USER'S MANUAL

the PROdigy
Digital Satellite Receiver

2009

the PRO digy

STANDBY ◄ VOL ► ▼ CH ▲

XCRYPT PV2 USB HOST USB DOLBY DIGITAL DV3

KBOX

Table of Contents

Safety Precautions

1. Important Safety Instructions

① Read these instructions.
② Keep these instructions.
③ Heed all warnings.
④ Follow all instructions.
⑤ Do not use this apparatus near water.
⑥ Clean only with dry cloth.
⑦ Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
⑧ Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
⑨ Do not reverse the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
⑩ Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
⑪ Only use attachments/accessories specified by the manufacturer.
⑫ Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

⑬ Unplug this apparatus during lightning storms or when unused for long periods of time.
⑭ Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

> ⚠ **Warning :**
> TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THE SET TO RAIN OR MOISTURE.

2. Notice

① These serving instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
② The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
③ The mains plug is used as the disconnect device. The disconnect device shall remain readily operable.

CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN WARNING: SHOCK HAZARD-DO NOT OPEN. AVIS: RISQUE DE CHOC ÉLECTRIQUE-NE PAS OUVRIR	TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER(OR BACK). NO USER-SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
The Lightning Flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product

Safety Precautions

3. FCC

This device complies with part I5 of the FCC Rules. Operation is subject to the following two conditions. :(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Caution: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generate, used int accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

1) Reorient or relocate the receiving antenna.
2) Increase the separation between the equipment and receiver.
3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4) Consult the dealer or an experienced radio/TV technician for help.

FCC ID :XCPKBOX

Before You Begin

1. Main Features

1) Max 500GByte external USB2.0 Host HDD supporting for Time Shift & Live recording or playback simultaneously, powerful trick mode .
2) Time Shift Max 2hours if external HDD is connected.
3) MPEG II Digital & Fully DVB compliant.
4) Powerful channel control by favorites, lock, skip, move and delete.
5) True Blind Scan.
6) USB 2.0Host Support. (Mp3 player , JPG viewer)
7) Multi-LNB controlled by DiSEqC control version 1.0,1.2 and USALS.
8) Multi-satellite Search.
9) On Screen display with 65535 Color Full resolution.
10) Favorite Channel Groups.
11) Closed Caption Support.
12) Maximum 10,000 Channel Programmable.
13) Channel sorting by Alphabet, Transponder and CAS.
14) Multi-language supported (Menu & OSD).
15) Support Extended 9-day EPG.
16) Multi-Picture Display.
17) Parental Lock & Receiver Lock.
18) Software & Channel Data upgrade via Rs232 & USB.
19) Universal Remote Control.
20) CVBS video & Audio output via RCA.
21) Component Y/Pb/Pr output via RCA.
22) S-VHS Video output.
23) Optical output for Digital Audio.
24) Software upgradeable via Internet with network adapter.

2. Accessories
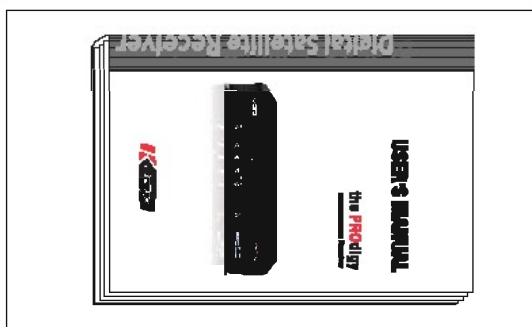
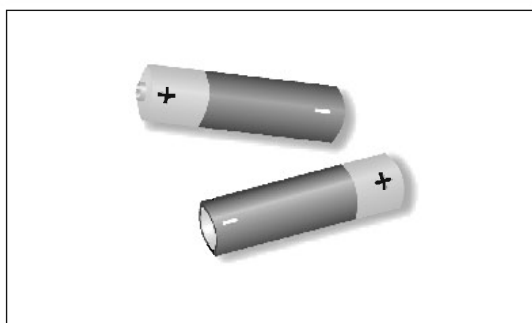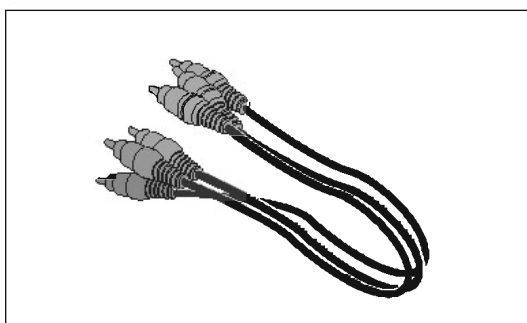| User`s manual	Remote Control

AAA size Batteries X 2	RCA Cable

NOTE : If any accessories listed above are missing, contact the sales representative where you purchased this unit

Hardware Description

1. Front Panel Configuration
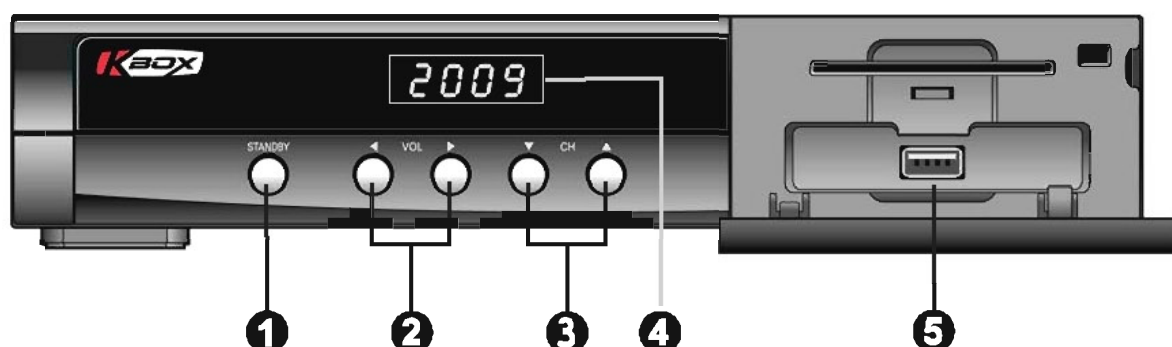
① **POWER Button :**
Press to switch between STANDBY and POWER ON modes.

② **Volume Up/Down Button :**
Press to change volume in normal mode, to move ARROW Left/Right in menu mode.

③ **CH Up/Down Button :**
Press to change channels in normal mode, to move the ARROW Up/Dosn in menu mode.

④ **DISPLAY :**
The 4-digit shows channel number or menu state in normal mode, show local time in standby mode.

⑤ **USB Port :**
To download firmware through USB memory stick.

2. Rear Panel Configuration
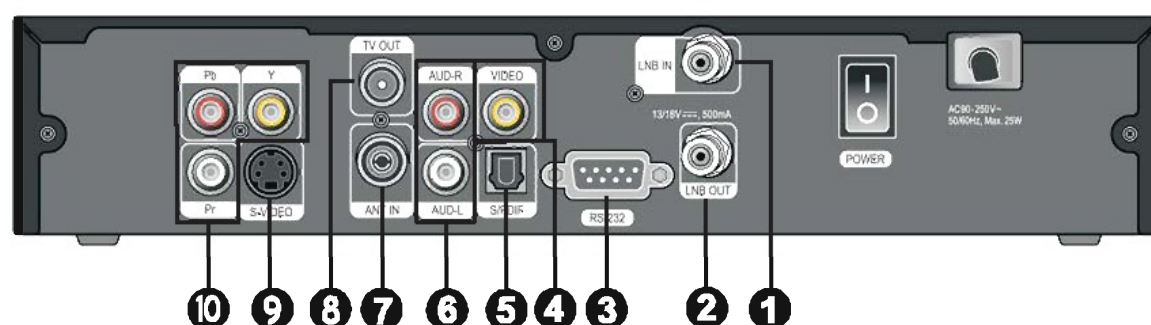
① **LNB IN :** Use to connect a satellite antenna.

② **LNB OUT :** Use it when connecting to another STB for loop-through.

③ **RS-232C :** Use it when connecting to your PC.

④ **VIDEO** : Use it when connect to input of TV or VCR.

⑤ **SPDIF** : Use to connect SPDIF to digital audio equipment.(Optic)

⑥ **AUDIO L/R** : Use it when connect audio left, right of TV or VCR.

⑦ **ANT IN** : Use to connect a general Aerial Antenna.

⑧ **TV OUT** : Use to connect to RF(ANT) Input jack to TV.

⑨ **S-VIDEO** : Use to connect to S-VHS video input on your TV or VCR.

⑩ **Y/Pb/Pr** : Use it when connecting component video to TV.

3. Remote Control Unit

POWER ① —

MUTE ⑥ —
INFO ⑦ —
EPG ⑤ —
MENU ⑧ —

ARROW ③ —

Audio ⑰ —

Numeric Keys ⑬ —

SAT ⑩ —

— ⑭ TV/RADIO
— ⑯ C.C
— ⑨ RECALL
— ⑮ TV/SAT
— ⑪ EXIT

— ④ OK

— ② COLOR Keys

— ⑫ SAT
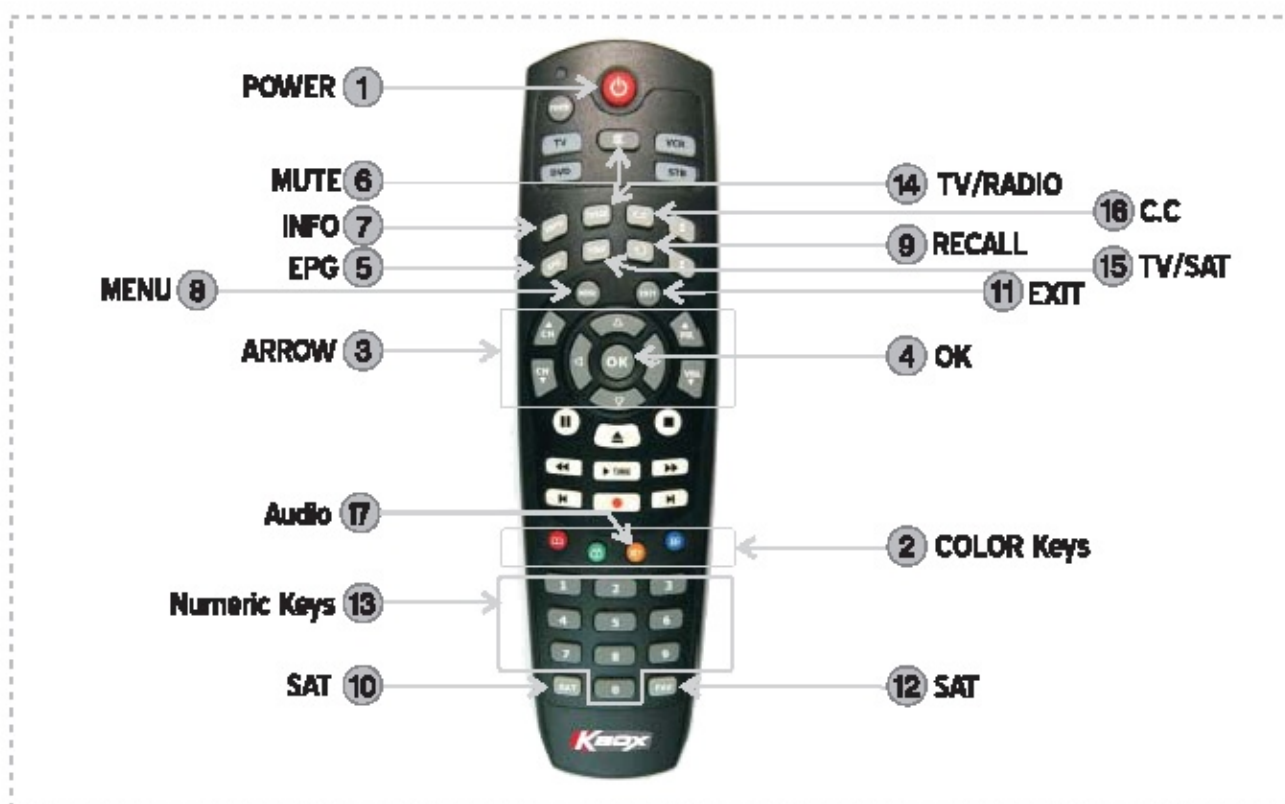
① POWER : Turns the STB On/Off.

② COLOR Keys : Used for special function in menu.
　　　　　　BLUE key is used to display multiple pictures

③ ARROW : Moves the highlight bar for selecting options on the menus. And this key is
　　　　　used to change channels(UP/DOWN) or change audio volume(LEFT/RIGHT).

④ OK : Shows the channel list in non-menu mode and select an item or confirm in menu mode.

⑤ EPG(Electronic Program Guide) : Show the TV/Radio program guide.

⑥ MUTE : Turns the sound On/Off.

⑦ INFO : Shows the information of the current program. If you press one more, detail
　　　　information box will be shown.

⑧ MENU : To enter the main menu or to move to the previous menu.

⑨ RECALL : Moves to previous channel.

⑩ SAT : To change the satellite groups.

⑪ EXIT : Exit from the menu or pop-up window.

⑫ FAV : To change the favorite groups.

⑬ NUMERIC Keys : Controls the numerical operation and channel numbers directly.

⑭ TV/RADIO : Switches between TV and Radio.

⑮ TV/SAT : Toggles the TV output source between the satellite inputs.

⑯ C.C : Turns the Sub-Title and Teletext On/Off.

⑰ AUDIO : To select audio language.

(!) **NOTE** : When inserting batteries, make sure that the polarity (+/-) is correct.

Connections Diagram

1. Receiver to TV

① Connect the satellite antenna cable to LNB IN.
② Connect the VIDEO and AUDIO L, R to VIDEO IN and AUDIO L, R IN of TV.
③ Connect the Y, Pb, Pr to Component input(Y, Pb, Pr) of TV (if necessary).

SATELLITE DISH
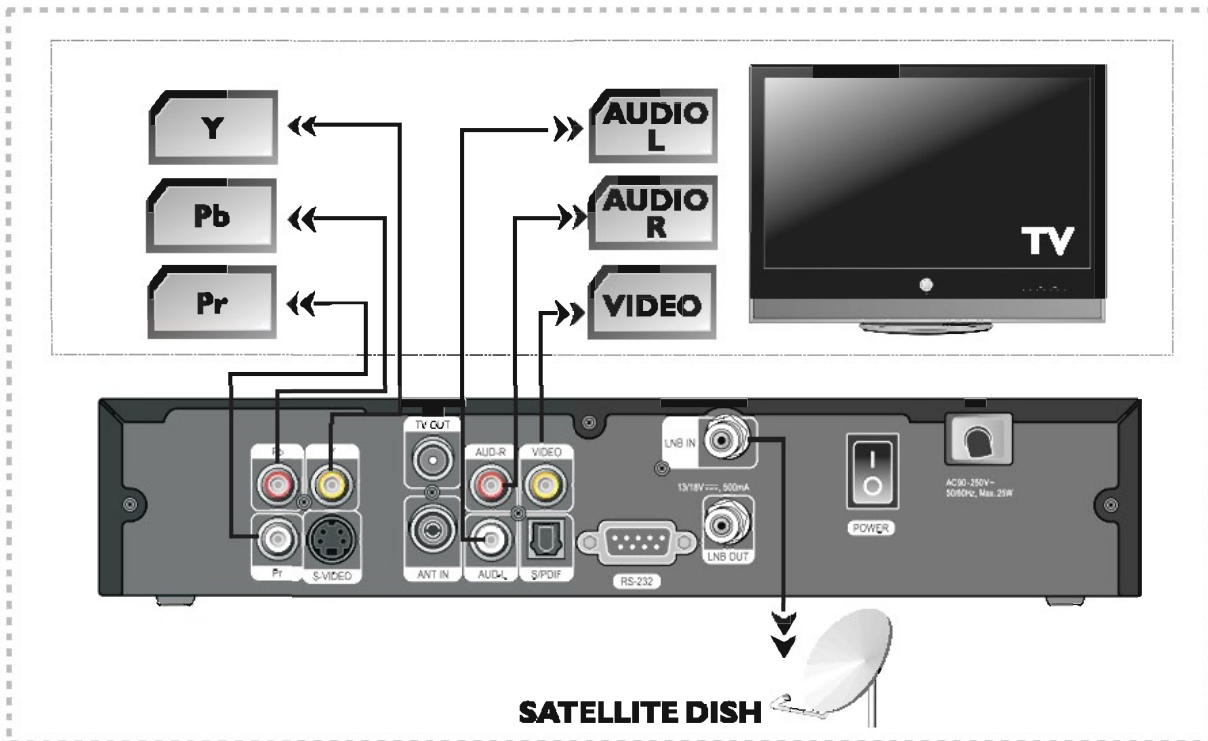
2. Receiver to Digital Audio Equipment

① To get better quality audio, you can use digital audio via optic cable.
   If you have a digital audio equipment, connect SPDIF to Digital audio input of the equipment.
   (Optic)
② Connect other jacks to the appropriate jacks of TV or VCR refers to above section, 1. Receiver
   to TV and 2. Receiver to TV and VCR.

SPDIF (Optic)

Digital Audio Equipment
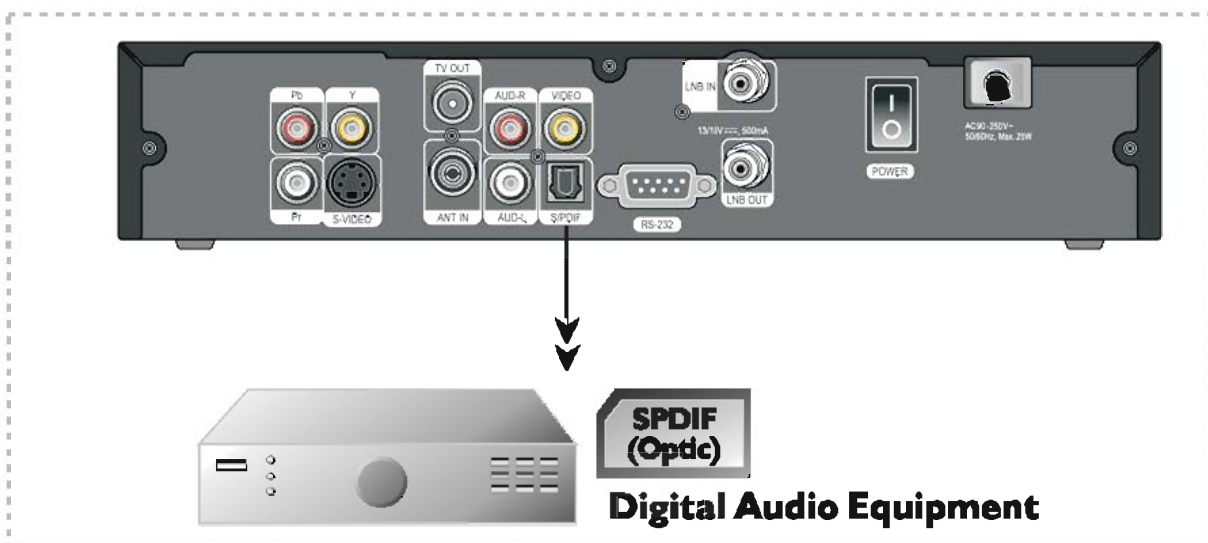
Guide of Functions

1. Select Service

To select the desired channel, you can use below methods

1. 1 Using UP/DOWN buttons
You can navigate between channels using UP/DOWN buttons. Whenever you press the UP(DOWN) button, current channel will be changed to next(previous) channel. You have to press UP or DOWN button until find the channel you want.

1. 2 Using NUMERIC buttons
If you know the channel number, enter the number directly using NUMERIC buttons.

1. 3 Using Channel List

To select the desired channel in the channel list, you should firstly display the channel list using OK button.
Use ARROW buttons to select a desired channel and press OK button. In the Channel List window,
you can also use additional functions with COLOR buttons

2. Information Window
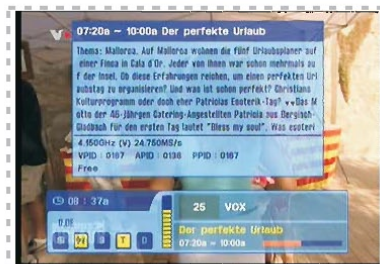
If, you want to view the current channel information window press INFO button. Then the Information window will appear.
This Information window is automatically displayed when changing channels. This window contains many items such as channel number, channel name, scrambled channel, Teletext, subtitle, Dolby Digital symbol, duration time and so on. Press INFO button once more, you can get more detailed information.

3. Electronic Program Guide(EPG)

Electronic Program Guide (EPG) helps you navigate through all the possible viewing options.
The EPG supplies information such as program listings, start/end times and detailed information about the program listings for all available channels. The availability and amount of these program details will vary, depending on the particular broadcaster.

① If you press EPG button, EPG menu will be displayed.
② Press the ARROW buttons to move to other channel or to see previous/next guide.
③ Press EPG button once to view full EPG (Entertainment Program Guide) and press button twice to view only selected EPG. Press button consecutively to go back and forth.
④ Press GREEN button to view next day EPG and RED button to view EPG for previous day.
⑤ Select the program by using the ARROW buttons then set the timer by pressing OK.

Guide of Functions

4. Satellite List

Select the SAT (satellite) button to view all satellite listings. Scroll through the various satellites using the ARROW buttons, and select the appropriate satellite by pressing OK.

5. Favorite Group

Select the FAV (favorite) button to view all favorite groups. Scroll through the various favorite group using the ARROW buttons, and select the appropriate satellite by pressing OK.

6. Volume Control

① To control audio volume while you are watching a channel, press LEFT/RIGHT button to control volume.
② Volume control bar will be appeared in top of the screen.
③ When necessary, press MUTE button to turn audio sound on/off.

7. PAUSE

The PAUSE button is used to freeze the video. Press PAUSE button once more to resume the video.
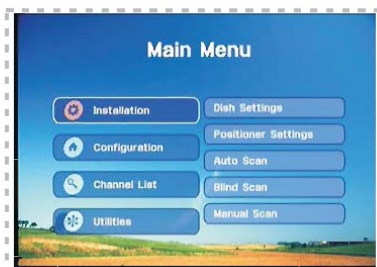
8. AUDIO

To adjust the audio status of the current channel, press AUDIO button, then audio related menu will be displayed.

9. Closed Caption

To display of Close Captioning press C.C on your remote control. Close Captioning is based on the transmitted data.

Guide of Main Menu

To display the menu, press MENU button at any time. You can select the sub menu using ARROW buttons. The selected sub menu becomes highlighted. When you have selected the sub menu you want, press the OK button. If you want to return to the previous menu, press the MENU button. And if you want to exit from the menu, press the EXIT button.

1. Installation

1. 1 Dish Settings

Select the antenna and LNB settings for channel search. The values that are set in this menu will be available for selection in other channel searching menus.

① Satellite : Select the satellite what you want to search the channel.
 - Press the LEFT/RIGHT button to select the satellite.
 - Select the wanted satellite name.
 - If the desired satellite name is not listed then select User Defined.
② LNB Power : Select the LNB power.
③ LNB Type : Select the LNB type.
④ LNB Frequency : Select the L.O. frequency that is set to antenna.
 - Use the LEFT/RIGHT buttons to select the LNB frequency.
 - If the required LNB frequency is not available, then select '0' and enter the frequency manually using the NUMERIC buttons.
 - When you select Universal in LNB type, both 9750 and 10600 are supported at the same time. And LNB 22KHz setting is disabled.
⑤ LNB 22KHz: When you use a dual LNB or two antennas connected to a 22KHz tone switch box, make 22KHz tone switch enable or disable to select LNB or antenna.
⑥ DiSEqC SW : Select your DiSEqC1.0 port connection to your receiver.

1. 2 Positioner Settings

① Satellite : Select the satellite what you want to search the service.
 - Press the LEFT/RIGHT button to select the satellite.
 - Select the wanted satellite name.
 - If the desired satellite name is not listed then select User Defined.
② Frequency : Select frequency what you want to check the signal.
③ DiSEqC motor
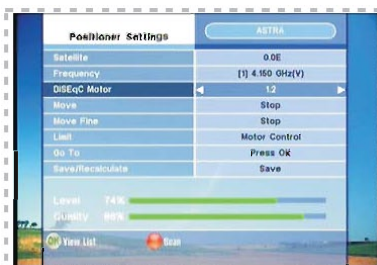
Off
—No positioner connected. Just DiSEqC 1.0 switch.

DiSEqC 1.2
 - Move : To move the dish from East to West with pressing LEFT/RIGHT button.
 - Move Fine : To move the dish in detail from East to West with pressing LEFT/RIGHT button.
 - Limit : Set your Dish East and West limit to be moved.
 - Go To : Move Dish to the stored location.
 - Save/Recalculate : Save the location or recalculate the new location.

Guide of Main Menu

USALS
- **Move** : To move the dish from East to West with pressing LEFT/RIGHT button.
- **Limit** : Set your Dish East and West limit to be moved.
- **Sat Degree** : Insert the satellite location.
- **Antenna Position** : Move to 0 position and insert antenna longitude and latitude of your present location by pressing numeric keys on RCU.
- **Go To** : Move Dish to the stored location.

1. 3 Auto Scan

- **Search Type** : Select the search type.
- **Network Search** : You can select Off or On. When you select 'On', you can find more transponders using the home network. As it refers to NIT during searching, if there is the frequency information of other transponder, it searches the other transponder besides the transponder that the user inputs.

1. 4 Blind Scan

- **Frequency** : Set Auto to search whole frequency or Set Manual to search only desired frequency.
- **Symbol Rate** : Selet symbol rate gabs.
- **Polarity** : Select the Horizontal or vertical polarization you wish to search.
- **Mode** : Select the search type.

1. 5 Manual Scan

- **Frequency** : Select the frequency from the list to search.
- **Symbol rate** : Enter the symbol rate using the NUMERIC buttons.
- **Polarity** : Select the polarity.
- **Search Type** : Select the search type.
- **Network Search** : You can select Off or On. When you select 'On', you can find more transponders using the home network. As it refers to NIT during searching, if there is the frequency information of other transponder, it searches the other transponder besides the transponder that the user inputs.

Guide of Main Menu

2. Configuration

2. 1 Time Settings

In this menu, you can set up your local time setting.

- GMT : Set On and local time is determined by adjusting the differences from GMT(Greenwich Meantime) according to your location.
- Current Date : Set GMT On and it will determined by GMT. Set Off and you can modify by pressing button.
- Current Time : Set GMT On and it will determined by GMT. Set Off and you can modify by pressing numeric keys on Remote control unit(RCU).
- Local Offset : Set GMT On and local time is GMT time + local offset

2. 2 Time Manager

This sub menu allows you to set up the reserved recording and wake up mode on your receiver.

Press the RED button while in the guide menu, and press "OK" to select a timer's parameter(Once/Daily/Weekly).

-. Start Date : Press 'OK' button, and you can select the start date on calender after press 'OK' button again.
-. Start Time : Input the time for start using the numeric buttons.
-. Duration : Select the duration by pressing Left/Right buttons.
-. Channel : Select the channel.
-. Type : Select the type(Play/Record)
-. Power Off : After finishing above setting, set up receiver power On/Off.

2. 3 A/V Output Settings

-. Audio Language : Select default language when changing channels.
-. Screen Format : Select the aspect ratio of TV which is connected to STB. (4:3/ 16:9)
-. Display Format : Select the format which the video is to be displayed on screen. (Letter Box / Pan Scan) In case of 16:9 mode, this option is not available.
-. RF Channel : Select RF channel. (3/4)
-. SPDIF : Select digital Audio output.

2. 4 UI Settings

① Menu Language : Select your OSD menu language.
② Transparency : Select OSD transparency.
③ Information timeout : Set the display duration of information window displayed on the screen after changing channels.
④ Volume timeout : Set the display duration of volume bar displayed on the screen after changing volume.

Guide of Main Menu

2. 5 System Recovery

Access to System Recovery is controlled by a 4-digit secret code that is defined by the user. Whenever you attempt to access System Recovery menu, the pop-up window will instruct you to input a PIN code. (If necessary, you can change it.) Note : The default PIN code is "0000"

-. Delete All Channels : Delete all channels from your channel list.
-. Factory Set : Press OK button to erase all channels and restore default setting.

3. Channel list

3. 1 Set Favorites

Press FAV button to mark the favorite group list. Once, favorite group is chosen, left side window will show all channel list marked and right side window will show only the marked channel list. Using ARROW and OK buttons you may add any channel to the favorite group or delete any channel from the favorite group.

3. 2 Edit Channels

All channel lists will be shown on left side of window. Move the highlighted bar to the channel what you want to edit its name and press OK button. Then you can see the virtual keyboard. Using ARROW and OK buttons, you can edit the channel name.
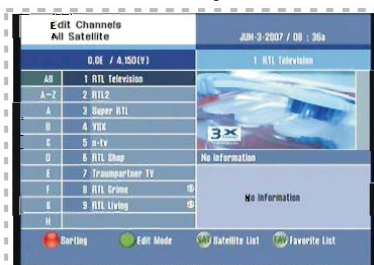
① Lock Channels: You can push red color button on the RCU if you want to lock the channel on the left side window.
② Skip Channels: You can push green color button on the RCU if you want to skip the channel on the left side window.
③ Move Channels: You can push yellow color button on the RCU if you want to move the channel on the left side window.
④ Delete Channels : You can push blue color button on the RCU if you want to delete the channel on the left side window.

3. 2 Edit Channels

Access to channels and programs is controlled by a 4-digit secret code that is defined by the user. Whenever you attempt to access parental control menu, the pop-up window will instruct you to input a PIN code. (If necessary, you can change it.) Note : The default PIN code is "0000"

Guide of Main Menu

-. Receiver Lock : Set On and receiver will ask to enter PIN code when power on.
-. Install Lock : Set On and receiver will ask to enter PIN code when access to installation menu.
-. Age Limit : Select age limit to access a channel among Free, 8, 12, 15 and 18.
-. Hide Skip Channels :
-. Hide Lock Channels :
-. Current password : Input the current password to change it.
-. New password : Input new password to be changed.

4. Utilities

4. 1 MP3 Player

Stick the external USB memory into the provided USB port on front panel. Once inserted, press OK button to read external USB memory stick and choose the MP3 file from the window you want to play.

4. 2 Image Viewer

You can display the image file that is in the external USB memory stick on the screen. Select the image file(jpeg format) and press OK button to display the image.

4. 3 Data Transfer

① Transfer Channel data to USB storage :
   If you want to use channel data in the future, this menu allows you to store current channel data. Press OK button to store current channel data to external USB storage.
② Data download from USB storage :
   This menu allows you to download the stored firmware data from external USB storage. Press OK button to download data.

4. 4 Play List
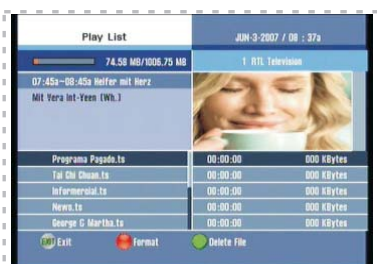
You can show the recorded list and play from the stored USB external HDD driver.

-. Select the Play List.
-. Select the file you wnat to play and press 'OK' button to play.
-. Press 'OK' button again to ger it full screen.

4. 5 System Information
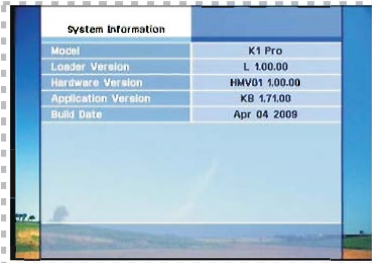
This displays general information about what hardware and software version your receiver is running on.

5. PVR

NOTE : 1. Do not remove the USB device while recording a program.
2. You can't change to another channel while recording a program.
3. This function is available when USB device si connected.

5. 1 Instant Recording
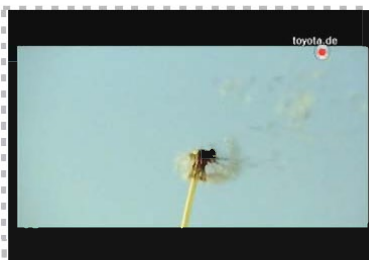
-. You can record a current channel by using REC button(🔴).
-. If you stop the recording, press STOP button(⏹).

5. 2 Timer Recording
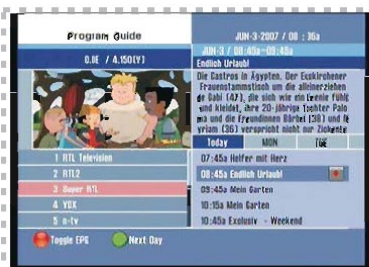
-. You can record a channel at EPG menu.
-. Select a channel to record, and press 'OK' button.
🔴 Icon will be marked at the channels to record.

5. 3 Play List & Replay

-. Press 🔼 button at normal video mode, and you will directly move to the Play List menu.
-. Select a channel to replay by using Up/Down button, and press 'OK' button to play.

Troubleshooting

Troubleshooting

Problem	Solution
- Does not display any message on the front panel.	- 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.
- No Picture	- See 'Does not display any message on the front panel' above. - Check the video output port is firmly connected to the TV or VCR - Check that you have selected the correct channel or video output on your TV. - Check the brightness level of the TV.
- Poor picture quality	- See 'No Picture' above. - Check the signal level, if this is low then try adjusting the alignment of your dish.
- No Sound	- See 'No Picture' above. - Check the volume level of the TV and STB. - Check the Mute status of the TV and STB.
- Remote Control does not operate	- Point remote control directly towards the STB. - Check and replace batteries.
- No or Bad Signal	- Check the LNB ; Replace LNB if necessary. - Check the cable from the LNB. - Check the position of the dish; realign dish if necessary. - If you are using a DISEqC 1.0 switch, check that you have connected the LNBs to the correct connections on the switch. - Check the 'Signal Level' and the 'Signal Quality'.

Specifications

Tuner & Channel Decoder

Input Connector	F-type, IEC 169-24, Female
Loop through out	F-type, IEC 169-24, Female
Frequency Range	950MHz ~ 2150MHz
Input Impedance	75Ω, unbalanced
Signal Level	-65 to -25dBm
LNB Power	13/18VDC, max.400mA
22KHz Tone	(22±2)KHz, (0.6±0.2)V
DISEqC Control	V1.0/1.2/USALS Compatible
Demodulation	QPSK
Input Symbol Rate	2 ~ 45 Ms/s
FEC Decoder	1/2, 2/3, 3/4, 5/6 and 7/8 with Constraint Length K=7

MPEG Transport Stream A/V Decoding

Transport Stream	MPEG-II ISO/IEC 13818
Profile Level	MPEG-II MP@ML
Input Rate	Max. 15Mbit/s
Video Formats	4:3 LetterBox, 4:3 PanScan, 16:9
Video Resolution	720 x 576, 720 x 480
Audio Decoding	MPEG / MusiCam Layer Ⅰ & Ⅱ
Audio Mode	Stereo / Joint stereo / Mono
Sampling Rate	32KHz, 44.1KHz and 48KHz

Main System

Main Processor	Conexant Virgo(32-bit RISC CPU 180 MIPS)
Memory	Flash-ROM : 2 MBytes
	SDRAM : 16 Mbytes

Audio / Video & Data IN/OUT

Video	Video Output (RCA)
	Y/Pb/Pr Video Output (RCA)
	S-VHS Video Output (Mini-DIN)
Audio L/R	RCA(Volume and Mute Control)
	AC-3 Dolby Digital (Optical)
RS-232C	9 pin D-SUB(Male) type, Transfer rate 115Kbps
USB	USB 2.0 Host Support

Specifications

Front Panel

Slot	1 USB Host Slot
Buttons	5 Buttons(STANDBY, CH UP/DOWN,Volume UP/DOWN)
Display	7-Segment (Channel No. or Time)

Power Supply

Input Range	AC 90 ~ 250V
Power Consumption	25W Max
Operation Frequency	50 ~ 60Hz (SMPS type)
Separator Internal Fuse	2A and AC 250V

Physical Specification

Size (W x H x D)	270mm X 175mm X 50mm
Weight (Net)	Around 2.0Kg
Operating Temp.	0°C ~ +45 °C
Storage Temp.	-10°C ~ +50 °C

Multi-Brand IR Remote Controller

1. Initial Setting

1. 1 DEVICE DEFAULT : STB

1. 2 MODEL DEFAULT

STB .... #001
T V .... #001
DVD .... #001
VCR .... #001

2. Device Keys

Device Keys are used for device changing.
Case of the model which POWER button comes to share with power on and power off, the DEVICE button operates with power on, the POWER button operates with power off(LED ON).

3. Code No. Checking(Number Call)

Step 1.   Press the DEVICE and OK button during about 2.5 seconds at the same time.
           DEVICE LED on.(Set mode)
Step 2.   Press the INFO button.
          LED will blink according to inputted mode number on the device.
          Case of digit 0, it blinks 10 times.

4. Setting Guide

When there is no input during about 20 seconds from set mode, LED is turn off and set mode is canceled.

4. 1 Using Device Code Number

Step 1.   Press DEVICE and OK button during about 2.5 seconds at the same time.
           DEVICE LED on.(Set mode)
Step 2.   Input three digit code numbers.
          DEVICE LED will blinks.
Step 3.   Press DEVICE button.
          DEVICE LED will blinks twice.

4. 2 Using UP and DOWN buttons

Step 1.   Press DEVICE and OK button during about 2.5 seconds at the same time.
           DEVICE LED on.(Set mode)
Step 2.   Press UP or DOWN button until DEVICE turns off, one and one.
Step 3.   If your DEVICE is turn off
          Press DEVICE button.
          DEVICE LED will blink twice.

5. Key Table

NO	STB	TV	VCR	DVD
1	DEVICE	DEVICE /POWER ON	DEVICE /POWER ON	DEVICE /POWER ON
2	POWER		POWER	POWER
3	RECORD		REC	OPEN/CLOSE
4	STOP		STOP	STOP
5	PAUSE		PAUSE	PAUSE
6	REWIND		REW	REW
7	PLAY		PLAY	PLAY
8	FAST FORWARD		FF	FF
9	PREV FILE			SKIP -
10	NEXT FILE			SKIP +
11	RED	UP		
12	GREEN	DOWN		
13	YELLOW	LEFT		VOL-
14	BLUE	RIGHT		VOL+
15	UP	CH+	CH+/TRK+	UP
16	LEFT	VOL-	VOL-	LEFT
17	OK	SEL/OK		SEL/OK
18	RIGHT	VOL+	VOL+	RIGHT
19	DOWN	CH-	CH-/TRK-	DOWN
20	EPG			
21	MUTE	MUTE	MUTE	MUTE
22	INFO	INFO		
23	MENU	MENU		MENU
24	RECALL	LAST		
25	SAT			
26	EXIT	EXIT		
27	PLAY LIST			
28	FAV			
29	1	1	1	
30	2	2	2	
31	3	3	3	
32	4	4	4	
33	5	5	5	
34	6	6	6	
35	7	7	7	
36	8	8	8	
37	9	9	9	
38	TV/RAD			
39	0	0	0	
40	TV/SAT	TV/VCR	TV/VCR	
41	C.C			
42	AUDIO			

Multi-Brand IR Remote Controller

6. Code Table : TV

Manufacturer/Brand	Set-Up Code Number	Manufacturer/Brand	Set-Up Code Number
ADMIRAL	072 081 160 161 096	EMERSON	005 028 043 048 076 096
ADVENT	247		155 004 051 143 151 153 154
AIKO	103	ESA	078
AKAI	006 146 248 150 157 167	FISHER	007 057
ALARON	028	FUJITSU	164 028 198 246 066 138
AMARK	112 143	FUNAI	028 043 052 249
AMERICA ACTION	043	FUTURETECH	043
AMPRO	073	GATEWAY	242 078
ANAM	043 054 055 056 080 112	GE	006 073 144 160 161 004 008
AOC	058 006 004 112		009 034 056 074 091 155 081 120
APEX DIGITAL	015 226 037	GEM	078
AUDIOVOX	076 103 043 035	GIBRALTER	004 073
BAYSONIC	043	GOLDSTAR	004 106 119 110 112 113 127 143
BELL&HOWELL	072	GRUNPY	028 043
BRADFORD	043	HALL MARK	004
BROKSONIC	096	HARLEY DAVIDSON	028
CANDLE	006 002 003 004	HARMAN KARDON	164
CAPEHART	058	HARVARD	043
CARVER	164	HISENSE	170
CELEBRITY	001	HITACHI	163 004 007 009 011 072
CETRONIC	043		010 012 023 075 143 158 166
CINERAL	103 120	HP	027 039
CITIZEN	006 002 003 004 101 103 143	HYUNDAI	049 067
CLASSIC	043	INFINITY	164
CONCERTO	004	INSIGNIA	024 142 147 148 149
CONTEC	043 051	INKEL	129
CORONADO	143	INTEQ	073
CRAIG	043 054 028	JBL	164
CROSLEY	164	JCB	001
CROWN	043 143	JCPENNEY	004 006 008 024 030
CURTIS MATHES	006 004 101 143		065 101 143 156 160
	011 072 081 120 164	JENSEN	013
CXC	043	JVC	038 001 034 083 206 159
DAEWOO	076 103 055 004 127 143	KENWOOD	006 001
	016 043 044 125 120	KLOSS	002 059
DAYTRON	004 143	KTV	006 043 143 154
DELL	041	LG	004 106 119 110 112 113 127 143 084
DENON	011	LODGENET	072
DUMONT	004 073	LOEWE	207 164
DWIN	102 104 161	LOGIK	072
DYNASTY	043	LUXMAN	004
DYNATECH	062	LXI	007 015 052 081 160 164
ELECTROBAND	001	MAGNAVOX	006 003 004 022 059 060 061
ELECTROHOME	024 076 143		063 064 127 164 094 160 028 035

Multi-Brand IR Remote Controller

Manufacturer/Brand	Set-Up Code Number
MAGNAVOX	124
MAJESTIC	072
MARANTZ	164 006
MATSUI	164
MATSUSHITA	080
MEGATRON	004
MINTEK	108 168
MITSUBISHI	109 024 042 004
	040 146 028 081 225
MOTOROLA	081
MTC	006 004 062 101
MULTITECH	043
NAD	015 025
OPTIMUS	080
OPTOMA	029 032
PHILCO	006 003 004 024 056 059
	060 063 064 127 143 164
PHILIPS	164 005 038 093 127
	006 003 004 059 210
PIONEER	023 025 135 176 004 018
	006 209 234 118 131 140
POLAROID	015 077 078 079
PORTLAND	004 143 103
PRISM	034
PROSCAN	144 160 161
PROTON	004 058 143 171 173 112
PROTRON	130 141
QUASAR	034 056
RADIO SHACK	004 019 127 143 043
RCA	160 161 144 156 065 006
	004 023 024 056 074 152 081
REALISTIC	007 019
RUNCO	072 073 050 137 169
SAMPO	006 004 058 242
SAMSUNG	004 101 127 133 143
	160 089 105 211 228 229
SANSEI	120
SANSUI	096
SANYO	007 053 057 082 020
SCEPTRE	036
SCOTCH	004
SCOTT	004 005 028 043 048 143
SEARS	004 007 015 028 030 057
	082 094 143 160 052 164
SEMIVOX	043

Manufacturer/Brand	Set-Up Code Number
SEMP	015
SHARP	081 014 019 028
	004 022 143 175
SIGNATURE	072
SONY	001 126 139
SOUNDESIGN	003 004 028 043
SPECTRICON	112
SQUAREVIEW	052
SSS	004 043
STARLITE	043
SUPRE MACY	002
SUPREME	001
SVA	079
SYLVANIA	006 003 059 060 063
	064 127 160 164 044 249
SYMPHONIC	052 249
SYNAX OLEVIA	084
SYNTAX OLEVIA	132
TANDY	081
TATUNG	056 062
TECHNICS	034 080
TECHNOL ACE	028
TECHWOOD	004
TEKNIKA	002 003 004 024 028
	043 072 101 143 103 164
TELERENT	072
TERA	172
TMK	004
TNCI	073
TOSHIBA	015 030 007 040 062 101 045
TOTEVISION	143
UNIVERSAL	008 009
VIDEO CONCEPTS	146
VIDIKRON	174 188 164 050
VIDTECH	004
VIEWSONIC	122
VIZIO	078
WARDS	004 064 164 008 009 019
	028 060 061 063 072 074 143
WESTING HOUSE	076 036
YAMAHA	004 006 115 116
YORK	004
YUPITERU	043
ZENITH	072 073 095 103 011 096
ZONDA	112

Multi-Brand IR Remote Controller

7. Code Table : VCR

Manufacturer/Brand	Set-Up Code Number	Manufacturer/Brand	Set-Up Code Number
ADMIRAL	025 053	HQ	034
AIKO	117	HUGHES	004
AIWA	034 161 101	INSTANTREPLAY	031
AKAI	043 046 124 146	JCL	031
AMERICA ACTION	117	JCPENNEY	004 012 031 040 101
AMERICAN HIGH	031	JENSEN	043
AMPRO	072	JVC	048 043 055 060
ANAM	031 103		130 150 152 012 031
ASHA	040	KEC	101 117
AUDIO DYNAMICS	012 023 043	KENWOOD	034 150 014 048
AUDIOVOX	101	KLH	024
BEAUMARK	040	KODAK	031 101
BROKSONIC	035 037 129 025	LG	101 004 012 020
CALIX	101	LLOYD	034
CANON	028 031	LOGIK	024
CAPEHART	108	LXI	003 009 017 034 101 004 106
CCE	024 117	MAGIN	040
CINERAL	117	MAGNASONIC	117
CITIZEN	101 117	MAGNAVOX	067 031 034 068 041 170
COLT	148	MARANTZ	067 069 012 031
CRAIG	003 040 135 024 101	MARTA	101
CUIRTIS MATHES	031 041	MATSUI	027 030
CYBERNEX	040	MATSUSHITA	031
DAEWOO	005 108 117 017 065 007 010	MEI	031
DAYTRON	108	MEMOREX	040 101 003 014 031
DBX	012 023 043		034 053 072 134 139 025
DYNATECH	034 053	MGA	045 046 059
ELECTROHOME	059 101	MGN TECHNOLOGY	040
ELECTROPHONIC	101	MINOLTA	004 020
EMERSON	006 029 035 037 129	MITSUBISHI	059 061 051 004
	153 017 025 027 031		046 020 045 053
	034 036 046 101 131 138 117	MOTOROLA	031 053
FISHER	003 010 008 009	MTC	034 040
FUJI	031	MULTITECH	024 034
FUNAI	034	NEC	012 023 043 048
GARRARD	034	NIKKO	101
GE	031 072 144 147	NOBLEX	040
	063 107 109 040 053	NORDMENDE	043
GO VIDEO	132 155 040 136	OLYMPUS	031
GOLDSTAR	101 004 012 020	OPTIMUS	053 101
HARLEY DAVIDSON	034	PILOT	101
HARMAN KARDON	012 045	PIONEER	021 004 048
HARWOOD	024	PORTLAND	108
HITACHI	004 026 034 043 063 137 150	PROFITRONIC	040

Multi-Brand IR Remote Controller

Manufacturer/Brand	Set-Up Code Number
PROTEC	024
RCA	107 109 144 041 031 004 020
	034 040 140 147 158 053
SALORA	014
SAMSUNG	040 017 107 109
	113 115 124 122
SANKY	053
SANSUI	043 135 048 025 034
SANYO	003 014 040 134
SCOTT	017 037 129 131
SEARS	003 004 008 014 017
	081 101 010 031 034
SHARP	053 031 054 159
SHINTOM	024
SHOGUN	040
SINGER	024
SONY	001 057 058 003 052
	053 031 154 171 009 034
SOUNDESIGN	034
STS	004
SYLVANIA	031 034 059 067

Manufacturer/Brand	Set-Up Code Number
SYMPHONIC	034
TANDY	034 010
TATUNG	043
TEAC	034 043
TECHNICS	031 070
TEKNIKA	031 034 101
THOMAS	034
TMK	006 040
TOSHIBA	017 131 004 008 059 082 150
TOTEVISION	040 101
UNITECH	040
VECTOR RESEARCH	012
VIDEO CONCEPTS	012 034 046
VIDEOSONIC	040
WARDS	003 004 017 024 031
	034 040 053 054 131
WESTINGHOUSE	024 025
XR-1000	024 031 034
YAMAHA	012 034 043
ZENITH	072 034 001 058
	080 101 153 048 025

Multi-Brand IR Remote Controller

8. Code Table : DVD

Manufacturer/Brand	Set-Up Code Number	Manufacturer/Brand	Set-Up Code Number
AIWA	202	MITSUBISHI	227
AKAI	199	MYRYAD	224
ALPINE	221	NAD	247 239
APEX DIGITAL	251 246 182 183	NAKAMICHI	225
ARCAM	215	ONKYO	240
CARY AUDIO DESIGN	184	OPTIMUS	229
CLASSE	193	PANASONIC	228 206 226
COBY	212	PHILIPS	253 237 214 242
CYBERHOME	220 213	PIONEER	255 222 229
DAEWOO	220	POLAROID	195
DENON	226 241	PRIMARE	185 186
FUNAI	208 211	PROCEED	245
GE	230 231	PROSCAN	230 231
GOLDSTAR	235 239	RCA	230 231
GO VIDEO	201 187 188 189 194	SAMSUNG	236 248 201 191
HARMAN KARDON	243	SANSUI	205
HITACHI	223	SANYO	204
HITEKER	246	SENSORY SCIENCE	189 190
INTEGRA	198	SHARP	252
JVC	238	SONY	001 232 218 203
KENWODD	216	SYLVANIA	208 211
KISS	197	SYMPHONIC	208 211
KLH	210	TATUNG	224
LG	148	TECHNICS	228
MAGNAVOX	254 237 211	THETA DIGITAL	229
MARANTZ	253 242	TOSHIBA	233 244 219 205 192 196
MCINTOSH	217	VENTURER	209
MEMOREX	207	YAMAHA	249 226 181
MINTEK	200	ZENITH	239 226 235 239

KBOX

Digital Satellite Receiver