OPTIBOX®
panthera

MPEG4(H.264) HDTV Digital Satellite Receiver

User's Manual

Optibox PANTHERA

DOLBY DIGITAL   **DVB** Digital Video Broadcasting   **HDMI** HIGH-DEFINITION MULTIMEDIA INTERFACE   **HD TV** HIGH DEFINITION   CE   ♻   🗑

Please read the entire manual thoroughly and retain it for future reference.

Important safety instructions

Safety Warnings

	CAUTION	
⚡	**RISK OF ELECTRIC SHOCK** **DO NOT OPEN**	⚠

CAUTION : To reduce the risk of electrical shock, do not remove the cover. No user serviceable parts inside. Refer any servicing to qualified Service personnel.

⚡ This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.

⚠ This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

Read this manual carefully before using the product. The cautions described below contain important information about safety, and are categorized into: Danger, Warning and Notice.
The company will not take any responsibility for accidents or damage resulting from careless handling by the user.

⚡ Danger

If the user mishandles the product, there is a risk of loss of life or critical injury.

- Connect the power cord only to A/C outlets as specified by the user manual or product specification.
  If the power code is connected to a non-specified A/C outlet, it could result in fire or electric shock.
- The product must not be exposed to water or liquid of any sort, or be exposed to drips or splashes.
  It could result in fire or electric shock.
- Do not place heavy objects, including the product itself, on top of the power cord. If it is damaged, it could result in fire or electric shock.
- Do not place metal objects on top of the apparatus. If metal objects fall into the apparatus, it could result in fire or electric shock.
- Do not repair, disassemble or modify this apparatus yourself. It might cause fire or electric shock.
  If internal checking or maintenance is needed, please contact your service center or agency.
- Do not block or cover any ventilation opening. A fire might result from overheating.
- Turn off and unplug the power as quickly as possible during electric storms.
  Failure to do so could result in fire or electric shock.
- Remove the antenna's power plug from the outlet as quickly as possible during electric storms.
  Failure to do so could result in fire or electric shock.
- Do not drop the apparatus (for example by putting it in a place where it may fall) or subject it to impact.
  The product might be damaged. If it is damaged, please turn off the power and remove the plug from the power outlet, or fire or electric shock may result.
- Never touch the power cord with wet hands. It could result in an electric shock.

⚡ Warning

If the product is mishandled, the user might receive a serious or minor injury.
Damage or loss to the user's property might also result.

- The product must not be exposed to water or liquid. If the apparatus is exposed to drips or splashes, it might cause a problem that cannot be repaired.
- Do not repair, disassemble or modify this apparatus yourself. It might be seriously damaged, possibly beyond repair.
- Turn off the power and unplug the power cord as quickly as possible during electric storms.
  They might damage the apparatus.
- Remove the antenna's power plug from the outlet as quickly as possible during electric storms, or the apparatus might be damaged.
- Data recorded in the HDD might be lost due to a shock, lightening or electricity failure.
  The user must back up his or her own data, and the company does not take any responsibility for failure to do so.

⚡ Notice

If the product is mishandled, it might cause minor damage.

- If the apparatus becomes marked, clean it gently with a soft cloth or towel. Never use chemical solvents such as benzene, thinner, acetone or other solvents. The surface of the apparatus might become discolored and the paint might peel.
- Do not place or keep the apparatus in the following situations. Doing so might cause problems.
  - Where it is too hot or cold.
  - Where there is high humidity.
  - Where there are excessive temperatures, for example in front of airconditioners or heating vents.
  - Where there is dust or soot.
  - In confined areas where the heat cannot be released.
  - Where it is exposed to direct sunlight.
- Turn the apparatus off or unplug the power cord if it is to remain unused for a long period of time.
- Do not place heavy objects on top of this apparatus. It might cause malfunction or damage.
- If the apparatus is so seriously damaged that it cannot be repaired, or has stopped working altogether, dispose of it properly in accordance with the local laws or regulations in your area.

Disposal

Batteries and packaging material do not belong in domestic waste. The batteries must be delivered to a collection center for old batteries. The separate disposal of packaging materials protects the environment.

Disposal old electrical & electronic equipment
(Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Contents

1. Getting Start

1.1 Package Contents

Make sure that the following accessories are supplied with your receiver.
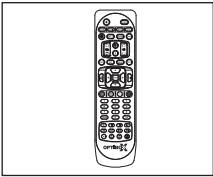
Remote Control Unit AAA Batteries (2 EA) User's manual

1.2 Front Panel

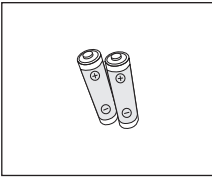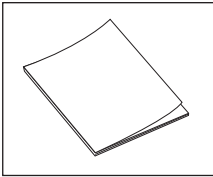|		Normal Mode	Change to the next channel.
❶	∧	Menu Mode	Move to the upper item.
	∨	Normal Mode	Change to the previous channel.
		Menu Mode	Move to the lower item.
	>	Normal Mode	Volume up.
		Change item	Change item.
	<	Normal Mode	Volume down.
		Change item	Change item.

❷	**Menu**	Normal Mode	Display the Main Menu.
		Menu Mode	Go to the sub menu.

❸	**Display window**	Displays the current state such as channel, time, and massage.
❹	**POWER**	Turn on & off the power.
❺	**Exit**	Return from menu.
❻	**Smartcard Slot**	Insert a Smartcard.

1.3 Rear Panel
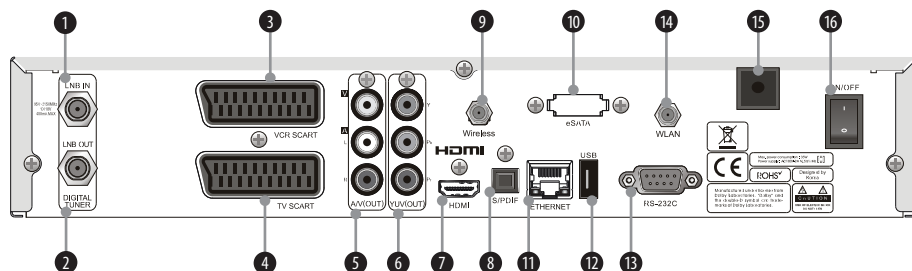
❶	**LNB IN**	Connect satellite antenna.	
❷	**LNB OUT**	Connect to the other satellite receivers.	
❸	**VCR SCART**	Connect VCR.	
❹	**TV SCART**	Connect TV.	
❺	**A/V(OUT)**	Connect TV (Left/Right)	
❻	**YUV(OUT)**	Connect TV through Y/Pb/Pr.	
❼	**HDMI**	Connect TV through HDMI.	
❽	**S/PDIF**	Connect TV Digital Amplifier (Optical).	
❾	**Wireless**	Internal Wireless Module(Option).	
❿	**eSATA**	Support SATA hard disk for PVR.	
⓫	**ETHERNET**	Connect TV LAN cable.	
⓬	**USB**	Connect USB memory.	
⓭	**RS-232C**	Connect PC for software upgrade.	
⓮	**WLAN**	Wireless LAN(Option).	
⓯	**POWER Supply**	100-240V~, 50/60Hz, MAX 35W.	
⓰	**POWER SWITCH**	Switch Power ON/OFF.	

1.4 Remote Control Unit
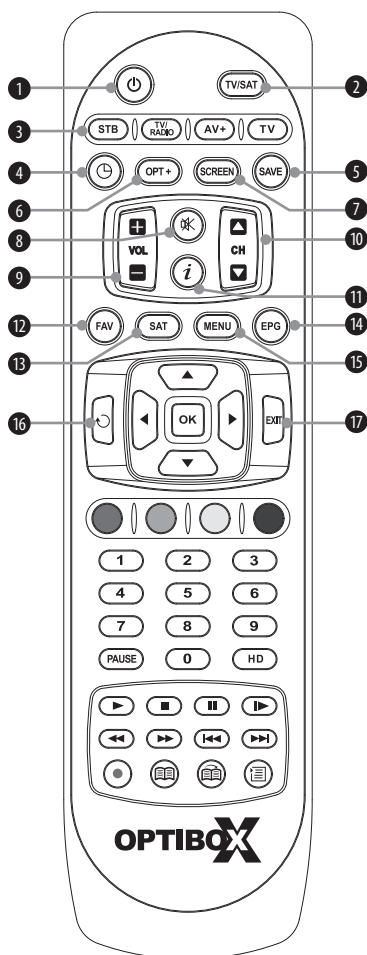
❶	**Power**	Power On/Off.	
❷	**TV/SAT**	Switch TV or SAT mode.	
❸	**STB**	Select STB.	
	TV/RADIO	Switch TV/Radio mode.	
	AV+	Digital Audio, Teletext, Subtitle menu.	
	TV	Select TV.	
❹	⊕	Sleep timer.	
❺	**SAVE**	Save current volume & channel.	
❻	**OPT+**	Show additional function menu.	
❼	**SCREEN**	Set screen format.	
❽	🔇	Mute the sound.	
❾	**VOL**	Adjust the volume.	
❿	**CH**	Normal mode	Change channel.
		Menu mode	Move menu item.
⓫	*i*	Show the current channel information.	
⓬	**FAV**	Show Favorite Channel List.	
⓭	**SAT**	Selects satellite.	
⓮	**EPG**	Show the Electronic Program Guide.	
⓯	**MENU**	Normal mode	Show the main menu.
		Menu mode	Return to the previous menu.
⓰	↺	Go back to previous channel.	
⓱	**EXIT**	Return to the previous menu.	

1.4 Remote Control Unit
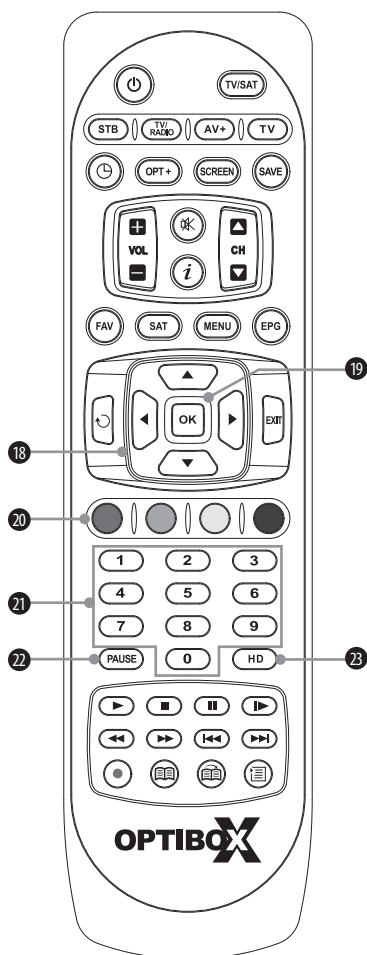
		Normal mode	Adjust the volume.
⑱	**VOL ◀▶**	Menu mode	Change the left/right item
	CH ▲ ▼	Normal mode	Change channel.
		Menu mode	Move menu item.
⑲	**OK**	Normal mode	Show the channel list.
		Menu mode	Execute the select item.
⑳	**Color Key**	Normal mode	Additional Menu **Red** - Fine tune menu. **Yellow** - Configure Diseqc1.2 / Positioner. **Green** - Additional Menu.
		Menu mode	Selected function according to the Menu.
㉑	**Numeric buttons**	Normal mode	Select channel.
		Menu mode	Directnumeric key entry.
㉒	**PAUSE**	Pause screen.	
㉓	**HD**	Sort HD channel only.	
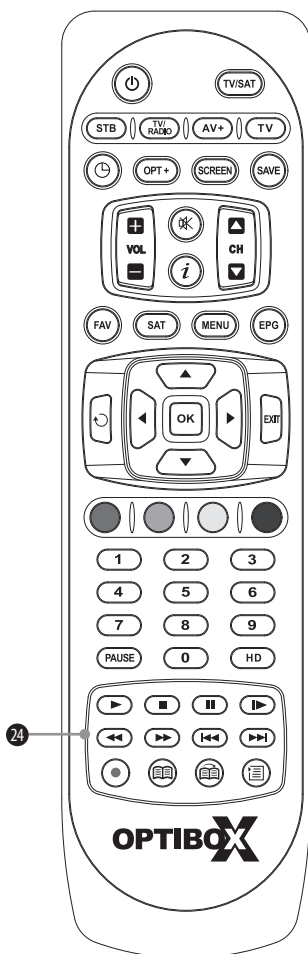
|			
		▶	**PLAY** • Change to normal speed in trick mode. • Show play navigation bar in normal speed.
		■	**STOP** • Stop file playback and watch live channel in time-shift or playback. • Stop recording.
		❙❙	**PAUSE** • Pause or resume play.
		▶❙	**SFWD(Slow forward play)** • Change to slow speed forward play. • Speed: ½x, ¼x, ⅛x.
24		◀◀	**FREV(Fast reverse play)** • Change to fast speed reverse play. • Speed: -x2, -x4,-x8, -x16, -x32, -x64.
		▶▶	**FFWD(Fast forward play)** • Change to fast speed forward play. • Speed: x2, x4, x8, x16, x32, x64.
		❙◀◀	• Go to start position.
		▶▶❙	• Go to end position.
		●	**RECORD** • Record current channel.
		📖	**BOOKMARK** • Set Bookmark in time-shift or playback.
		📖	**BOOKMARK JUMP** • Jump to bookmark.
		📋	**BROWSER** • Show File List.

1.5 Connecting Your Equipment

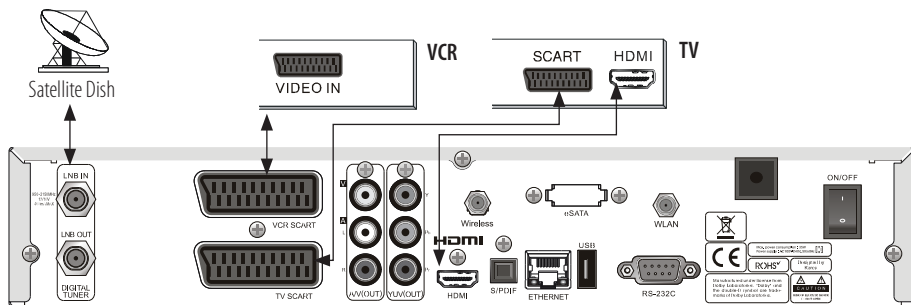Connect related equipments to STB as below.

> **Note**
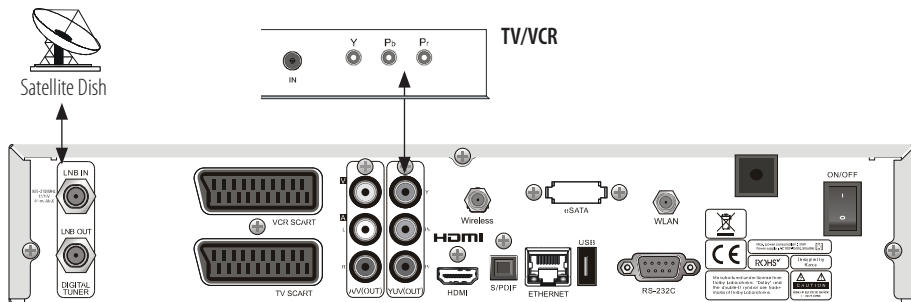> When you connect STB to TV by using SCART, please fit the CLAMP FILTER near SCART jack.

1.5.1 Connect TV with RCA cable
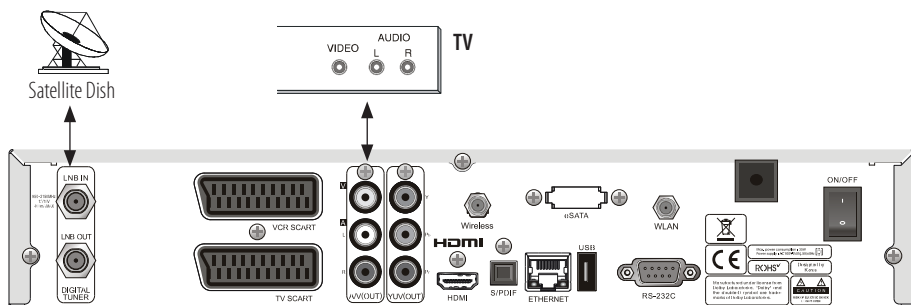
1.5.2 Connect TV/VCR with SCART / HDMI cable
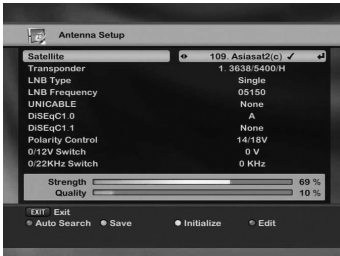

1.5.3 Connect TV/VCR with YUV cable install

2. Installation

2.1 Antenna Setup

- **Satellite** :   Select any satellite by pressing ◀▶ keys.
                        (Press blue key to edit the name of the satellite)
- **Transponder** :   Select a transponder.
- **LNB Type** :   Dual / Universal, Single, OCS, Wideband, Digiturk
                        MDU1, Digiturk MDU2.
- **LNB Frequency** : Select a proper LNB frequency.
                        (Press blue key to input local frequency)
- **DiSEqC 1.0 & 1.1** : Select between "None" or "DiSEqC1.0 A, B, C, D " and "
                        DiSEqC1.1 1 ~ 16".
- **Polarity Control** : Select one out of "14/18V", "0/12V", "0/22KHz".
- **0/12V Switch** :   Select between "0V", and "12V".
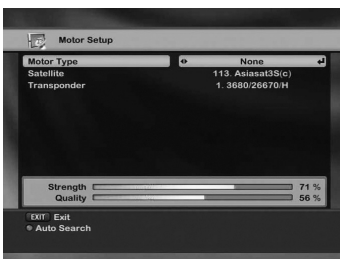- **0/22KHz Switch** : Select between "0KHz", "22KHz", "Auto".

> **Note**
> Make sure to save searched channels before exit.
> Press **YELLOW** button to initialize satellite value.
> After Antenna setup, you can move to Auto search menu with **RED** button.

2.2 Motor Setup

> **Note**
> Setting DiseqC 1.2
> 1. Select DiseqC 1.2 in the Motor setup menu.
> 2. Select satellite.
> 3. Move motor until you see good signal.
> 4. After searching satellite, SAVE current position.
> 5. Repeat this operation for other satellites.
> 6. Go to Auto search menu with RED key.
>
> Setting USALS
> 1. Select USALS in the Motor setup menu
> 2. Enter longitude and latitude value
> 3. Save current setting in move control
> 4. Move motor to current satellite position and
>   check signal.
> 5. Go to Auto search menu with RED key

You can Select "None", "DiSEqC1.2", or "USALS" by pressing ◀▶ keys.

- **Motor Type** :   Select a motor type by pressing ◀▶ keys.
                      (Press blue key to edit the name of the satellite)
- **Satellite** :   Select a Satellite.
- **Transponder** :   Select a transponder.

2.2.1 Setting up DiSEqC1.2

In the Motor Setup Menu, select the DiSEqC1.2 then the following menu will be
displayed.

- **Satellite** :   Select a satellite by pressing ◀▶ keys.
                      (Press blue key to edit the name of the satellite.)
- **Transponder** :   Displaying current TP value.
- **Nudge Size** :   Motor move step (1-5).
- **Move Coarse** :   Move west (◀ key), Move east(▶ key).
- **Move Fine** :   Move by the value of Nudge size.
- **Motor Contro l** : GOTO, SAVE, GOTOREF.
- **Limit Setup** :   Setting limit.
  - EAST LIMIT :   Confirming the setting of East Limit.
  - WEST LIMIT :   Confirming the setting of West Limit.
 - DELETE LIMIT :   Delete the setting of East & West Limits.

2.2 Motor Setup

2.2.2 Setting up USALS

Select the USALS in the Motor Setup menu, and press OK key to display following menu.

- **Satellite** : Select a satellite by pressing ◀▶ keys.
- **Transponder** : Displaying current TP value.
- **Satellite Position** : You can edit the position of satellite.
- **Longitude** : Setting the longitude position.
- **Latitude** : Setting the latitude position.
- **Move Coarse** : Move DiSEqC1.2 motor manually. Move west (▶), Move east (◀).
- **Move Fine** : Moves depending on the value of Nudge size.
- **Motor Contro l** : GOTO, SAVE, GOTOREF.
- **Limit Setup** : Setting limit.
  - EAST LIMIT : Confirming the setting of East Limit.
  - WEST LIMIT : Confirming the setting of West Limit.
  - DELETE LIMIT : Delete the setting of East & West Limits.

2.3 Auto Search
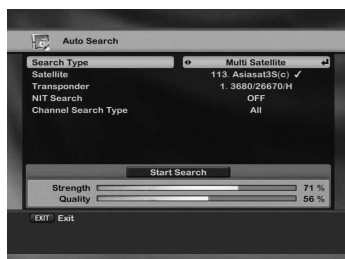
All channels will be searched if the selected satellite is properly assigned in the Antenna Setup menu.

- **Search Type**
  - Multi Satellite : Search multiple satellites as you select in pop-up window.
  - One Satellite : Search only the current satellite.
  - Multi Transponder : Search multiple TS in transponder pop-up window.
  - One Transponder : Search current transponder.
- **Satellite** : Select one of Satellite.
  (Select satellite in the auto search menu and press RED key to Multi Satellite Register)
- **Transponder** : Select one of transponders in TP list.
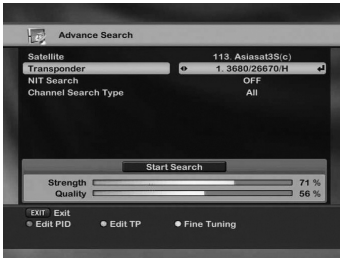- **NIT Search** : Activate network search mode.
- **Channel search Type** :
  Select one of search Type between "ALL", "FTA", "Scramble", "All TV", "FTA TV", "RADIO", "Scramble TV", "All RADIO", "FTA RADIO", "Scramble RADIO".

2.4 Advanced Search

When a new satellite is launched or you want to search channels from a satellite which is not programmed, you can edit all of the transponders of the satellite by this function and then channels can be searched by "Advance Search".

・ **Edit TP** : When you press GREEN key, EDIT TP menu It will be displayed, The settings of "Frequency", "Symbol Rate", "Polarization", and the other of selected transponder will be displayed in each field.

・ **Edit PID** : When you press RED key, Select any out of ¡DEC¡,¡HEX¡.

・ **Find Tuning** : When you press YELLOW key, You can control ¡AGC Value¡, ¡Bandwidth¡.

2.5 Blind Search

When a new satellite is selected or you want to search all Transponder from a satellite which is known or unknown transponder.

2.6 Fast Scan
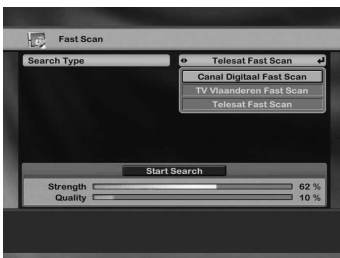
You want to search channels from Canal Diditaal Fast Scan, TV Viaanderen Fast Scan and Telesat Fast Scan.

3. Channel / Event

3.1 Channel Control

Channel Control consists of TV channel control and Radio channel control.
All kinds of channel editing functions can be performed in this menu like Channel view, Edit Name, Set/Clear favorite, Lock/Unlock, Edit PID, Move and Delete.

Note

By default, there¡s no channel list for both TV and Radio.
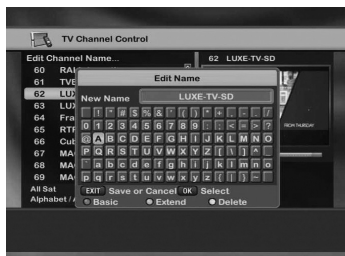Be sure to perform search channels before use.

3.1.1 Channel Mode

In order to control various channel lists, Channel Mode function keys assist users to organize many channels within their scope of action.
There are various keys to help you to perform channel control functions in help line.

3.1.2 Edit Mode

Press OK key then select channel Edit mode.

3.1 Channel Control

3.1.3 Edit Name

Edit the name of the selected Channel.
Select one channel and press OK key and then you can edit name.

3.1.4 Favorite Channels

Select Set/Clear FAV in the channel control popup menu, then another popup menu will appear on the right side of the screen (e.g. News, movie, drama). Select one of them and press OK to add to your favorite list. Then favorite icon will appear beside the channel name To deselect, go to the selected channel and press OK.

3.1.5 Lock/Unlock Channels

Select Lock/Unlock in the channel control menu. Press OK on the channel that you want to change. Then lock icon will appear beside the channel name. It will confirm that the channel is locked.
To unlock the channel, use ▼ ▲ key on the remote, and press OK on the channel.
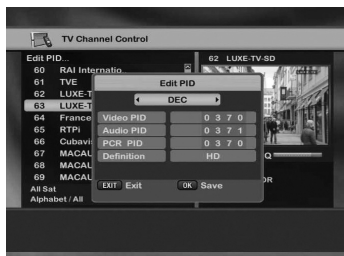
3.1.6 Hide Channel

Select Hide Channel in the edit channel popup menu.
Press OK on the channel that you want to set and clear hide channel.

To Show/disappear the Hide channel, you have to enter private password by pressing REC key.

3.1.7 Edit PID

Edit Video PID, Audio PID, PCR PID with Hex or decimal code.
If you want to change PID number, press RED key to Enter value by yourself.

3.1.8 Move

Change the position of the selected channel in the channel list.
Select MOVE in the edit channel popup menu, Press OK on the channel that you want to move, use press UP/DOWN key to locate channel position and RED (move channel) key and then Press EXIT key to save.

3.1.9 Delete

Delete the selected channel or TP.
Select delete in the edit channel popup menu, press OK on the channel that you want to delete, and RED(delete channel) key or Yellow (delete all)

3.2 Event Timer

Set the STB work in reservation mode to Wake up and Sleep using Timer.
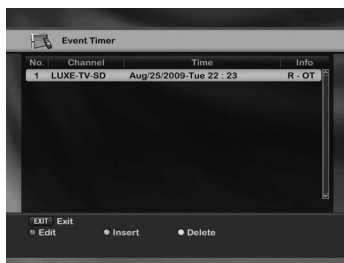
Add the event in the list by the Green key, and edit the selected event in the list by the Red key.
To delete the event, press the Yellow key.

Ch View : Set the watching channel for turn ON/OFF time, cycle, etc.

Wakeup : STB will be automatically powered on by setting of Wakeup time.

Sleep : STB will be automatically powered off by setting of Sleep time.

Record : Record the reserved channel.

4. Menu Guide

4.1 Channel List

Press OK key while watching video, then Channel List menu will be shown depends on channel mode (Sort mode). If the channel mode (Sort mode) is favorite mode, then Favorite channel list will be displayed. You can search the channel by sort function.

4.1.1 Satellite sort

If you want to change satellite select mode, press SAT key, and then Small pop-up window will be displayed, select one among them by pressing OK, and then select channel by pressing OK. Then the satellite select will be changed.
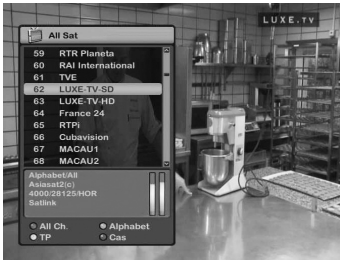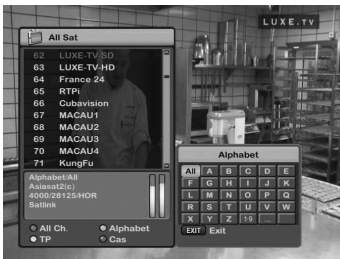
4.1.2 Alphabet Sort

If you want to change alphabetical mode, press Green key, and then Small pop-up window will be displayed, select among them by pressing

LEFT/RIGHT/UP/DOWN, and then select alphabet by pressing OK. Then the alphabetical mode channel list will be changed.

4.1.3 HD Sort

If you want to change into HD sort mode, press HD key.

4.1.4 Favorite Sort

If you want to change Favorite Sorting mode, press FAV key, and then Small pop-up window will be displayed, select among them by pressing UP/DOWN, and then select Fav. list by pressing OK. Then the Favorite channel list will be changed.
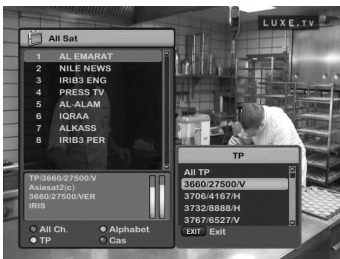
4.1.5 TP Sort

If you want to change TP (Transponder) Sorting mode, press Yellow key, and then Small pop-up window will be displayed, select among them by pressing UP/DOWN, and then select TP list by pressing OK. Then the TP channel list will be changed.

4.1.6 CAS sort

If you want to change into CAS Sorting mode, press Blue key, and then Small pop-up window will be displayed, select one among them by press UP/DOWN, and then select another CAS list by press OK. Then the CAS channel list will be changed.

4.2 Channel Guide

4.2.1 Channel Guide

Press EPG key while watching channel, then TV GUIDE menu will be shown.

The EPG menu consists of Channel number, Event name and the flag of extended event description.
Brief TV guide information of current channel will be displayed on the bottom of the screen.

By pressing RED key, select FULL TV Guide.

By pressing GREEN Key, 7-Days Guide will be displayed. And it is possible to move Now to guide and Next guide by pressing LEFT/RIGHT key.

Information consists of Event Name, Event Description and Extended Event Description

By pressing YELLOW button, you can easily set reservation schedule.

4.3 Normal Mode

For more detailed channel information, some channels are supporting Teletext/Subtitle service.

There are two types of EBU Teletext service as followings:

This satellite receiver supports the both types.

- **VBI** : Supported by TV and controlled by Teletext key on TV remote controller.
- **STB** : Supported by satellite receiver and controlled by receiver's remote controller.

4.3 Normal Mode

Press AV+ key in the normal mode.
Choosing a Teletext service, then it will display to Teletext from current channel
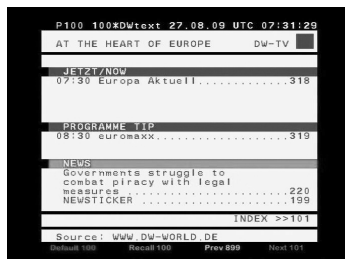
< Teletext Mode >

< Subtitle >

4.3.1 Audio Control

Press AV+ key, then you can see Audio pop-up window and you can select audio language and audio mode (Left, Right, Stereo).
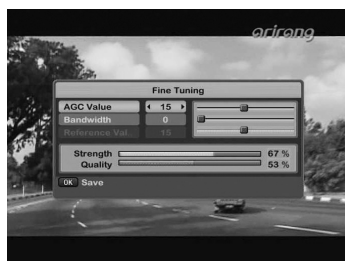
4.3.2 Fine Tuning

When the signal is very poor, you can change the user value in fine tuning menu, for better reception.

Press RED key in the normal mode, then select Fine Tuning.

4.3.3 Auto Channel Change

Press UP/DOWN key for 2 ~ 3 seconds, then you can see auto Channel message on the channel information and you can change the time of auto channel change.

4.4 System Setup

4.4.1 OSD Setup
In Normal Mode, Press MENU key, then select System Setup Menu and select OSD menu.

4.4.1.1 Language
You can set language which will be used for displaying menu. You can select English, French, Russian, Arabic, Persian, Turkish, Italian, and German.

4.4.1.2 Audio Language
You can set the default audio language.

4.4.1.3 Subtitle Language
You can set the default subtitle language.

4.4.1.4 Banner Time
You can set the displaying duration of Banner menu.
• **Time Range** : From 1 to 30 seconds.

4.4.1.5 Transparency
You can set the transparency of menu screen. 9 levels of the transparency are supported.
Ranges from 0% to 80%.

4.4.1.6 Main Image
You can set the type of main still image for background.

4.4.1.7 Signal Visualize
You can set the display type of signal level in banner information.

4.4.2 Video
Press MENU key in Normal Mode, then select System Setup, and select Video submenu.

4.4.2.1 Screen Ratio
You can select the aspect ratio of TV screen according to your TV type.
4:3 and 16:9 modes are supported.

4.4.2.2 Screen Format
If the Screen Ratio is 4:3, there will be choices as Letter Box, Center, combined, and Full.
If the screen Ratio is 16:9, you will have choice as letter Box and Center and Full.

4.4 System Setup

4.4.2.3 Display Format

You can select Display Format according to your TV type.
"PAL", "NTSC", "SECAM", and "PAL & NTSC" modes are supported.

4.4.2.4 Display Size

1080i, 720p, 576p, 480p.

4.4.2.5 Deinterlacer

You can turn on/off the Deinterlacer.
If you set the deinterlacer value to ON, HDMI/YUV picture quality of SD channels will be improve.
but, channel change speed will be slower.

4.4.2.6 YUV Output

You can turn on/off TV Component output.
If you want to set the video mode for TV SCART(RGB), then turn off the YUV Output and change SCART Output to RGB.

4.4.2.7 SCART Output

You can set the video mode for the TV SCART output, by pressing OK key, then press ▲ ▼ key on the remote control unit.
2 Video Output as RGV/CVBS are supported.

4.4.3 Option

Press MENU key in Normal Mode, then select System Setup menu, and select Option.
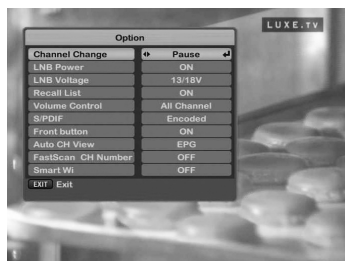
4.4.3.1 Channel Change

You can select the way of changing the channel by pressing OK key, then press
▲ ▼ key on the RCU.
Supported mode : Blank, Fade

4.4.3.2 LNB Power

You can set the LNB Power ON/OFF by pressing OK key, then press ▲ ▼ key on
the RCU.

4.4.3.3 LNB Voltage

You can set LNB voltage by pressing OK key, then press ▲ ▼ key on the remote control unit.
Supported voltage : 13/18V, 14/19V.

4.4.3.4 Recall List

If you set it "ON", you will be able to see the "Recall List" when you press RCL button.
If you set it "OFF", you can go back to the previous channel only.

> **Note**
> Recall list is the menu in which you can see the channels you watched past.

4.4.3.5 Volume Control

You can set the Volume Control by pressing OK key, then press ▲ ▼ key on the RCU.

Supported mode : All Channel - the volume value of all channel same value channel - every channel can have different volume value.

4.4.3.6 S/PDIF

You can set the S/PDIF output mode, Encoded and PCM.

4.4.3.7 Front Button

You can set ON/OFF
• **ON** : Front Key is working
• **OFF** : Front Key is not working

4.4.3.8 Auto CH View

You can set the channel change mode in Channel List and EPG Menu.
If you set the EPG or CH List, you can change channel by moving item in each menu.

4.4.3.9 FastScan CH Number

You can set the logical channel number mode. It is supported by the Program Provider.

4.4.4 Time

Mode, then select System Setup menu, and select Time menu.

• **Time Offset**
Press ◀▶ key to set the Current Time.

For your reference, when you scroll time zone, the name of city will be displayed.

4.4.5 Color Control

If you want fine tuning for color value, press MENU key in Normal Mode, then select System Setup menu, and select Color Control menu.

4.4.5.1 Color Mode

You can set the Color Mode.
Supported mode : User, Movie, News, Sports.

4.4 System Setup

4.4.6 Parental Control

You can prevent children from watching channels, which are unsuitable for them. Only the person who knows the password can watch the prohibited channels. In the parental control menu, you can select four password options.

4.4.6.1 Lock Grade

Change the password options by ◀▶, None, Menu, channel, Menu & Channel. Password is made up of 4 digit numbers; it is never shown on the screen. Only asterisks appears as you input password, when you select the locked channel in "Favorite TV/Radio" or "TV/Radio channel Control", you will find the following message "Key in Password" on screen.
Then please insert your password.

4.5 Additional Function

4.5.1 Channel Information

· Basic Box

This is the information box containing "Program Number", "Program Name", "Signal Quality bar", "Current Time", and "Provider name" only.

· Extended Box

This has additional information like and Satellite, channel Frequency and CAS Type as well as basic Channel Information.

4.6 Module

4.6.1 CI Slots

The CI (Common Interface) is an interface for a standard PCMCIA module in receiver. If you want to watch a scrambled channel, you need CAM (Conditional Access Module) and Smart Card to the channel.

CI menu is provided by CAM and its Smart Card.

This menu will be activated if you insert the CAM In the slot CI menu varies according to the kind of CAM and its Smart Card.

4.6.2 Network Setup

· Static

Static IP address can be used by entering the reserved IP address.

· DHCP

If DHCP (Dynamic Host Configuration Protocol) is selected, IP address and all the basic TCP/IP protocols set automatically.

· PPPoE

It is one of the Ethernet communication protocol and it also can be controlled by ID and PW.

· Ping

Verify the status of network connection to the server.

4.6.3 Software Upgrade

For Software upgrade, enter the server IP address which is defined by the Service Operator.

4.6.4 Embedded

This menu is for Free To Air + Embedded, and This menu allows you to view the information of the smart card such as available entitlements, Maturity Rating and PIN code.

4.7 STB Status
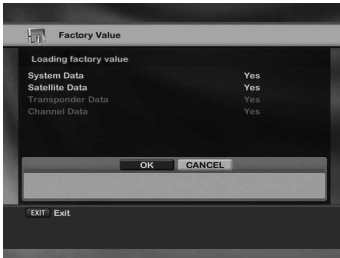
4.7.1 Factory Value

This function will reset all the parameters as factory default value.
When this menu is selected, the message will be displayed on the screen.

You can change each field into default data in Factory Value.

4.7.2 STB Information

STB Information shows STB software version, data, etc for your reference.
At the top of the page you will see the software version of the STB.

5. eSATA PVR Guide

5.1 PVR Setup
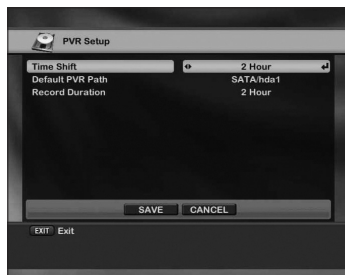
You can change the PVR configuration in PVR Setup menu.
To enter this menu, press MENU key in normal mode, and go to Channel / PVR menu, then select PVR Setup.

- **Time Shift** : Configuration for recording the current channel automatically If you set Time Shift to Enable(1 or 2 Hour), you can use time shift without recording a channel explicitly.
- **Default PVR Path** : Configuration for selecting the default recording device. If you attached the storage -SATA, USB-device, then you can select the default recording device.
- **Record Duration** : Configuration for default user record duration. If you select 2 Hour, then you can record a 2-Hour of channel when you record.

5.2 Media Setup

You can see the information of hard disk and format a hard disk in Media Setup menu. To enter this menu, press MENU key in normal mode, and go to Channel / PVR menu, then select Media Setup.

You can use an external SATA storage, external USB storage and USB memory stick. And it supports FAT16, FAT32, EXT2 and EXT3 file systems.

You can select the storage-SATA, USB- device in Media and select its partition. If your storage is not formatted or formatted with an unsupported file system, at first you have to format it. All data in the storage are removed when you format, so please backup your data before format. You can format hard disk by pressing OK key on Format item.

There are two ways of formatting hard disk - Media, Partition.
Media type is to format whole partition in hard disk and Partition type is to format the partition that you select in Partition item.

You can delete all files in partition that you select with RED key.
You want to extract the hard disk, please do safe remove by pressing GREEN key.

5.3 File Browser
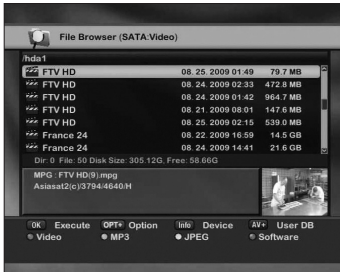
You can see the files that you recorded and other media files(ex JPEG) in File Browser. To enter this menu, press BROWSER(目) key in normal mode. You can see the file information (size, date, duration etc) here.
You can play a media file by pressing OK key on a file that you want to play.
If you select a recorded channel, then you can select how to play.
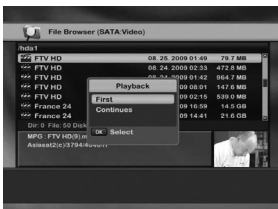
- **First** :   Playback from first position
- **Continues** : Playback from last stop position

Press EXIT key in File Browser, then you can watch a file playback in full screen. If the file is reached to end time, then file playback will be stopped and be changed to live channel

If you want to play other media file(Photo or Music), then please change the Media file type by pressing the color keys as follows.
- **Red** :   Video (Video Files List)
- **Green** :   MP3 (MP3 Files List)
- **Yellow** :   JPEG (JPEG Files List)
- **Blue** :   Software (Software Files List)

You can select the storage device with INFO key.

You can do the additional functions with OPT+ key.
In these functions you can delete file and you can sort file lists by Alphabet, Date, or Size.
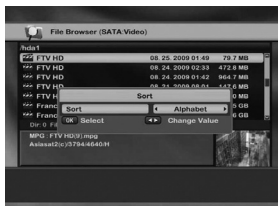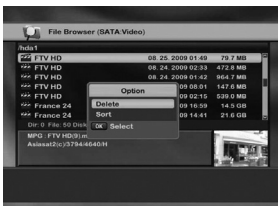
5.4 Instant Recording

You can start recording a channel that you are watching by pressing RECORD(●) key. You can record 3 channels in same transponder

The default duration is set in PVR Setup Menu and file name is derived from channel information. You can change duration by pressing RECORD(●) key one more.

To stop recording, press STOP(■) key then you can stop recording by pressing OK key on the list that you want to stop or stop all recording by pressing RED key.

While you are recording channel, you cannot enter some menu (such as Installation, Media Setup, etc..)

5.5 Time Shift

Time Shift is a time-delayed broadcast of the channel that you are watching. To use time shift, the channel must be recorded. In other word, Time Shift option must be set to 1 or 2 Hour in PVR setup menu or you have to record the channel explicitly.

1) Pause a channel by pressing PAUSE(❚❚) key while you are watching a channel, then you can see the shifted time in message
2) Resume the channel by pressing PAUSE(❚❚) or PLAY(▶) key later, then you can watch the time-delayed channel.
3) If you want to jump to live channel, please press STOP(■) key.

5.5 Time Shift

You can also shift a time with trick play key in normal mode and seek key in the Play Navigation. Please refer to Trick Play and Play Navigation.

5.6 Trick Play

You can change the playback speed while you are in time shift mode or watching a file playback.
You can use trick function in normal mode or progress bar. Trick play function supports fast forward, fast reverse and slow forward as follows.

- **Slow Forward play**(▶): ½x, ¼x, ⅛x
- **Fast Reverse play**(◀◀): -x2, -x4, -x8, -x16, -x32, -x64
- **Fast Forward play**(▶▶): x2, x4, x8, x16, x32, x64

If you press trick key repeatedly, playback speed is changed to each step and speed is changed to normal speed in last step.
If you press PLAY(▶) key in slow or fast speed playback, then playback speed is changed to normal speed also.

5.7 Play Navigation

You can change the time position of playback in Play Navigation Bar.
To enter Play Navigation Bar, press PLAY(▶) key while recording a channel or watching a file in normal speed.
To change the previous or next position of playback, press LEFT, RIGHT key in Play Navigation Bar.
You can also use trick play key in this bar.

5.8 Getting Ready

Please follow below steps to get ready for recording function.

Preparation
This function works with external HDD with Serial ATA interface (eSATA HDD).

Connecting eSATA HDD to the Set Top Box
1) Ensure the power of both devices are turned off.
2) Connect STB and eSATA HDD with eSATA Cable.
3) Turn on the eSATA HDD.
4) Turn on the STB.

Formating eSATA HDD with HDD Manager

Media Setup

HDD information

Format confirmation message box
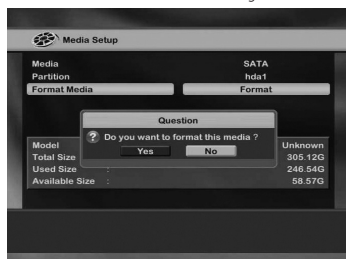
Format complete
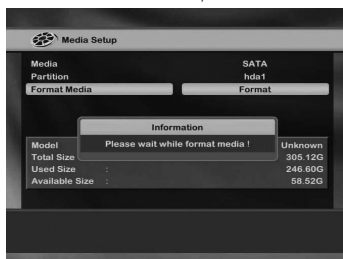
5.9 Recording

1) Press REC button on RCU.
2) Recording will be started with tiny message box on upper right side displaying recording time & channel name.
3) To stop recording, press STOP button on RCU.

4) **BACKGROUND RECORDING** : You can switch to other channel to watch it while recording
   (recording channel and watching channel should belong to same TP)
5) As you try to move channel in different TP, recording could be stopped with confirmation message box.
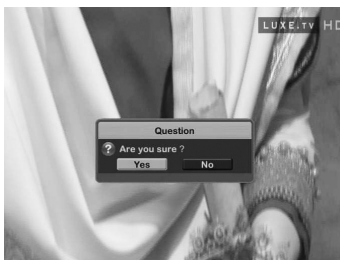
Recording CH : Luxe-TV-HD
Live Viewing CH : RAI Interna

5.10 Play Back

1) To browse recorded files in HDD, go to FILE MANAGER MENU.
2) Selecting one of them, small preview window opened and play automatically.

Recorded file lists

Small window preview
Rename, Delete, Sort option available

5.10 Play Back

3) For full screen playback, press OK button on RCU
4) For playback information, press i button on RCU

full screen playback

playback information

Pause by II button

2X speed playback by ▶▶ button

5) **PLAYBACK while RECORDING** : You can playback recorded file while recording live channel.
   Start recording and then follow No.3 PLAYBACK procedure.

Playback file :   LUXE-TV-SD
Recording channel :   LUXE-TV-HD

6. Appendix.

6.1 Troubleshooting

Problem	Solution
No display LED on the front panel. **No power supply.**	• Power cord plug in correctly.
No picture.	• Ensure that the receiver is switched on. • Check connection and correct. • Check channel and video output and correct.
Poor picture quality.	• Check the signal level, if it is low. • Check that the RF cable is properly connected.
No sound.	• Check the volume level of the TV and receiver. • Check the mute status of the TV and receiver. • Check the connection of audio cable.
Remote control does not operate.	• Point remote control directly towards the receiver. • Check and replace batteries. • Check that nothing blocks the front panel.
Service is not running or scrambled.	• Check that the smart card is appropriate for the selected service.
You have forgotten your secret PIN code.	• Refer to change PIN code of this user's manual.

6.2 Remote Control TV Setting

6.2.1 Programing the Remote Control
There are two ways to program the remote control ; Automatic Code Search or Direct Entry.

6.2.2 Using Automatic Code Search
1. Turn on the component(TV) you want to control.
2. Press and hold the TV button until the LED on the remote control turns on, then release the key.
3. Point the remote at the component(TV), press and release the UP button, then wait three seconds or until the LED stops flashing.
   At this point the remote control is searching for the correct code to program.
   If, after three seconds, the component(TV) you want to control does not turn off, press and release UP button again to tell the remote to search the next set of codes.
   Continue pressing and releasing UP button until the component turns off.
4. If the component you want to control does turn off ;
   Press and release OK button, then the LED blinks three times.

6.2.3 Using Direct Entry Method
1. Turn on the component(TV) you want to control.
2. Locate the enclosed Code List. Find your brand of the component you want to control.
3. Press and hold the TV button until the LED on the remote control turns on, then release the key.
4. Enter 3-digit code from the code list, then the LED blinks three times.
5. If you get no reponse, repeat these steps using the next code listed for your brand until the component reponds to the remote control command.

6.2.4 Changing Volume Lock
Locking the volume controls to a single device makes it easier to control volume, without having to guess whether the volume will change. If you lock the remote's volume controls to the TV, you will always be able to change the volume to the level you want, without having to adjust it on multiple devices.

If you wnat to lock the volume for the TV system ;
1. Press and hold the STB component key until the LED on the remote control turns on.
2. Enter 3-digit code, 9 9 9.
3. Press and release the STB component key, then the LED blinks three times.

Unlocking volume control ;
If you want to unlock the volume for the STB component ;
1. Press and hold the STB button until the LED on the remote control turns on.
2. Enter 3-digit code, 9 9 9.
3. Press and release the STB component key, then the LED blinks three times.

6.2 Remote Control TV Setting

Brand List for TV

[A]

ACER 415
A MARK 222
A.R. SYSTEM 208 286 409
ABEX 206
ACCENT 208 286
ACCUPHASE 208
ACTION 313 325
ACURA 224
ADMIRAL 230 244 270 275 309 323 397 410
ADYSON 206 253
AEA 208 286
AGASHI 253 270
AGB 384
AGEF 397
AIKO 208 218 219 224 253 270 286 307 394
AIM 208 218 286 331
AIWA 348 349 393
AKAI 205 208 218 224 229 253 270 286 296 299 307 309 325 346 377 382 384 385 386 387 388 394 410
AKIBA 208 274 286 389
AKITO 208 286
AKURA 208 224 254 270 274 286 331 400 407
ALARON 252 261 265
ALBA 207 208 224 254 286 310 323 346 374 400 410
ALCYON 396
ALKOS 394
ALLORGAN 253 311
ALLSTAR 208 286
AMBASSADOR 241
AMPLIVISION 253 374
AMSTRAD 208 224 241 249 270 286 331 346 355 384 408
ANAM 208 223 224 262 286
ANAM NATIONAL 208 214 286
ANGLO 224 270
ANITECH 208 224 270 274 286 329 396
ANSONIC 208 224 286 312 329 374 380 398 400 410 413
AOC 205 222 229 266

APOLLO 381
AR 433
ARCAM 252 253
ARCHER 222
ARDEN 208 286 387
ARISTONA 208 286
ARTHUR-MARTIN 410
ASA 360 361 370 373 378 395 397 398 399
ASBERG 208 286 329 396
ASORA 224
ASTRA 208 286
ASUKA 253 254 270 274
ATLANTIC 208 286 308
ATORI 224
AUCHAN 410
AUDINAC 289
AUDIOSONIC 208 224 253 270 286 374 376 380 387 388
AUDIOTON 253 270 374 376 380
AUDIOVOX 219 222 262 282
AUMARK 216
AUSIND 379 396
AUTOVOX 253 258 275 307 378 396 397 405
AWA 208 224 253 270 286 331 385

[B]

BAIRD 218 253 296
BANG & OLUFSEN 397
BARCO 284 410
BASIC LINE 208 224 253 254 274 286 389 400 410
BASTIDE 253
BAUR 208 285 286 287 292 298 307 309 405
BAYSONIC 262
BAZIN 253
BEAUMARK 229 260
BEC 309 313 325
BECRESE 242 298 299 309 313
BEKO 208 286 374 376 380 385 387 388 394
BELCOR 229
BELL & HOWELL 226 239 296
BEON 208 286 323
BERTHEN 400
BEST 374
BESTAR 208 286 374

BINATONE 253
BLACK DIAMOND 208 346
BLACK PANTHER 329
BLACK STRIP 394
BLACKSTRIPE 242 296 298
BLACKTRON 274
BLACKWAY 274
BLAUPUNKT 250 251 269 389
BLUE SKY 208 254 274 286 346 387 388 389 400
BLUE STAR 274
BOOTS 224 253
BOSCH-BAUER 308
BPL 208 274 286 409
BRADFORD 262
BRINKMANN 208 286 323 376 400
BRIONVEGA 208 286 397 408
BRITANNIA 252 253
BROCKWOOD 229
BROKSONIC 222 257 283
BROTHER 270
BRUNS 328 380 397
BSR 303 307 311 410
BTC 254
BUSH 207 208 224 253 254 270 274 286 296 303 307 309 310 346 387 400 401 405 410

[C]

CANDLE 205 215 267
CAPEHART 325
CAPSONIC 270
CARAD 208 286 400
CARENA 208 286 389
CARNIVALE 205
CARREFOUR 207 208 286 395
CARVER 213 248
CASCADE 208 224 286
CASIO 208 286 405 410
CATHAY 208 286
CCE 208 253 277 286
CCI 318
CENTRUM 346
CENTURION 208 286
CENTURY 397
CGE 291 323 374 396 410
CIE 333
CIMLINE 224 310

CINERAL 219 282
CITIZEN 205 209 215 216 219 242 267 273
CITY 224
CLAIRTONE 266
CLARIVOX 208 286 323 324 329 395
CLATRONIC 208 224 253 270 286 308 329 374 387 396
CLAYTON 346
CME 207 208 218 224 225 241 244 253 255 256 258 275 278 285
CMS HIGHTEC 253
CONCERTO 215
CONCORDE 224
CONDOR 208 224 270 274 286 308 312 323 329 374 410
CONIC 313
CONRAD 208 286
CONTEC 207 208 224 252 262 266 270 286
CONTINENTAL EDISON 351
COSMEL 208 224 286
CRAIG 262
CRIPTOVISION 295
CROSLEY 213 313 362 396 397 410
CROWN 208 209 224 262 286 296 323 329 374 376 385 387 388 396 404 407 409
CS ELECTRONICS 252
CTC 308
CURTIS MATHES 205 209 210 211 213 215 216 226 230 236 239 242 246 282 296
CXC 262
CYBERTRON 254

[D]

DAEWOO 208 209 219 224 253 282 286 333
DAINICHI 254
DANSAI 208 224 253 270 286 394
DANSETTE 331
DANTAX 374 376 385 387 388

DATSURA 296 409
DAWA 208 286
DAYTON 224
DAYTRON 208 209 229 286 298
DE GRAAF 296 410
DECCA 208 218 253 286 326 384
DEITRON 208 286
DENKO 270
DENON 236
DENVER 208 286 385
DESMET 208 224 286 308 397
DIAMANT 208 286
DIAMOND 270 401
DIGATRON 208 286
DIGILINE 208 286
DIGITOR 208 286
DIGIVISION 307
DIK 208 286
DIXI 208 223 224 253 286 328 397
DOMEOS 400
DORIC 405
DTS 224
DUAL 208 253 286 307 405 410
DUAL TEC 253
DUMINT 329
DUMONT 218 227 229 253 329 395 397 398
DUNAI 410
DUX 208 286
D-VISION 208 286
DYNATECH 253
DYNATRON 208 286

[E]

EB TELECOM 295
ECTEC 289
ELBE 208 253 286 307 312 319 374 384 408 410 413
ELBE-SHARP 384
ELCIT 329 384 397 410
ELECTROBAND 266
ELECTROHOME 288 296 313
ELEKTA 208 224 270 274 286
ELG 208 286

ELIN 208 224 286 307 398 399 405 410
ELITE 208 242 254 286 296 308
ELMAN 329
ELTA 224 270
EMERSON 208 209 229 239 241 257 260 261 262 263 264 265 266 271 273 274 283 286 307 374 376 395 396 397 410
EMPEROR 274
ENVISION 205
ERRES 208 286
ESC 208 253 286
ESTELE 410
ETRON 208 224 286 410
EURO-FEEL 253 270
EUROMANN 208 253 270 286 374
EUROPA 208 286
EUROPHON 208 253 286 329 384 410
EXCEL 208 286
EXPERT 410
EXQUISIT 208 286

[F]

FAGOR 208 286
FAMILY LIFE 208 286
FENNER 224
FERGUSON 208 286 307 394 398
FIDELITY 208 252 270 286 287 294 307 331 410
FILSAI 253
FINLANDIA 218 296 307 373 407 410
FINLUX 208 218 253 261 286 303 312 323 326 329 360 361 362 363 370 373 378 379 381 382 383 384 385 386 387 388 394 396 397 398 399 410
FIRST LINE 208 218 224 252 253 286 296 307 311 312 329 387 400 405 410
FISHER 218 239 243 253 296 298 307 328 374 390 398 405 410

FLINT 208 218 270 286 389
FNR 329
FORMENTI 208 286 293 308 376 396 397 410
FORMENTI-PHOENIX 362 379
FORTRESS 397
FRABA 208 286 374
FRIAC 208 224 286 329 374
FRONTECH 224 244 253 270 309 405 410
FUJITSU 208 223 224 218 253 261 286 307 325 329 410 422 423
FUJITSU GENERAL 224 253 410
FUNAI 249 261 262 270 311 331 400
FUTURE 208 286
FUTURETECH 262

[G]

GALAXI 208 286 307 329 410
GALAXIS 208 286 323 329 352 374
GALERIA 224
GBC 224 309 362 410
GE 201 203 210 211 214 229 230 235 260 274 282
GEANT CASINO 410
GEC 208 218 253 286 305 307 313 326 384 405 410
GELOSO 224 309 362 410
GENERAL TECHNIC 224
GENESIS 224
GENEXXA 208 224 244 254 286 331 410
GIANT 253
GIBRALTER 205 227 229
GO VIDEO 216
GOLDFUNK 400
GOLDSTAR 205 206 208 209 215 220 221 224 229 234 253 260 270 286 303 320 337 353 370 374 385 410 412
GOODMANS 207 208 218 224 253 261 270 286 333 346 382 384 394 400 412

GORENJE 374
GPM 254
GRADIENTE 208 212 215 248 280 286
GRADIN 308
GRAETZ 208 244 286 307 309 404 410
GRANADA 208 218 253 286 296 299 325 381 384 396 404 406 407 410
GRANDIN 208 224 274 286 387 388 389 400 410
GRONIC 253 329 410
GRUNDIG 208 224 250 258 269 286 337 370 374 395 396 402
GRUNPY 261 262

[H]

HAIER 270 401
HALIEAX 270
HALIFAX 253 270
HALLMARK 260
HAMPTON 253
HANSEATIC 208 224 253 274 286 287 307 308 309 311 312 362 374 380 397 405 409 410 413
HANTAREX 208 224 286 329 384
HANTOR 208 286
HARLEY DAVIDSON 261
HARMAN KARDON 213
HARVARD 262
HARWOOD 208 224 286 331
HAUPPAUGE 208 286
HCM 208 224 253 270 274 286 323 331
HEDZON 208 286
HEMA 224 253
HEMMERMANN 307 405
HIGHLINE 208 286
HINARI 207 208 224 254 261 270 286 296 410
HISAWA 274 289
HIT 397
HITACHI 206 207 208 215 218 229 231 232 236 238 240 244 253 256 286

6.2 Remote Control TV Setting

Brand List for TV

Brand	Codes
HITACHI	287 292 298 299 300 301 304 305 306 307 309 313 314 315 316 317 325 358 367 381 382 383 384 399 405 406 407 410 411
HITSU	224 389
HMV	397
HORNYPHONE	208 286
HOSHAI	389
HUANYU	252
HUSPfELEKTRONIK	323
HYGASHI	253
HYPER	224 253
HYPER VISION	307 334
HYPSON	208 253 270 274 286 387 388 389
HYUNDAI	208 286

[I]

Brand	Codes
IBERIA	208 286
ICE	208 224 253 270 286
ICES	254
ICT	208 286
IMPERIAL	208 286 291 302 307 309 312 323 374 396 405 410
INDESIT	258
INDIANA	208 286
INFINITY	213
INGEKEN	339
INGELEN	244 307 387 410
INGERSOLL	224
INNO HIT	208 218 224 253 274 286 325 329 384 396 412
INNOVA	208
INNOVATION	208 286
INTEQ	227
INTERACTIVE	208 286 287 307 374 397 410
INTERBUY	208 224 270 286 287
INTERFUNK	208 244 286 287 305 307 309 368 374 377 397 405 410
INTERNAL	208 286

Brand	Codes
INTERVISION	208 224 253 270 274 286 329 354 374 376 389 410
IRRADIO	208 224 286 379 396 412
ISUKAI	208 254 274 286 389
ITC	253
ITS	208 224 270 274 286
ITT	244 261 296 298 307 309 373 381 382 404 405 410
ITT-NOKIA	261 296 307 368 373 377 381 382 385 386 404 405 410
ITV	208 270 286

[J]

Brand	Codes
JACSON	326
JBL	213
JCB	337
JEC	242 394
JMB	208 286
JOCEL	403
JUBILEE	503
JVC	207 212 247 264 323 385

[K]

Brand	Codes
KAISUI	208 224 252 253 254 274 286 389
KAMP	252
KAPSCH	244 305 307 309 398 410
KARCHER	208 270 274 286 329 374 410
KATHREIN	208 286 287
KAWASHO	252 276
KB ARISTOCRAT	410
KEC	262
KENDO	208 286 287 309 310 312 329 374 380 408 410
KENNEDY	362 410
KENWOOD	205 229 399
KINGSLEY	252
KITON	208 286
KLH	325

Brand	Codes
KLOSS	202
KMC	234
KNEISSEL	208 286 312 374 408 413
KOLSTER	208 286 329 305
KONIG	207 208 224 225 244 251 258
KONKA	208 286 323 387
KORPEL	208 286
KORTING	308 374 397
KOSMOS	208 286
KOTRON	270 331
KOYODA	224
KTV	205 209 253 262 265 266 273
KUBA	405 410
KUBA ELECTRONIC	307 405 410
KURO	409
KYOSHU	270 323 331
KYOTO	253 410

[L]

Brand	Codes
LASAT	374 376
LEADER	224
LECSON	208 286
LEMAIR	312
LENCO	208 224 270 286 333 356 398 410
LENOIR	224
LEVIS AUSTRIA	208 286
LEYCO	208 218 270 286 311 325
LG	208 215 224 229 253 286 307 344 374 385 387 410 412
LIESENK & TTER	208 286
LIESENKOTTER	208 286
LIFETEC	208 224 270 286 287 346 400
LLOYD'S	224
LLOYTRON	206
LOEWE	208 213 286 287 346 347 371 372 374 375 390 397 408 413
LOGIK	208 220 226 286 401
LOGIX	400
LUMA	208 224 286 309 312 408 410

Brand	Codes
LUMATRON	208 253 270 286 307 408 410
LUX MAY	208 224 286
LUXMAN	215
LUXOR	253 258 261 292 296 304 307 309 325 367 373 377 381 382 383 386 405 406 410 411 412
LXI	210 213 227 229 239 242 260 296

[M]

Brand	Codes
MAGNADYNE	307 329 362 384 397 410
MAGNAFON	329 379 384 396
MAGNASONIC	296
MAGNAVOX	200 202 204 205 207 208 213 261 267 268 286 313
MAGNUM	208 286 387 388
MAIDSON	208 286
MAJESTIC	226
MANDOR	270
MANESTH	208 253 270 286 308 310 394 410
MANHATTAN	208 286 346 400 410
MARANTZ	205 208 213 286 287 331
MARELLI	397
MARK	208 224 253 286 387 388
MASUDA	208 224 253 270 286
MATSUI	208 218 224 225 241 253 286 296 302 307 310 384 389 394 405 410
MATSUSHITA	211 279
MC MICHAEL	313
MEDIATOR	208 286
MEDION	208 286 287 400 401
MEGATRON	222 229 236 260 299
MEI	266
M.ELECTRONIC	208 224 244 253 286 287 307 312 373 382 383 398 399 405 410
MEMOREX	208 215 224 226 229 234 237 239 260 270 279 296

Brand	Codes
MEMPHIS	218 224 325
MERCURY	208 224 286
METZ	208 286 346 397 400
MGA	205 208 229 233 237 260 286 398
MICROMAXX	208 286 346 400
MIDLAND	206 209 210 211 227 235
MINATO	208 286
MINERVA	258 384 395 396
MINOKA	208 286 331 407
MINUTZ	201
MITSUBISHI	207 208 229 230 233 237 258 260 286 287 296 397
MITSURIGENERAL	410
MIVAR	252 253 370 374 384 396 412 413
MONACO	224
MORGAN'S	208 286
MOTION	396
MOTOROLA	214 230
MTC	205 215 216 229 252 266 287 307 374 405 410
MULTISTANDARD	329
MULTITEC	208 286 346 376 400
MULTITECH	208 224 252 253 262 270 286 309 329 374 376 396 405
MURPHY	218 398 410
MUSIKLAND	208 286
MULTIMEDIA	332
MYRYAD	208 286

[N]

Brand	Codes
NAD	229 242 246 260 307 410
NAIKO	208 286 385
NAKIMURA	208 286
NAONIS	309 410
NATIONAL	258
NEC	205 207 208 215 224 229 248 253 286 389
NECKERMANN	208 253 269 285 286 287 292 309 312 323 374 397 405 410
NEI	208 286 410

Brand	Codes
NESCO	261
NETSAT	208 286
NEWFUNK	208 224 274 286 387
NEW TECH	208 253 286
NIKKAI	206 208 218 224 242 252 253 254 270 286 325 394
NIKKO	205 210 219 227 229 239 242 260
NISATO	289
NOBLEX	281
NOBLIKO	329 379 395 396
NOKIA	261 270 296 298 304 305 306 307 309 353 373 381 382 383 385 386 404 405 407 410
NORDIC	253
NORDMENDE	208 286 387 410
NORFOLK	410
NORMEREL	208 286
NOSHI	228
NOVATRONIC	208 286 399
NTC	219
NURNBERG	307 410

[O]

Brand	Codes
OCEANIC	244 296 307 309 311 377 381 382 410
ODEON	270
OKANO	208 218 224 270 286 374
OMEGA	270
ONWA	262 329
OPERA	208 286
OPTIMUS	230 239 245 246 279
ORBIT	208 286
ORION	208 224 241 257 261 270 283 286 307 308 310 311 329 331 384 387
ORLINE	208 286
ORMOND	208 346 400
ORSOWE	384
OSAKI	206 208 218 253 254 270 286 325 331
OSIO	208 286 412
OSO	254
OSUME	206 208 218 286 325

Brand	Codes
OTTO VERSAND	207 208 224 253 269 274 285 286 287 292 298 303 307 308 309 310 311 362 380 384 405 409

[P]

Brand	Codes
PACIFIC	208 286
PAEL	379
PALLADIUM	208 253 286 309 312 323 374 397 405 410
PALSONIC	208 253 270 286 331 401 434 435
PANAMA	208 224 253 270 286
PANASONIC	208 210 211 212 213 214 216 220 230 236 237 239 242 244 245 255 258 260 278 279 286 307 309 384 410
PANAVISION	208 286 312
PATHE CINEMA	252 308 374 405 410 413
PAUSA	224
PCE/PEC	242 296 298
PENNY	201 203 205 206 209 210 211 215 216 221 222 228 229 235 242 260
PERDIO	208 218 274 286 410
PERFEKT	208 286
PHASE	206
PHILCO	200 202 204 205 208 213 229 236 267 268 283 323 362 374 396 397 410
PHILEX	410
PHILHARMONIC	253
PHILIPS	201 202 203 204 208 209 213 227 228 229 286 287 313 325 338 340 349 397 414 421 427 428 429 431
PHOENIX	208 218 286 374 376 397 410
PHONOLA	208 286 308 397
PILOT	205 208 209 229 286 403
PIONEER	208 244 246 286 307 374 376 380 410
PLANTRON	208 224 270 286
PLAYSONIC	253 387

Brand	Codes
POLICOM	258 307 329 395 397 410
POLYRON	270
POPPY	224
PORTLAND	209 219 229
PRANDONI PRINCE	307 309 379 384 396
PRECISION	253
PREMIER	224
PRIMA	224 242 270 296 331
PRINZ	218 307 325 405 411
PRISM	211
PROFEX	224 307 396 410
PROFI	224
PROFITRONIC	208 286 329
PROLINE	208 218 286 312
PROSCAN	205 210
PROSONIC	208 286 374 387 400
PROTEC	309 329
PROTECH	208 224 253 270 274 286 323 376 400 405 410
PROTON	222 229 260
PRO-VISION	208 286 346
PULSAR	227 229 313 325
PYE	208 286 331 397 405
PYMI	224

[Q]

Brand	Codes
QUASAR	211 214 224 245 279
QUELLE	208 224 225 253 270 285 286 287 298 303 307 309 310 311 360 361 368 370 373 377 378 379 395 398 399 400 405 412
QUESTA	207

[R]

Brand	Codes
R-LINE	208 286 410
RADIALVA	208 286 410
RADIO SHACK	205 206 208 209 210 215 229 239 245 260 262 286 296
RADIOLA	208 253 286
RADIOMARELLI	208 286 384 397
RADIOTONE	208 224 270 286 323 331 374 380 400

6.2 Remote Control TV Setting

Brand List for TV

RADIX 298
RANK 395
RANK ARENA 207 395 416 417 418 419
RBM 395
RCA 210 211 228 229 230 235
REALISTIC 205 206 209 215 229 239 245 260 262 296
RECOR 208 286
RECTILIGNE 208 286
REDIFFUSION 307 373
REDSTAR 208 286
REFLEX 208 286 346 400
REKORD 359
REOC 387
REVOX 208 286 374
REX 244 270 275 309 312 410
RFT 218 270 286 328 374 380 397 413
RHAPSODY 252 265 266
RICOH 208 286
ROADSTAR 208 224 254 270 274 286 323 346
ROBOTRON 397
RODEX 208 286
ROWA 253 270 401 403
ROYAL LUX 331 374
RTF 208
RUKOPIR 208 286
RUNCO 205 227

[S]
SABA 244 305 307 309 397 384 410
SAGEM 274 339 389
SAISHO 224 225 241 253 270 310 384 410
SAIVOD 208 286 410
SAKIO 270
SALORA 244 292 296 304 307 309 325 364 365 366 367 368 369 377 384 391 392 404 405 406 407 409 410 411 412
SAMBERS 329 379 384 396
SAMPO 205 206 209

SAMSUNG 205 206 208 209 215 216 218 224 229 253 260 270 277 286 287 296 325 337 374 410 412
SAMSUX 209
SANDRA 252 253
SANSEI 282
SANSUI 208 283 286 389 402
SANTON 224
SANYO 207 208 218 223 224 225 239 243 253 264 286 296 297 298 325 326 361 374 376 398 404 409 410 413 420 423 425 426 432
SAVE 208 286
SBR 208 286
SCHAUB LORENZ 307 309 376 385 387 405
SCHNEIDER 208 253 254 270 286 307 336 346 353 357 362 387 400 405 410
SCIMITSU 229
SCOTCH 260
SCOTLAND 410
SCOTT 229 257 260 261 262
SEARS 210 213 215 229 239 242 243 249 260 261 296
SEG 207 208 224 253 270 286 328 329 346 396 400 405 408 410
SEI 208 241 286 329 384 397 405 410
SEI-SINUDYNE 208 286 307 309 310 311 329 384 397
SELECO 244 270 275 290 309 312 321 322 373 408 410
SEMIVOX 262
SEMP 242
SENCORA 224
SENTRA 224 242 394 405
SERINO 389
SHARP 207 209 230 245 384
SHINTOSHI 208 286
SHIVAKI 208 286
SHOGUN 229
SHORAI 261 311

SIAREM 329 362 384 397 410
SICATEL 320
SIEMENS 208 250 251 269 286 307
SIERA 208 286
SIESTA 374
SIGNATURE 226 242
SILVA 208 286 307
SILVER 207 208 261 286 307 388 389 410
SIMPSON 267 268
SINGER 208 224 286 329 362 397 410
SINUDYNE 208 241 286 307 329 362 384 397 405 410
SKANTIC 309 406
SKY 208 286
SKYMASTER 399
SLX 400
SOGERA 308
SOLAVOX 206 208 218 244 286 307 410
SONIKO 208 286
SONITRON 253 296 298 374 404
SONNECLAIR 208 286
SONOKO 208 224 253 270 274 286
SONOLOR 244 274 296 307 410
SONTEC 208 224 286 374
SONY 206 207 208 225 230 264 272 285 286 329 424 426 430
SOUND & VISION 208 286 329
SOUNDESIGN 229 260 261 262 267
SOUNDWAVE 208 286 323
SPECTRA 224 333
SPECTRICON 222
SQUAREVIEW 249
SR2000 296
SSANGYONG 224
SSS 229 262
STAKSONIC 224
STANDARD 208 224 253 254 286 308 346
STARLITE 208 224 262 270 286 331 410

STENWAY 274
STERN 244 270 275 309 312 410
STRATO 208 224 270 286
STYLANDIA 253
SUNIC LINE 208 286
SUNKAI 208 286 310 311 389
SUNSTAR 208 224 270 286
SUNWOOD 208 224 286
SUPERLA 253 384
SUPERTECH 208 224 286 307
SUPRA 215 224
SUSUMU 254
SUTRON 224
SYDNEY 253
SYLVANIA 200 202 204 205 213 267 268 288
SYMPHONIC 249
SYSLINE 208 286
[T]
TADNDY 325
TANDBERG 307 312 408 410
TANDY 218 230 244 253 254 410
TASHIKO 207 253 313 407 410
TATUNG 208 214 218 222 253 286 325 384
TCM 387
TEAC 208 224 229 253 270 274 286 287 307 323 331 346 362 389 400 401 402 403 405
TEC 208 224 253 286 307 333 410
TECHLINE 208 286 329 400
TECHNEMA 308
TECHNICS 210 211 227 279
TECHNISAT 208 286 330 410
TECHNOL ACE 261
TECHWOOD 211 215 222
TECHNIMAGEN 208
TEDELEX 208 224 253 286 296 385
TEIRON 224

TEKNIKA 209 213 215 216 219 226 229 237 261 262 267
TELECO 335
TELECOR 208 253 286 410
TELEFUNKEN 208 215 286 376
TELEGAZI 208 270 286 410
TELEMEISTER 208 286 308
TELESONIC 208 286
TELESTAR 208 286 331
TELETECH 208 224 286 400
TELETON 207 253 267 309 405 410
TELEVIDEON 308 410
TELEVIEW 208 286
TELEXA 329
TEMPEST 208 224 286
TENNESSEE 208 286
TENSAI 208 224 253 254 286 303 308 311 388 398 399 410
TENSON 224
TESLA 335
TEVION 208 286 400
TEXET 224 252 253 254
THOMAS 313 325
THOMSON 208 258 286 345 405
THORN 208 218 242 285 286 287 297 298 307 313 315 326 327 394 398 407
THORN-FERGUSON 307 394 398
TMK 215 229 241 260
TOKAI 208 224 253 286 325 400 410
TOKYO 394
TOMASHI 274
TOSHIBA 207 216 239 242 253 259 296 298 329 370 394 395
TOSONIC 266
TOTEVISION 209
TOWADA 253 309 329 405
TOYODA 224
TRAKTON 270
TRANS CONTINENS 208 253 286 400
TRANSONIC 208 270 286 287 389 401 403

TRIAD 208 286
TRIDENT 253 384
TRISTAR 270
TRIUMPH 208 241 259 286 373 384
TSOSCHI 274
TV TEXT 287
TV TEXT 95 208

[U]
UHER 208 286 308 323 329 374 376 396
ULTRA 289 325
ULTRAVOX 208 286 329 362 397 410
UNIC LINE 208 286 381 389 405
UNITED 208 286 387 388
UNIVERSAL 201 203
UNIVERSUM 208 224 253 270 286 287 307 312 323 373 374 381 382 383 386 395 396 398 399 400 405 408 410 412
UNIVOX 208 286 397 410
UTAX 410

[V]
VECTOR RESEARCH 205
VESTEL 208 253 286 346 400 410
VEXA 208 224 286
VICTOR 212
VIDEOSYSTEM 208 286
VIDEOLOGIQUE 253
VIDEOTECHNIC 253
VIDEOTON 304 406 410
VIDIKRON 213 329
VIDTECH 207 229 260
VISA 207 208 224 225 244 258
VISION 208 253 286 308
VISTAR 307
VORTEC 208 286
VOXSON 208 244 286 309 323 396 397 410
VTQ 328

[W]
WALTHAM 208 253 286 304 309 323 400 406
WARDS 200 201 203 204 205 213 215 226 229 235 242 245 260 261 268
WATSON 208 224 286 308 346 400 410
WATT RADIO 307 329 362 405 410
WEGA 207 208 286 397
WEGAVOX 208 224 286
WELTBLICK 208 253 286
WESTON 208 286
WHARFEDALE 208 286
WHITE WESTINGHOUSE 208 252 286 296 308
WINDSOR 400
WINDSTAR 274
WINDY SAM 208
WINTEL 387
WORLD-TECH 333

[X]
XRYPTON 208 286

[Y]
YAMAHA 205 229
YAMISHI 208 253 274 286 389
YOKAN 208 286
YOKO 208 224 253 270 286 333 374 404 409
YORK 298

[Z]
ZANUSSI 253 275 309
ZENITH 219 226 227
ZENOR 404
ZONDA 222

6.3 Specification

DVB-S/S2 Tuner And Channel

RF Input Range	950MHz ~ 2150MHz
Input Connector	F-Type Female (With Loop-Through Output)
Input Impedance	75[Ohm]
Input Dynamic Range	-65dBm ~ -25dBm
Multi Demodulation Standard	DVB-S, DVB-S2 : QPSK, 8PSK
Symbol Rate	DVB-S : QPSK Maximum 45Msps @ 2~45Msps
	DVB-S2 : 8PSK/QPSK Maximum 30Msps @ 10~30Msps
Multi Decoding Method Standard	LDPC/BCH DVB-S2(1/2, 2/3, 3/4, 3/5, 4/5, 5/6, 8/9, 9/10)

DVB-S/S2 MPEG TS A/V Decoding

Transport Stream Format	MPEG-4 Part10 AVC/H.264 HD HP@L4.1 1920x1080@50Hz(ISO/IEC 13818 MPEG-2 TS Specifications)
Profile Level	MPEG-2 MP@HL, MPEG-4 Part10 AVC/H.264 HD HP@L4.1
Input Rate	Maximum 90Mb/s
Video Aspect Ratio	4:3, Letter Box, 16:9, Pan & Scan
Video Display Resolution	1920x1080i, 1280x720p, 720x576i/p, 720x480i/p @ 50/60Hz
Audio Decoding Format	Dolby Digital bit-streams, MPEG-1 Layer 1,2,3
Audio Output Mode	Mono, Left, Right, Stereo, Dolby Digital bit-streams(PCM 5.1 Channel, Stereo down-mixed Dolby ProLogic)

A/V And Data Output

Analog Component YPbPr	1 Set(3xRCA Vertical Array Type)
CVBS(Composite Video), Stereo Audio	1 Set(3xRCA Vertical Array Type)
S/PDIF Dolby Digital Interface	1 Optical(Fiber Optic Type)
HDMI (with HDCP Option)	1 Connector
SCART Interface	TV/VCR
USB2.0 Host Interface	2 USB A-Type Connector
Ethernet	1 Connector RJ-45 10/100 Base-T
RS-232C Data Port D-Sub9 Interface	Transfer Rate 115,200bps(Firmware Upgrade Port)

6.3 Specification

Conditional Access Interface

PCMCIA	2 Slots For DVB Common Interface Standard
Smart Card	2 Smart Card Support

Storage Device

SATA(Serial ATA)	1 External eSATA Port

System Resource Information

Main Processor	300MHz MIPS32TM/16-e class CPU
Flash ROM	Default 32Mbytes
DDR SDRAM	Default 256Mbytes

Power Supply

Input Voltage	AC 100-240V ~ 50/60Hz
Power Consumption	Maximum 35Watts
Protection	Separate Internal Fuse
Type	SMPS(Switching Mode Power Supply)
Safety And EMI	For Country Regulation

Physical Specification

Dimension(WxDxH)	340x268x60[mm]
Net Weight	About 3.0Kg
Operation Temperature	5℃ ~ 50℃
Storage Temperature	-40℃ ~ 65℃