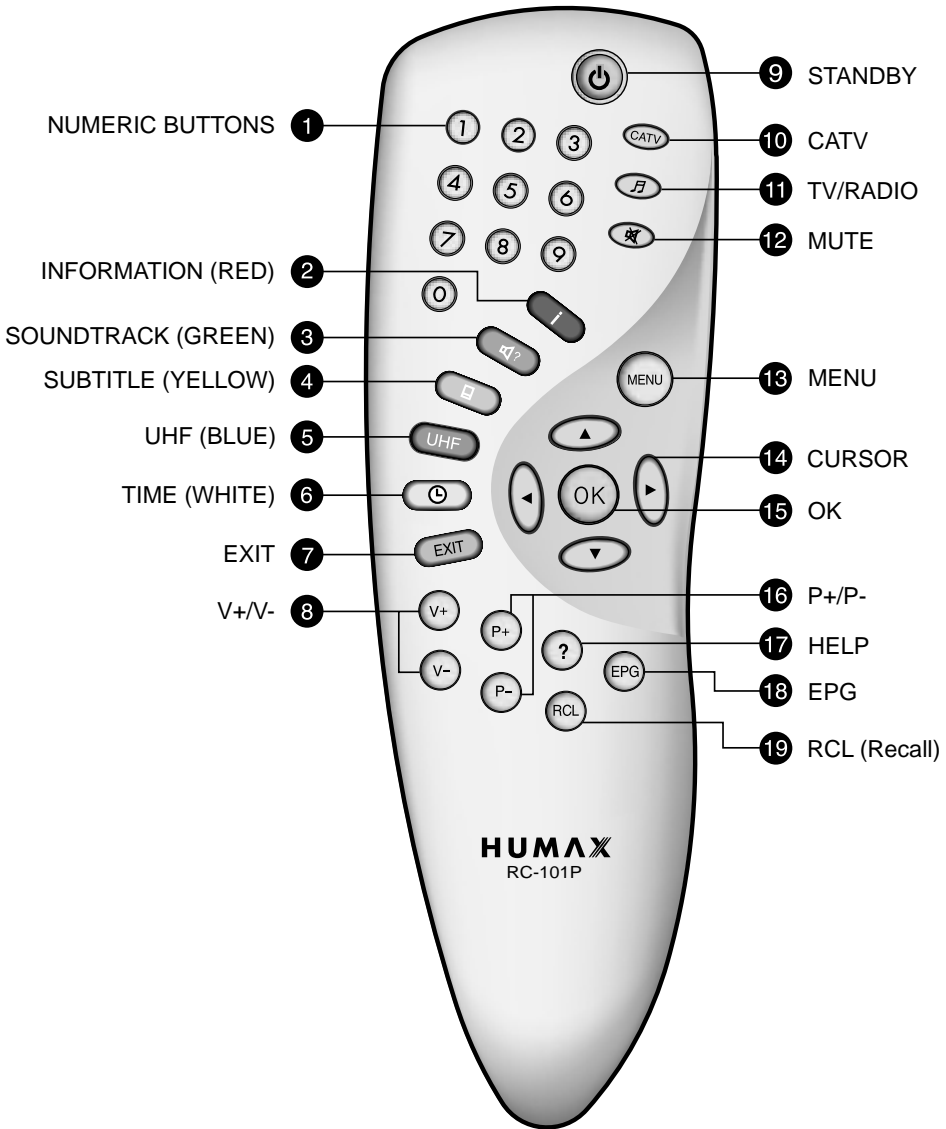
Intermediate Frequency (IF)

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

Service

- A channel to which a decoder or TV is tuned.

Remote Control Unit



1 NUMERIC BUTTONS

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

2 INFORMATION (RED)

Press to display the programme information box on the screen. And this button functions same as the RED button on the menus.

3 SOUNDTRACK (GREEN)

Press to display the soundtrack list for the current service. And this button functions same as the GREEN button on the menus.

4 SUBTITLE (YELLOW)

Press to display the subtitle language list for the current service. And this button functions same as the YELLOW button on the menus.

5 UHF (BLUE)

Press to set the UHF menu.
This button functions same as the BLUE button on the menus.

6 TIME (WHITE)

Press to display the current time on the screen.
Press to reserve services on the Information box or EPG. And this button functions same as the WHITE button on the menus.

7 EXIT

Press to return to the previous menu and screen.

8 V+/V-

Volume up/down buttons.
Press to increase or decrease the volume.

9 STANDBY

Press to switch between Operation and Standby modes.

10 CATV

Press to select the CATV mode.

11 TV/RADIO

Press to select the TV/RADIO mode.

12 MUTE

Press to temporarily cut off the sound.

13 MENU

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

14 CURSOR

Press to move the highlight bar for selecting options on the menus.
And this button is used to change services (up/down) and increase or decrease the audio volume.

15 OK

Press to display the service list.
This button is used to select the item on the menus.

16 P+/P-

Programme up/down buttons.
Press to tune to the next or previous service.
Press to move up or down pages on the menus.

17 HELP

Press to display the help box on the screen.

18 EPG

Electronic Programme Guide button displays the TV/Radio programme guide.

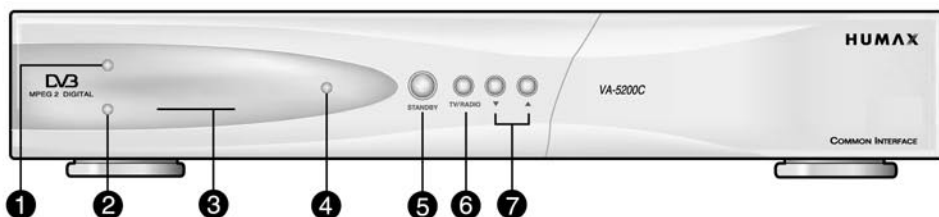
19 RCL (Recall)

Press to select the service that was previously viewed.

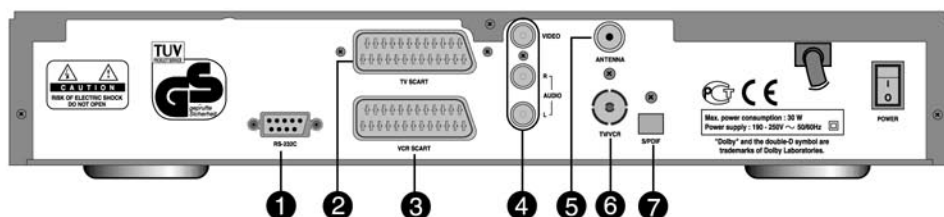
• **Please note** : The design of Remote Control Unit may be changed without notice in advance.

STB Connection

FRONT & REAR PANEL

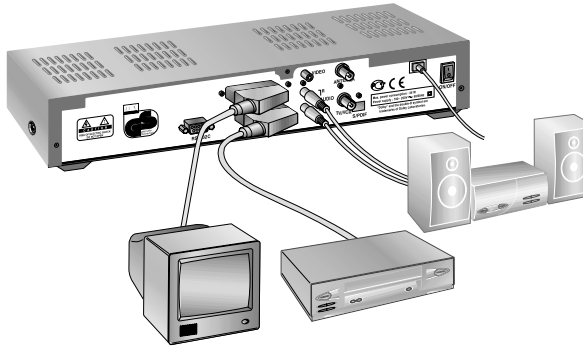


- 1 TV LED(AMBER)**
The LED lights on in TV mode.
- 2 RADIO LED(GREEN)**
The LED lights on in RADIO mode.
- 3 DISPLAY**
Shows service number, error messages, RCU commands and time in Standby mode.
- 4 STANDBY LED(RED)**
Indicates that the STB is under standby.
- 5 STANDBY**
Press to switch between Operation and Standby modes.
- 6 TV/RADIO**
Press to switch between TV and Radio modes.
- 7 ▼, ▲**
Use to change services down/up.



- 1 RS-232C**
Use it when connecting to your PC.
- 2 TV SCART**
For the audio/video input of the TV.
- 3 VCR SCART**
For the VCR.
- 4 AUDIO/VIDEO OUTPUT**
Audio/video signal from your STB to VCR or TV.
- 5 ANTENNA**
Use to connect a CATV Antenna jacks to a ANTENNA input jack on the STB.
- 6 TV/VCR**
Use to connect a CATV signal from your STB to RF(ANT) input jack on your TV or VCR .
- 7 S/PDIF**
Output for connection to a digital amplifier.

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

1. Connect one end of 21-pin SCART cable to the TV SCART socket on the STB and the other end to a SCART socket on your TV.
2. If you want to use RCA/Cinch cable, connect one end of RCA/Cinch cable to the VIDEO socket on the STB and the other end to a Video Input socket on your TV.
Connect two ends of RCA/Cinch stereo cable to the AUDIO R/L socket on the STB and the other ends to the Audio R/L Input socket on your TV.
3. Connect one end of RF lead to the TV/VCR socket on the STB and the other end to the RF IN socket on your TV.
4. Connect your CATV line to the ANTENNA socket on the STB for receiving cable services.

TV with VCR

1. Connect one end of a 21-pin cable to the TV SCART socket on the STB and the other end to a SCART socket on your TV.
2. Connect one end of a 21-pin SCART cable to the VCR SCART socket on the STB and the other end to a SCART socket on your VCR.
3. Connect one end of a RF lead to the TV/VCR socket on the STB and the other end to the RF IN socket on your TV.
4. Connect your CATV line to the ANTENNA socket on the STB for receiving cable services.

With Hi-Fi System


1. 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.

Connect a S/PDIF Fiber-Optic cable

If you are watching a programme with a Dolby Digital soundtrack (see page 8) 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,...).

Guide of Function


Information Box (I-Plate)

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

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

SERVICE-PART (Left side of the box)

SERVICE PART consists of the following items:

- I-Plate icon, Current time and Dolby Digital symbol
- Service name, Service number,  icons
- Subtitle, Teletext, Scrambling service symbol
(These are automatically displayed when the broadcasting station provides appropriate information.)
- Signal quality bar


EVENT-PART (Right side 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 and next event information.

- ▶ button : Use to move from the current event information to the next event information.
- ◀ button : Use to move from the next event information to the current event information.

When the Help()button is pressed under I-Plate display and there are no detailed event informations in the I-Plate, the Help window will appear on the screen.

The Help window shows the current Network information, including: Network Name, Frequency, Symbol Rate, Constellation..







The detailed information for the event can be displayed by pressing the Help()button in the I-Plate with event data displaying mode. You can reserve the programme in the event data display mode by using the White()button.

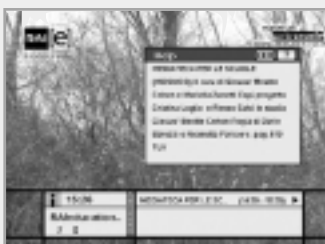
You can reset timer programme Once, Daily or Weekly mode.

When you release the timer programme mode, then you will be asked to confirm the action.

Changing Services

To change services, do in the following sequence;

1. Press the Numeric buttons(0~9) on the remote control unit.
2. Press the  buttons or  buttons.
Or press the Recall(), Service-list, EPG()mode button.
To switch between TV and Radio services, press the TV/Radio() button.
To select the previous viewed Service, press the Recall() button.



Volume Control

To adjust the volume level, use the $\text{V+}/\text{V-}$ buttons or $\blacktriangle/\blacktriangleright$ buttons. To temporarily stop the volume, press the Mute(M) button. To cancel mute, press the Mute(M) button again or press the $\text{V+}/\text{V-}$ buttons or $\blacktriangle/\blacktriangleright$ buttons.

Soundtrack

When you want to change the audio language of current service, press the Green(G) button firstly. The on-screen menu is displayed on the top to left side of the screen.

To change the audio language:

1. $\blacktriangle/\blacktriangleright$ buttons : Use to select the audio on the left, right or both.
2. $\blacktriangle/\blacktriangledown$ buttons : Use to select the audio language you want.
3. OK , 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.

Subtitle

When the current broadcasting programme provides subtitle, press the Subtitle(S) button to see the current subtitle language list.

To change the subtitle language:

1. Use the $\blacktriangle/\blacktriangledown$ buttons to select a Subtitle language you want.
2. Press the OK button and the selected language is highlighted and then the Subtitle Language you want is displayed on the screen.

Press the EXIT button to cancel the Subtitle mode.

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(T) is displayed on the i-plate.



Guide of Main Menu



1. Select Service

The select service displays the required service list which can be viewed in Simple or Advanced mode.

2. TV Guide

Your STB has an Electronic Programme Guide (EPG) to help you navigate through all the possible viewing options. The TV Guide supplies information such as programme listings and start and end times for all available services. In addition, detailed information about the 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. Parental Control

Access to services and programmes is controlled by a PIN Code (i.e., a 4-digit secret code that is defined by the user). The very first time you attempt to lock all services (or lock programmes by ratings), the on-screen menu will instruct you to assign a PIN Code (Later on, if necessary, you can change it).

4. Installation

The Installation mode allows you to have the information of setting services and newly set services (language, time, organise, search,..). Furthermore, you can recognize the states of hardware and software versions and signals from your STB.

5. Utility

This menu provides Calendar and Biorhythm.

1. Select Service

To select the desired in the service list, you should firstly display the service list using **(OK)** button. Use **▲/▼/◀/▶** buttons to select a service and press **(OK)** button. Also use **(P+)**/**(P-)** buttons to select a service directly in the service list.

The contents of service list are as follows:

Simple Service List

1. Use the **▲/▼** buttons to select "Select Service" from the Main Menu and press the **(OK)** button.
2. Use the **▲/▼** buttons to select "Simple" from the Main Menu and press the **(OK)** button.
3. Then the simple service list(max. 10 services) will appear on the screen.

Advanced Service List

The advanced service list shows thirty services. This list is similar to the Simple service list except that it shows thirty services and is apart from the Network and Genre list that displays twenty services. Use the following colour buttons to list various service lists:

The colour button corresponds the following Service List.

- Red **(I)** button - service list All
- Green **(M)** button - Favourite
- Yellow **(N)** button - Network
- Blue **(UHF)** button - Genre
- White **(O)** button - service list by Alphabetical order

Service Configuration

To change the attributes of a service

1. Use the **▲/▼/◀/▶** buttons to move a service you want to change in the Service List.
2. Press the Menu **(MENU)** button.
3. Use the **▲/▼** buttons to move to an item(such as genre, favourite, lock, skip, delete) you want on the Service Configuration screen.
4. Use the **◀/▶** buttons to select. Press the **(OK)** button to complete.


Service All

1. To display the Service All, press the **(OK)** button
Use Red **(I)** button to select the service All list.
2. Select the desired service by using the **▲/▼/◀/▶** buttons.
3. Press the **(OK)** button to view the selected service.
The service list provides you the Simple mode and Advanced mode. The right side scroll-bar of the screen displays the location of the selected service in relation to All services.
Press the Red **(I)** button to toggle between Simple mode and Advanced mode.




Guide of Main Menu



Service Favourite

1. Press the Green() button on the remote control unit to select the Favourite service list.

Note : The groups are labeled in four different alphabet characters (A,B,C,D).



2. Use the ▲/▼ buttons to select a favourite group that you want.
3. Press the Green() button to toggle group and service list.

Service Network

1. Press the Yellow()button on the remote control unit to select the Network service list.
2. Use the ▲/▼/◀/▶ buttons to select a service
3. Press the Yellow()button to toggle provider and service list.



Note : 1. The provider name is displayed on the left window and the provider's services are displayed on the right window.
2. The scroll bar on left of the screen shows the location of the cursor in the Network. The scroll bar on right of the screen shows the location of the service from the selected Network.

Service Genre

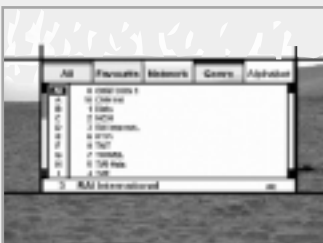
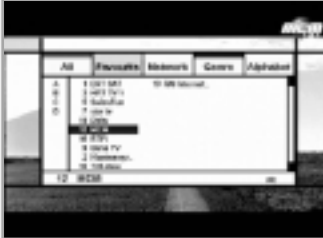
1. Press the Blue()button on the remote control unit to select the Genre service list.
2. Use the ▲/▼/◀/▶ buttons to select a service.
3. Press the Blue()button to toggle Genre and service list.

Note : The scroll bar on left of the screen shows the location of the cursor in the selected Genre. The scroll bar on right of the screen shows the location of the service.

Service Alphabet Order

1. Press the White()button on the remote control unit to select the Alphabet service list.
2. Use the ▲/▼/◀/▶ buttons to select a service.
3. Press the White()button to toggle Alphabet and service list.

Note : The scroll bar on left of the screen shows the location of the cursor in the Alphabet. The scroll bar on right side of the screen shows the location of the selected Alphabet service.



2. TV Guide

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

To enter the TV Guide mode

Press the EPG(EPG) button on the remote control unit or select the TV Guide on the Main Menu.

To select the TV/Radio Guide

Press the (TV) button on the remote control unit and TV Guide will be switched to the Radio Guide.

TV Guide mode includes four different modes.

To select each mode, use the following buttons:

- Red (I) button : Use to display the current and next programme list.
- Green (1W) button : Use to display the programme list for one-week.
- Yellow (E) button : Use to display the reserved programme list.
- Blue (UHF) button : Use to display the simple TV Guide list. (Quick mode)

NOW / NEXT mode

Show the informations of the programmes that are played now or will be played next time.

This mode consists of the service name, event name, event duration time, current time and on-screen-display window.

To watch a programme you want through the display window :

- Use the (P+)/(P-) buttons to select a programme you want. The selected service will appear on the right display window.
- Use the ▲/▼ buttons to select a programme you want. And then press the (OK) button on the remote control unit. The selected service will appear on the right display window. The selected OSD will be highlighted every time the cursor moves.

To reserve a programme you want :

- Select a programme you want by using the (P+)/(P-) buttons or ▲/▼ buttons. And then press the White (S) button. Press the ◀/▶ buttons to watch the programme of previous page or the programme of next page. Press the Yellow (E) button to watch the Reserved programme list.

Weekly mode

Shows the information of programmes that will be played for a week. Select a day you want using the ◀/▶ buttons.

To watch and reserve a programme you want, do the same steps with the NOW/NEXT mode.



Guide of Main Menu

Reserved mode

Shows the programme lists that you have already reserved on the TV Guide or Information box.

Maximum eight programmes can be reserved.

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

To cancel the Reserved service, select a programme you want to cancel using the ▲/▼ buttons and then press the White (Ⓞ) button.



Quick mode

Shows a simple TV Guide like an Information box.

This mode shows in the A/V playback mode.

- Red vertical line : Indicates the current time.
- Black/white bar : Shows the proceeding state of programme.
- Time range of bar : This consists of three blocks by 30 minutes per block.



3. Parental Control

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

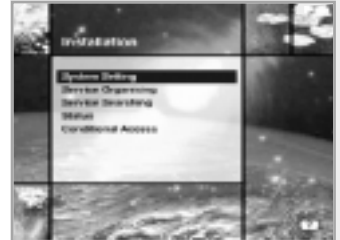
1. When the (OK) button is pressed after selecting the highlighted parental control on the initial menu screen, a display window for entering the PIN Code will appear on the centre of screen.
** The default PIN Code is **0000** .
2. Enter the PIN Code on the display window.
(If any problem occurs when entering a PIN Code, you cannot switch to the next mode.)
3. Set the parental guidance rating of highlighted censorship classification.
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.
4. To change your PIN Code:
 - 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.
5. 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.)

4. Installation

This mode allows you to customise, add a new service and displays the state of the STB. Enter the submenus after selecting the Installation mode in the Main Menu.

4-1. System Setting

The System Setting 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, UHF Tuning and Other Settings.



Language Setting

Select the language for menu, audio or subtitle.

1. Select the highlighted language setting using the ▲/▼ buttons in the system setting mode and then press the **OK** button.
2. Select the highlighted Menu(or Audio, Subtitle) Language and press the ◀/▶ buttons and the language list will be displayed.
3. Use the ▲/▼ buttons to move to a language you want and then press the **OK** button to finish setting.

Menu Language

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



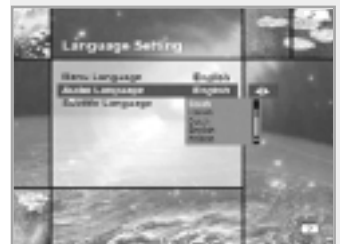
Audio Language

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:

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

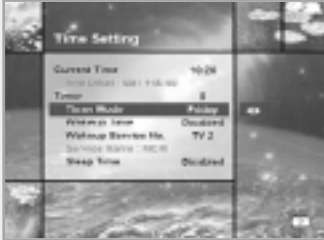
If no language is provided, then the default language of current service will be automatically selected.



Subtitle Language

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

Guide of Main Menu



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 Guide, Wakeup and Sleep Timer.

Time Offset

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

Timer

You can select nine kinds of Timer like 1,2.....8 and Disabled. If you select "Disabled", then the other timers will not work. Press the **OK** button at timer option to display the Timer table. The Timer determines the on/off time and can also be used for VCR recording.

Timer Mode

Wakeup/Sleep timer determines the Timer Mode.

- Once : The timer programming is applied only once.
- Daily : The timer recording is applied everyday repeatedly.
- Weekly : The timer recording is applied weekly.
(Set one day in a week).

Use the **◀/▶** buttons to select the type of timer programming.

Wakeup Time

Select the time when STB is turned on.

Use the Numeric buttons(0~9) on the remote control unit to enter your Wakeup Time.

Wakeup Service No.

Use the **◀/▶** buttons to set the service number provided for the set Wakeup Time.

Use the TV/Radio(**Ⓟ**) button on the remote control unit to toggle TV/Radio service.

Service Name

The Service Name that has been determined by the Wakeup Service No. will be shown.

Sleep Time

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

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 SCART and RCA/Cinch Jack. (Stereo/Mono)

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.

Screen Mode

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.

UHF Tuning

You select the STB output by using the UHF channel.

Channel

Select an UHF channel. The range of channels and frequency value are different for each PAL Standard:

PAL I/G for Europe	: CH21 ~ CH69
PAL B for Europe/Australia	: CH28 ~ CH69
PAL D for China	: CH13 ~ CH62
PAL K for Russia	: CH21 ~ CH69

PAL Standard

Select a PAL Standard according to the above range of channels.

Offset

Adjust the fine tuning value. The Offset ranges from -4 to +4 and each Offset represents 1MHz.



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Other Setting

Select the OSD Transparency, Information Box Display Time and so on.

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, opaque, 20%, 40%,60% and 80%.

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.

Menu Background

Set the type of background for the menu to be displayed on.

Changing to Reserved Service

When the reserved time has come during the view of services:

- Manual Mode

This mode shows the message "A reserved event has started on another service. Press OK to view the reserved service. Press EXIT to ignore reserved service. (will automatically change after 10 seconds.)" And ask the presence of change and then makes a change.

- Auto Mode

The current service will be automatically changed to the time-reserved service.

4-2. Service Organising

This menu gives users access to options that allow them to organise their TV Services, Radio Services and Networks.

** The default PIN Code is **0000** .

Organise TV Services

Organise All Services









This mode allows users to Delete, Move, Lock, Skip and Rename TV Services.

- Delete



1. Press the Red(**EXIT**)button to delete unwanted services.
2. Highlight the services that you want to delete in grey.
3. Press the **OK** button to confirm.
4. Press the **EXIT** button to cancel the deletion.






• **Move**



1. Press the Green()button to move the service to where you want to locate.
Then, the icon() will be displayed in front of the service number.
2. Use the /// buttons to select a new location.
3. Press the  button to fix the location.
4. Press the  button to return to the original location.

• **Lock**


1. Press the Yellow()button to lock services.
Then, the symbol “  ” will be displayed at the right side of the service name.
2. Enter the PIN Code to view the locked services.

• **Skip**

1. Press the Blue()button to skip services.
Then, the symbol “  ” will be displayed at the right side of the service name.
2. Use Numeric buttons(0~9), service list or  button to view the skipped services when selecting channels.

Note : You can't view the skipped services by using / buttons.

• **Rename**

1. Press the White()button to change the service name.
Then, the keyboard image will be displayed on the screen.
2. Key in the new service name.

You can use the four direction keys to move or select the services.

- ◀ : to move the previous service
- ▶ : to move the next service
- ▲ : to move back by 16 services
- ▼ : to move forwards by 16 services

Note : The box between service list and the description of the colour buttons offers the brief information of a service where the cursor is located.



Organise Favourite A~D

Each of TV and Radio has four Favourite groups.
Each Favorite group contains up to 100 services.
Delete, Move, Lock, Skip or Rename each TV service in a Favourite TV group and re-group them into your Favourite TV group.

This mode has the same operating methods as “organise all services”.

- When you delete a service in the Favourite group, it will be available again on the All TV service list. This allows the service to be removed from the Favourite group.



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- You can move the service only within the Favourite group.
- Coloured keys are available when the cursor is located in the middle window.
(Except when the middle window is disabled(grey).)

• **To select the Favourite group;**

1. Use the ◀ button to move the cursor to “Gr.”-plate(left).
2. Select the wanted favourite group.

• **To group the services into Favourites;**

1. Use the ▶ button to move the cursor to “services”-plate (right).
2. Select the service you want to group into Favourites.
3. Press the (OK) button.
4. Use the ◀ button to move the cursor to “Favourites”-plate(left).
5. Press the (OK) button to save the selected group.

Note : 1. Use the ◀/▶ buttons to move the cursor.

2. Use the (P+)/(P-) buttons to select the previous or next page.

Organise Service Genre

The Organise Service Genre feature allows the user to Delete/Lock/Skip/Rename a service in the selected Genre.

Available genre : Movie, News, Show, Sports, Children, Music, Art, Education, etc.

The colour buttons function same as ones for Organise All services except the following differences:

- When you delete a service in the selected genre, it will be available again on the All TV services list at the right side.
At that time, the genre for the deleted service becomes “etc”.
- You can move the service only in the selected genre.
- Coloured buttons are available when the cursor is located in the middle window.

• **To select the Genre;**

1. Use the ◀ button to move the cursor to “Gr.”-plate(left).
2. Select the wanted genre.

• **To group the services into a Genre;**

1. Use the ▶ button to move the cursor to “services”- plate(right).
2. Select the service you want to group into Genre.
3. Press the (OK) button.
4. Use the ◀ button to move the cursor to “Genre”-plate(left).
5. Press the (OK) button to save the selected group.

Note : 1. Use the ◀/▶ buttons to move the cursor.

2. Use the (P+)/(P-) buttons to select the previous or next page.



Organise Radio Services

The Organise Radio Services functions same as TV Services except that it uses Radio Services.

You can delete or move Radio Services and change the attributes of them.

Organise All Services

The Organise All Services lets the user Delete, Move, Skip, Look or Rename Radio services on the All Radio services list.

Organise Favourite A-D

The Organise Favourite A-D lets the user Delete, Move, Lock, Skip or Rename Radio Services from the Favourite Radio Services and group into a new Favourite Radio Services.

The Radio Services are grouped into a Favourite in the same way as the TV Services(refer to page 18).

Organise Service Genre

The Organise Service Genre lets the user Delete, Lock, Skip or Rename Radio Services and group into Radio Service Genres. Radio Genres include : Pop, Rock, Country, Classic, Jazz, Folk, News, Show, Sports, Education, User A-D, etc.

The Radio Services are grouped into a Genre in the same way as the TV Services (refer to page 19).

Organise Networks

You can edit services using the network unit.

- The provider names are displayed on the left side of screen, and the TV/Radio Services included in the highlighted Network are displayed on the right side of screen. Only the Delete, Move, Rename Function can be used in this mode.
- When TV/Radio Services are too many to be displayed, use the ► button to move the cursor to the right window and use the ▲/▼ and (P+)/(P-) buttons to move the cursor to the next list.

When the number of services is under 10, the scroll bar is not displayed. In Radio Service icon(🎵) is marked in front of service number.



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4-3. Service Searching

Enter the PIN Code to access the Service Searching menu as you access the Parental Control or Service Organising menu. Press the (OK) button to start Service Search after setting the parameters.

** The default PIN Code is **0000** .

Manual Search

After setting the search parameters such as Frequency, Symbol Rate etc., you can manually find the services you have selected.

Frequency

Input the Frequency of the cable signal you want to find manually.

Symbol Rate

Input the Symbol Rate of the cable signal you want to find.

Constellation

Select the Constellation of the cable signal you want to find. You can select the value of 16, 32, 64, 128, 256-QAM or Auto.

Network Search

You can select Yes or No. When you select "Yes", you can find more services using the home network. As it refer to NIT during searching, if there is information about the frequency of other services, it searches not only the service the user has entered but the other services.

Service Search OSD

- If you press the (EXIT) button during the search, then Service Search stops and the searching menu will appear.
- When you find all the services, the following picture appears.
- Before saving it, you can select the services you want to delete.

Found services OSD

- The picture above shows services that are found after Manual Search.
- Use the Red()button to mark the services that you want to delete.

To unmark a service, select the service and press the Red()button again.



- Press the **(OK)** button to save, or press the **(EXIT)** button to exit without saving.
- Then Service Searching menu appears again. When you exit from all menus, the first service of the found service list is played.

In the bottom of found service picture, network, the information of transponder and the number of found service that the services belong to are displayed.

The deleted service by the Red **(I)** button is excepted from counting of the number of services.

The deleted service is not included in this number.

“Free” applies to the empty space of the memory.

It will be used to store future services.

Automatic Search

Start Frequency

In order to set the frequency range to seek, set the frequency which the automatic service search starts from.

End Frequency

In order to set the frequency range to seek, set the frequency which the automatic service search ends to.

Symbol Rate

Set the Symbol Rate of cable signal you want to find.

Constellation

Select the constellation of the cable signal you want to find. You can select the value of 16, 32, 64, 128, 256-QAM or Auto.

Press the **(OK)** button anywhere to start Automatic Search.

The picture during searching is as follows.

The picture searches with varying Frequency, Symbol Rate and FEC etc. Satellite Name is the name that the user selects to correspond with Antenna Alternative of Antenna Setting.

The progress bar(%) appears on bottom of the picture.

During the search, services that are found are displayed as follows:

1. Press the **(EXIT)** button during Automatic Search to stop search.
2. After the search is finished, the appearite message appears.
3. Press the **(OK)** button to return Service Search menu.



Guide of Main Menu



4-4. Status

STB Status

Displays the information of H/W Version, S/W Version and Loader Version.

Signal Detection

Shows the Signal Level(AGC level) and Signal Quality(BER) of the current service and is help to the initial antenna setting.



4-5. Conditional Access(for Viaccess Embedded)

This menu allows the user to view the information on the Smart Card and Viaccess conditional access system such as general Smart Card Information, Service List, Change Maturity Rating and Change PIN Code.

General Smart Card Information

You can see the Unique Address, so user Address, Current Maturity Rating of the Smart Card.



Service List

Services or Bouquets are encrypted by Viaccess and operators name, like TPS or ABSat, are displayed on the TV screen. To get more detailed information of viewing rights of services or Bouquets, press **OK** button.

Change Maturity Rating

The STB is required by Viaccess to include a parental control facility for the viewing of restricted services. This can be set to 'No block' or for ages ranging from 4 to 18. The correct PIN Code is required to change this option.



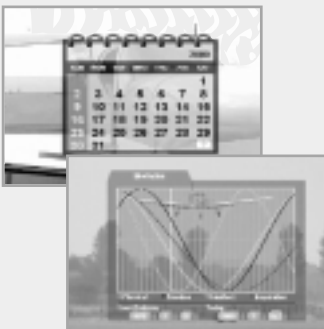
Change PIN code

When you buy a new Smart Card, the initial PIN Code is set to 'NULL'. Therefore, it is recommended that this PIN Code should be changed. This PIN Code is available only on Conditional Access Menu. Enter this PIN Code to see the blocked Viaccess Service.

5. Utility

STB supports additional functions such as Calendar and Biorythm.

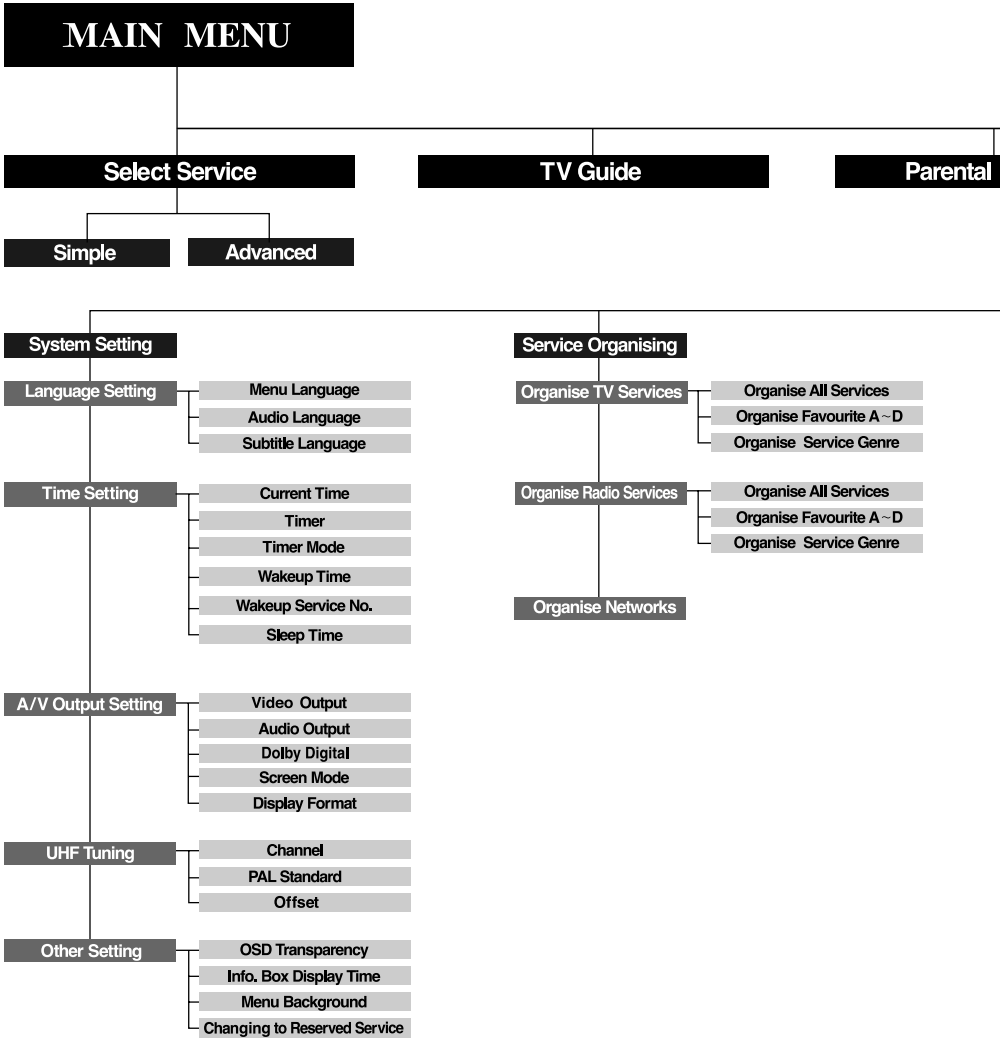
At the Biorythm use the **▲/▼/◀/▶** buttons to adjust your birth year and date to see your current biorhythm status.

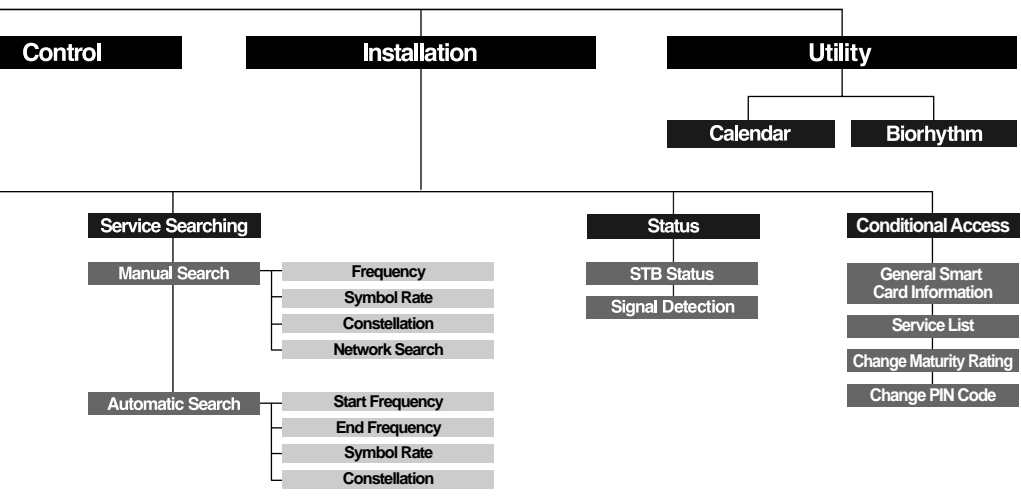


Troubleshooting Guide

Problem	Solution
About STB	
Does not display any message 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. Check you have switch the STB main power switch ON at the rear of the STB. Check whether STB is in Standby mode.
No Picture	Ensure that the STB is switched on (see above). Check the video output port (SCART & RCA Jack) is firmly connected to the TV or VCR. If you are using the RF Output, check that the RF Lead is connected firmly to the STB and TV/VCR. Check that you have selected the correct channel or Video Output on your TV. If you are using the RF Output, check that you have correctly tuned the UHF channel of the STB or TV. Check the brightness level of the TV.
Poor picture quality	See "No Picture" above.
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 Connection of CATV Line. Check the "Signal Level" and the "Signal Quality" in the Signal Status menu.
Service is not running or scrambled / No access to the service slot.	Check whether the Smart card is correctly inserted. Check whether the Smart card is appropriate for the selected service.
Please check the card / No right for this service / No smart card in slot and please insert your card.	Check that the Smart card is inserted correctly. Check the Smart card is appropriate for the selected service. Check the subscription rights of the Smart card.
Time Display	
The front panel does not display the time.	Make sure you have switched on the STB. Switch the STB on and tune to a service to allow the STB to receive the time sent with the signal by the service provider. Front panel will only display the time in Standby mode.
Time displayed on the front panel is in correct.	Adjust the time in the Time Settings menu.
Service Search	
"No Signal" in Manual Search	Check the "Signal Level" and the "Signal Quality" in the Signal Status menu. Check the Connection of CATV Line.
Front Panel Error Messages	
E - dE : Incorrect data block(CRC-16)	Try switching STB power Off and On.
E - 1d E - 7d : Invalid system ID	Check whether the system ID is different for Software and STB.
E - 4E : UART RX/TX time out	Try switching STB power Off and On.

Menu Map





Specification

Conditional Access Interface

Viaccess Embedded	1 Slot Smart Card
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Tuner & Channel

RF Input Connector	IEC 169-24, Female
Frequency	47 - 862 MHz
Level	-13 to +23dBmV
RF Loop through Output Connector	IEC, Male
Demodulation	QAM
Input Symbol Rate	1.5-7 Ms/s
Constellation	16, 32, 64, 128, 256-QAM

MPEG Transport Stream A/V Decoding

Transport Stream	MPEG-2 ISO/IEC 13818 Transport stream Specification
Profile Level	MPEG-2 MP@ML
Input Rate	60 Mbit/s Max
Aspect Ratio	4:3, 16:9
Video Resolution	720 x 576
Audio Decoding	MPEG/MusiCam Layer I & II
Audio Mode	Single channel / Dual channel / Joint stereo / Stereo
Sampling	32, 44.1 and 48KHz

Memory

Main Processor	TMIPS R3930(81MHz)
Flash Memory	3Mbyte
Graphic(MPEG) & System DRAM	4Mbyte

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.

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

RF-Modulator

RF-Connector	75Ω, IEC 169-2, Male / Female
Frequency	470 - 860 MHz
Output Channel	CH21-69, CH28-69 or CH13-62 for the Remodulator
TV Standard	PAL I/G/B/D/K selectable by Menu setting
Preset Channel	CH36 (or TBD). Software changable by Menu

Power Supply

Input Voltage	190 - 250V AC, 50/60 Hz
Type	SMPS
Power Consumption	Max. 30W
Standby Power	≤9W
Protection	Separate internal fuse. The input shall have lightning Protection

Physical Specification

Size (W x H x D)	370 x 60 x 280 mm (Excluding the Foot) Foot height is 8 mm
Weight (Net)	Around 2.8 kg
Operating Temp	0°C to + 45°C
Storage Temp	-10°C to + 70°C
Storage Humidity	5% ~ 95% RH (Non-Condensing)

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

