PERSONAL VIDEO RECORDER
DIGITAL SATELLITE RECEIVER

USER'S MANUAL

VIEWSAT PVR7000

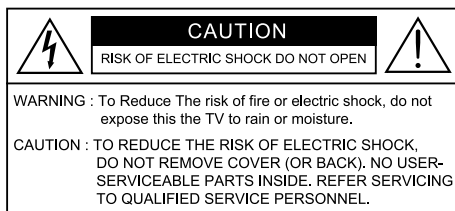VIEWSAT PVR7000

Table of Contents

Important Safety Instruction

1) Read all of these instructions.
2) Save these instructions for later use.
3) Follow all warnings and instructions marked on the product.
4) Follow all instructions.
5) Do not use the 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 defeat 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 the third prong are provided for your safely. 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) Do not place the apparatus on an unstable cart, stand or table. The apparatus may fall, causing serious damage to the apparatus.
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 moisture, does not operate normally, or has been dropped.
15) 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.

Shock Hazard Marking and Associated Graphical Symbols

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

Explanation of Safety Related Symbols

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

WARNING : To Reduce The risk of fire or electric shock, do not expose this the TV to rain or moisture.

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

WARNING : To Reduce The risk of fire or electric shock, do not expose this the apparatus to rain or moisture.

Declaration of Conformity

FCC Rule : TESTED TO COMPLY WITH FCC PART 15, CLASS B
            OPERATING ENVIRONMENT : FOR HOME OR OFFICE USE.

FCC COMPLIANCE STATEMENT :
 This device complies with part 15 of the FCC rules. Operation is subject to
 the following 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.

INFORMATION TO USER:
This equipment has tested and found to comply with the limits of a Class B
digital device, pursuant to part 15 of the FCC Rules. These limit are designed to
provide reasonable protection against harmful interference in a residential
installation. This equipment generates, user and can radiate radio frequency
energy and, if not installed and used in 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 / Relocate the receiving antenna.
 2. Increase the separation between the equipment and receiver.
 3. Connect the equipment into an outlet on a circuit difference from that to
    which the receiver is connected.
 4. Consult the dealer or an experience radio / TV technician for help.

CAUTION : Changes or modifications not expressly approved by
                manufacturer responsible for compliance could void the user's
                authority to operate the equipment.

1. SAFETY PRECAUTIONS

This receiver has been manufactured to satisfy the international safety standards.
Please read the following recommended safety precautions carefully.

MAINS SUPPLY : AC 95~240V 50/60Hz

LOCATION : Locate the receiver indoor. Locate receiver away from potential hazards such as houseplants, lightning, raining and direct sunlight.

OVERLOADING : Do not overload wall outlets, extension cords or adapters as this can result in fire or electrical shock.

LIQUIDS : Keep liquids away from the receiver.

CLEANING : Before cleaning the receiver, disconnect it from the wall socket. Use a cloth lightly dampened with water (no solvents) to clean the exterior.

VENTILATION : Do not block the receiver ventilation holes. Ensure that free airflow is maintained around the receiver. Never set the receiver on soft furnishings or carpets. Do not use or store the receiver where it is exposed to direct sunlight, or near heater.
Never stack other electronic equipment on top of the receiver.
Place the receiver at least 30mm from the wall.

ATTACHMENTS : Do not use any attachment that is not recommended by the manufacturer, as it may cause a hazard or damage the equipment.

SERVICING : Do not attempt to service this product yourself. Any attempt to do so will make the warranty invalid. Refer all servicing to a qualified service agent.

LIGHTNING : If the receiver is installed in an area subject to intense lightning activity, protection devices for the receiver mains connector and modem telephone line are essential.
The individual manufacturer's instruction for safeguarding other equipment, such as TV set, Hi-Fi, etc., connected to the receiver, must also be followed during lightning storms.

1.A. ACCESSORIES

Check the following accessories when you open the box.
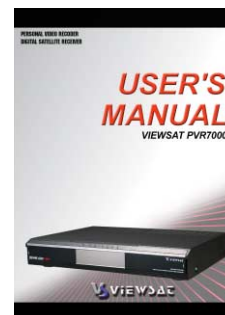
User's manual　　　RCU　　RCA cable　　Serial cable

DiSEqC S/W　　　　　Batteries　　　How to install HDD of PVR

The device, packaing material and batteries must never be disposed of with household.

Please obtain appropriate information about regulations in your community, and dispose of all in accordance with regulations at the separate locations provided.

2. GENERAL FEATURES

■ Fully MPEG-2 & DVB Compliant

■ 2 Tuners

■ Time-shifting

■ MP3(MPEG-1 Layer3) decoding

■ Powerful trick mode supported

■ Playback of the selected region repeatedly

■ USB supported for fast PC interface

■ Dual Decoding(PIP-Picture In Picture)

■ Dual Recording simultaneously

■ Support 2 Recording, 1 live at the same time

■ Input Frequency 950 ~2150MHz

■ Supports Electronic Program Guide (EPG), Picture In Graphic (PIG)

■ Supports SCPC & MCPC from C / Ku-band

■ Tuner Symbol Rate : 1 ~ 45MS/s

■ Fast Booting & Auto Scan

■ Quick Channel Changing

■ Max 6000 Channels (TV & Radio) Programmable

■ User Friendly 256 Colors OSD & Easy GUI

■ A lot of OSD Language supported

■ Favorite Channel List Editing

■ Master PIN Code Function & Parental Lock Function

■ 100 Steps Volume Control

■ Automatic Detection of Forward Error Correction

■ Window based S/W Download Program Supported by RS232 Serial Port

■ Set to Set Download (Main Program, Channel Data)

■ 4:3, 16:9, Letter Box

■ Various LNB Polarity Control

■ 22KHz Switching Control

■ 9 RCA Output for Video (Twin), Audio L/R(Twin), Component

■ S/PDIF Output for Digital Audio

■ S-VIDEO Output

■ RF-Modulator Output

■ Zoom function

■ Hardware based Blind Scan

■ DiSEqC 1.0, 1.2 and USALS (1.3) Compatible

■ Photo Album

3. HOW TO CONNECT YOUR RECEIVER

Please DO NOT plug in the main power supply cord until you have finished all the connections.
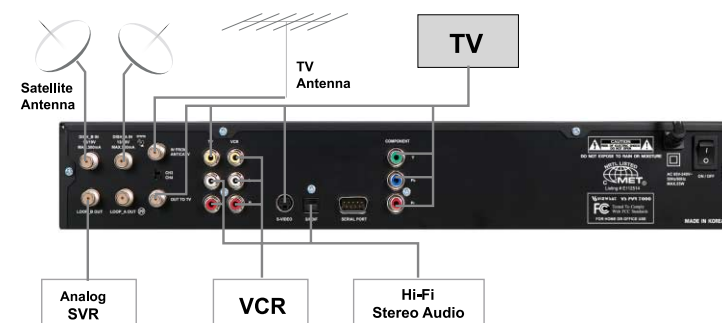
1) LOCATION OF THE RECEIVER
Your receiver should be placed under proper ventilation.
Don't put in completely enclosed cabinet that will restrict the flow of air, resulting overheating.
The location should be safeguarded from direct sunlight, excess moisture, rough handling or household pets.
Avoid stacking other electronic components on the top of the receiver.
The location should be safely accessible by the cable.

2) CONNECTING THE RECEIVER WITH DISH SYSTEM
After installing your dish system, connect the coaxial cable from LNB of your dish antenna to "DISH IN"terminal marked at the rear of the receiver.
All cable connectors should be finger tightened ; do not use any kind of wrench on the cable over connectors.
The cable should be 75 Ω impedance coaxial twisted at the end with a "F" type connector.

- Please check the followings and follow that according to your dish system type.

1. Two Separated Antenna
- Connect two separated antenna cable to each tuner. In that case, works as followings.

1) Watching live channel without recording
You can watch all the channels in tuner A and B.
2) Recording in Tuner A(B)
If you record a channel in tuner A(B), you can watch only the channels that have the same TP of the recording channel. On the other hand, you can watch all the channels in tuner B(A).
3) Recording in Tuner A and B at the same time
If you record channels in tuner A and B at the same time, you can watch the channels that have the same TP of recording channel at each tuner.

Satellite Antenna

2. One Antenna and Loop through
- Connect antenna cable to tuner A(B) and connect "LOOP OUT" of the tuner A(B) to "DISH IN" of the tuner B(A) using loop through cable. In that case, works as followings.

1) Watching live channel without recording
You can watch all the channels in tuner A(B). In tuner B(A), but you can watch the channels that have the same polarity(Hor/ver) of the watching channel in tuner A(B).
2) Recording
In tuner B(A), you can record and watch the channels that have the same polarity (Hor/Ver) of recording channel in tuner A(B). Except previous case, it is working like Two Separated Antenna.

Satellite Antenna

3) CONNECTING THE RECEIVER TO TV
To connect the receiver with your TV, you can follow four methods :
through RF cable, RCA cable, S-Video cable and Component cable.
Connect the RF cable to the terminal marked "OUT TO TV" at the rear panel of the receiver and its other end to the TV RF input socket.

4) CONNECTING YOUR VCR
To connect a VCR, the receiver has been provided with RCA at the rear marked "VCR" Using a RCA cable, the VCR can be connected to the receiver.

5) CONNECTING EXTERNAL AUDIO Hi-Fi SYSTEM
To connect any external Audio Hi-Fi system, the receiver has been provided with two RCA connectors at the back of the receiver, marked with "L"and "R" respectively to connect the left and right audio.

6) CONNECTING YOUR ANALOG RECEIVER
To facilitate the user using analog receiver to view analog channels, the receiver has been provided with a loop through terminal marked as "LOOP OUT".
Connect the coaxial cable from this terminal to the IF input terminal of your analog receiver. Now by keeping the receiver in standby, you will be able to tune and view analog channels from your analog receiver.

7) CONNECTING THE RECEIVER TO YOUR PC
To connect USB cable for transporting files using the USB port. Please check the USB connector before you connect.

4. HOW TO SET YOUR HARD DISK

Working your receiver, a Hard disk should be set in the rack.
Disk interface must be "IDE" type and size is usable between 80G Byte and 2T Byte.

A. Note that you must not plug in main power supply cord during these actions.
1) When you are setting the Hard disk, you have to set Jumper Setting as the MASTER. Jumper setting type differs from manufacturing of Hard disk, so please check the label outside the Hard disk.
2) Open the HDD rack door which is on the left of your receiver front.
3) Take out the empty HDD rack.
4) Connect your Hard disk to the inner part of HDD rack using data cable and power cable.
5) Fix up Hard disk using screws.
6) Push the HDD rack tightly with a snap and certainly close the door.
B. Note that you have to check these actions after plugging the main power.
1) When you set new Hard disk, you must format it
(**Main Menu ->Installation->Hard Disk->Hard Disk Format**).
2) You need to compare Hard Disk information in menu with real information on the Hard disk
(**Main Menu ->Installation->Hard Disk-> Hard Disk information**).

* Do not turn off the power and do not unplug the power cable while hard disk drive is still running. And hard disk drive is easily damaged by a shock. Be sure to back up all of your current files. The company is not responsible for any loss of data.
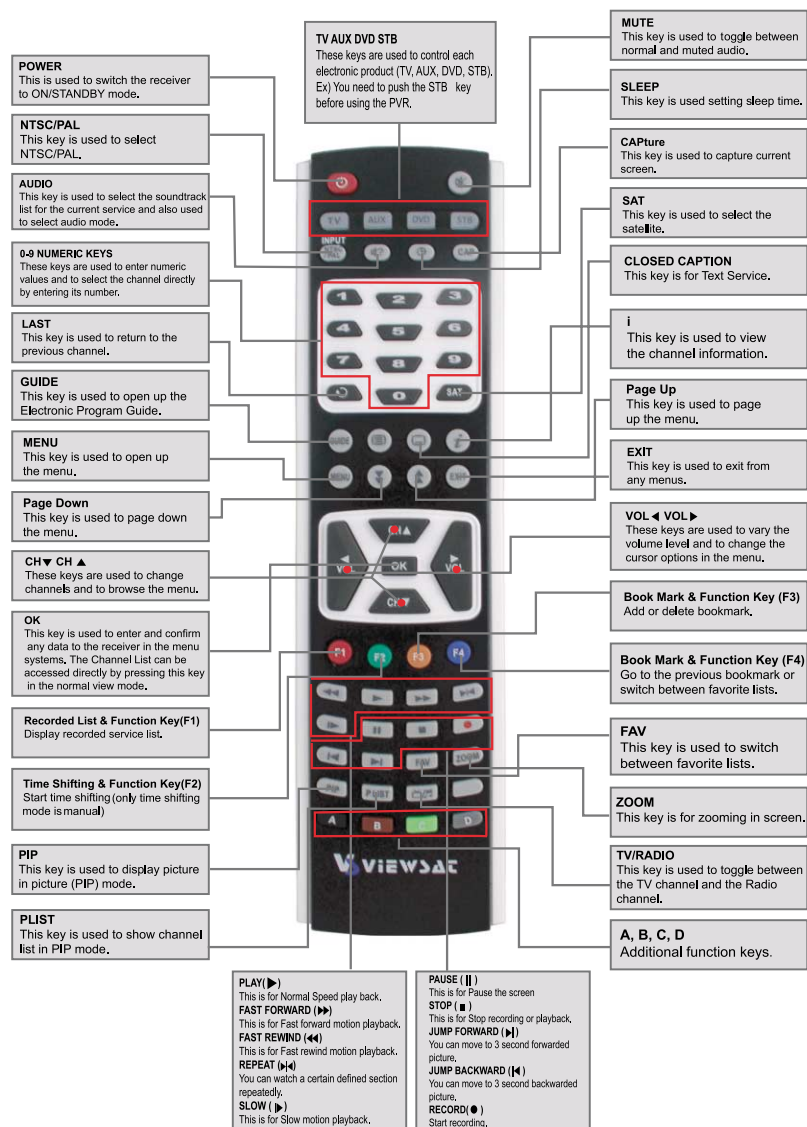
5. HARDWARE DESCRIPTION

5.A. FRONT FANEL

1) POWER : This key is used to turn the receiver on and off (stand by).

2) MENU : This key is used to open up the menu.

3) OK : This key is used to enter and confirm any data to the receiver in the menu systems.

4) CH : These keys are used to change the channels.

5) VOL : These keys are used to increase and decrease the volume level manually.

6) INFRARED SENSOR : This is to receive the IR commands from the RCU. Do not block the view of the sensor.

7) 7 SEGMENT DISPLAY : This segment display will show the current channel number. While the receiver is in stand by mode, the display will show the current time.

8) SMART CARD INTERFACE SLOT : To watch scrambled channels you should insert a smart card into Smart Card Interface issued the service provider whom you subscribes to. Therefore you can watch only a specific range of channels with entitlements in smart card. The smart card includes information to decipher parameters necessary for descrambling the program. Please note that the gold chip on the smart card should face down and inward when you insert it into Smart Card Interface(Option for CAS model only).

9) USB PORT : This is used to connect your receiver to computer through a USB cable.

10) HDD RACK : You can take out the HDD disk from the receiver using this and change the HDD disk. You can keep your recorded data outside the receiver.

5.B. REAR PANEL

1) DISH IN (A/B) : This port is to connect the coaxial cable from LNB of your Dish. The IF input is provided through this port and the input frequency range is 950~2150MHz. Also the voltage switching 13V and 18V is passed through this port.

2) LOOP OUT (A/B) : To enable the connection of an analog receiver, the receiver is provided with this port. Connect this port to LNB IN port of the other receiver via RF Cable.

3) IN FROM ANT/CATV : This is used to connect your local RF channels to your TV through Loop(Option).

4) OUT TO TV : This is used to connect your TV through RF cable(Option).

5) CH 3,4 : The switch select RF 3,4 channel number.

6) VIDEO (TV&VCR) : These RCA connectors are used to connect any external video (TV and VCR).

7) AUDIO 2 R/L : These RCA connectors are used to connect any external audio.

8) S-VIDEO : This is used to connect your TV through S-Video Cable.

9) S/PDIF DIGITAL OUTPUT : This port is for the connection to the external Hi-Fi system which has a optical S/PDIF input interface(Option).

10) SERIAL PORT : This is used to connect your receiver to computer through a serial cable. This port can be used for upgrading software.

11) COMPONENT(Y, Pb, Pr) : These RCA connectors are used to connect any external video.

12) POWER INPUT : This is to plug in the AC mains power cord. The input AC volts range is 95V to 240V, 50Hz/60Hz supply.

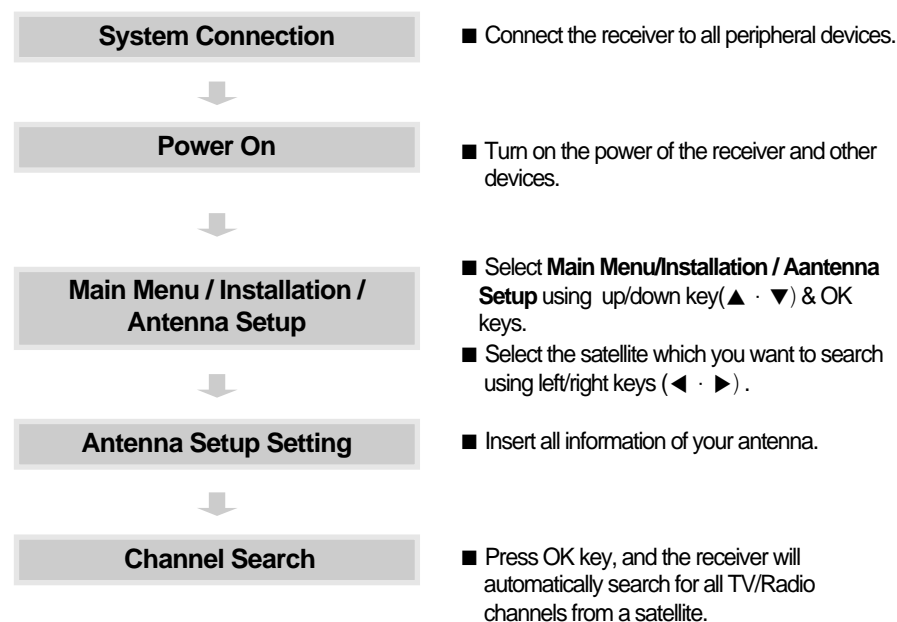**13) POWER SWITCH** : This is switch to turn on and off the AC main power.

5.C. REMOTE CONTROL UNIT

POWER
This is used to switch the receiver to ON/STANDBY mode.

NTSC/PAL
This key is used to select NTSC/PAL.

AUDIO
This key is used to select the soundtrack list for the current service and also used to select audio mode.

0-9 NUMERIC KEYS
These keys are used to enter numeric values and to select the channel directly by entering its number.

LAST
This key is used to return to the previous channel.

GUIDE
This key is used to open up the Electronic Program Guide.

MENU
This key is used to open up the menu.

Page Down
This key is used to page down the menu.

CH▼ CH ▲
These keys are used to change channels and to browse the menu.

OK
This key is used to enter and confirm any data to the receiver in the menu systems. The Channel List can be accessed directly by pressing this key in the normal view mode.

Recorded List & Function Key(F1)
Display recorded service list.

Time Shifting & Function Key(F2)
Start time shifting (only time shifting mode is manual)

PIP
This key is used to display picture in picture (PIP) mode.

PLIST
This key is used to show channel list in PIP mode.

TV AUX DVD STB
These keys are used to control each electronic product (TV, AUX, DVD, STB). Ex) You need to push the STB key before using the PVR.

MUTE
This key is used to toggle between normal and muted audio.

SLEEP
This key is used setting sleep time.

CAPture
This key is used to capture current screen.

SAT
This key is used to select the satellite.

CLOSED CAPTION
This key is for Text Service.

i
This key is used to view the channel information.

Page Up
This key is used to page up the menu.

EXIT
This key is used to exit from any menus.

VOL◄ VOL►
These keys are used to vary the volume level and to change the cursor options in the menu.

Book Mark & Function Key (F3)
Add or delete bookmark.

Book Mark & Function Key (F4)
Go to the previous bookmark or switch between favorite lists.

FAV
This key is used to switch between favorite lists.

ZOOM
This key is for zooming in screen.

TV/RADIO
This key is used to toggle between the TV channel and the Radio channel.

A, B, C, D
Additional function keys.

PLAY(►)
This is for Normal Speed play back.
FAST FORWARD (►►)
This is for Fast forward motion playback.
FAST REWIND (◄◄)
This is for Fast rewind motion playback.
REPEAT (►I◄)
You can watch a certain defined section repeatedly.
SLOW (►)
This is for Slow motion playback.

PAUSE (II)
This is for Pause the screen
STOP (■)
This is for Stop recording or playback.
JUMP FORWARD (►I)
You can move to 3 second forwarded picture.
JUMP BACKWARD (I◄)
You can move to 3 second backwarded picture.
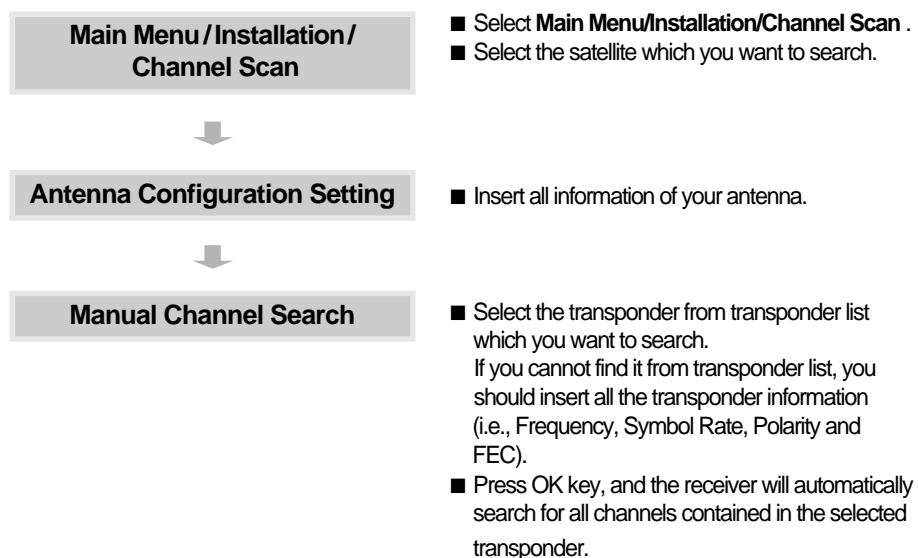**RECORD(●)**
Start recording.

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6. SYSTEM SET-UP

6.A. Automatic channel search for a satellite

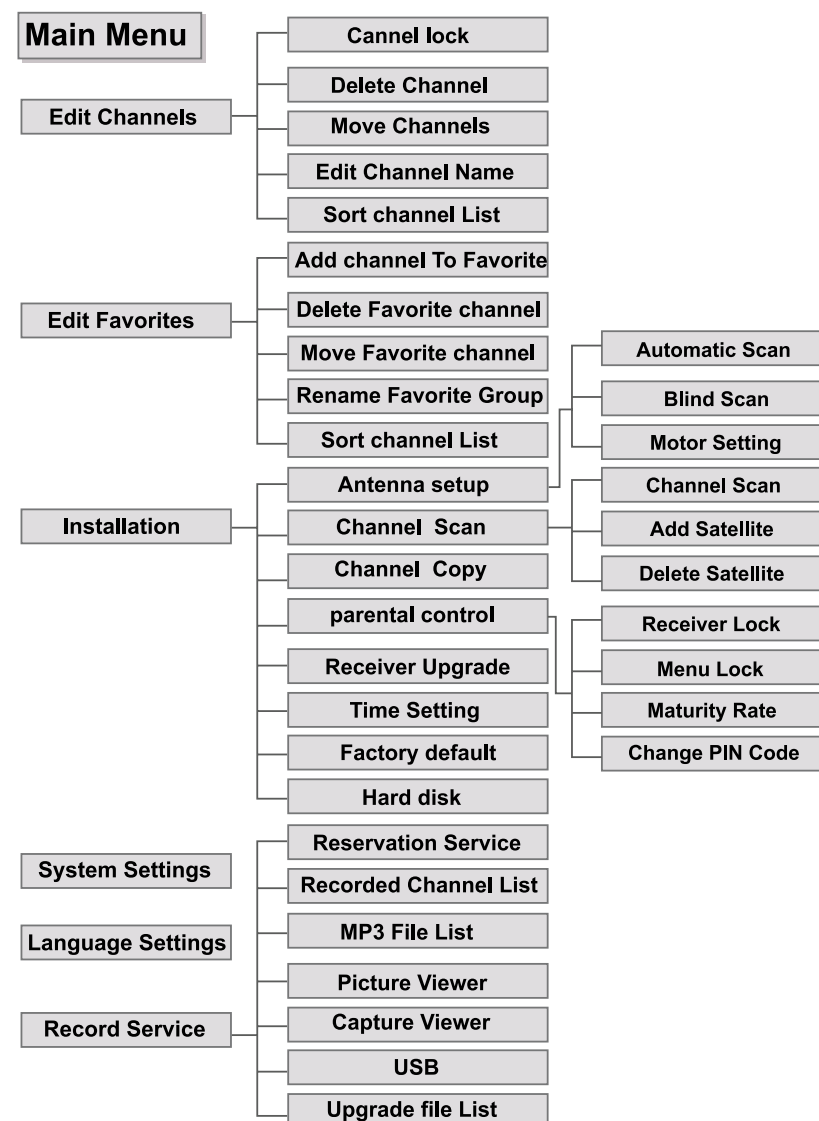*You can automatically detect and save all TV and Radio channels of a satellite as follows .*

System Connection	■ Connect the receiver to all peripheral devices.
⬇	
Power On	■ Turn on the power of the receiver and other devices.
⬇	
Main Menu / Installation / Antenna Setup	■ Select **Main Menu/Installation / Aantenna Setup** using up/down key(▲ · ▼) & OK keys. ■ Select the satellite which you want to search using left/right keys (◄ · ►) .
⬇	
Antenna Setup Setting	■ Insert all information of your antenna.
⬇	
Channel Search	■ Press OK key, and the receiver will automatically search for all TV/Radio channels from a satellite.

7. MENU STRUCTURE

6. B. Manual channel search for a transponder

You can automatically search and save all TV and Radio channels of a transponder as follows.

Main Menu / Installation / Channel Scan

■ Select **Main Menu/Installation/Channel Scan** .
■ Select the satellite which you want to search.

Antenna Configuration Setting

■ Insert all information of your antenna.

Manual Channel Search

■ Select the transponder from transponder list which you want to search.
  If you cannot find it from transponder list, you should insert all the transponder information (i.e., Frequency, Symbol Rate, Polarity and FEC).
■ Press OK key, and the receiver will automatically search for all channels contained in the selected transponder.

Main Menu

Edit Channels
- Cannel lock
- Delete Channel
- Move Channels
- Edit Channel Name
- Sort channel List

Edit Favorites
- Add channel To Favorite
- Delete Favorite channel
- Move Favorite channel
- Rename Favorite Group
- Sort channel List

Installation
- Antenna setup
- Channel Scan
- Channel Copy
- parental control
- Receiver Upgrade
- Time Setting
- Factory default
- Hard disk

(Antenna setup / Channel Scan)
- Automatic Scan
- Blind Scan
- Motor Setting
- Channel Scan
- Add Satellite
- Delete Satellite

(parental control)
- Receiver Lock
- Menu Lock
- Maturity Rate
- Change PIN Code

System Settings

Language Settings

Record Service
- Reservation Service
- Recorded Channel List
- MP3 File List
- Picture Viewer
- Capture Viewer
- USB
- Upgrade file List

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8. MENU OPERATION

The main menu is classified into several sub menus, which will carry out the various operations individually.

MAIN MENU

After installing your receiver with appropriate connectors, plug in the AC main power and turn on the receiver.

Press the MENU key of the RCU.
You will see the **Main Menu** like the screen on the left. You can move into the desired submenu using the up/down keys (▲ · ▼).
Press OK key to confirm your selection. If the **Main Menu** is locked, note that you should enter the PIN code in order to move into the corresponding submenu in case of **Edit Channels** menu, **Edit Favorites** menu and **Installation** menu. The factory default PIN code is "0000". Press the MENU key or EXIT key to return to previous menu.

8.1. EDIT CHANNELS

You can edit channels on various channel lists - channel lock, delete channel, move channel, edit the name of a channel, and sort the channel list. Select **Edit Channels** menu in **Main Menu** and you will be asked to enter your PIN code. You can find the **Edit Channels** screen on the left by entering it.

8.1.A. CHANNEL LOCK
Select the **Channel lock** icon using the left/right keys (◄ · ►).
Select the channel that you want to lock or unlock from the channel list using the up/down keys (▲ · ▼) and the page up/down keys (⬆ ⬇).
Press the OK key to confirm your selection. Also, you can use the ⌨ key to select either TV channel list or Radio channel list. Once the channel is locked, every time you try to watch the program, you will be asked to enter PIN code.
Press the MENU key or EXIT key to return to previous menu.

8.1.B. DELETE CHANNEL
Select the **Delete channel** icon using the left/right keys (◄ · ►).
Select the channel that you want to delete from the channel list using the up/down keys (▲ · ▼) and the page up/down keys (⬆ ⬇). Press the OK key to confirm your selection.
Also, you can use the ⌨ key to select either TV channel list or Radio channel list.
Press the MENU key or EXIT key to return to previous menu.

8.1.C. MOVE CHANNEL
Select the **Move channel** icon using the left/right keys(◄ · ►).
Select the channel that you want to move from the channel list using the up/down keys (▲ · ▼) and the page up/down keys (⬆ ⬇). Press OK key to confirm your selection.
Move it to the position where you want to place it using the up/down keys (▲ · ▼) and the page up/down keys (⬆ ⬇). Press the OK key to confirm.
Also, you can use the ⌨ key to select either TV channel list or Radio channel list.
Press the MENU key or EXIT key to return to previous menu.

8.1.D. EDIT CHANNEL NAME
Select the **Edit channel name** icon using the left/right keys (◄ · ►).
Select the channel that you want to edit from the channel list using the up/down keys (▲ · ▼) and the page up/down keys (⬆ ⬇). Also, you can use the ⌨ key to select either TV channel list or Radio channel list. Press OK key to confirm your selection.
Select the character, which you want to edit using the browse keys (◄ · ►, ▲ · ▼).
Press OK key to confirm. Save the name currently selected using the (F2) key.
Press the MENU key or EXIT key to return to previous menu.

8.1.E. SORT CHANNEL LIST
Select the **Sort channel list** icon using the left/right keys (◄ · ►). Press OK key to confirm.
Select the sort type which you want to sort using the up/down keys (▲ · ▼). Press the OK
key to confirm.
Also, you can use the 🔘 key to select either TV channel list or Radio channel list.
Press the MENU key or EXIT key to return to previous menu.

* CHANGE TUNER
When you want to change Tuner A/B, you can change it using the (F1) key.

8.2. EDIT FAVORITES
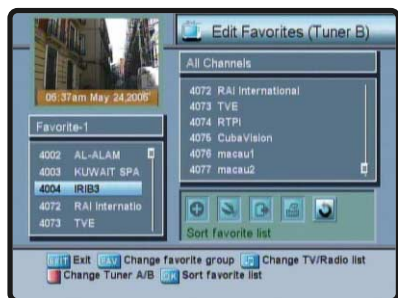
You can edit the favorite channel list, such as
add/delete channels or move its position, which
facilitates you to easily find your favorite channel
from the favorite channel list.
The favorite channel is classified into one of 8
favorite categories depending on its genre. Select
Edit Favorites menu in **Main Menu** and you will be
asked to enter your PIN code.
You can find the **Edit Favorites** screen on the left by
entering it.

8.2.A. ADD CHANNEL TO FAVORITE
You can choose TV channel list or Radio channel list in an alternative way by pressing the🔘
key on the RCU. By pressing FAV key on the RCU, you can choose your favorite channel
group out of 8 favorite groups.
Select the Add channel to favorite icon using the left/right keys (◄ · ►). Select a channel that
you want to add into the favorite channel list, using the up/down keys (▲ · ▼) and the page
up/down keys (▲ ▼).
Press the OK key, and the selected channel will be added to the favorite channel list. Press
the MENU key or EXIT key to return to previous menu.

8.2.B. DELETE FAVORITE CHANNEL
You can choose TV channel list or Radio channel list in an alternative way by pressing the 🔘 key
on the RCU. By pressing FAV key on the RCU, you can choose your favorite channel group out of
8 favorite groups. Select the Delete favorite channel icon using the left/right keys (◄ · ►).
Select a channel that you want to delete from the favorite channel list using the up/down keys (▲ ·
▼) and the page up/down keys (▲ ▼). Press the OK key, and the selected channel will disappear
from the favorite channel list. Press the MENU key or EXIT key to return to previous menu.

8.2.C. MOVE FAVORITE CHANNEL
You can choose TV channel list or Radio channel list in an alternative way by pressing the 🔘 key
on the RCU. By pressing FAV key on the RCU, you can choose your favorite channel group out of
8 favorite groups. Select the Move favorite channel icon using the left/right keys (◄ · ►).
Select a channel that you want to move using the up/down keys (▲ · ▼) and the page up/down
keys (▲ ▼). Press OK key to confirm your selection. Move it to the position where you want to place
it using the up/down keys (▲ · ▼) and the page up/down keys (▲ ▼). Press the OK key to confirm.
Press the MENU key or EXIT key to return to previous menu.

8.2.D. RENAME FAVORITE GROUP
You can choose TV channel list or Radio channel list in an alternative way by pressing the 🔘 key
on the RCU. By pressing FAV key on the RCU, you can choose your favorite channel group out of
8 favorite groups. Select the Rename favorite group icon using the left/right keys (◄ · ►).
Press the OK key and select the character, which you want to edit using the browse keys (◄ · ►,
▲ · ▼). Press the OK key to confirm. Save the character currently renamed using the (F2) key.
Press the MENU key or EXIT key to return to previous menu.

8.2.E. SORT CHANNEL LIST
You can choose TV Channel list or Radio channel list in an alternative way by pressing the 🔘 key
on the RCU. By pressing FAV key on the RCU, you can choose your favorite channel group out of
8 favorite groups. Select the Sort favorite list icon using the left/right keys (◄ · ►).
Press the OK key to confirm. Select the Sort type which you want to sort using the up/down keys
(▲ · ▼). Press the OK key to confirm. Press the MENU key or EXIT key to return to previous
menu.

* CHANGE TUNER
When you want to change Tuner A/B, you can change it using (F1) key.

8.3. INSTALLATION

Installation menu helps you to setup a variety of parameters necessary for receiving signal, add new service, upgrade the new software and reset the channel data.
Select **Installation** menu in **Main Menu** and you will be asked to enter your PIN code.
You can find the Installation screen on the left by entering it.

8.3.A. ANTENNA SETUP

Your receiver includes the preprogrammed information of transponders contained in various satellites. You can update the transponder list preprogrammed for a satellite by adding a new transponder to it or modifying the information of the existing transponder (Refer to the Channel Scan described in section 7.3.B).
Select **Antenna Setup** menu in **Installation** menu and the following screen will be displayed.

Select the desired satellite using the left/right keys(◄ · ►) and the up/down keys (▲ · ▼) and select Tuner A or B as you want to watch. Select the LNB Setting using the left/right keys(◄ · ►) then you can set LNB Power, LNB Type, LNB Freq., 22KHz with left/right keys(◄ · ►) at each field. And you can set Search option, DiSEqC 1.0 to the appropriate value using the left/right keys (◄ · ►) at each field.
Press the ⒡ key to select Drive motor menu and you can set Motor and USALS setting.
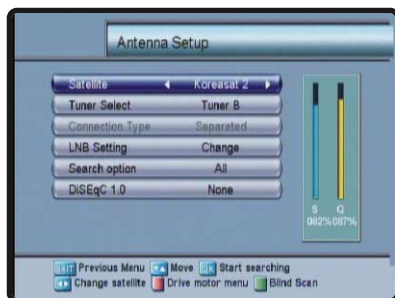
8.3.A.1. Automatic Scan
Check the signal strength. Press OK key to start the scan procedure. You can see the progressive status of channel searching.
Please note that the scan procedure may take a few minutes.
Press the MENU key or EXIT key to return to previous menu.

LNB Power	: Depending on the user's antenna LNB, you can supply either LNB power by setting ON or not by setting OFF. Normally set this to ON.
LNB Type	: You can select the LNB type.
LNB Freq.	: You can select the predefined LNB frequency or manually enter a specific frequency in MHz unit by pressing numeric keys.
22KHz	: In case you are using two antennas connected to a 22KHz tone switch box, you can supply either 22KHz by setting ON or off by setting OFF to select antenna.
Search option	: You can search all the free channels & scramble channels or only free channels or only scramble channels by setting the search option.
DiSEqC 1.0	: If you have DiSEqC 1.0 you can choose port by selecting port number. Otherwise, choose None.

8.3.A.2. Blind Scan
Blind Scan search the channel when you don't know the transponder information.
Press the ⒡ key to start the blind scan procedure. Please note that the scan procedure may take a few minutes. Press the MENU key or EXIT key to return to previous menu.

8.3.A.3. Motor Setting
If you have a DiSEqC 1.2 or 1.3 (USALS) motorized system, then you can take advantage of the Motor Setting functions available. Press the ⒡ key to drive your motor. Then adjust antenna direction using the left/right keys(◄ · ►) with checking the signal strength. Press the MENU key or EXIT key to return to previous menu.

TP Freq.	: You can select TP frequency of the selected Satellite.
Mode	: Mode 1.2(Motor) / Mode 1.3(USALS)
Move	: You can move East, West direction consecutively.
Move Fine	: You can move East, West direction by stages.
Limit	: Set the limit or go to reference.
Store Position	: Store the current position of the motor for the selected satellite.
Goto Position	: Move the motor to the stored position of the selected satellite.

| * 1.3(USALS) only.	
Sat Position	: It is the longitude of the selected satellite. It is set automatically as the selected satellite. And you can enter the position value using numeric keys.
Longitude	: It means the longitude of your location. You can select the value using the left/right keys(◄ · ►)or numeric keys.
Latitude	: It means the latitude of your location. You can select the value using the left/right keys(◄ · ►) or numeric keys.

8.3.B. CHANNEL SCAN

It will be more convenient to use Channel Scan procedure when you want to search channel for a specified transponder offered from the satellite.
As in **Antenna Setup**, **Channel Scan** also searches all channels broadcasted over a specific transponder using its predefined information.
You can add a new transponder if you cannot find it on the predefined transponder list.
Select **Channel Scan** menu in **Installation** menu, and the following screen will be displayed.
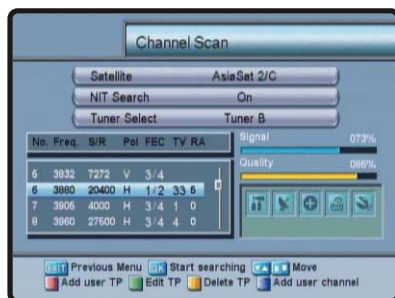
8.3.B.1 Channel Scan
Select the desired satellite using the left/ right keys (◄ · ►).
Select the **Antenna Configuration** icon using the browse keys(▲ · ▼ ,◄ · ►).
Select the LNB Setting using the left/right keys(◄ · ►) then you can set LNB Power, LNB Type, LNB Freq., 22KHz with left/right keys(◄ · ►) at each field. Press EXIT key and set Search Option, DiSEqC1.0 fields to the appropriate value using the left/right keys(◄ · ►) at each field.

Check the signal strength and press EXIT key.

Select the **Search/Edit TP** icon using the left/right keys(◄ · ►).
Press OK key and select the desired transponder using the up/down keys(▲ · ▼). Press OK key to start the scan procedure for selected transponder.
You can see the progressive status of channel searching.

If you cannot find the desired transponder from the transponder list, you can add it by inputting appropriate parameter values for a new transponder using the (F1) key.
When you want to change the parameter of an existent transponder, select the parameter using the (F2) key, change its value and press the EXIT key.
Correctly set various parameters.
When you want to delete newly added transponder, delete the transponder using the (F3) key. And you can add your own transponder using the (F4) key.
Press the MENU key or EXIT key to return to previous menu.

Freq.	: Input the frequency of the transponder you want to find manually.
S/R	: Input the symbol rate of the transponder you want to find.
Polarity	: Select the polarization of the transponder you want to find. In the case of horizontal, 18V and in the case vertical, 13V are output through LNB line.
FEC	: Select the FEC of the transponder you want to find. You can select the value of 1/2, 2/3, 3/4, 5/6, 7/8 or auto.

8.3.B.2. Add Satellite
You can add a new satellite. Select the **Add Satellite** icon using the left/right keys (◄ · ►) and press the OK key. Select the **Search/Edit TP** icon using the left/right keys(◄ · ►). Press the OK key and add a new transponder using the (F1) key. You should set various parameters of the transponder. The default name of the added satellites is "User SAT-No".

8.3.B.3. Delete Satellite
You can also delete the user satellite. Select the satellite that you want to delete from the satellite list. Select the **Delete Satellite** icon using the browse keys (▲ · ▼ ,◄ · ►). Press the OK key, and the selected satellite will disappear.

8.3.C. CHANNEL COPY

This function provide you with transferring channels from tuner A(B) to tuner B(A).
Select the **Direction**, **Tuner A >>> B** or **Tuner B >>> A** using the left/right keys(◄ · ►).
Then select the **Transfer** menu and press the OK key. If you copy channel A >>> B, you connect the same satellite of tuner A to tuner B. Then, It will work in Tuner B. Press the MENU key or EXIT key to return to previous menu.

8.3.D. PARENTAL CONTROL

This function prevents children or unauthorized people from watching programs.
Also you can change PIN code. Select **Parental Control** menu in **Installation** menu. The screen on the left will be displayed.
Press the MENU key or EXIT key to return to previous menu.

8.3.D.1. Receiver Lock
To lock receiver, select **Receiver lock** in the **Parental Control** menu and change it to On mode using the left/right keys (◄ · ►).

8.3.D.2. Menu Lock
To lock the **Main Menu**, select **Menu lock** in the **Parental Control** menu and change it to On mode using the left/right keys (◄ · ►).

8.3.D.3. Maturity Rate
Select **Maturity Rate** level with left/right keys (◄ · ►).

8.3.D.4. Change PIN Code
You can change your PIN code from factory default value "0000" as follows: Select **Change PIN Code** in the **Parental Control** menu using the up/down keys (▲ · ▼). Press OK key.
Then you will be asked for a new PIN code.
Once you enter a new PIN code, the receiver will ask you to enter it in again.
After you enter a new PIN code twice, the PIN code is changed permanently.
If you forget the PIN code, you have to contact the distributor to find out it.

8.3.E. RECEIVER UPGRADE

You can upgrade the software of this receiver through serial port when the new software is released.
Please contact the distributor for receiver upgrade.
Distributor supports you useful information and new software for the receiver.

8.3.F. TIME SETTING

You can adjust date and time in **Time Setting** menu. And you can switch on/off the receiver using this menu.
Select **Time Setting** menu in the **Installation** menu and the screen on the left will be displayed.
Press the MENU key or EXIT key to return to previous menu.

Mode	: Select manual or auto. In auto mode, the receiver is using the time code from satellite signal. In manual mode, user can set the time manually.
Time Adjustment	: Set the time offset from the UTC (GMT) (Auto mode only).
Current date	: The current date is indicated (manual mode only).
Current time	: The current time is indicated (manual mode only).
Summer Time	: Enable or disable the Summer Time(Auto mode only).
On time	: Set the time when the receiver will be automatically turned on.
Off time	: Set the time when the receiver will be automatically turned off.

8.3.G. FACTORY DEFAULT

This is to restore the factory set values in case the user has encountered some problems after changing any new values of channel data and others, which may be in error.
Select **Factory Default** menu in **Installation** menu and press OK key.
If you want to continue, select Yes cell.
The receiver will be reset to settings automatically.
Please note that the **Factory Default** procedure may take a few seconds.

8.3.H. HARD DISK

This menu helps you to know Hard disk information.
Select **Hard Disk** menu in **Installation** menu. And
the screen on the left will be displayed.
Press the MENU key or EXIT key to return to
previous menu.

Time Shifting	: Auto/Manual(Please refer to the 10.3 TIME SHIFT).
Over Time	: Overtime is a setting for the record reservation. A record will be extended by this setting. Over time doesn't work if another reservation would be influenced.
Quick Record Time	: You can set quick record time in advance.
Hard Disk Standby	: Time for standby state of Hard disk.
Hard Disk Information	: You can get information of Hard disk.
Hard Disk Format	: If you want Hard Disk Format, press OK key and enter PIN code. If you want to continue, select Yes cell.

8.4. SYSTEM SETTINGS
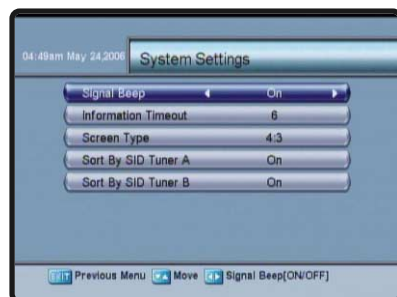
This menu helps you to set up Signal Beep,
Information Timeout, Screen Type, Sort By SID
Tuner A/B.
Select **System Settings** menu in **Main Menu**. And
the screen on the left will be displayed.

Signal Beep	: If this is On, receiver will beep out the signal status.
Information Timeout	: You can choose how long information is shown on the screen.
Screen Type	: You can choose display mode Auto, 16:9, 4:3 or Letter box.
Sort By SID Tuner A/B	: When you choose On, channel number is counted from programmed channel number in the receiver. When Off, counted from nature channel number at Tuner A(B).

Press the MENU key or EXIT key to return to previous menu.

8.5. LANGUAGE SETTINGS

This menu helps you to set up Menu Language,
Audio Language and Closed Caption.
Select **Language Settings** menu in **Main
Menu**. And the screen on the left will be displayed.
Press the MENU key or EXIT key to return to
previous menu.

Menu Language	: You can choose language of menu.
Primary Audio Language	: You can choose language of primary audio. If you watch the channel which support many languages, this language is showed first of all.
Secondary Audio Language	: You can choose language of secondary audio. If watching channel doesn't support primary audio language, this language is showed.
Closed Caption	: You can choose visibility of Closed Caption. On/Off.

8.6. RECORD SERVICE

Your receiver includes recording service and other additional functions.
Select **Record Service** menu in **Main Menu**, and the following screen will be displayed.

8.6.A. RESERVATION SERVICE

In this menu you can do reservation record or recording the current watching channel **(Please refer to the 11. HOW TO DO RESERVATION RECORD).**

8.6.B. RECORDED CHANNEL LIST

This menu shows the recorded channels and the currently recording channel on the Hard Disk. It is also shown the file size and duration time.
Enter the **Recorded Channel List** by using the OK key. Select a the recorded channel using the up/down keys (▲ · ▼) key and push the OK key. Then playback starts. In the Recorded Channel list, you can edit the recorded channels using the (F1) key, delete the recorded channels using the (F2) key, lock/unlock the recorded channels using the (F3) key. And you can make folders using the (F4) key.
You can sort the recorded channels using [A] key. You can move to Mp3 File List using [B] key. And you can select/ unselect file for move using [C] key.

8.6.C. MP3 FILE LIST

You can enjoy listening to music in this function.
Select **MP3 File List** menu in **Record Service** menu and the MP3 Player screen on the left will be displayed.
You can select music files to use up/down keys (▲ · ▼) and OK Key. And then press the [▶] key to play the music.

When you want to play the music, the player will work if you press OK key. If you want to display the information window of MP3 files, press (i) key. And you can play the jump backward and jump forward using [◄◄], [►►] keys. Also you can jump to next and previous song using [I◄], [►I] keys.

8.6.D. PICTURE VIEWER

You can see the picture of JPG file format using this function. The maximum image size is (720*480) pixels that you can use.
Select **Capture Viewer** menu in **Record Service** menu. And you can select the JPG file using the up/down keys(▲ · ▼) and press the OK key. The (F2) key is for delete files and the (F1) key is for rename files.
If you try to see the pictures over the maximum size or other format files with the exception of JPG format, the error message called "File Load Error" will be displayed.

8.6.E. CAPTURE VIEWER

You can do capture screen, and you can see the pictures that were captured.
Select **Capture Viewer** menu in **Record Service** menu. And you can select files using the up/down keys (▲ · ▼) and OK key.
If you want to do capture screen when you watch a program full screen, press the (CAP) key.

8.6.F. USB

You can transmit files(mp3, jpg, bmp and AV files etc.) between receiver and your computer using this function.
You have to connect USB cable to USB port and install driver and USB application in your computer before you select **USB** menu in **Record Service** menu. And then if your connection is successful, you can see the USB CONNECTED message in your computer and you can transmit files
(Please refer to the 12.APPLICATIONS For TRANSMISSION).
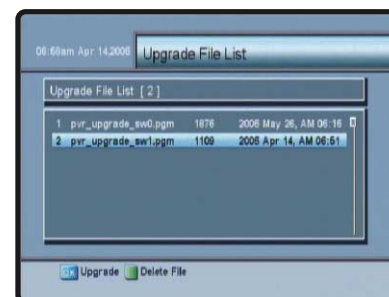
8.6.G. UPGRADE FILE LIST

You can upgrade the receiver using this function such as main s/w.
You have to bring the files using the USB connector from your computer for upgrading.

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9. ADDITIONAL FUNCTION

9.1. CHANNEL GUIDE

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Press GUIDE key, and the screen on the left will be displayed.
It will give the titles of the current and next programs on different channels.
The information may include : current time /channel name, name of the current and next program, the start and total time of the current program, the start and total time of the next program.
When you want to know more key information, press ▬ key (help key).

If you press GUIDE key once more, you can see the other channel guide information. Program information will be available only when it is included in the transmission. With ⓘ key you can get more information about a marked event, if available.
When you press ⟳ key, you can alternatively select TV or Radio channel guide. In the Channel Guide you can do reservation record and reminder for each event.
Press GUIDE key, MENU key or EXIT key to return to TV or previous menu
(Please refer to the 11. HOW TO DO RESERVATION RECORD).

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9.2. CHANNEL LIST

This menu helps you to easily select the channel that you want to watch.
Press OK key, and the screen on the left will be displayed.
You can get the information of channel number, channel name, and whether the program is scrambled or locked.
To watch a specific channel, first select it by pressing the up/down keys (▲ · ▼) and the page up/down keys (⬆ ⬇). Then press OK key.
This enables you to move into that specific channel.
If you press OK key again, the menu disappears. When you press ⟳ key, you can alternatively select TV or Radio channel list. When press ⒡₂ key, you can see all channel list or FTA channel or favorite channel list.
Press the OK key, the MENU key or EXIT key to return to TV or previous menu.

9.3. AUDIO LANGUAGE

Press ⟨◁?⟩ key. Select the audio mode which you want, using the left/right keys (◀ · ▶).
Some programs are broadcasted with one or more alternative language soundtracks.
You can select the preferred audio language for soundtrack using the up/down keys (▲ · ▼).
You leave the menu with EXIT key or ⟨◁?⟩ key.

9.4. SLEEP MODE

Press ⏲ key to start this function and select off time of your receiver by pushing ⏲ key several times. You can select reservation off time by 10, 20, 30, 40, 50 and 60 minutes.

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9.5. ZOOM FUNCTION

You can zoom in screen to use with ⓩⓞⓞⓜ key, and press the OK key. If you want to move zoom box, you can move it using the browse keys (◄ · ►,▲ · ▼). Also, you can change the size of zoom box using the page up/down keys (▲ ▼).
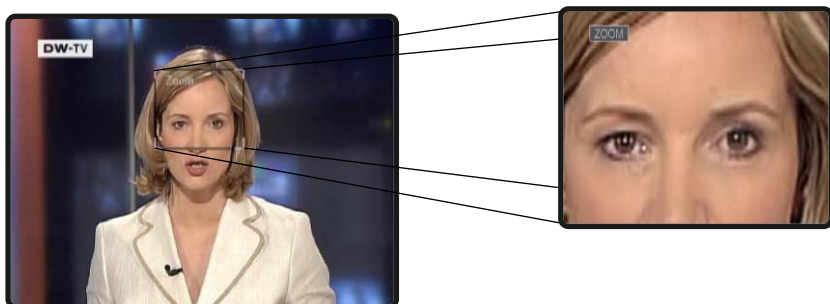

9.6. PIP(Picture in Picture)

You can watch two channels at the same time. If you want to use this function, press ⓟⓘⓟkey.

You can change PIP channel through the PIP channel List. If you want to use it, press ⓟⓛⓘⓢⓣ key. Then, the screen on the left will be displayed. You can move to the channel of the same TP which you want to watch using up/down keys (▲ · ▼) and OK key.
Main screen can be changed with PIP screen using the ▄▄ key, And PIP screen move clockwise when you press ▄▄ key.

9.7. PREVIOUS CHANNELS

You can see previous 8 channel list. If you want to use it, press ◎key.
Select the channel which you want to watch using up/down keys (▲ · ▼) and press OK key. Current channel will be changed with the channel you selected.

10. HOW TO DO RECORD & PLAYBACK

10.1. RECORD
There are 3 record ways, Quick Record, in the **Channel Guide** and in the **Record Service** menu.

a) Quick Record
Push the 📷 key and the current watching channel will be recorded. If you want to stop the record, push the 📷 key. If the channel that you want to record has EPG data, it records the EPG's events.

b) Channel Guide
After moving to the event that you want to record in the **Channel Guide**, push the 📷 key for the reservation record.

c) Record Service
If you move to **Main Menu**->**Record Service** menu you can input Date and Time for the reservation record.

 * Please refer to the **11. HOW TO DO RESERVATION RECORD** if you want to know how to record in the **Channel Guide** & **Record Service** menu.
 * In case the reservation record time is reached during recording a channel, it stops the recording and asks if you want to start the reservation record.
 * A record will be extended by the over time setting. Over time does not work if another reservation would be influenced.

10.2. PLAYBACK
  1. If you push ⒡ key, the **Recorded Channels List** appears.
  2. Select the channel with which you want Playback using up/down keys (▲,▼) and OK key.
  3. If you want escape **Recorded Channel List**, push EXIT key or after selecting a playback
   event push OK key.
 * Please refer to the **8.6.B. RECORDED CHANNEL LIST**

10.2.A. Playback Menu
You can see **Playback** Menu pushing the 📷 key during playback.
In the **Playback** Menu, You can see Progress Time, Process percentage, function button, Book Mark, Repeat status.

10.2.B. BOOKMARK
Easily you can move and watch the point that you want again using Book Mark in the **Playback** Menu.

1) Push F3 key for set-up in the **Playback** Menu.
2) Using F4 key, you can move to the Book Mark which you want.
* After moving to the Book Mark and pushing key within 2 seconds, the book mark setting is cancelled.
3) In **Playback** Menu if you push numeric keys for the specified time you can jump that point. For example if you push "012530" you will see 1:25:30 point of the playback.

10.2.C. REPEAT
Using repeat, you can watch a certain defined section repeatedly.
1) In **Playback** , push 📷 key.
2) Set the section using left/right keys (◄,►).
3) Set repeat up pushing 📷 key.
* For canceling repeat, push 📷 key once more.

### 10.2.D. FAST FORWARD
This is fast forward motion playback. Please also see 9.2.H. Jump Forward.
1) In **Playback**, push 📷 key.
2) In order to increase playback speed, push 📷 key several times.
3) For returning to normal speed, push 📷 key.
* Forward playback speed can be increased by 4steps.

10.2.E. FAST REWIND
This is for fast rewind motion playback. Please also see 9.2.I. Jump Backward.
1) In **Playback**, push 📷 key.
2) In order to increase rewind playback speed, push 📷 key several times.
3) For returning to normal speed, push 📷 key.
* Rewind playback speed can be increased by 5 steps.

10.2.F. SLOW MOTION
This is for slow motion playback.
1) In playback, push ▶▶ key.
2) For returning to normal speed, push ▶ key.
* Slow playback speed can be increased by 4 steps.

10.2.G. PAUSE
Pausing the picture, push ▶▶ key.

10.2.H. JUMP FORWARD
If you push ▶ or ▶▶ key during playback, you enter the **Playback** Menu. There you can jump fast forward using the ▶▶ key. You will see progress time.

10.2.I. JUMP BACKWARD
If you push ▶ or ◀◀ key during playback, you enter the **Playback** Menu. There you can jump fast backward using the ◀◀ key. You will see progress time.

10.3. TIME SHIFT
If you want to leave for a while for watching a channel, Time Shifting function is very useful function.
If you set up Time Shifting and return to your place, you can watch the channel from the picture that was shown when you left.

1) For watching live channel, push (F2) key for Time Shifting set-up(only manual mode).
2) Pause the picture pushing ▶▶ key.
3) Push ▶ key for playback.
4) If you want slow motion playback, push ▶▶ key.

* If you want to return to live channel, push ■ key. But Time Shifting function is still running until you change the channel. If you push ▶ key at that channel, you can use Time shifting again.
* You can choose Time Shifting function Auto or Manual in the **Main Menu-> Installation->Hard Disk** menu. In case of auto mode time shifting is always activated.
 If you change the channel, Time shifting restarts without pushing any key. In case of manual mode time shifting is activated after pushing (F2) key.
* The Time Shifting channels are not recorded into Hard Disk. If you want to record something and make Time Shift, you should push ● key and (F2) key. You can see Time-Shifting status. Push the ◀◀ key, you can watch the event from a selected point, while program is still recording.

11. HOW TO DO RESERVATION RECORD

There are 2 ways for Reservation Record. One is the way to set the date, time and duration of the event you want to record in the Record Service menu. The other is the way to set program event that you want to record in the Channel Guide.
For the reservation record, you must have synchronized the reservation's time and your local time, which is very important
(Please refer to the 8.3.F. TIME SETTING).

11.1. RESERVATION RECORD IN RECORD SERVICE MENU

In this menu you can do reservation record or record the current channel.
Select **Reservation Service** menu in **Record Service** menu. At Record Type, you can see three types.
Those are Reservation, Recording1, Recording2. If you want reservation record, choose the Reservation and set other fields to the appropriate value. Change the File Name if you want. And then Push OK key at Save. (F4) key shows all the reserved programs in the Reservation Table.

Recording1, Recording2 can be used during current recording. If you push the ● key during current recording , you can see the above screen. At first recording time, you can control Recording1 function. At second recording time, you can control Recording2 function. You can control the Duration submenu and see the recording state.

Record Type	: Select Reservation/Recording1/Recording2.
Channel	: Select the channel with OK key.
Mode	: Select One Time/Every Day/Weekly (Only activated if you selected Reservation Record).
Date	: Recording the Current channel, the Current date is shown. In the Reservation mode, you can enter the date of reservation record.
Start Time	: In the Reservation mode, you can enter the Start Time of reservation record.
End Time	: In the Reservation mode, you can enter the End Time of reservation record.
Duration	: Enter the recording duration.
File Name	: Name the recording file. If you don't name it, the channel name becomes the file name.
Save	: You have to save every time when you changed something.

In the **Reservation Table**, you can delete the reserved programs selectively or all of them. In case the date and time which you want to do reservation record is doubled with the registered date and time of **Reservation Table**, it can't be registered into the **Reservation Table**.

11.2. RESERVATION RECORD IN CHANNEL GUIDE MENU
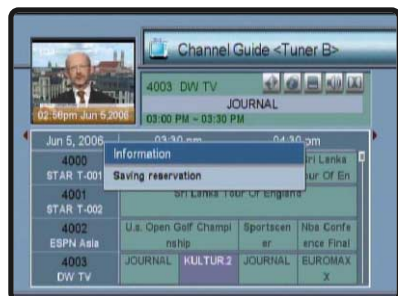
Press GUIDE key, and the screen on the left will be displayed.
It will give the titles of the current and next programs on different channels, if their information is transmitted from the provider.
In the **Channel Guide** you can do reservation record for each event.
If you have an event to the reservation record, you can do it pushing (F1) key after moving to that event.

The reservation is canceled pushing (F1) key one more time. If you want to see the reserved programs, push (F2) key and reservation table shows them.
Press the MENU key or EXIT key to return to previous menu.
* In case you have three events at once, only two can be recorded.
* When the event that you want to do reservation record is registered into the reservation table, you can't reserve it.

12. APPLICATIONS FOR TRANSMISSION

To upload or download MP3, JPEG, CAPTURE Files and Main S/W to or from your computer, you need to download drivers and programs.
That will be found at website **http://www.viewsatusa.com**.

12.1. HOW TO INSTALL DRIVERS & PROGRAMS

Connect the USB cable between receiver and computer, and select **USB** menu in **Record Service** menu. Then your computer will find the New Hardware, you can see window that looks like left picture.
Choose "Install the software automatically" and click "Next".

Your computer will be starting to find driver from your downloaded files.
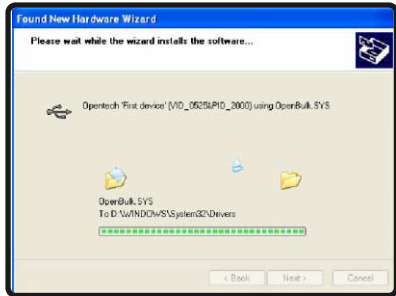
After that your computer will install driver in your computer.
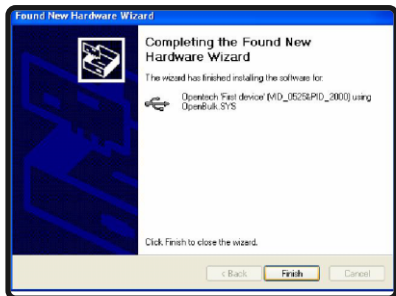
Click "Finish"when your computer has finished the driver installation.

12.2. HOW TO USE TRANSMISSION PROGRAM
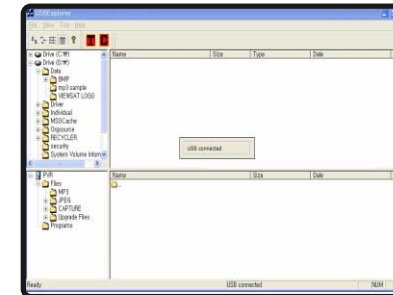
If you finish the installation completely, you can start transmission program.
If you can see the message of USB Connected, that means connection complete for starting program.
If your connection is not complete, you can see the message of USB Disconnected.
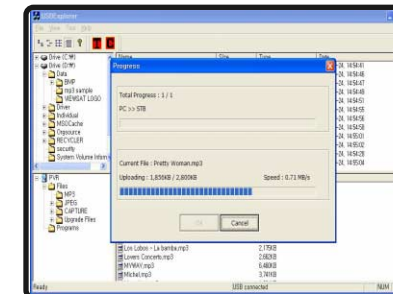
When connection is complete, you can see the four folders under the "Files" folder and the "Programs" folder. Four folders are"MP3","PICTURE", "CAPTURE" and "Upgrade Files".
"MP3" folder is for MP3 files and "PICTURE" folder is for the "PICTURE Viewer"."CAPTURE" folder is for the "Capture Viewer" and "Upgrade Files" folder is for software.
"Progams" folder is for recorded files. If you want to copy file, just drag & drop.
Click "OK" when you finished copying files.

13. TROUBLE SHOOTING

Problem	Solution
About the Receiver	
Does not display LED on the front panel or the receiver has no power.	- Connect the power cord to the power outlet properly. - Check if the receiver is in standby mode.
No pictures on the screen	- Check if the video output port is firmly connected to the TV. - Check if you have selected the correct channel or video output on your TV.
No sound	- Connect the audio cords properly. - Check the volume level of the TV. - Press "MUTE" key.
Remote Control does not operate	- Point remote control directly towards the receiver. - Check and replace Alkaline batteries.
Poor picture quality	- Check the signal strength in the Antenna Setup, Channel Scan menu. If this is low, try to adjust the alignment of your dish.
On - Screen Error Messages	
Searching Signal	- Connect the antenna cable properly. - Check the signal strength in the Antenna Setup menu.
Unrecognized smartcard Please insert your smartcard	- Check the smartcard. - Insert the smartcard.

14. TECHNICAL SPECIFICATIONS

Power Supply

Type	: SMPS
Input Voltage	: AC 95V~240v 50Hz / 60Hz
Fuse Rating	: 250V/T2A

Tuner

Input Frequency	: 950～2150MHz
Input Signal Level	: -65～-25dBm
Input Impedance	: 75Ω Unbalanced
Connector Type	: 'F' Type Female
LNB Power Supply	: 13V/18V, Max 500mA with Short Circuit Protection
22KHz Tone	: Frequency 22± 4KHz, Amplitude 0.6±0.2Vpp
DiSEqC	: 1.0 & 1.2 Usals(1.3) Compatible
Channel Selection	: PLL Frequency Synthesizer

Demodulator

Type	: QPSK Demodulation(DVB-S)
Symbol Rate	: 1～45 MS/s
Inner FEC	: Viterbi Convolutional Coding
Rate	: 1/2, 2/3, 3/4, 5/6, 7/8
Outer FEC	: Reed Solomon Coding(204,188) T=8

Video Decoder

System Decoding	: MPEG-2 ISO/IEC 13818-2
Profile and Level	: MPEG-2 MP@ML
Data Rate	: 1～15 MB/s
Video Formats	: 4:3(Normal) & 16:9(Widescreen)

Audio Decoder

System Decoding	: MPEG-1 ISO/IEC 11172-3 Layer I & II
Audio Mode	: Mono, Dual, Stereo, Joint Stero
Sampling Frequency	: 32, 44.1, 48 KHz

Audio/Video Output

Audio Output	:4 RCA Cinch
Video Output	:2 RCA Cinch
Digital Audio	:1 S/PDIF(Optical)
S-Video	:1 S-VIDEO
COMPONENT	:3 RCA Cinch

RF Modulator

Modulator Output	: CH3~4
Video Type	: NTSC
Output Connector	: "F" Type Female
Ant. IN Connector	: "F" Type Female

Serial Data Interface

Signal	: RS-232, Max. 115200 bps
Connector Type	: 9 Pin D-Sub(male)

Memory

Flash	:4M Byte
SDRAM	:40M Byte(System: 16MB*2, A/V:8MB)
EEPROM	:16K Bit

Front

7 Keys
4 Digits (7 Segments) Display

USB Interface

USB	:USB port
Data rate	:25M bps ~ 400M bps

HDD

Capacity	:80G Byte ~ 2T Byte
Interface Type	:IDE Type

Demultiplexer

ISO/IEC 13818-1 Compliant

Physical Specification

Operating Temperature	:+5°C to +40°C
Net Weight	:3.7 Kg
Dimensions	:420(W) x 320(D) x 65(H)mm

15. PRORAMING THE REMOTE CONTROL

2. Enter 3-digit code, **8 8 8**.
3. Press and release the STB component key, then the LED blinks three times.

Infinity	012
JBL	012

Programing The Remote Control

There are two ways to program the remote control ; Automatic Code Search or Direct Entry

Using Automatic Code Search

1. Turn on the component you want to control (**TV, VCR** or **DVD**)

2. Press and hold the component key you want to program. Holding the component key until the LED on the remote control turns on, then release the key.

3. Point the remote at the component, 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 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.

Using Direct Entry Method

1. Turn on the component you want to control (**TV, VCR** or **DVD**)

2. Locate the enclosed Code List. Find your brand of the component you want to control.

3. Press and hold the component key you want to program. Holding the component key 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 response, repeat these steps using the next code listed for your brand until the component responds to the remote control command.

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 (for example), you will always be able to change the volume to the level you want, without having to adjust it on multiple devices.

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

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

STB Power Macro

It realizes users to switch on/off both STB & TV simultaneously, to relieve extra efforts with adjusting device key on the RCU.

If you want to lock the power macro function ;
1. Press and hold the STB component key until the LED on the remote control turns on.
2. Enter 3-digit code, **8 8 8**.
3. Press and release the STB component key, then the LED blinks three times.

Unlocking power macro function ;
If you want to unlock the power macro function ;
1. Press and hold the STB component key until the LED on the remote control turns on.

Brand List for TV

A Mark	151
Abex	130
Admiral	013 131 166
Aiko	009
Akai	014
Alleron	056
Amtron	030
Anam National	015 030
AOC	016 017 018 019 140
	141 169
Apex	181
Audiovox	030
Belcor	016
Bell & Howell	013 042 058
Broksonic	016 182
Brokwood	016
Candle	016
Carver	012
Celebrity	014
Citizen	009 010 016 018 030
	042 096 139 173
Colortyme	011 016 018
Concerto	016
Contec / Cony	005 006 007 030
Coronado	151
Craig	030
Crosley	012
Crown	030
Curtis Mathes	008 012 016 018 042
	045 058 096 139 172
	173
Daewoo	000 001 009 016 017
	018 116 139 151 167
Daytron	016 018 139
Dimensia	045
Dumont	016 125
Dynatech	016
Electroband	014
Electrohome	002 003 014 015 016
	018
Emerson	004 005 016 018 020
	021 022 023 024 025
	026 027 028 029 030
	031 032 033 034 035
	036 037 038 039 042
	056 058 114 139 142
	143 151 167 178
Envision	016 018
Fisher	042 057 058 059 144
Fujitsu	056
Funai	030 056
GE	003 015 016 018 045
	060 061 062 078 132
	147 148 149 174
Gilbralter	016
Grundy	056
Hallmark	016 018
Hitachi	005 006 007 016 018
	067 068 069 100 101
	102 103 104 105 106
	107 108 109 119 123
	124 143 151 161 171
	179

JC Penney	003 006 010 016 017
	018 041 045 055 060
	061 064 078 095 096
	117 130 132 139
Jensen	016 018
JVC	005 006 007 046 047
	048 061 068 128 129
	133 158 178
Kawasho	014 016 018
KEC	151
Kenwood	002 016 018
Kloss Novabeam	030 049 065
KMC	151
KTV	030 066 139 142
LG(Goldstar)	002 005 016 017 018
	055 063 064 120 127
	130 139 151
Logik	013
Luxman	016 018
LXI	012 018 040 041 042
	045 058 132
Magnavox	002 010 012 016 018
	043 044 049 050 065
	079 110 111 112 151
Majestic	013
Marantz	012 016 018 051 067
Megatron	018 067
Memorex	013 017 018 042 056
	058
MGA	002 003 016 017 018
	052 053 059
Midland	130
Mitsubishi	002 003 016 017 018
	052 053 054 059 115
Montgomery Ward	013
Motorola	015 131
MTC	016 017 018 096
Multitech	030
Multivision	076
NAD	018 040 041 134 171
NEC	011 015 016 017 018
Nikko	009 018
Onwa	030
Optimus	134 171
Optonica	075 131
Orion	032 168
Panasonic	015 061 138 152 175
Philco	002 005 010 012 015
	016 017 018 043 049
	050 065 151
Philips	002 005 010 012 015
	016 043 049 065 070
	077 078 079 151
Pilot	016
Pioneer	016 018 071 072 134
	143 171
Portland	009 016 017 018 139
	151
Price Club	096
Prism	061
Proscan	045 132
Proton	005 016 018 073
Pulsar	016
Quasar	015 061 066 074 175
Radio Shack	042 058

Radio Shack / Realistic	005 016 018 030 042
	045 058 075 130 139
RCA	002 015 016 017 018
	019 045 090 091 092
	093 094 099 118 132
	135 136 143 153 162
	167 172 176 180
Realistic	042 058
Runco	125
Sampo	016 018 130 139
Samsung	000 002 005 008 016
	017 018 095 096 097
	130 139 151 163
Sansui	168
Sanyo	016 042 053 057 058
	085 098 137 144
Scott	005 016 018 021 030
	032 056
Sears	002 006 007 012 016
	018 040 041 042 045
	047 056 057 058 059
	086 087 132 144 151
	160
Sharp	005 016 018 023 026
	075 080 088 089 113
	131 139 151
Shogun	016
Signature	013
Sony	014 150 157 159 164
	170 177
Soundesign	010 016 018 030 056
SSS	016
Starlite	030
Sylvania	002 010 012 016 018
	043 044 049 050 065
	079 081 146
Symphonic	020 030 056 160
Tandy	131
Tashiko	041
Tatung	015
Technics	061
Techwood	016 018 061
Teknika	005 006 007 009 010
	012 013 016 017 018
	030 044 056 096 138
	139 151 175
Telecaption	082
Tera	016
Thomson	154
TMK	016
Toshiba	040 041 042 058 082
	083 086 096 145 146
	155 156 183
Totevision	139
Universal	060 078
Vidikron	012
Vidtech	016
Wards	002 012 013 016 017
	018 020 021 043 044
	045 049 056 060 065
	075 078 079 084 151
Yamaha	002 016 017 018
Zenith	013 016 121 122 125
	126 165

Brand List for AUX

- PVR/DVR -

AT&T	009
PANASONIC	009
PHILIPS	001 002 004
RCA	010
Sonic Blue	009
SONY	003 006
TIVO	002 003 004 005 006
TOSHIBA	005

- CD -

ADC	013
AIWA	018
AKAI	014
EMERSON	019
FISHER	020
GE	016
HITACHI	021
JVC	022
KENWOOD	023
MARANTZ	025
MITSUBISHI	017
NAKAMICHI	034
NEC	024
ONKYO	026
PANASONIC	027
PIONEER	028
RCA	029
SEARS	015
SHERWOOD	035
SONY	030
TECHNICS	031
TOSHIBA	033
YAMAHA	032

- Receiver / AMP / Tuner -

AIWA	058 059 060 061 062 072 078
CARVER	058
Harman Kardon	058 071
JBL	071
JVC	063
KENWOOD	064
LINN	058
MAGNAVOX	058
MARANTZ	058
ONKYO	073
PANASONIC	074 075
PHILIPS	058
PIONEER	070
RCA	065
SANSUI	058
SHERWOOD	077
SONY	066 067 076
TECHNICS	074 075
WARDS	058 070
YAMAHA	068 069 070
Cool Sat	007
ECHOSTAR	000
PANSAT	008
Replay TV	009

- CABLE -

ABC	046 052
Colour Voice	039 054
DISHNET	046
ECHOSTAR	051
GE	042 047 049
GEMINI	046
General Instrument	047
HITACHI	047
JERROLD	046 047
MOTOROLA	046 051
PHILIPS	040 054
PIONEER	048 055
PROSCAN	043 048 050
RCA	044 051
SAMSUNG	055
Scientific Atlanta	036 038 041 045 052 053 056
SIGNATURE	048
STARCOM	046
STARGATE	046
TOCOM	053
ZENITH	037 057

Brand List for DVD

Aiwa	000 019
Allegro	099 100
Alpine	001
Apex	004 006 008 009
Blaupunkt	003 041
Bose	093
Broksonic	007 101
Clarion	022
Classic	023
Daewoo	010
Denon	005 011 036 037
Emerson	038 039
Fisher	040
Funai	039
GE	002 041 048
Go Video	094 100
GPX	049
Hitachi	018 042 043 050 051
JVC	014 029 032 095
Kenwood	033
Konka	017 024
Magnavox	026 034
Memorex	035
Mintek	044
Mitsubishi	015
NAD	038
Nakamichi	045
Norcent	046 047
Onkyo	052
Oritron	081
Panasonic	025 053 054 055 059 060 061
Philips	026 031 056
Pioneer	016 057 058 077 078
Proscan	002 079
Qwestar	080 081
RCA	002 003 067 092 096
Sampo	068
Samsung	069 070 071 097
Sansui	072
Sanyo	020 073 098
Sharp	074 075
Sherwood	076
Sony	012 021 027 062 063 064 065 066
Sylvania	039
Teac	084
Technics	085
Techwood	086
Toshiba	013 028 087 088 089 102
Yamaha	082 090 091
Zenith	030 083 099

16. WARRANTY CARD

Viewtech Inc. Return Merchandise Authorization Form

In order to return defective product for repair or replacement, this form must be filled out completely and included with your return. Any product returned without this completed form will be shipped back at the customer's expense.

RMA# _____ *You will need to call Tech Support to get this number.

Name _____
Address _____
_____
_____

Phone _____

E-mail _____

Item Returned _____ Purchase Date _____

Product Serial # (s) _____

Company Purchased From _____
Address _____
Website Purchased From _____

Conditions and terms:
- The Viewsat warranty is valid for a period of one year from the date of purchase.
- Product must have official Viewsat factory firmware only (No 3rd Party firmware). Copy of receipt showing date of purchase and company purchased from must be included with return.
- Proper packaging must be used to prevent further damage to unit.
- If product is damaged due to user error, warranty is void. Damage caused by lightening, water, fire, acts of war, public disturbances, incorrect ventilation or any other cause beyond the control of the distributor are not covered under warranty.
- Products where label bearing the serial number has been removed, defaced, or is illegible are not covered under warranty.
- Illegal copies, counterfeits, or clones of our product will not be covered under warranty and product may be seized and used as evidence in legal action against seller.
- If product does not meet warranty requirements, customer agrees to pay $25 to have product shipped back.
- If Viewtech agrees to repair a unit that is not covered under warranty, there will be a $50 service charge.

Customer must sign here. _____

By signing, customer agrees to all of the above terms and conditions.