USER'S MANUAL

TWIN TUNER
PERSONAL VIDEO RECORDER

SCHWAIGER   DSR 5016DR   CH 9

Please read this user's manual carefully.
The menu structure and specification can be changed without notice.

SCHWAIGER

Contents

General Information

➡ **Safety and Precautions**

Thank you for purchasing the digital satellite receiver.

For your safety and proper operation, please take time reading this manual fully before installing and operating the receiver.

We *hope you will be able to take advantage of the numerous functions with the help of this manual.*

◈ *MAINS SUPPLY*

Use only 100 - 250VAC 50/60Hz.

◈ *OVERLOADING*

Do not overload a wall outlet, extension cord or adapter as this may result in fire electric shock.

◈ *LIQUIDS*

Do not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

◈ *CLEANING*

1. Always disconnect the STB power cord from the outlet before cleaning.

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

◈ *VENTILATION*

1. The slots on top of the STB must be left uncovered to allow proper airflow to the unit.

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

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

4. Do not stack electronic equipments on top of the STB.

5. Do not use this appliance in airtight area.

6. Do not open the top cover.

◈ *CABLE*

Use standard certified cables to prevent any malfunction of the STB.

➡ **Safety and Precautions**

◈ *ATTACHMENTS*

Do not use any attachments that are not recommended as these may cause hazard or damage to the STB.

◈ *CONNECTION TO THE SATELLITE DISH LNB*

Disconnect the STB from the mains before connecting or disconnecting the cables from the satellite dish.

Failure to do so can damage the LNB.

◈ *CONNECTION TO THE TV*

Disconnect the STB from the mains before connecting or disconnecting the cables from the TV.

Failure to do so can damage the TV.

◈ *EARTHING*

The LNB cable MUST BE EARTHED to the system earth for the satellite dish.

The earthing system must comply with SABS 061.

◈ *LOCATION*

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

◈ *SERVICING*

1. Do not attempt to service this product yourself.
2. Refer all servicing to qualified service representatives

NOTICE : The power remains on even when the switch is turned off.

WARNING RISK ELECTRIC SHOCK DO NOT OPEN	TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER(OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
⚡	This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.
⚠	This symbol indicates important instructions accompanying the product.

General Information

→ Accessories

Check the following accessories when you open the box
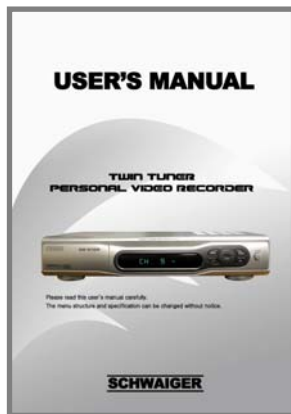
User's Manual 1 ea.

RCU 1 ea

RF Loopthrough cable 1 ea.   **USB Application CD 1 ea.**   **Batteries 2 ea.**

The device, packaging 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.

STANDBY (Power)
Power On/Off, Standby

NUMERIC KEYS :
Select channels by channel numbers or enter programming parameters.

TV / RADIO
Receiver switches between TV and Radio mode.

F. List
Display the recorded file list

VOL (VOLUME)
Increase or decrease the volume. And move left or right highlight marked cursor.

LIST/OK
Select menu option, or to updated on entry and to enter List menu

MENU
Display the Main Menu

AUDIO (Red Key)
Select audio mode (left, right, stereo, language)

SUBT (Green Key)
Display subtitle contents

REW Rewind a program

PLAY Play a program

R.SKIP Skip a program backward (Default interval : 10 seconds)

REC
Record a program

CAPTURE
Capture current image

REPEAT
Repeat a section

Book.M Bookmark key

TV/SAT
Receiver switches between TV and Satellite receive mode.

EXIT Cancel the user selection

FAV (Favorite)
Set receiver to favorite service mode, display the favorite channel.

MUTE
Enable or disable audio

RES Display the reservation list

Back (Previous)
Return to the previous menu, status or channel

EPG Display the TV/Radio Electric Program Guide

INFO (INFORMATION)
Display channel status or various program information of current service.

CH UP/DOWN
Tune to the next or previous channel. And move up or down highlight marked cursor.

ZOOM
Operate zoom function

SLEEP (Blue Key)
Operate sleep mode

TEXT (Yellow Key)
Show Teletext

FWD Fast forwards a program.

STOP Stop a program

F.SKIP Skip a program backward (Default interval : 10 seconds)

PAUSE
Pause a program

Book.J Bookmark jump key

Sat list View a satellite list

CA Skip Mark for CA Skip

Option Clear all CA skip mark

System Connection

➡ Front Panel

◈ *2 LED Display*

  - Stand by LED : It shows Red LED when the power is off.

  - REC by LED : It shows GREEN LED when a program being recorded.

◈ *Normal Display* : It shows VFD of Channel number and channel name when the power is on. But it shows current time in Standby mode.

  On : "run" is displayed on the LED Display panel and shows the current channel number.

  Standby : You can see the clock works.(Only RCU Operated)

◈ *Tact switch* : AC PWR On/Off, CH UP/DOWN , VOL UP/DOWN . MENU , OK
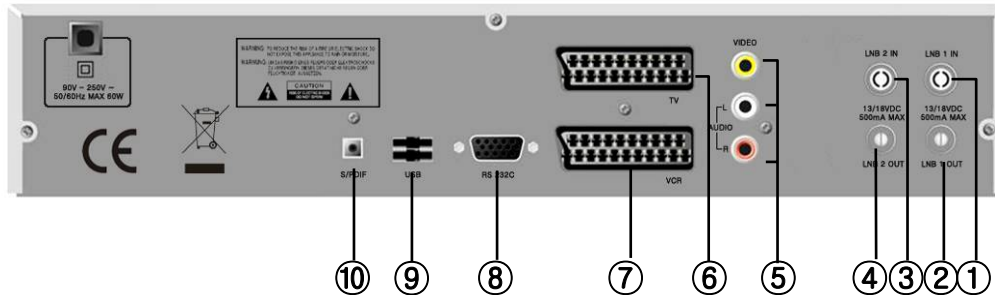
◈ *Common Interface slot*

NOTICE :
1. *Current time is based on the TDT(Time and Date Table) at the stream of the current service. If the TDT information is not correct, current time might be incorrect.*
2. *Please do not insert metal or alien substance into the slot for the modules and Smartcards. In doing so can cause damage to the STB and reduce its life span.*

Rear Panel

Please refer to the diagram above for all possible connections of your receiver

> *Do not connect the unit to the mains socket until all other connections have been made and checked.*

1) **LNB1 IN** : This port is to connect the coaxial cable from LNB of your Dish.

2) **LNB1 OUT** : This enables the connection of an Analogue receiver.

3) **LNB2 IN** : This port is to connect a satellite antenna cable or connect LNB 1 OUT.

4) **LNB2 OUT** : This enables the connector of an Analogue/Digital receiver.

5) **VIDEO** : This RCA connector is used to connect your TV through RCA cable.
    AUDIO R/L : These RCA connectors are used to connect your TV through RCA cable or any external audio amp or system.

6) **TV SCART** : This is used to connect your TV through Scart cable

7) **VCR SCART** : This Scart connector is used to connect any external video.

8) **RS 232C SERIAL PORT** : This is used to connect your receiver with a computer or other STB through a serial cable.

9) **USB** : PC to STB, STB to PC data transfer and receiver (Optional)

10) **S/PDIF** : This is used to connect with Digital audio amplifier (Optional)

System Connection

➔ Connecting Your System
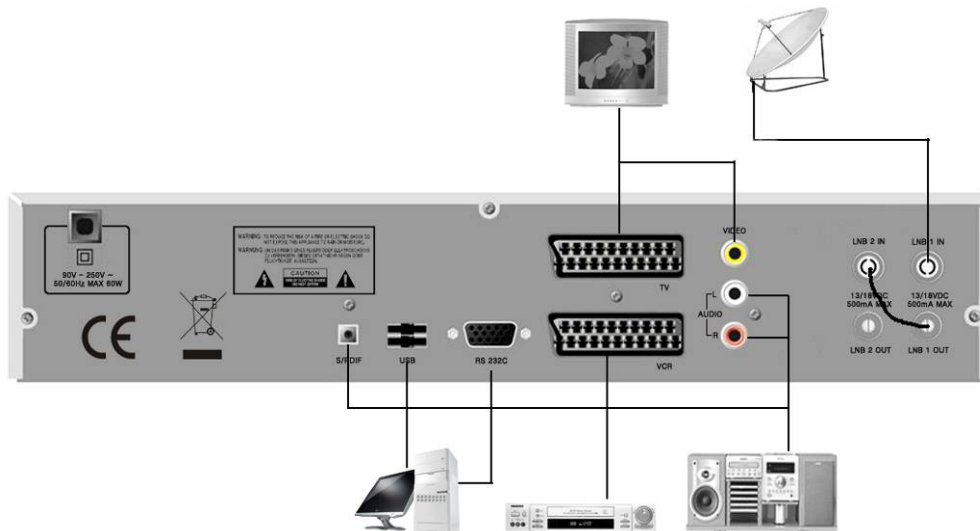
◈ TV Only

There are two ways to connect the STB to your existing TV system. We recommend using one of the following cases for the best result :

- Connect one end of RCA cable to the RCA jack on the back of the STB and the other end to a RCA jack on your TV.

- Connect one end of Scart cable to the Scart jack on the back of the STB and the other end to a Scart jack on your TV.

- Finally connect the coaxial cable from the LNB to the LNB IN jack on the STB.

◈ With 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 Audio L and R.

- Connect an RCA stereo cable from the AUDIO L, R jacks on the back of the STB to the LINE, AUX, SPARE OR EXTRA input jacks on your Hi-Fi System.

◈ TV with VCR

- Connect one end of Scart cable to the Scart jack on the back of the STB and the other end to a Scart jack on your VCR.

➜ Connecting Your System

◆ TV with Motorized System (DiSEqC 1.2)

There are two ways to connect the STB to your existing TV system.
We recommend using one of the following cases for the best result

- Connect one end of RCA cable to the RCA jack on the back of the STB and the other end to a RCA jack on your TV.
- Or connect one end of Scart cable to the Scart jack on the back of the STB and the other end to a Scart jack on your TV.
- Connect one end of your coaxial cable to the LNB IN connector on the STB and the other end to the REC or Receiver connector on the DiSEqC 1.2 motor.
- Connect the coaxial cable from the LNB to the LNB connector on the DiSEqC 1.2 motor.

◆ Reference

DiSEqC 1.0 Connection

All our receivers are designed to be DiSEqC 1.0 and DiSEqC 1.2 compatible.
This allows multiple antennas to be connected to the STB at the same time.

If you have two or more fixed antennas or LNBs, then we recommend you use a DiSEqC 1.0 switch.
Connect the coaxial cable from the first LNB to the LNB 1 or LNB A input connector of the DiSEqC switch.
Do the same for any other LNBs that you have.

Connect one end of a coaxial cable to the RF output connector of the DiSEqC switch, connect the other end to the LNB IN socket on the STB.

To the digital receiver, you can connect either a single satellite antenna directly or LNB of multi-feed equipment.

USALS System

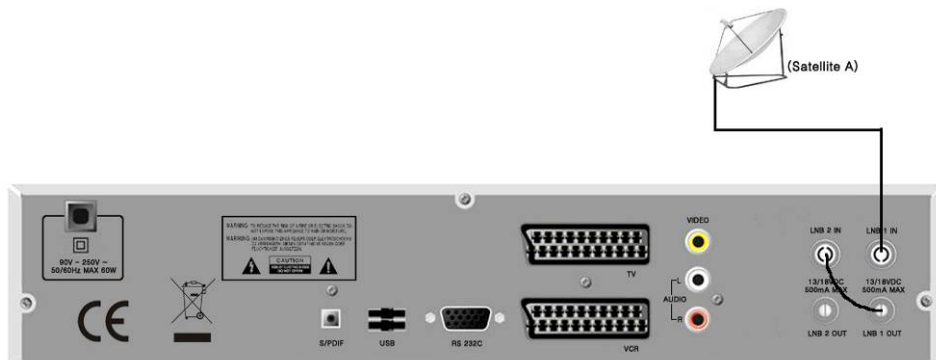When it comes to USALS System, please refer to Page 17.

System Connection

Recommended Antenna Connection

◆ *When you set the PVR to Loop Mode.*

1. When a user has one antenna.
Input a single source to Tuner A, and input the output signal from Tuner A to Tuner B using a splitter or loop through.

2. When a user has two antenna.
Connect two antennas to DiSEqC and input the outputs to Tuner A. Then input the output signal from Tuner A to Tuner B using a splitter or loop through.
Note: A splitter is recommended in the single mode. (For Tuner A, use a splitter with the function of DC bypass, and for Tuner B use a splitter regardless of the function of DC bypass.) Otherwise, it is recommended to use a splitter. Use only a splitter in order to connect another set-top-box using a loop through to your PVR.

◆ Recommended Antenna Connection

◈ *When you set the PVR to Dual Mode.*

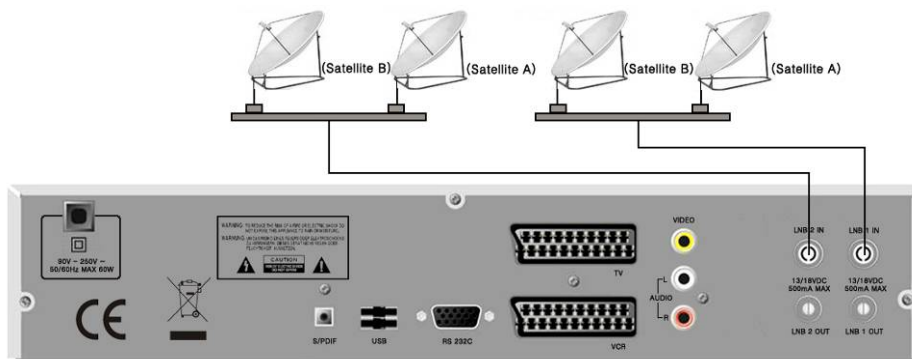To provide Live and Timeshift services , and Recording service through Tuner A or Tuner B, input a signal source of the same attributes with the signal input to Tuner A to Tuner B.

◈ *When you set the PVR to Split Mode.*

Tuner A & Tuner B are activating separately in this mode.
Connect two antennas to each tuners.
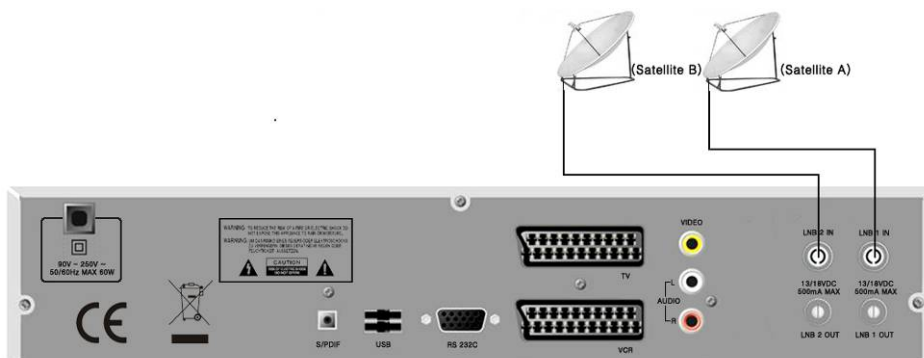
Setting Up Your System

→ **Time Setting**

Time Setting enables you to set your local time, manage time on the basis of your standards.
When you initially power on, enter the Time Setting menu, and you set the local Time, your STB will provide all services based on the initial set time.
In order to set an initial time, set date/month/year/hour/minute.
After setting the initial time here, you can also change the time in Time Setting of Main menu. When plugged out and re-plugged in, you need to set your Local time again.

Main Menu

Installation
- **Service searching**
- **Download Software**
  - **Receive DB from PC**
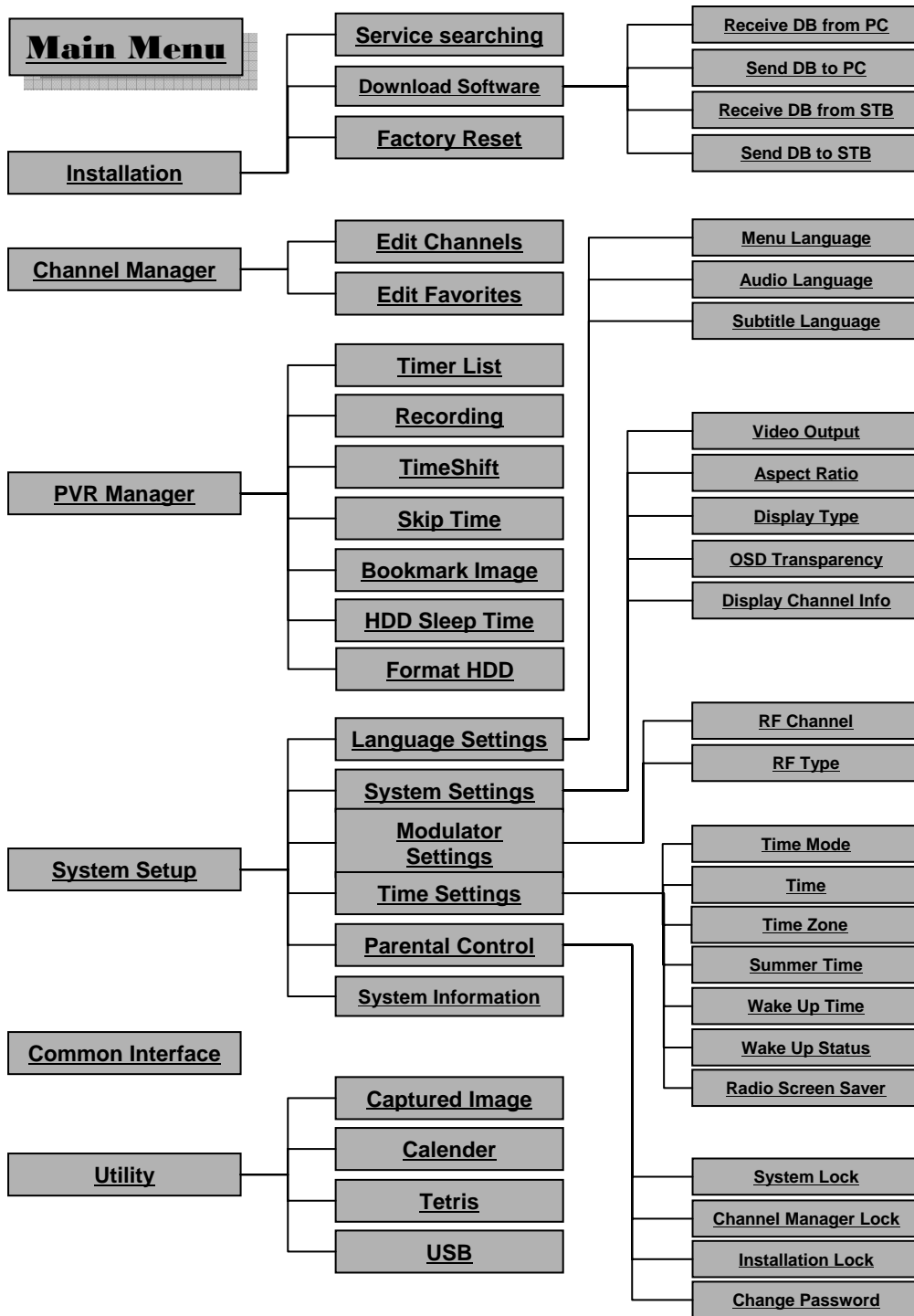 - **Send DB to PC**
  - **Receive DB from STB**
  - **Send DB to STB**
- **Factory Reset**

Channel Manager
- **Edit Channels**
- **Edit Favorites**

PVR Manager
- **Timer List**
- **Recording**
- **TimeShift**
- **Skip Time**
- **Bookmark Image**
- **HDD Sleep Time**
- **Format HDD**

System Setup
- **Language Settings**
  - **Menu Language**
  - **Audio Language**
  - **Subtitle Language**
- **System Settings**
  - **Video Output**
  - **Aspect Ratio**
  - **Display Type**
  - **OSD Transparency**
  - **Display Channel Info**
- **Modulator Settings**
  - **RF Channel**
  - **RF Type**
- **Time Settings**
  - **Time Mode**
  - **Time**
  - **Time Zone**
  - **Summer Time**
  - **Wake Up Time**
  - **Wake Up Status**
  - **Radio Screen Saver**
- **Parental Control**
  - **System Lock**
  - **Channel Manager Lock**
  - **Installation Lock**
  - **Change Password**
- **System Information**

Common Interface

Utility
- **Captured Image**
- **Calender**
- **Tetris**
- **USB**

Menu Guide

➡ Installation

◈ Service Searching

Edit

Place the cursor on the satellite which you want to edit and press the "Red" key to move satellite edit menu.

1) Tuner Select

  PVR has two tuner input. You can select either one

2) Ant Connect

You can select antenna connection mode.
Loop / Split / Dual mode support

3) LNB Power

Depending on the type of LNB cling to your antenna, you can supply either LNB power   by setting "On" or not by setting "Off".

4) LNB Frequency

You can select the predefined Local Frequency (0….9, One Cable1/2 , 5150, 9750, 10600, 10750MHz, Universal or Unicable) by pressing the ◀ ▶ keys or manually enter a specific frequency in MHz unit by pressing the numeric keys.

You can input the number only when it displays "0…9".

Installation

◈ **Service Searching**

Edit

1) 22KHz
In case you are using 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.

2) DiSEqC
DiSEqC must be used when using two or more antennas and LNBs.
Select None, DiSEqC 1.0 , DiSEqC1.1 , MOTOR and USALS.

3) Committed
Set the port number of DiSEqC 1.0 switch

4) UnCommitted
Set the port number of DiSEqC 1.1 switch.

5) Save
After Setup complete, Press "RED" key to save

Menu Guide

➡ **Installation**

◆ **Service Searching**

Edit

∗ When selecting "**MOTOR**" Yellow color key(in DiSEqC menu)

- **DiSEqC 1.2 Motor** : You can move the motor to the left or right by pressing the ◄► keys continuously, but when you stop pressing the ◄► keys, the motor will be stopped.
- **Save** : When you press the "**OK**" key, current position of the DiSEqC motor will be saved.
- **Go to Reference** : Move to the position "O".
- **Calculation** : The difference between the current position and the new position of the current satellite is applied to all the other satellite also.
- **Limit** : You can set the maximum move extent. You can control "**Enable**" or "**Disable**" mode. When you select "**Enable**", "**East limit**" and "**West Limit**" will be activated.
  Press the "**OK**" key, then current position will be restored as each limit.
- **Reset** : After select the "Reset" and press the "**OK**" key, the original value of motor will be restored.

∗ When selecting "**USALS**" Yellow color key(in DiSEqC menu)

Input the value of latitude and longitude in which the dish-installer is placed.

As the satellite that you want to target was selected in the last menu, it is possible to press "**OK**" key in "**Rotate**". Then the degree of an angle for rotate will be calculated automatically and the DiSEqC Motor will adjust to rotate the dish to the previously selected target satellite.

First of all, when you set this procedure, notice the following point, that is, the zero degree of DiSEqC Motor must be headed for the due North at initial setup state.

➡ Installation

◈ Service Searching

Rename

Select the satellite name you would like to rename and press the **"OK"** key.
By using the **"BACK"** buttons, Move to be previous menu. Press **"BLUE"** key to Save.

Scan

Select the satellite you want to scan by using the ▲▼ keys .
Press the "OK" key and Scan will begin. 7-Segment will display "SCA∏".

1)Network *:* If you want to have all other

   Transponder information, you need to

   Select network ' **On** '.

2)Search Mode *:* You can select ALL /

   FTA option mode in each satellite by

   Using the the ◀ ▶ keys.
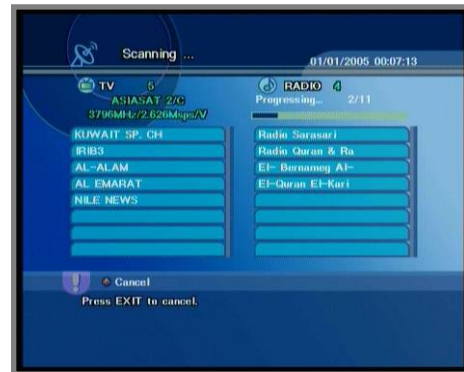
STB will automatically search all TV/Radio channels from a satellite and save them into the Channel List.

You can see the progressive status of channel searching.   Press the **Red** or **Exit** key to stop Channel Search.

When the Channel Search is completed, the result will be saved and the first channel of the searched ones will be displayed.

Notice : Please wait for the receiver to process all the channels, and note that the "Channel Search" procedure may take a few minutes.

Menu Guide

➡ Installation
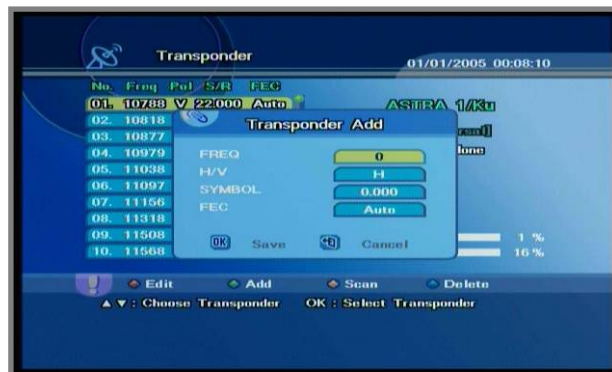
◆ Service Searching

Transponder

1) Edit

- Press the red key to change the parameter values of the selected transponder.
- Place the cursor on the sub menu by using the ▲▼ keys and press the ◀ ▶ keys or " NUMERIC" key to change the setting.
- Insert the frequency of the transponder you want to edit.
- Select the polarization of the transponder you want to edit **(Horizontal / Vertical)** .
- Input the symbol rate of the transponder you want to edit.
- Select the FEC (Forward Error Correction) of the transponder you want to edit.

2) Add

If you cannot find the desired transponder from the transponder list, you can add it by inputting appropriate parameter values for a new transponder.

Installation

## ◆ Service Searching

Transponder

3) Scan

If you cannot find it from the transponder list, you should insert all the setting parameters.

If you want to have all other transponder information, select network "On".

You can also search a special channel of the specified transponder by specifying Video PID (Packet Identifier), Audio PID and PCR PID.

When you want to search a specified channel, please input the specified PCR PID with specified Video/Audio PID.
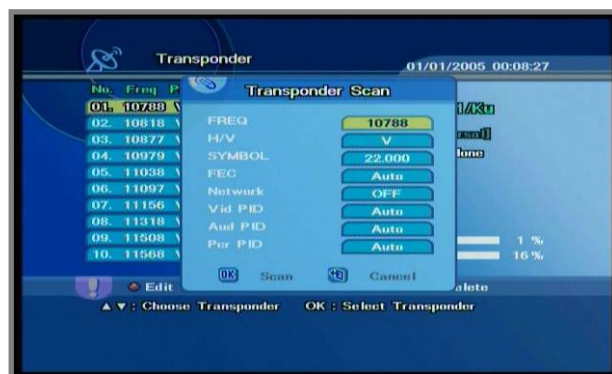
4)Delete

Press the "Blue" key to delete the selected transponders.

Menu Guide

✦ Installation

◆ Download Software

To maintain the STB up-to-date, you can upgrade the DB of the STB via other STB and personal computer.
New versions of DB may include latest information on Satellites and transponders.

1. STB Upgrade

You can select "On" if you want to upgrade the software via satellite directly**.**

2. STB Auto Upgrade

You can select "On" if you want to upgrade the software via satellite automatically.

How to download Software (Set to Set)

1. Connect two STBs using RS232C cable.

2. The receiver which receives database
   select a " **Receive DB from STB**" mode

3. The receiver which sends database select a "**Send DB to STB**" mode.

4. Press the "OK" key

Notice : While downloading, don't turn off the STB. If the power turns off, turn on the STB and restart the downloading process again.
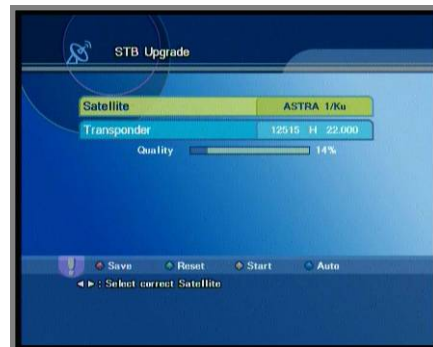
◆ OTA Update

At this menu, you can download the latest PVR software from the Astra Satellite.
The Setup details are as bellow ;

1. Manual Upgrade
   . Satellite : ASTRA 1/Ku
   . Transponder : 12604 / H / 22.000
   . To start OTA, press "Start" yellow
     button at start item.

2. Auto Upgrade
   . "Blue" button start

For OTA (Over-The-Air), it takes around several minutes to download software from the satellite.

◆ Factory Reset

This mode is to restore the factory reset values. After selecting 'Factory Reset', A warning message will be displayed. If you press the "**OK**" key, all preset information will be formatted. (default vale: **0000**)

NOTICE: This causes your previous settings to be deleted and default setting to be loaded.

➡ Channel Manager

◈ **Edit Channel**

You can select, lock, delete, & move channel's position in the channel list.

Lock
● You can select the channels that you want to lock or unlock by using the ▲▼ keys.
  And press the Red key to confirm your selection.
● Press the Green key to lock selected channels.
● Once the program is locked, you can not watch the locked channel till you change
  the configuration from "**Lock**" to "**Unlock**" in the channel edit menu or List Menu.
● The symbol of "**Lock**" is marked at the right side of the channel name on the
  "Channel Edit" List.
● On the other hand, the locked channel is displayed with the symbol "**Lock**" on the
  Information screen.

Delete
Select the channel name, and press the '**YELLOW**' key.
By using the "**EXIT**","**BACK**" keys, move to be previous menu.

Move
Press the "**BLUE**" key to select the channel that you want to move its position of,
and place the cursor on the position where you want to move it by using the the ▲▼
keys and press the "**OK**" key to confirm.

Menu Guide

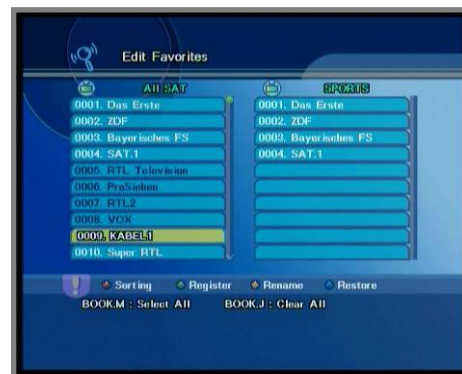## ➔ Channel Manager

◈ Edit Favorite

Sorting

Press the "**RED**" key and the following "Program Sorting" menu screen will be displayed.

You can rearrange the lists by satellite, FTA / scramble, or alphabetically.

Register

Before you can use the "Favorite Channels List", you must first register your favorite channels into the favorite list.

* Select the desired list by pressing the "**Fav**" key.
* The Favorite Channel List can be sectioned into five categories from Fav A to Fav E.
* The list screen is divided into two, the list on the left displays all channels available and the list on the right displays selected favorite list.
* You can select the channels that you want to register into favorite groups by using the ▲▼ keys. And press the "**OK**" key to confirm your selection.
* Press the Green key and the selected channels will be added to each group of the favorite channel list.
* Same channel can be selected for each favorite group simultaneously.

Fav-Rename

Press the "**YELLOW**" key to change the name of Favorite Group, then the following "Favorite Rename" menu and keyboard screen screen will be displayed.

Use the ▲▼ and ◀▶ keys to place the cursor on the desired character and press "OK"key to select.

Delete

You can also delete channels from the favorite channel list by pressing the "**BLUE**" key After selection by using the ▲▼ keys and press the ◀▶ keys change language.

The language of menu & subtitle or soundtrack will be changed to the selected language.

➡ **PVR Manager**

◈ **Timer list**

The Timer list function enables you to reserve a program recorded and view it using Reserve key.
You can seek the previously reserved channels.
Use the ▲▼ key to place the cursor on the desired location and press "**OK**" key to select.

Channel

Press "◀ or ▶" key and then, sub menu will be displayed.
Search channel using "▲▼ " key and confirm it Using "**OK**" key.

Record
You can select either Record or View by using the "◀▶" key

Mode
You can selelct among Once/Daily/Weekly on the Record mode by using the "◀▶" key

Start Time / End Time

Set the start time and end time by pressing numerical buttons(0-9) in Day, Month,

Year, Hour,
Minute order. Edit the time using "◀▶" key, and confirm it using OK key.

Menu Guide

PVR Manager

◈ Recording

You can record using REC(●) key on Live screen or "**RED**" key on Recording menu screen .
The start time of recording is the current time, and the end time is automatically entered on Setting the duration time. You can set the duration time using "**OK**" key and "◀,▶" or "▲,▼"key, and rename the recording file. During the recording, you can stop it by using the Green key.

* How to use Playback function
You can find the list of the recorded files using "**F.LIST**" key, and play them using OK key. It is also possible to sort the recorded files by alphabetical and FTA channel order.

Trick mode

You can operate Trick mode when Timeshifting or playing a recorded program.

1. Pause

You can pause the screen using Pause (||) key.

2. Fast Forward/Fast Rewind playback

You can rewind fastly up to 4 times speed using REW(◀◀) key and forward fastly up to 8 times speed using FF(▶▶) key.
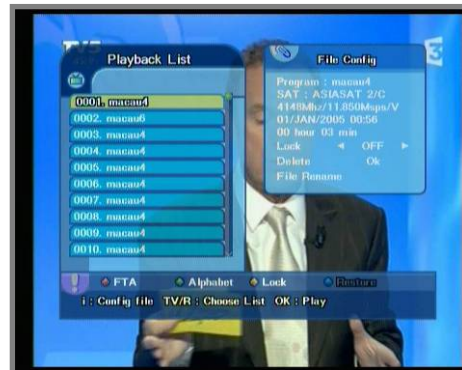
3. Slow Motion playback

Press the Pause (||) key, and then FF(▶) key or REW(◀◀) key to see slow motion with 5 steps.
Press Play (▶) key to resume the playback with normal speed.

4. Skip playback

Press the F.SKIP(▶▶|) key to forward skip. Press the R.SKIP (|◀◀) key to backward skip. 10sec ~ 60sec

Caution : Please do not Power off or Standby
while recording to prevent HDD damage.

➜ PVR Manager

◆ Time Shift

You can activate the time shift function
by using "**OK**" key.
select "**ON**" or "**OFF**" by using the
"◀▶" key.,and Press "**OK**" key to
confirm.

◆ Skip Time

You can activate the skip time function
by using "**OK**" key.
Skip time can be set by user
(10/20/30/60/120 sec)

◆ Bookmark Image

You can activate the Bookmark by using
"**OK**" key.
The Bookmarked image can be displayed
with information bar by selecting ON/OFF

◆ HDD Sleep Time

You can activate the HDD Sleep time by
using "**OK**" key.
HDD Sleep time can be set by user
(1/5/10/15/30 min.)

◆ HDD Format

The HDD format feature can not be
activated while file Playback, recording or
Timeshift. To go to HDD format, follow the
steps below.
Main Menu→PVR manager→HDD format.
If you press OK key on an warning
message, it shows "Enter Password"
message. Enter the password, then it
starts activation and HDD will be initialized.
After the format is complete, you have to
restart STB

➡ System Setup

◆ Language Settings

To select the desired language of the Menu & Audio or Subtitle. Place the cursor on the sub menu by pressing the "▲,▼" keys and press the "◄,►" keys to change language.

The Language of Menu & Audio or Subtitle will be changed to the selected language

◆ System Settings

1. Video Output

You can receive different TV output signal by selecting CVBS / RGB / YPbPr / S-VIDEO.

2. Aspect Ratio

Select the format of the video to be displayed on screen. You can choose either 4:3 ratio (Standard) or 16:9 (Wide) according to the TV type.

3. Display Type

Select "FANSCAN" When the format of your TV set is 4:3

Select "Letter Box" When the format of your TV set is 16:9

4. OSD Transparency

Set the level of OSD Transparency, it varies from 0 to 40.

Default : 10

5. Display Channel Info

Set the i-plate and play time, it varies from 0 to 10 sec. Default : 3 sec

System Setup

◈ Modulator Settings

1. RF Channel
Select or change the RF channel
number when the STB is connected
to the TV by the RF jack.
(Ch21~Ch69)
Default : Ch38

2. RF Type
You can select the RF type by using the
◀ ▶ keys out of PAL B/G, I D/K.

◈ Time Settings

1. Time
You can set the Current Time
(Local area time) in this mode.
To set the Current Time, select the
value using the standardized
information of current service area
by pressing the ◀ ▶ keys.
The time setting will be used as the
standardized time for the I-Plate,
Program Guide and Sleep Timer.
Current Time is based on TDT (Time
and Date Table) at the stream of the
current service.

2. Summer Time
You can set the summer time "On" or "Off".

3. Wake Up Time
You can set the time for STB to be turned on automatically. STB will be turned on
automatically at the time you set everyday, unless you erase the setting time.

4. Wake Up Status
You can select Once/Daily mode.

5. Radio Screen Saver
It activates only in Radio mode without any window in TV screen after a default time
passes, 30 minutes.
If you want to change the screen saver starting time, please follow the below steps.
Go to Main Menu → Select System Setup → Time Setting → Screen Saver
Note : Captured images display on TV screen in turns automatically.

6. Time Zone

Menu Guide

➡ System Setup

◆ Parental Control

1. System Lock

To lock the receiver, select "System Lock" in the "Parental Control" menu and change it to the "On" mode by using the "◄,►" keys.

If the receiver is locked, whenever you try to start the STB, the "Password" screen will appear and you will be asked to enter your Password.

2. Channel Manager Lock

To lock the Channel Manager, select "Channel Manager Lock" in the "Parental Control" menu and change it to the "On" mode by using the "◄,►" keys.

3. Installation Lock

To lock the Installation Menu, select "Installation Lock" in the "Parental Control" menu and change it to the "On" mode by using the "◄,►" keys.

4. Change Password

You can change your Password from the factory default value "**0000**" as follows:
Select "Change Password" in the "Parental Control" menu.
You will then be asked for a new password.
Once you enter a new password, the system will ask you to re-enter for confirmation.
When you have entered a new password twice, the password has been changed.
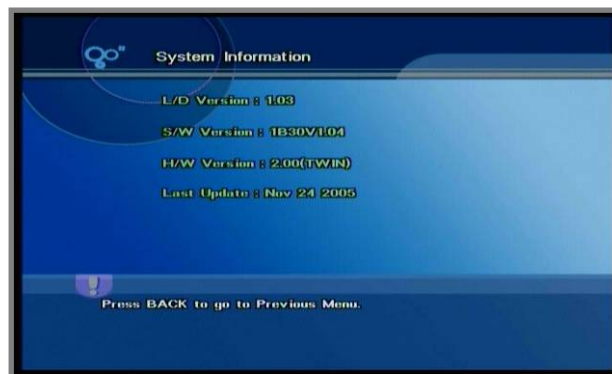If you forget the password, contact the distributor to recover it.

System Setup

◆ System Information

Place the cursor on this sub menu and press the "**OK**" key.

It will show you the information of S/W & H/W version and provider.

Menu Guide

➔ Common Interface

You can enjoy not only scrambled services using the Conditional Access Modules (CAM) with smart card, but also Free-To-Air services.

This receiver is equipped with a twin-slot Common Interface under DVB specification, accepting two different types of PCMCIA modules. Plug in the appropriate CI module together with a valid Smart Card. You will then have access to the respective scrambled and pay-per-view services.
Each Smart Card contains your subscription details. You can view your entitlement via the CI option on the receiver's main menu .
This receiver currently supports seven kinds of CAM as follows.
Viaccess, Irdeto, Nagravision, Cryptoworks, Conax, Alphacrypt, SECA (Mediaguard)

◈ How to use your CAM and Smart card

Slide the CAM into the slot provided until the eject button is fully extended.
Insert the smart card into the CAM gently with the gold colored chip upwards
Ensure that these contacts are clean before inserting it into the CAM.
To remove the CAM out of slot, push the button on the right side of the CAM slot.

CAM and Smart Card depend on the service provider. If you need CAM, please contact your service provider or distributor.

NOTICE:
Both the CAM and Smart Card contain delicate electronic circuitry, please handle them with care when inserting and removing them from the receiver.

◈ Getting into CI mode through main menu :

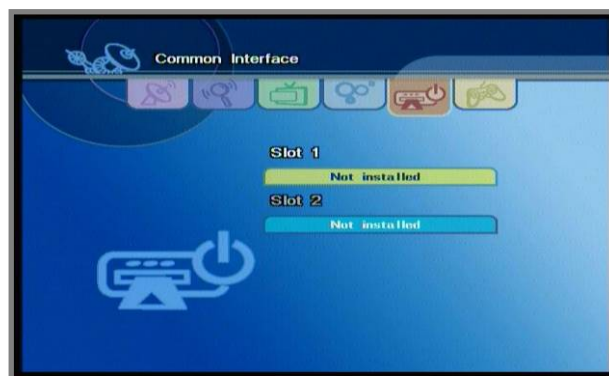Press Menu, and select Common
Interface from the main menu.

➡ Common Interface

You will see the next screen when you select "Common Interface" from the Menu.
For example ;
Slot 1 : Viaccess CAM is in the socket 1 and initialized
Slot 2 : CAM is in the socket 2 and your receiver is initializing the CAM.

The information available on the CI menu depends on the CAM provider.
Typically they will contain subscription information such as subscription duration,
accessible programs, maturity level, network information etc.

◆ Getting into CI mode during viewing mode :

Following screen will be on your display when you slide the CAM with smartcard into the
slot during viewing mode.
The message "Initializing the module.." indicate that your receiver is initializing the CAM.
If the scrambling type of current channel doesn't match up to the CAM and smartcard
being initialized now, you will see the message "not available" on your screen.
Otherwise you can enjoy the scrambled services.

Menu Guide

Utility

◆ Captured Image

You can view the captured images, and
edit the files on this menu.
The images can be captured by pressing
Capture (📷) key while watching .

1. View Image

Press "▲,▼ " keys to choose the files,
and OK key to view them.

2. Edit file

You can rename and delete the selected
files.
Press Red key to choose the file and
delete it using the Blue key, and rename
then using the Green key.

3. Screensaver

You can activate the screensaver function with the captured image while listening to a
Radio channel. In Time setting menu, you can select On/Off and the interval time to
start the screensaver function.
Main menu → System Setup→ Time Setting→Screen saver

◆ Calendar

▼ : Previous Year
▲ : Next Year
◀ : Previous Month
▶ : Next Month

➥ Utility

◈ Tetris

OK : Drop
▲ : Rotate
◀ : Move left
▶ : Move Right

◈ USB (Universal Serial Bus)

USB port hidden under a front flip enables you to transfer data the AV files, and captured image files from a built-in hard disc in STB to PC, and conversely from PC to STB. Once the USB cable is connected to the port, it displays "Connected" on the status of the USB menu. You need to install the USB application program provided from us in your PC. After that , you can feel free to utilize the wide variety of USB functions.

Functions Guide

➔ Program Guide

Now / Next / Schedule / Information (EPG)

The information is only available from the transponder of the channel you are watching.

To see the titles of current & next program, press the Red & Green key.

You can see the program information that will be played for a week by pressing the Yellow key.

The information may include: current time, name of the Now and Next Program, the starting and ending time of the Now/Next Program and on-screen display window.

With the TV/RADIO/FAV keys you can browse among the various program lists.

Select the channel by pressing the "▲,▼" keys and press the "**OK**" key to watch this channel. To see the extended information of program, press " **i** " key.

The extended information may include :

It shows the detailed information such as the actors, the providers .. etc.

Reservation Functions

1. Maximum 20 events can be reserved.
2. To reserved the channels you want,

    1) Select the reservation channel using "◄,►" keys.
    2) Select the type "Record/View."
    3) Select the mode "Once / Daily / Weekly".
    4) Set the Start and End time using numeric keys.
    5) Select "**OK**".

3. To cancel the reserved channels, select "**Exit**".
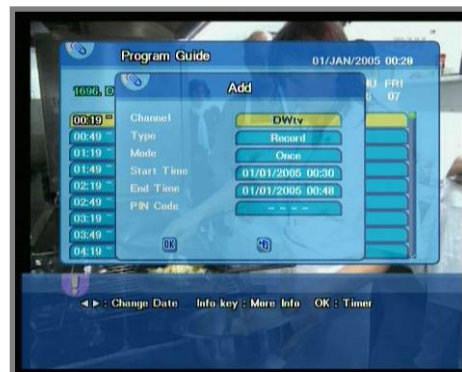
Timeshift

In the Timeshift mode, recording and playback can be activated simultaneously. You can play back a Recorded program from where you missed.

1.To enable Timeshift, follow the steps below.

Main Menu → PVR Manager → Timeshift → Enable or Disable

2. There are two ways to activate Timeshift function. One is to pause at the point of program where you want to stop using Pause

(||) key, and the other is to play back to where you missed.

To go to the desired position, press REW (◀◀) key or FF (▶▶) key. Your position is displayed in information bar using " **i** " key. To remove the information bar, press Exit key.

Bookmark

This function enables you to bookmark your favorite scene and repeat it as many times as you want.

You can jump to the position directly by bookmark function in playback and time shifted playback.

To search the positions quickly, you can use this function. You can bookmark maximum 10 positions and delete them by bookmarking the same position or the position within 10 seconds.

To go to the bookmarked positions, press "**BOOK.J**" key or "◀,▶" key to move the bookmarked pictures and select "**OK**" key to go directly to the desired position.

Functions Guide

➡ Repeat

During the play, Institution period of file (A-B) play repeatedly.
There are three ways to activate repeat function

1) None : To disable repeat function.

2) All : repeat all of one file.

3) A-B : repeat the section between A and B.
   Follow the steps below
   - In the playback mode, Press the repeat key in RCU.
   - Move cursor to the A-B, Using "▼", "▲" key. and press the "OK" key
   - Press the "OK" key at the Start position
   - Press the "OK" key when you are at the end position

➡ SKIP

During the playback mode, You can skip the play position manually using "**F.SKIP**" and "**R.SKIP**" Skip duration mode see page 26

➡ CA (Commercial Advance) SKIP

During the playback mode, You can skip the play position you want. To mark the skip start position, press **"CA SKIP"** button. To mark the skip end position, press **"CA SKIP"** button again. Then, while playback the marked interval will be skipped automatically.

List Menu

This menu helps you to easily select the channel that you want to watch or edit.
To display the Channel List, press the "**List**" or "**OK**" key while you are viewing a program and you will see all channels that you saved into the channel list.
To watch a specific channel, first select it by pressing the "▲,▼" keys, and press the "**OK**" key to confirm.
You can also select a specific channel by pressing the numeric keys directly.
When you press "i" key in this menu, you can change the attributes(Lock, Favorite and Delete) of a service through the Service Configuration.
The symbol of "Lock" & "Scrambled" feature displayed on the Right side of the list stands for locked channel or scramble channel.

The channel list can be constructed independently for each Satellite, Favorite Group, TV or Radio, by pressing the "TV, RADIO or FAV" keys
1. When you press the ◄► keys, you can see and control the Channel List by each satellite.
2. When you press the "**TV/Radio**" key, you can automatically select TV and Radio Channel List.
3. When you press the "**FAV**" key, you can see each favorite channel list from A to E.
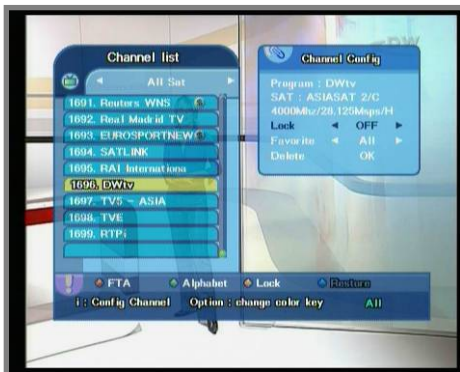
STB Teletext

STB Teletext menu will be activated when you press "**TEXT**" key in the channel which provides Teletext service. If the channel doesn't provide Teletext service, "**TEXT**" key will not be activated.
Teletext menu is composed of "Navigation Board, Status Board and Page Display Board".

Functions Guide

Function Keys

Use the following color keys to display various service lists and the symbol of color key will be marked right above of the channel list:

- Red key : To display only
  Free to Air service list
- Green key : To display service
  list by alphabetical order
- Yellow key : To display all locked
  service list
- Blue key : To restore default service list

Use the following Option keys to display various service lists and the symbol of color key will be marked right above of the channel list:

- Red key : To display Bouquet service list
- Green key : To display SAT list
- Yellow key : To display all kind of CAS
  service list
- Blue key : To restore default service list

Change the Attributes of a service

At the Channel Configuration you can change the favorite group, locking status and delete the channel.
To save the changes in Service Configuration, press the "**OK**" key when the cursor is at Lock, Favorite or Delete.

1. Select specific service you want to change the parameter values of in the Service List by using the "▲,▼" keys .
2. Press the "**i**" key and the Service Configuration screen will pops up.
3. Use the "▲,▼" keys to select the submenu you want to modify on the Service Configuration screen.
4. Use the "◄,►" and "**OK**" keys to confirm.

➡ **Hard Disc Recording**

► About Hard Disk Recording

This set top box is equipped with a built-in hard disk drive (HDD). It can be used to record and store TV and radio programs. Basically, the hard disc is similar to those being used in personal computers.

To make the best use of your HDD recordings, we recommend to keep in mind these rules as a general information

- We suggest that you spend some time testing the major functions along with HDD recordings in order make yourself familiar with them.
- The recording capacity of the HDD is quite large, however, it is limited. By default, it is about 20 hours or 40 hours of TV recording (depending on the size of the installed HDD, e.g. 40 GB or 80 GB).
- Actual recording time may vary because it widely depends on the recorded program material and its data volume. In case of radio reception, recording time can be up to 40 times larger than TV recording time.
- A small portion of the HDD capacity is always reserved for "Time Shift" recording and cannot be used for regular storage of TV or radio programs.
- Remember to delete recordings from the disk that you don't needed any longer.
- Recordings made on the built-in disk cannot be digitally transferred to an external digital recording device.
- Recordings you want to keep you may transfer to a conventional analogue VCR.
- This set top box can be used also for direct recording of TV and radio programs on a conventional analogue VCR.
- Recording can be made only from the channel you are watching for the moment. For example, you cannot watch TV program no. 1 and record program no. 2 at the same time.
- Timer recordings (internal HDD or externally connected conventional VCR) can be booked easily by using the EPG recording function.
- Time Shift (TS) viewing / recording is one of the big advantages of the built-in HDD. You can start watching playback of a recorded program while the recording of the same program is still in progress. Or you can pause viewing a TV program and continue watching some time later without missing anything: the HDD drive has performed necessary intermediate recording meanwhile.

Functions Guide

➔ Hard Disc Recording

Further details of the above mentioned recording functions are described in this manual.

- **Please note:** recording of copyright protected TV and radio program material is permitted only for personal use. In order to avoid infringements of copyright laws please observe the existing regulations in your country.

Description of details for better understanding the complex functions, such as:

(Example 1)

- **HDD Standby Timer setting**
  By experience, a HDD will not be used at all times. Normal TV watching or radio listening does not require a running HDD. This menu is used for both, extending service life of the HDD and saving power that is consumed by an idling HDD.

  Example: If the timer is set to 10 minutes, the HDD goes into standby mode after 10 minutes of non-use.

Note:
Start-up time of a "sleeping" HDD is about 5 seconds. This will increase the time delay for recording start after pressing the record or TS (Time Shift) button.
If you prefer a quicker start of the record mode you should better select the timer setting "Always ON". Toggle with L/R (◄ ►) buttons to set the desired parameter.

(Example 2)

- **Timer Recording**
  You can use the timer function for unattended recordings on HDD or on a conventional VCR that has been connected to the VCR SCART connector of this unit. You also can us the timer function for automatically switching your receiver ON / OFF or changing the TV program at a preset time in case you don't want to miss the start of a program but want to watch another channel until then.
  The timer function allows you to set up a list with all the required timer settings in which you can enter the date and time for the receiver to be switched on and off, the program and if necessary daily or weekly repeat of each switching operation.
  If you are currently watching a program and timer switching operation is pending, the receiver reminds you by overlaying a massage that the timer switching operation will take place in one minute. When this time is reached, the receiver switches over to the required channel and REC is displayed on the front display. After the preset time has expired, the receiver switches back to the original channel.

Hard Disc Recording

(Example 3)

● **Time Shift**

Let us assume that the phone is ringing while you are watching TV.
You do not want to miss anything of the program, so you decide to start
Time Shift recording while you answer the phone.

● While watching TV, just press the TS button.

● The picture will freeze, no sound will be heard and the recording will start.

● Time shift enables you to follow a running program with a delay of up to
120 minutes.

Let us assume again that 10 minutes later the situation is like this:

● A frozen picture on the TV and no sound.

● Of course, you would like to watch now the Time Shift recording that
contains your missing 10 minutes.

● You start the playback of the Time Shift recording by pressing the ►
(Play) button.

NOTE: Further recording is still in progress.

To turn off the Time Shift recording:

● Keep on watching the playback until the program is finished.

● Press the ■ (Stop) button to turn off the Time Shift recording.

● In order to save HDD memory space, Time Shift recordings will be
deleted automatically from the temporary memory when pressing the
■ (Stop) button.

NOTE: During Time Shift playback you may use the special playback
modes, such as Slow, REW, FF, and Pause.

When starting the playback during an ongoing Time Shift recording you can press
the FF button repeatedly if you do not want to be 10 minutes behind the live
transmission of the program. So it is possible to have a quick look at what has
been recorded during your phone conversation - and at the same time finally
reach the direct transmission of the program. If anything of interest seems to be
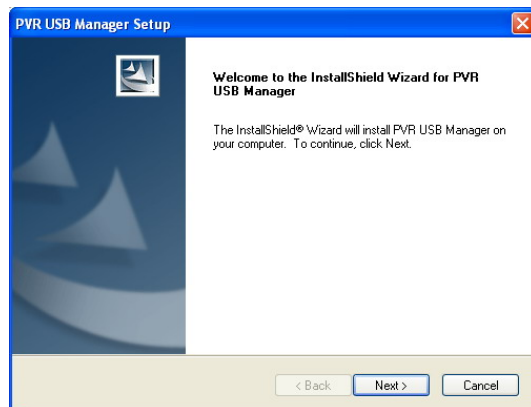going on you can press ► (Play) again and select normal speed (with sound).

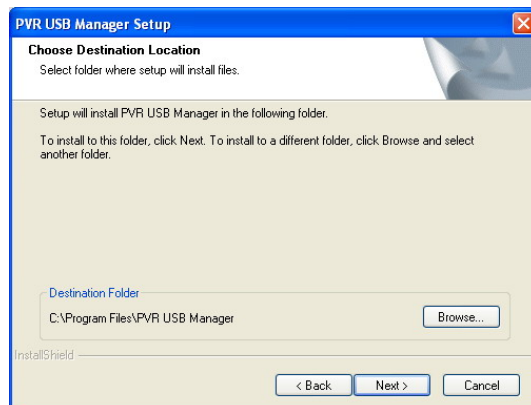# Functions Guide

USB Manager

● *How to Install PVR USB Manager.*

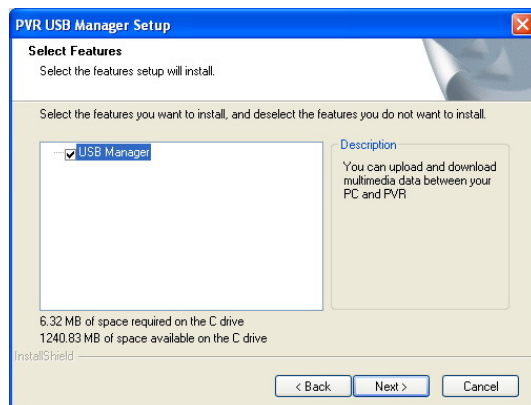■ *First Step – Installation of Application*

1. Execute setup.exe in your Installation CD or your Hard Disk.
2. Then you will see this installation window.
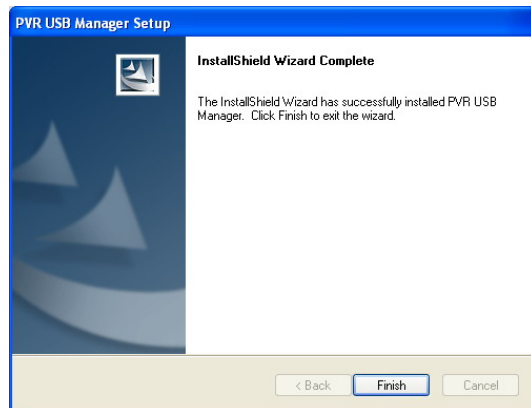
3. Click on the Next button

4. Click Next button

⬇ USB Manager

5. Click Next Button. Then PVR USB Manager program will be installed and then you will see this window. Now click on the Finish button.

■ *Second Step* – *Installation of Device Driver*

1. Connect the USB cable between your PVR and your PC. Then with your PVR, Go to the Main Menu → Utility → USB. Then following window will be appeared in your PC automatically. Check "Install from a list or specific location(advanced)" and click on the Next button

2. Check "Include this location in the search". Click browse and select the directory where your drivers are.

Functions Guide

USB Manager

3. Click on the Next button. Then the driver will be installed and you will see this window.

4. Now you can use your PVR USB Manager by click the PVR USB Manager icon. PVR USB Manager icon is in the Program group " PVR-5910".

● *How to use PVR USB Manager*
■ *Executing PVR USB Manager*

1. Go to Main Menu → Utility → USB in the PVR menu or press Option of RCU. Then you can see USB menu in the TV.
2. Connect USB Cable between PC and PVR
3. Run PVR USB Manager in your PC. Then you will see the PVR USB Manager window as below.
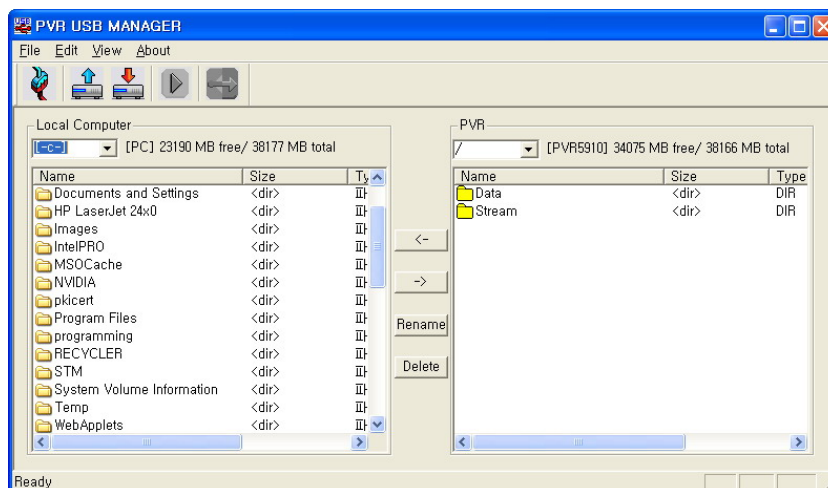
USB Manager

4. Right sub window is for your local hard disk. Left sub window is for your PVR hard disk.

5. In the PVR hard disk, there are two folders – Data and Stream. Data is for the files of captured images. Stream is for the files of recorded programs.

► File name extensions

1) .vid : Recorded files of TV channels

2) .aud : Recorded files of Radio channels

3) .jpg : Captured Image Files

◢ *Operations*

1. Move files - .vid, .aud, .jpg

1) Select a stream file or data file you want to move.

2) Press ⬆️ or `<-` to transfer file from PVR to PC.

3) Press ⬇️ or `->` to transfer file from PC to PVR.

2. Convert file format

1) You can convert .vid file to .ts file.

2) Select a stream file you want to convert.

3) Press 🔃 to convert file format.

3. Play stream file

1) Select a stream file you want to play.

2) Press ▷ .

4. Rename file name

1) Select a file you want to rename.

2) Press Rename .

3) Rename the file name.

5. Delete file

1) Select file you want to delete.

2) Press Delete .

Specification

➜ Technical Specification

Conditional Access Interface

PCMCIA	2 Slots Common Interface

Front End

Input Frequency	950~2150MHz
Input Impedance	75Ω
Connector	2xF-Type
RF Input Level	-65~-25dBm
LNB Control	DiSEqC 1.0 & 1.2, USALS
LNB Power	13V/18V (Max500mA with short circuit protection)
LNB Tone Switch	22KHz
Wave Form	QPSK (SCPC, MCPC capable)
Symbol Rate	2~45 MS/S

A/V Mode

Video	MPEG-II Main Profile/Main Level
Audio	MPEG-I Layer I&II
Aspect Ratio	4:3, 16:9
Audio Sampling Rate	32, 44.1, 48KHz
Audio Type	Mono, Dual Mono, Stereo, Joint Stereo
Graphic Display	720x576(PAL), 720x480(NTSC)

Specification

➡ Technical Specification

Connectors

TV SCART	CVBS, RGB,S-VIDEO, Audio L/R
VCR SCART	CVBS, S-VIDEO, Audio L/R
Audio Output	2 x RCA/Cinch
Composite Video Output	1 x RCA/Cinch
S/PDIF	1 x optic con. (Dolby Bitstream Out Available)
USB	USB 2.0 Compatible (Device/B-type)
RF Modulator	UHF I/O IEC male/female CH21~CH69(PAL B/G/I/D/K)
RS232C	9 Pin D-Sub RS232C serial port

General Characteristics

Supply Voltage	100-250VAC, 50/60Hz
Power Consumption	Max. 60W
LED Display	Alpha-Numeric VFD
Weight	Kg (without HDD : 0.4~0.6Kg)
Dimensions	350(W) x 270 (D) x 60 (H) mm
Channel Storage	Each other Max. 4000 TV & Radio Channels

Please Note : The specification of the STB may be changed without notice in advance.

Specification

➡ **Technical Specification**

CPU

Main CPU	STi5514/180 MHz
Front Control MPU	AT89SS52/11.0592 MHz

Memory

Flash Memory	4 MB
Graphics (MPEG) Memory	8 MB
System Memory	8 MB

Storage

Fixed HDD	160 GB
Recording Time	80 Hr/ 160 GB (Changeable depending on bit rate)

Seagate (ST380012ACE, 160 GB) is the most recommendable to optimize the receiver's function.

RTC (Real Time Clock)

RTC	Optional Function

➜ **Trouble Shooting**

If you suspect there is a fault with your receiver, please check the following trouble shooting guide before calling an authorized service agent.

Warning! Under no circumstances attempt to repair the receiver yourself. Tampering with the receiver may result in fatal electric shock and will invalidate your warranty.

Symptom	Possible cause
No display on the LED Display Panel	• The power cord is not plugged in correctly.
No picture on the screen	• Receiver is in Standby mode. • Scart Jack is not connected firmly to the video output port of television. • Incorrect channel or video output is selected on television. • Brightness level of your TV set is incorrectly defined.
No sound	• The Scart & RCA cable are connected incorrectly. • The Volume level is low. • Muting function is active.

Trouble Shooting Guide

➜ **Trouble Shooting**

Symptom	Possible cause
Poor Picture Quality	• The level of Signal strength is low.
Receiver not responding to remote control unit	• RCU batteries are dead or inserted incorrectly. • The RCU is pointing toward wrong direction.
Receiver is on but no picture or sound except the following messages (No signal, Locked channel, Not available)	• Channel is not available. • Channel is locked. • Service installation not yet done.
No Signal	• The level of Signal strength is low. • LNB is out of order. • The cable from the LNB is incorrectly connected. • The position of the dish is aligned incorrectly.
Settings you made in the menu have now changed	• The receiver lost power before being able to enter into standby mode. • Some of the Settings saved by user can be deleted partly or fully.
No HDD or No HDD access	• Check the jumper setting (Master or Single Drive) • Check whether HDD cartridge is correctly inserted