The User’s Manual

Personal Video Recorder

TF5000PVR Masterpiece

-Personal Video Recorder

Please read this User’s Manual carefully.
The menu structure and specification can be changed without notice.
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WARNING

Please read the following recommended safety precautions carefully for your safety.

MAINS SUPPLY : 90-250V AC 50/60 Hz.
OVERLOADING : Do not overload wall outlets, extension cords or adapters as these can result in fire or electrical shock.
LIQUIDS : Keep liquids away from the PVR. 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.
FLAME SOURCES : Do not place naked flame sources, such as lighted candles, on the PVR or near the PVR.
SMALL OBJECTS : Coins or other small objects must be kept away from the PVR as they can fall through the ventilation slots of the PVR and cause serious damage.
CLEANING : Disconnect the PVR from the wall socket before cleaning it. Use a dry cloth lightly dampened (no solvents) to clean the exterior of the PVR.
VENTILATION : Do not block the PVR’s ventilation slots. Ensure that a free airflow is maintained around the PVR.
   Never stand the PVR on soft furnishings or carpets. Do not use or store the PVR where it is exposed to direct sunlight or near a heater.
   Never stack other electronic equipment on top of the PVR.
ATTACHMENTS : Do not use any attachments that are not recommended as these may cause hazards or damage the equipment.
CONNECTION TO THE SATELLITE DISH LNB : Disconnect the PVR from the mains before connecting or disconnecting the cable from the satellite dish. Failure to do so can damage the LNB.
WARNING

SERVICING: Do not attempt to service this product by yourself. Do not remove the cover. Refer all serving to qualified service agents.

LIGHTNING: For protection we recommend that you connect the PVR via an external surge protection device. Disconnect the antenna cable from PVR during lighting storms.

EARTHING: The antenna cable must be earthed.

LOCATION: Locate the PVR indoor place properly to prevent lightening, raining and direct sunlight. Do not allow the PVR to be exposed to hot, cold or humid conditions.

RESPONSIBILITY: Do not use the PVR and its contents for illegal purpose.
We are not responsible for any kind of illegal use.
Do not use the PVR to backup important data. It can be deleted.
We are not responsible for any kind of problems caused by TAP application programs.

CAUTION

RISK ELECTRIC SHOCK
DO NOT OPEN

This symbol indicates “dangerous voltage” inside the product that presents a risk of electric shock or personal injury.

Warning

Please do not insert metal or alien substance into the slots for the Modules and Cards.
In doing so can cause damage to the PVR and reduce its life span.
Thank you for purchasing the Personal Video Recorder (PVR).

This PVR is fully compliant with the international DVB standard and thus transmits digital images, sounds, information guides and teletext directly to your TV through the satellite broadcasting.

Now you can comfortably see and receive digitally transmitted music, news, movie and sports satellite broadcasts in your office or at your home. The PVR records and plays back satellite broadcasts. You can enjoy interesting games embedded in PVR.

In the Service Search section, both the automatic service search method and the manual search mode are provided. Also it supports DiSEqC 1.0, 1.1, 1.2 and USALS(DiSEqC 1.3), enabling you to move your antenna in order to focus preferred satellite. You can save up to 5000 TV and Radio services and work around with the Favorite, Lock, Delete, Move and Sort functions.

The menu is very modern and supports multiple languages. All functions can be carried out using the remote control and some of the functions can also be carried out using the front panel. The PVR is easy to use and adaptable for future advances. Please be aware that new software may change the functions of the PVR.

If you have any difficulties concerning the operation of your PVR, please refer to the relevant section of this manual, including the 'Troubleshooting'. This Manual will provide you with useful information on using the PVR.

Please ensure that the following items are included with the PVR.

1) Remote control unit
2) Batteries (size AAA)
3) User’s Guide (this document)
- MPEG-2 Digital and fully DVB compliant
- 2 Common Interfaces for CONAX, CRYPTOWORKS, IRDETO, NAGRAVISION, SECA & VIACCESS
- 2 Tuners
- 5000 channels (TV and Radio) programmable
- Multilingual Audio support
- Multilingual menu text support
- Channel switching time less than 1 second
- Channel list editing
- Favorite channel list editing
- True-color On-Screen Display (OSD)
- Full Picture In Graphic (PIG) function
- Electronic Program Guide (EPG) for on screen channel information
- Subtitle supported
- Teletext supported by VBI insertion and software emulation
- Parental lock facility by channel and program event
- Program and Channel information transfer from receiver to receiver
- Exciting games embedded
- S/PDIF for digital audio or Dolby AC-3 bitstream output
- DiSEqC 1.0, 1.1, 1.2 and USALS(DiSEqC 1.3)
- Recording capacity : 40 hours for 4Mbps stream with 80GB HDD
- Powerful trick mode supported
- Playback of the selected region repeatedly
- Dual Decoding(PIP)
- Dual Recording and Playback simultaneously
- Dual Recording and Time-shifting simultaneously
- USB 2.0 supported for fast PC interface
- MP3 (MPEG-1 Layer 3) decoding
- VFD Display for service information
- RTC(Real-Time-Clock)
1) FRONT PANEL

- POWER
  The power button of STB (ON / Stand by)
- DISPLAY
  During the STANDBY mode, the current time is displayed.
  When the power is ON, the current status is displayed (TV/ Radio/ Menu).
- SERVICE
  Change the services
- VOLUME
  Change audio volume level

2) REAR PANEL
1. LNB 1 IN
   - Connect the satellite antenna cable
2. IF 1 Out
   - Use it to connect to another STB or LNB 2 IN
3. LNB 2 IN
   - Connect the satellite antenna cable
4. IF 2 Out
   - Use it to connect to another STB
5. VIDEO OUTPUT
   - Video output. (YELLOW)
6. AUDIO-LEFT OUTPUT
   - Audio output. (WHITE)
7. AUDIO-RIGHT OUTPUT
   - Audio output. (RED)
8. S-VIDEO
   - S-Video output. Connect the S-Video input of your TV.
9. TV SCART
   - Connect the TV SCART
10. VCR SCART
    - Connect the VCR SCART
11. USB port
    - Connect USB port of PC
12. RF IN
    - Connect the TV antenna
13. RF OUT
    - Connect the TV RF IN
14. S/PDIF
    - Optical output for Digital Audio
15. RS232
    - Upgrade the PVR data & software
REMOTE CONTROL UNIT (RCU)

1. **POWER Button ( )**
   - Switch the PVR between Operation and Standby mode.

2. **MUTE Button ( )**
   - Enable / Disable the Audio.

3. **UHF Button ( )**
   - Display and alter the UHF setting in menu.

4. **TV/STB Button ( )**
   - Change the terrestrial TV and STB mode.

5. **SLEEP Button ( )**
   - Display the sleep time. At the sleep time, the power is automatically turned OFF and the PVR goes to the STANDBY mode.

6. **Numeric Buttons (0 ~ 9 )**
   - Select the TV or Radio services and menu options.

7. **RECALL Button ( )**
   - Select the previously viewed service.

8. **INFO Button ( )**
   - Display the program information box on the Screen and remove it.
   - Display the extended event information when the information box is displayed.

9. **GUIDE Button ( )**
   - Display the EPG on screen when available.
   - Remove EPG when EPG is displayed.

10. **TV/ Radio Button ( )**
    - Select the TV/Radio mode.

11. **MENU Button ( )**
    - Display the Menu on screen or return to previous menu from submenu.
12. **SOUND Button ( )**
   - Select Sound Track and LEFT / RIGHT / MONO / STEREO sound.
   - Select the multifeed service if multifeed is available.
13. **V+/V- Buttons ( )**
   - Adjust the volume (Increase / Decrease).
   - Change the value of the selected item in Menu.
14. **P+/P- Buttons ( )**
   - Service up or down through the available services.
   - Move the selection bar in Menu.
15. **OK Button ( )**
   - Display Service List on screen.
   - Select an item in the menu.
16. **FAV Button ( )**
   - Display the favorite service list.
17. **SUBTITLE Button ( )**
   - Activate the subtitle selection window. Select the subtitle language in the list.
18. **EXIT Button ( )**
   - Return to the previous menu and the screen.
19. **TELETEXT Button ( )**
   - Enable the teletext with software emulation.
20. **Button**
   - Fast rewind when the progress bar is displayed.
   - Start reverse playback.
   - Change the speed of reverse playback.
21. **Button**
   - Display the progress bar of time shifting or playback when no progress bar is displayed.
   - Start playback with normal speed.
   - Return to normal speed from trick mode.
22. **Button**
   - Start fast forward or fast motion playback.
   - Change the speed of forward playback.
23. **Button**
   - Start slow motion playback.
   - Change the speed of slow motion playback.
24. Button
   - Stop time shifting, playback or recording.

25. Button
   - Start recording.

26. Button
   - Pause the playback and live picture.

27. Button
   - Move the position of Sub-picture at the PIP by counter clockwise.

28. Button
   - Move the position of Sub-picture at the PIP by clockwise.

29. ( ) Button
   - Exchange main-picture with sub-picture at the PIP.
   - Display the satellite list at normal picture and at service list.

30. (Red) Button
   - Enable, Resize and Disable the Sub-picture.

31. Button
   - Make a bookmark while playback or time shift.

32. Button
   - Go to the bookmarked position.

33. Button
   - Go to backward by 10 seconds per each pressing of this button.

34. Button
   - Display file list. (Recorded service list, MP3 file list, Application file list)

35. ( ) Button
   - Select the period for repeated playback or cut out.
   - Display the Service List of Sub-picture.
   - Select a play mode in MP3 play.

36. Button 37. Button
   - Change 4:3 Center Extract -> 4:3 Center box -> 16:9 Full screen.
   - Above buttons is a kind of function key. So, the function in each OSD Screen can be referred in each instruction message in help window.

*Remarks
If the RCU does not work, please check the RCU mode. There are 4 modes in the RCU. You change the mode by pressing two buttons simultaneously.

-Mode 1: + 1
-Mode 2: + 2
-Mode 3: + 3
-Mode 4: + 4

Only Mode 1 will work at default.
First, connect both the satellite antenna and the TV to the PVR.

- There are some of the most common ways to connect the equipment in this manual.
- There are several ways of connecting the PVR to the existing Audio/TV system.
- We recommend one of the following setups.
- If you have problems with your connections and need help, contact your dealer or service provider.

### Connection to TV, VCR and Hi-Fi

1. **Connection to the TV with the SCART Cable.**
   Connect one end of the SCART cable to the TV SCART socket on the PVR and the other end to a SCART socket on the TV.

2. **Connection to the VCR with a SCART Cable.**
   Connect one end of the SCART cable to the VCR SCART socket on the PVR and the other end to a SCART socket on the VCR.

3. **Connection to the TV with the CINCH Cable.**
   Connect one end (3 connectors) of the CINCH cable to the AUDIO-RIGHT (red), AUDIO-LEFT (white) and the VIDEO output (yellow) socket on the PVR. Connect the other end (3 connectors) to the AUDIO-RIGHT (red), AUDIO-LEFT (white) and the VIDEO input (yellow) socket on the TV or Hi-Fi.
4) **Connection to the TV using the RF cable.**
   Connect a terrestrial antenna to RF IN socket on the PVR.
   Connect one end of the RF cable to the RF OUT socket on the PVR.
   Connect the other end to the ANT IN socket on the TV.

5) **Connection to the TV using the S-VIDEO.**
   Connect one end of the S-VIDEO cable to the S-VIDEO socket on the PVR and the other end to a S-VIDEO socket on the TV.

**Connection to the Antenna.**

We recommend one of the following installation diagrams because of the LNB specifications for selecting RF signal band by DC voltage and 22Khz tone.
If the PVR is installed with separated connection type, there is no restriction for zapping while recording.

1) **Installing the PVR with two separated Antennas.**
The Connection Type in LNB setting menu should be set to Separated.
2) Installing the PVR with one Antenna.
The Connection Type in LNB setting menu should be set to Loop Through.
Tuner 1 and 2 can receive the RF signal of the same polarity and the same band.

3) Installing the PVR with Twin LNB Antenna.
The Connection Type in LNB setting menu should be set to Separated.

4) Installing the PVR with two separated Twin LNB Antennas and DiSEqC switches.
The Connection Type in LNB setting menu should be set to Separated.

Connection to the other Satellite Receiver.
Connect the satellite antenna cable to the LNB IN socket on the PVR. With other connector, connect the IF OUT socket on the PVR and the LNB IN socket of the other PVR or STB.

* Remarks
LNB power will not be bypassed from IF OUT to LNB IN. Only IF signal will be bypassed to IF OUT from LNB IN.
GETTING STARTED

Press the Power ( ) button to operate the PVR from the STANDBY mode. Now, the Info Box will appear for a given time and disappear. By pressing button, the Info Box will remain on the screen. The display time of the Info Box is adjustable in the System Setting menu of the Main menu.

IMPORTANT: Before taking charge of your new PVR, some important technical settings are essential.

- First, press the MENU ( ) button on the RCU to make the Main Menu appear.
- Go to the LNB Setting item in the Installation menu and press button.
- Choose the right parameters for Satellite Name, Tuner Select, Connection Type, LNB Frequency, LNB Power, 22KHz, DiSEqC 1.1 and DiSEqC 1.0.
- Set the Motorized DiSEqC1.2 and the USALS items according to your antenna, LNB and satellite settings. If the right Satellite Name and LNB Frequency were not found in the list, call the dealer for satellite information.
- Then, press button at Service Search item and go to the Service Search menu.
- Set the Search Mode to the Auto. (Manual, Advanced or SMATV Search)
- Select the Start Search... item and press button.
- The search procedure will take a while. Press button when the searching process is finished to confirm and save the new service list.
- For further information, please refer to the LNB Setting part of MENU OPERATIONS in this manual.
Now this chapter assumes that the PVR system has been installed correctly, meaning:
• The satellite antenna for the PVR has been installed, connected to the PVR.
• The PVR is connected to the TV.
• The RCU has batteries and ready to control the PVR.

If the PVR has not been installed or connected properly, please refer to the INSTALLATION menu on this manual.
Many of the functions of the PVR are available from the Main Menu. Press button to open it.
MENU OPERATIONS

System Setting

The exact local current time can be adjusted by using the Mode, the GMT, the Time Offset, the Time Format, the GMT Collection, the Satellite, the Transponder and the Summer Time sub menus.

A. Mode
By using buttons, you can select on of the Auto/Manual mode. The Auto mode updates the time settings automatically by the GMT received from the broadcast and the Time Offset you have inserted. The Auto mode is recommended.
System Setting

![System Setting](image)

Time Setting

![Time Setting](image)

The exact local current time can be adjusted by using the **Mode**, the **GMT**, the **Time Offset**, the **Time Format**, the **GMT Collection**, the **Satellite**, the **Transponder** and the **Daylight Saving Time** sub menus.

**A. Mode**

By using 

buttons, you can select on of the **Auto/Manual** mode. The **Auto** mode updates the time settings automatically by the GMT received from the broadcast and the **Time Offset** you have inserted. The **Auto** mode is recommended.
B. Local Time
The Local Time is adjustable only when the Mode is in the Manual mode. Adjust the current time, if necessary, by using the numeric buttons and V-, V+ buttons.

C. GMT
GMT is referred to the standard time of Greenwich. It cannot be changed.

D. Time Offset
The current time of the local area can be inserted. In another words, insert the time difference of the local time zone from the GMT. For example, if the local area is Seoul (the time difference from the GMT is 9), insert 9:00. The time is adjustable by using V-, V+ buttons, 15 minutes at a time.

E. Time Format
Selected a Time Format by using V-, V+ buttons. The default Time Format is 12-hour.

F. GMT Collection
The PVR will get the time information from the TPs selected.

<table>
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<tr>
<th>Mode</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>The PVR gets the time information from all the TPs.</td>
</tr>
<tr>
<td>CAS TP</td>
<td>The PVR gets the time information from the CAS TPs.</td>
</tr>
<tr>
<td>User Select</td>
<td>The PVR gets the time information from the TPs selected by users.</td>
</tr>
</tbody>
</table>

G. Satellite
This menu is selectable while the GMT Collection menu is User Select. Select a satellite you want to select TPs from it.

H. Transponder
This menu is selectable while the GMT Collection menu is User Select. Select TPs you want to select to get the time information.

I. Daylight Saving Time
Select the Daylight Saving Time to On or Off. The default Summer Time is Off.

Parental Control
Password to various menus can be configured. The PIN Code box will automatically appear when this menu is selected. The default PIN Code is 0000.
A. Censorship
The Censorship item blocks programs according to each specific setting. Use \( V^-, V^+ \) buttons to select the items below.

**No Block** : Access to everyone.
**Total Block** : Access to no one without PIN code.

If the service is limitation free, the block function will not work.

4~18(age): Inaccessible for viewers within each minimum age limit if a maturing rating of the event is same or lower than the age limit.

In case of inaccessible, the PVR asks the PIN Code and check the age limit.

B. Change PIN Code
Go to the **Change PIN Code** item to configure new PIN Code. Press \( \text{OK} \) button, then a box will appear on the screen. Enter the PIN code by using the numeric buttons on your RCU.

C. Access Control
The **Access Control** menu controls access to following items: **Time Setting**, **Language Setting**, **A/V Output Setting**, **Organizing Service**, **Organizing Favorites**, **Installation** and **IRD Lock**. Press \( V^-, V^+ \) buttons to Locked/Unlocked the access.

**Locked** means controlling the access to the specific menus with the PIN Code system. The default PIN Code is **0000**.
Language Setting
There are many languages available for the menu.

A. Menu Language
It is an item for changing the language of the Main menu.
Select the language that the menus will be shown in.
* The supported language can be changed without any notice.

B. Subtitle Language
It is an item for changing the language of the subtitle.
As long as the services support it, the subtitle language is changeable by pressing button on your RCU.
* The supported language can be changed without any notice.

C. Audio Language
It is an item for changing the language of the Audio.
If more than one audio language is transmitted, you may select one language among the languages transmitted by pressing button.
* The supported language can be changed without any notice.

A/V Output Setting
The PVR has many A/V Outputs. Control this menu properly according to external components connected to the PVR. Configurations concerning Audio and Video can be made here.

A. TV Type
Select your TV standard. For automatic PAL/NTSC selection, set it to Multi.

B. Video Output
Select the mode of Video output among RGB, S-Video, YUV and CVBS on TV SCART by using buttons.

C. VCR SCART Type
Select the VCR SCART type either Standard or External A/V. In case of External A/V, the source of TV SCART Output will be selected between VCR SCART input and internal AV by pressing button on the RCU. In case of Standard, it will be done
MENU OPERATIONS

automatically by the SCART functionality.

D. TV Aspect Ratio
Select your TV screen format. Select 4:3 or 16:9 mode by using \( \text{V-}, \text{V+} \) buttons.

E. 16:9 Display Format
If you have a TV set with the 4:3 picture format and transmission is in 16:9, you can select the display format. Select the Letter Box or Center extract by using \( \text{V-}, \text{V+} \) buttons.

F. Sound Mode
It allows you to configure the sound mode. Select the Stereo, Mono, Left and Right mode by using \( \text{V-}, \text{V+} \) buttons. The Sound mode is configurable later on by using \text{aud} button on your RCU.

G. RF Output
When the STB is connected to the TV by an RF cable, you may need to select the correct TV standard system. Select the PAL G, PAL I, PAL K, NTSC M mode by using \( \text{V-}, \text{V+} \) buttons. The default RF output is NTSC M.

H. RF Channel
Select a RF channel by using \( \text{V-}, \text{V+} \) buttons. The default RF channel is CH36. When you change the RF channel number, you must also change to the same value on the TV. If you do not, there will be no picture and sound.

MediaHighway EPG
A. MediaHighway EPG
To enable the Canal EPG function, select On.
Select On or Off by pressing V- , V+ buttons.

B. Satellite Name
This menu is selectable while the MediaHighway EPG menu is On.
Select a satellite you want to select TPs from it.

C. Home Transponder
This menu is selectable while the MediaHighway EPG menu is On.
Select TPs you want to select to get the Canal EPG.

D. Tuner Select
This menu is selectable while the MediaHighway EPG menu is On.
Select Tuner1 or Tuner2 by pressing V-, V+ buttons.

OSD Transparency
Adjust the OSD transparency of all the menus. The available levels are ranging from 0% to 50%.

Info Box Display Time
Adjust the time-out of the Info Box. Set the period of time that the Info Box is displayed on screen. The adjustable time is 0 to 30 seconds, No info box and Never Hide.

Info Box Position
Adjust the position of the Info Box. It allows you to change the position by using V- , V+ buttons.

Time Shifting
To enable the time shifting function, select Enable.
If the Time Shifting is enabled, the PVR records the current service in live. And, you can take advantage of the time shifting function.
To disable time shifting function, select Disable. If you don’t want to use time shifting function or reduce the power consumption, let the time shifting disable.
MENU OPERATIONS

Timer Setting

To insert new entry of Timer Setting, press (Red) Button. Press OK button to edit the entry, and press (Green) button to delete the selected entry.

There are Record ON and OFF modes in Timer Setting.

A. Record ON: This function is used for the delayed recording to the HDD of PVR.
   - Type: Select TV or Radio by pressing V- , V+ button.
   - Satellite: Press OK button to display the satellite list. Select a satellite that includes the service to be recorded.
   - Service: Select the service to be reserved for recording by pressing OK button.
   - Tuner Select: Select Tuner1 or Tuner2 by pressing V- , V+ buttons.
   - Mode: By using V- , V+ buttons, select one among One Time, Everyday, Every Weekend, Weekly, and Every Weekday.
MENU OPERATIONS

- **Date**: Select the recording start date by pressing **V-, V+** buttons.
- **Start Time**: Select the recording start time. **V-, V+** buttons and **0 – 9** buttons are available.
- **Duration**: Select the recording duration by pressing **V-, V+** buttons.
- **File Name**: To change file name as you want, press **OK** button. The keyboard will appear.
- **OK**: To confirm the setting for the reserved recording, press **OK** button.

**B. Record OFF**: It is a useful function for reserved recording to a VCR or for wakeup function like VCR Timer. If the **Record** item is set to **Off**, the PVR wake up and play it by the reserved conditions, but does not record it to the HDD of PVR.

For details, refer to the explanation of **Record ON**.

**File List**

The file list has 3 lists. They are **Recorded Services**, **MP3** and **Program Files**. The lists are selected by **REV**, **FWD** buttons. The File list is displayed by pressing **F-list** button.

<table>
<thead>
<tr>
<th>File List (Recorded Services / MP3 / Program Files)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD/MM</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Information of selected file**

**Help Messages**

**Information of HDD**
Recorded Services List

The file list is displayed by pressing F-list button. The file list of Recorded Services can be selected by button, buttons from other list.

1. You can see the file number, file name, date of recording, information of scramble, locking, Service name, event information, file size, HDD information, etc.

2. Folder

A new folder can be made by pressing button. The new folder will be named as GROUP #. The name can be changed by option button. The keyboard will be displayed if you select the Rename there.

3. Move

Press (Yellow) button after selecting a file you want to move. The lists of Folders will appear. You can select a folder you want.

4. Delete

Press (White) button after selecting a file you want to delete. You have to confirm it to delete at confirmation box.

5. Sorting, Rename, Lock

Press (Blue) button to display option list. You can sort, rename and lock the selected file or folder. If a file is locked here, the Lock icon will appear in the file list.

6. Icons

Scrambled Icon

<table>
<thead>
<tr>
<th>Icon (color)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ (Yellow)</td>
<td>Scrambled</td>
</tr>
<tr>
<td>$ (Yellow/Green)</td>
<td>Partially Scrambled</td>
</tr>
<tr>
<td>$ (Green)</td>
<td>Decrambled</td>
</tr>
<tr>
<td>None</td>
<td>Non-scrambled (FTA)</td>
</tr>
</tbody>
</table>

Lock Icon ( )

It means that the file is locked. To play the files you have to enter the PIN code.

7. Playback

To playback the selected file, press button or button.

8. Successive Playback of Services

Press (Red) button to number the services among the recorded services list and
press OK or play button to playback the multi-services in sequence automatically. This function is very convenient for you to descramble the pay TV service with proper CAM module and smart card. You can descramble the scramble services and copy it while you are not using this PVR.

9. Successive copy of Services
Select the services you want to copy by pressing (Red). You can start copying by pressing button.

10. Event information
If there was Event information when the service was recorded, you can see the information by pressing button.

MP3 File List
The file list is displayed by pressing button. The file list of MP3 files can be selected by , buttons from other list.

1. You can download the MP3 files via USB from PC using Altair.exe. You can get it from www.i-topfield.com. The list of MP3 files will be displayed here.

2. Folder
A new folder can be made by pressing (Green) button. The new folder will be named as GROUP #. The name can be changed by option (Blue) button. The keyboard will be displayed if you select the Rename there.

3. Move
Press (Yellow) button after selecting a file you want to move. The lists of folders will appear. You can select a folder you want.

4. Delete
Press (White) button after selecting a file you want to delete. You have to confirm it to delete at confirmation box.

5. Sorting, Rename
Press (Blue) button to display option list. You can sort, rename the selected file or folder.

6. Play
To play the selected file, press button or play button.

7. Successive Playback of MP3 files
Press Red (Red) button to number the files among the file list and press or play button to play the files in sequence automatically.
8. **Play by folder**
   To play the files in specific folder, select a folder and press `▶` button.

9. **Select Play mode**
   To select a play mode of MP3, press `▶️` (white) button. There are normal, repeat one and repeat all modes.

**Program File List**

The file list is displayed by pressing `Program files` button. The file list of Program files can be selected by `Revs` , `FWD` buttons from other list.

1. You can download the TAP (Topfield Application Program) via USB from PC using Altair.exe. (You can get it from www.i-topfiled.com). The list of the TAP will be displayed.

2. **Folder**
   A new folder can be made by pressing `Green` (Green) button. The new folder will be named as GROUP #. The name can be changed by option `Blue` (Blue) button. The keyboard will be displayed if you select the **Rename** there.

3. **Move**
   Press `Yellow` (Yellow) button after selecting a file you want to move. The lists of Folders will appear. You can select a folder you want.

4. **Delete**
   Press `White` button after selecting a file you want to delete. You have to confirm it to delete at confirmation box.

5. **Sorting, Rename**
   Press `Blue` (Blue) button to display option list. You can sort and rename the selected file or folder.

6. **Run**
   To run the selected file, press `OK` button.

7. **Auto Run**
   If you want a program runs automatically when the PVR starts up, move the program to the Auto Start folder.
   If you are pressing the `0` button when the PVR starts up, the program in the Auto Run folder will not run. Remove the program from the Auto Run folder if you do not want to auto run.
MENU OPERATIONS

Installation

LNB Setting

The Low Noise Block down Converter (LNB) amplifies the signal received by the satellite dish and lowers the frequency of the signal. The signal is then fed from the LNB at the dish via cable to the PVR.

For the LNB Setting, move the cursor to Installation item and press OK button. Then, move the cursor to the LNB Setting item and press OK button.

A. Satellite Name

Press OK button to display the Satellite List. The list of Satellite is put in alphabetical order. Select one of the preprogrammed satellites that corresponds to the direction of the antenna. If the desired satellite name is not in the list, then select Other.

B. Tuner Select

Select a tuner for service searching from the selected satellite.

C. Connection Type

If two tuners share one LNB, select Loop Through. If a service is being recoded, the other tuner can receive only the signal of the same band and polarity as being recorded in this configuration.

If the tuners are connected to separated LNBs (or Dual LNB), select Separated. There is no restriction as in the Loop Through configuration.
D. LNB Frequency
Select the L.O. Frequency of the LNB. The LNB Frequency of 5150, 9750, 10600, 10750, 11475, 9750/10600 or 9750/10700 can be selected by V- or V+ button. Also you can insert LNB frequency by using Numeric key on the RCU.

E. LNB Power
Select LNB power On to output the LNB voltage.

F. 22 KHz
If you are using a 22 KHz tone switch box, make 22 KHz tone switch enable or disable to select LNB or antenna.

NOTE: If the LNB Frequency is set to Universal LNB (9750/10600 or 9750/10700), it is not possible to set 22KHz because high or low band is selected by 22KHz.

G. DiSEqC 1.1
The PVR is designed to be DiSEqC 1.1 compatible. This allows multiple antennas to be connected to the PVR at the same time. If you are using two or more fixed antennas or LNBs, then it is recommended to use a DiSEqC 1.1 switch.

If you use a DiSEqC 1.1 switch only, it is possible to connect up to 4 antennas.

Set the DiSEqC 1.0 to Disable and select an item in DiSEqC1.1.

If you use a DiSEqC1.1 switch and DiSEqC1.0 switches, it is possible to connect up to 16 antennas. Connect the DiSEqC1.1 switch to the LNB input and connect the DiSEqC1.0 switches to the DiSEqC1.1 switch.

Set the DiSEqC1.1 item and DiSEqC1.0 item according to the antenna configuration. For example, set DiSEqC1.1 to 2 of 4 and DiSEqC1.0 to 3 of 4 to select A7.

H. DiSEqC 1.0

The PVR is designed to be DiSEqC 1.0 compatible. This allows multiple antennas to be connected to the PVR at the same time. If you are using two or more fixed antennas or LNBs, then it is recommended to use a DiSEqC 1.0 switch.

Select one of 1 of DiSEqC to 4 of DiSEqC, Mini A, Mini B or Disable according to the option or the configuration of DiSEqC switch box or antenna.

I. Service Search

To go to Service Search menu directly from LNB Setting menu, press OK button at this item.

Service Search
A. Satellite Name
Press OK button to display the Satellite List Box. The list of Satellite is put in alphabetical order. Select one of the preprogrammed satellites that correspond to the direction of the antenna. If the desired satellite name is not in the list, then select Other.

B. Search Mode
There are 4 search modes. There are 4 search modes, Auto, Manual, Advanced and SMATV. The Auto mode enables you to search using the information the PVR has. On the other hand, you may need to know in advance the frequencies and the symbol rates before using the Manual mode. On the Advanced mode, enter the Audio PID, Video PID or the PCR PID. The SMATV mode is used to special purposes on satellite master antenna TV system.

C. Frequency
Select or enter the Transponder’s Frequency by using the numeric buttons on your RCU.

D. Symbol Rate
Enter the Transponder’s Symbol Rate by using the numeric buttons on your RCU.

E. Polarization
Choose the type of polarization, either the Horizontal or the Vertical.

F. Network Search
This Network Search item can be used if the Search mode is set to Manual or Auto. If the Network Search item is set to On and the NIT (Network Information Table) is available, the Transponder’s information can be found.

G. PID
This item is valid when the Search Mode is set to Advanced only. Press OK button to enter Video, Audio and PCR PID’s.

1) Video PID
Insert the Video PID by using the numeric buttons on your RCU.

2) Audio PID
Insert the Audio PID by using the numeric buttons on your RCU.

3) PCR PID
Insert the PCR PID by using the numeric buttons on your RCU.

4) SAVE
MENU OPERATIONS

To ensure the above Video, Audio and PCR PID change, press button at this item.

H. FTA/Scrambled
Choose your favorable services you want to search among FTA only, CAS only and FTA+CAS.

I. Tuner Select
Select a tuner for service searching from the selected service.

J. Start Search...
To start the searching process, press button at this item.
To stop the searching process on the way, press either the button or the button. This menu will be shown as long as the PVR is searching for services. All services found will be listed in two columns on the screen with TV services in one column and Radio services in the other. Please note that the search procedure may take a few minutes.
When the search procedure is completed, the screen will show how many TV and Radio services have been found. Press button to save the services.

K. LNB Setting
To go to LNB Setting menu directly from Service Search menu, press button at this item.

Services Copy
In this menu, you can copy the existing services between Tuner 1 and Tuner 2.

A. Tuner 1 to Tuner 2
Copy the service list of Tuner 1 to that of Tuner 2.

B. Tuner 2 to Tuner 1
Copy the service list of Tuner 2 to that of Tuner 1.

C. All
Add the service lists of Tuner 1 and Tuner 2 and save it to service list of Tuner 1 and that of Tuner 2.
If you have DiSEqC 1.2 motorized system, then you can use the DiSEqC 1.2 functions.

A. Satellite Name
Select a satellite name that will be used to identify a motor position.

B. Tuner Select
Select a tuner that is connected with DiSEqC 1.2 system.

C. Transponder
Select the transponder to catch the strong signal. Select the TP from TP list box to get the strong signal.

D. LNB Setting
Please refer to LNB setting of this chapter.

E. Motorized DiSEqC1.2
Select Enable or Disable. If you are using DiSEqC1.2 antenna, set to Enable.

F. DiSEqC Command Mode
Change the current mode between User and Installer modes.
-User: This mode is used to fine-tune the position of the motor for better reception.
-Installer: This mode is used to search for the position of a satellite manually.

G. Movement: In case of User mode, the movement is adjustable by fine-tuning. In case of Installer mode, the movement is adjustable by East, West going command.
**MENU OPERATIONS**

**H. Motor Control**
- **Goto**: Move the motor to the stored position of the selected satellite.
- **Store**: Store the current position of the motor for the selected satellite.
  * The followings are available only at the Installer mode.
- **Recalculate**: Recalculate the position of the Stab Rotor motor.
- **Goto Ref**: Go to reference.
- **Limit E, Limit W**: Set the limits of East and West position.
- **Limit Off**: Remove the limitation.
- **Reset**: Reset all the stored position of the motor relative to the "0" position

**I. Service Search**

After saving the DiSEqC configuration at the highest signal quality, press \[\text{OK}\] button to start service searching of the selected satellite.

**USALS Setting**

USALS is very convenient motorized DiSEqC system that supports DiSEqC 1.3 command and also can get the satellite position automatically if you know your geographical location. Basically, the listed satellites have its Longitude and therefore the angle of the satellite can be calculated without problem.

If you have USALS motorized system, then you can use the USALS as followings.
A. Tuner Select
Select a tuner that is connected with USALS system.

B. Motorized DiSEqC1.3
Select Enable or Disable. If you are using DiSEqC1.3 switch, set to Enable.

C. Satellite Name
Select a satellite that will be used to identify a motor system.

D. Satellite Angle
It is the longitude of the selected satellite and it can be set automatically in case of selecting a satellite name. You can use numeric keys of RCU to enter the angle. East or West will be selected by V- or V+ button.

E. My Longitude
It means the longitude of your location. You can select the angle, East and West by V- or V+ or numeric button.

F. My Latitude
It means the latitude of your location. You can select the angle, South or North by V- or V+ or numeric button.

G. Reference Position
Go to Reference position (90°)

H. Move: After searching the position you want by Goto the position item, you can tune the antenna to go to the exact position by this item. V- or V+ button moves the antenna to anti-clockwise and clockwise respectively.

I. Transponder: Selects the Transponder to catch the strong signal.

J. Goto the position
After setting the Longitude, Latitude and the longitude of the selected satellite, this menu is used when you want to move the desired direction (position) of the dish saved before. Its moving limit is ±65°.
MENU OPERATIONS

Factory Setting

All the stored data can be reset just like it was manufactured. The factory setting has two steps. The first is to reset the service data and other system configurations except Motorized DiSEqC1.2 setting. The second is to reset the parameters of Motorized DiSEqC 1.2.

Format Hard Disk

To format the HDD in PVR, Press button at this Item. Formatting Hard Disk will delete all the data and the files recorded in HDD permanently. If a new HDD is installed, it should be formatted because the file structure of PVR is different from others. You can not use the Time shifting, Recording and playback functions with an unformatted HDD.

Transfer Firmware

A. Transfer Program to Other IRD

It is used to transfer PVR firmware to other PVR for upgrading the PVR.

Notes: Please proceed this menu with connecting the PVR of same model and same specification.

B. Transfer Data to Other IRD

It is used to transfer PVR Data such as service information to other PVR for upgrading the PVR.
Notes: Please proceed this menu with connecting the PVR of same model and same specification.

Firmware Upgrade

At this menu, you can download the latest PVR software from Satellite. The TP details are as bellows.

Astra
- FREQUENCY: 12603 MHz
- S / R: 22000 KS/s
- Polarity: Horizontal
- PID: 347

Hotbird 4
- FREQUENCY: 12673 MHz
- S / R: 27500 KS/s
- Polarity: Vertical
- PID: 730

For OTA (Over - The - Air Upgrade), it takes around several minutes to download software from the Satellite.
To start OTA, press button at Start item.

For better service, the satellite and TP can be added or changed. You can get the information at www.i-topfield.co.kr.
**MENU OPERATIONS**

**Organizing Svc/Fav**

This menu can be used to rename, reorder, lock, hide and delete TV Services.

**Organizing Services**

A. **Browse**

Press the OK button. Now, browsing through the **Organizing Services** is possible. Press assigned buttons on the help message.

B. **Rename**

Use the buttons to select **Rename** item and press the button to move the cursor to the Service List. Press the button to display keyboard, and rename the service. After renaming it, be sure to save it by pressing the button at **Save** item.
C. Move
You can reorder and move the service to the preferred position. Mark the desired service to move and press OK button. Use P+/P- buttons to choose the Move mode.

D. Lock
You can restrain and lock the services. From here, locking (and later unlocking) services in any of the lists is possible e.g. in order to prevent children from watching it. If a locked service is selected, you should enter the PIN code in order to enjoy it.

E. Skip
You can hide and skip the services. In order to unlock the skip function, press OK button on the skipped service. The skipped services will not be visible on the Service List.

F. Delete
Press OK button to delete Services. The delete function differs from the skip function as it deletes the service completely. Whereas, the skip function just makes the service invisible.

NOTE: Deleted services are permanently deleted. The only way to recover them is to perform a new service search.

G. Sort
You can sort and rearrange the Service List.

Organizing Favorites
This mode is helpful in adding and deleting services to and from the favorite group. Under the menu Organizing Favorites, there are three different modes: Fav List, Fav Services and TV or Radio Service List.

On the Fav List mode, four standard lists are selected as the default menus: News, Sports, Movie and Music. Up to 30 lists including these lists can be added and renamed. When deleting a service, select a service in the Fav Services section and press the assigned button on the help message.

To add services into Favorites, locate the cursor to the desired service in Service List and press OK button. To delete a service from Favorites, locate the cursor to the service in Fav Services and press button.

Information

IRD Status
Check the PVR’s system information here. It shows the System ID, Loader Version, Device Version, Application Version and Last Update.

**Calendar**

Press \( \text{V-} \) or \( \text{V+} \) button to select the year. Press \( \text{P-} \) or \( \text{P+} \) button to select the month.

**Common Interface**

The menu differs according to each inserted CAM. If the module has not been installed yet, the phrase **Not Installed** will be indicated.

**Game**

- **ExBlock**
- **Bomb Hexa**
Press \text{ok} button to see the Service List. The Service List displays as follows.

- Service provider. (It can be displayed by pressing \text{chk} button.)
- Service List by \text{T1} (Tuner 1) or \text{T2} (Tuner 2).
- Scrambled Mark by \$.

By using \text{WB} (White) button in the Service List, you can use the functions as follows.

- \text{RB} (Red) button: Display the Service List of Tuner 1 or Tuner 2.
- \text{GB} (Green) button: Sort the Service List by Alphabetic.
  * The sorted Service List will be displayed in the Service List menu only.
- \text{YB} (Yellow) button: Search the Service List by Alphabetic.
- \text{BB} (Blue) button: Display the options. You can use this options by pressing \text{V+}, \text{V-} or \text{OK} button.

- \text{Satellite}: Displays the Service List by satellite.
- \text{Tuner}: Selects among Tuner 1, Tuner 2 and all Tuner.
- \text{Show Provider}: Displays the services by service provider.
- \text{Sorting}: Selects among \text{Default}, \text{Alphabetic}, \text{FTA~CAS}, \text{CAS~FTA}, \text{Provider} and \text{Fav~NO Fav}.
- \text{Rename}: Renames the marked service.
- \text{Lock}: Makes the marked service \text{Unlocked} or \text{Locked}.
- \text{Delete}: Deletes the marked service.
- \text{Add to FAV}: Adds the marked service to the FAV List.
**FUNCTION GUIDE**

**Information Box**

Press \(\text{\textdag} \) button on the RCU to see the program information. The Information box displays as follows:

- Service Number
- Service Name
- Detailed Program Information
- Signal Level and Quality
- Tuner Information
- Information of subtitle and / or teletext
- Parental Lock

You can hide the Information Box by pressing \(\text{\textdag} \) button.

A. Live picture

<table>
<thead>
<tr>
<th>Number</th>
<th>Service Name</th>
<th>Signal Strength</th>
<th>Satellite / TP info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Name</td>
<td>Event Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start Time ~ End Time</td>
<td>Information icon</td>
<td>Current Time</td>
<td></td>
</tr>
</tbody>
</table>

You can see the Current/Next event by pressing \(\text{\textlft} / \text{\textrgt} \) button in the information box. To control the volume in the information box, you have to press \(\text{\textlft} / \text{\textrgt} \) button two times without interval.

If EPG is available on programs, by using \(\text{\textlft} / \text{\textrgt} \) buttons, you can see the EPG. You can see extended information of the event by pressing \(\text{\textdag} \) button once more.

B. Playback

<table>
<thead>
<tr>
<th>ICON</th>
<th>File Name</th>
<th>Information icon</th>
<th>Satellite / TP info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress Bar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Event Name</td>
<td>Event Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration</td>
<td>Time</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**FUNCTION GUIDE**

C. MP3

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Title</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Artist</td>
<td>Album</td>
</tr>
<tr>
<td></td>
<td>Duration</td>
<td>Time</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Icon</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EPG (Electronic Program Guide)**

To display the information about currently being broadcasted as well as those that will be broadcasted next, press button on the remote control unit.

If EPG is available on programs, you will see the detailed description of the programs, start/end time and programs schedules etc.

- buttons will be used to move program and to see next program schedules.
- buttons will be used to switch the service.
- button makes the reservation for the next program.
- button shows extended information of the event.
- button will change the contents of EPG between TV and Radio services.
- (Red) button switches the EPG from Single Service to Multi Service and in opposition.

**Subtitle**

You can choose a language of subtitle using button on the RCU.

If the broadcaster provides subtitles, you can see symbol in the Information Box.

**Teletext**

If the broadcaster supports teletext, you can see symbol in the Information Box. There are VBI insertion mode and software emulation mode in teletext. In the VBI insertion mode, which is always on, you can watch the teletext with your TV using the RCU of your TV. To watch teletext with VBI insertion, your TV must support teletext.
FUNCTION GUIDE

C. MP3

<table>
<thead>
<tr>
<th>ICON</th>
<th>Title</th>
<th>Information icon</th>
<th>Bitrate</th>
<th>Progress Bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artist</td>
<td>Album</td>
<td>Duration</td>
<td>Time</td>
<td></td>
</tr>
</tbody>
</table>

**EPG (Electronic Program Guide)**

To display the information about currently being broadcasted as well as those that will be broadcasted next, press the **guide** button on the remote control unit.

If EPG is available on programs, you will see the detailed description of the programs, start/end time and programs schedules etc.

- **P+**, **P-** buttons will be used to move program and to see next program schedules.
- **V+**, **V-** buttons will be used to switch the service.
- **OK** button makes the reservation for the next program.
- **Info** button shows extended information of the event.
- **TV** (Red) button switches the EPG from Single Service to Multi Service and in opposition.

**Subtitle**

You can choose a language of subtitle using **Subtitle** button on the RCU.

If the broadcaster provides subtitles, you can see **Subtitle** symbol in the Information Box.

**Teletext**

If the broadcaster supports teletext, you can see **Teletext** symbol in the Information Box.

There are VBI insertion mode and software emulation mode in teletext. In the VBI insertion mode, which is always on, you can watch the teletext with your TV using the RCU of your TV. To watch teletext with VBI insertion, your TV must support teletext.
In the software emulation mode, you can watch the teletext even though your TV does not support teletext. You can watch the teletext using the RCU of PVR.

Press **Teletext ( )** button to watch the teletext with software emulation mode.

Press **button once more or EXIT ( )** button to escape from teletext.

### Sound Track

You can choose a language of soundtrack by pressing ** Aud button when a broadcaster supports various languages of soundtrack.

Also, it is possible to choose a mode among Stereo, Mono, Left and Right using ** V+ , V-** buttons. ** Aud button is used for multifeed function, too. If the multifeed is available in current service,

Multifeed Track will be displayed first. You can change the display to Sound Track selection menu by pressing ** button once more.

### Multifeed

If multifeed is available in the service, Multifeed Icon ( ) will appear at the right side of the Information box. If available, the Multifeed Track and Sound Track are toggled by ** button. It is possible to choose one of the multifeed service.

### Time Shifting
1. To use **Time Shifting** function, the **Time Shifting** option should be enabled. To find the Time Shifting option menu, follow the steps below.

   **Main Menu**  |  **System Setting**  |  **Time Shifting**  |  **Enable**

2. Press button to display Time Shifting progress bar. You have to press button once more to display Time Shifting progress bar during Trick mode (such as Fast Forward, Reverse Playback, Slow motion).

3. To go to the desired playback position, press , , button or , , button. This function is valid while the Time Shifting progress bar is displayed.

4. To remove the Time Shifting progress bar at once, press , or button.

5. To go to the live video, press button.

6. To start Instant Time Shifting, press button. The start position of the playback goes 10 seconds back per each pressing of button.

**Recording while Time Shifting**

1. Press button to display Time Shifting progress bar.

2. To go to the desired position, , , button or , , button.

3. Press button to start recording.

4. The recording will be started from the selected position.

5. Press button to stop Time Shifting.

6. Press button once more to stop recording.

**Caution**: If the recording time is less than about 1 minute, the recorded file will not be saved.
FUNCTION GUIDE

Recording, Checking and Editing the reserved delayed recording

To record services, refer to the following steps. There are four kinds of recording references.

Caution : If the recording time is less than about 1 minute, the recorded file will not be saved.

Immediate Recording by RECORD button

A. Recording
Press \text{REC} button to record the service you are watching. To specify the stop time, go to \text{End of recording} Window and modify \text{Duration} item. To go to the \text{End of recording} Window, press \text{REC} button once more.

B. End of recording
To see \text{End of recording}, press \text{REC} button once more in the service of recording or pause. This function can be used for duration of the recording time, recording by the event, record pause etc.

1. Duration
To change the duration of the recording time, press \text{V-} or \text{V+} button.

2. After this program
It records only current event and stops.

3. After next program
It records to next event and stops. Also, the file is saved in a different name.

4-1. Record pause
To pause recording, select \text{Record pause}. 
4-2. Record continue
To restart recording, select Record continue.
Note: If you would like to continue recording in pause, press \textbf{Record} button in order to see End of recording Window. Then, continue item will appear.

C. Checking and modification
A Recording Icon ( ) will be displayed on the upper rightmost of the TV screen for several seconds if the recording is initiated. Press \textbf{Info} button to see the Recording Icon.
To check and modify the recording options, go to End of recording Window.

D. Stop
Press \textbf{Stop} button and select the service to stop the Recording by confirming \textbf{OK} button. If only one service is being recorded, it is possible to stop the recording by pressing \textbf{Stop} button twice.

Recording by EPG

\begin{itemize}
\item \textbf{A. Record}
Press \textbf{Guide} button to display EPG. Select a service that you want to record, and press \textbf{Rec} button. Instead of \textbf{Rec} button, two times pressing of \textbf{OK} button is valid for delayed recording. In these cases the Recording mark ( ) will be displayed.
Pressing the \textbf{Rec} button once more at the service can modify the parameters of delayed recording. If you press the \textbf{Rec} button in the modification window, the modification will be canceled.
\end{itemize}
B. Checking and modification
Press the guide button to display EPG. The reserved services for delayed recording will be marked with a Recording mark (R) or Reserved Event mark (P).
Pressing the rec button once more at the service can modify the parameters of delayed recording. If you press the rec button in the modification window, the modification will be canceled.

C. Cancel
Press the guide button to display EPG. To cancel a reservation of delayed recording, select the service you want to cancel and press the OK button once or twice till the recording mark is disappeared on the service.

Delayed Recording
See [Main Menu -> Timer Setting] for more details on Delayed Recording.

Playback a Recorded Service

1. Press the list button to display the recorded service list.
2. You can use several useful editing functions at Recorded Services as followings.
   A. New Folder: Press (Green) button to make new folder.
   B. Move to Folder: Press (Yellow) button to move the Service to a folder.
   C. Option: By pressing (Blue) button, you can use optional functions such as
      - Sorting by Alphabetic, Size, Time.
      - Rename
D. Delete File: Press \( \text{intvl} \) button to delete the recorded service.
E. Event Info: Press \( \text{info} \) button to display extended event information.

3. Select a recorded service at the list.

4. Press \( \text{OK} \) button to start playback.

5. Press \( \text{play} \) button to display Time Shifting progress bar. You have to press \( \text{play} \) button once more to display Time Shifting progress bar during Trick mode. (such as Fast Forward, Reverse Playback, Slow motion)

6. To go to the desired playback position, press \( \text{V}^+, \text{FWD} \) button or \( \text{V}^-, \text{RVS} \) button.
   This function is valid while the progress bar is displayed.

7. If you enter the position by percent with numeric button of RCU, the playback position will be moved to the point. This function is valid while the progress bar is not displayed.

* Successive Playback of Services
Press \( \text{Red} \) (Red) button to number the services among the recorded services list and press \( \text{or} \) button to playback the multi-services in sequence automatically.
This function is very convenient for you to descramble the pay TV service with proper CAM module and smart card. You can descramble the scramble services and copy it while you are not using this PVR.

* MP3 and TAP
Press \( \text{or} \) buttons at recorded service list to go to MP3 files and program files(TAP).

Stop
1. This function is available for playback.
2. To stop playback, press \( \text{stop} \) button.
3. You can stop the recording in the recorded service list, too. To stop the recording, press \( \text{stop} \) button at the selected recording file.

Pausing
To pause the live picture or playback, press \( \text{pause} \) button.
Press \( \text{pause} \) button again or \( \text{play} \) button to quit pausing.
FUNCTION GUIDE

1. Pause from live video
If the PAUSE is kept more than 10 seconds with enabled Time Shifting mode, the live picture is changed to time-shifted playback. The video continues from the paused image when resumed from PAUSE.

2. Pause from Time Shifting
The video continues from the paused image when resumed from PAUSE.

3. Pause from Playback
The video continues from the paused image when resumed from PAUSE.

**Slow Motion Playback**
1. To playback in slow motion (without sound), press the ➤ button.
2. Slow motion speed can be adjusted by pressing the ➤ button repeatedly.
3. There are 3 steps (1/2, 1/4, 1/8) in slow motion playback.
4. Press ➤ button to resume playback with normal speed.
5. The slow motion function is available for the playback and the time-shifted playback.

**Fast Motion Playback**
1. If there is a Time Shifting or Playback progress bar, remove the progress bar by pressing ➤ button.
2. Press ➤ button for fast motion playback. To change the playback speed, press ➤ button repeatedly.
3. There are 3 steps (2, 4, 6) in fast motion playback.
4. Press ➤ button to resume playback with normal speed.
5. The fast motion function is available for the playback and the time-shifted playback.

**Fast Forwarding and Rewinding**
1. Press ➤ button to display Time Shifting or Playback progress bar.
2. To go to the desired playback position, press button ◀ or ▶ button. This function is valid while the progress bar is displayed.
3. To remove the progress bar at once, press ➤ button.
Reverse Playback

1. If there is a Time Shifting or Playback progress bar, remove the progress bar by pressing play button.
2. Press revers button for reverse playback. To change the playback speed, press revers button repeatedly.
3. There are 3 steps (1,2,3) in reverse playback.
4. Press ply button to resume playback with normal speed.
5. The reverse playback function is available for the playback and the time-shifted playback.

Bookmark

You can jump to a position directly by bookmark function in playback and time-shifted playback. To search positions very quickly and easily, use bookmarks.
It is impossible to use the bookmark in the following conditions.
- Timeshifting is disabled and you are watching live picture.
- You are recording 2 services, and you are watching the other sevice.

1. Add a bookmark
To add a bookmark, press BOOKMARK ( ) button at the position you want to add it.
You can make the bookmark at maximum 64 positions.

2. Go to a bookmark
Press GO TO BOOKMARK ( ) button to jump to the next bookmark. Then, the PVR plays from the book marked position.
3. Delete a bookmark
To remove a bookmark, you have to display the progress bar by pressing \( \text{PLY} \) button. Select the bookmarked position by \text{GO TO BOOKMARK}\( \text{ ( )} \) button and press \text{BOOKMARK}\( \text{ ( )} \) button.

4. 30 seconds forward
If there is no preset bookmark, the PVR plays every 30 seconds forward by pressing \text{GO TO BOOKMARK}\( \text{ ( )} \) button.

**Recording The Descrambled Live Service**

1. Select the live picture you want to record. Descramble the service with a proper CAM and smart card. The live service should be decoded well with the proper CAM and smart card.
2. Start recording according to the recording procedure.
3. During recording, don’t change the service neither try the time shifting function.

**Caution**: If there is any disturbance such as service changing or time shifting during recording, the recorded file will be changed to the scrambled format from this position. If the recording time is less than about 1 minute, the recorded file will not be saved.

**Descrambling Recorded Services**

1. Select and playback a service you want to descramble. Descramble the service with a proper CAM and smart card. The playback service should be decoded well with the proper CAM and smart card.
2. Press \( \text{PLY} \) button to display Playback progress bar.
3. To go to the desired position, press \( \text{REV} \) button or \( \text{FWD} \) button.
4. Start playback and the picture should be descrambled with a proper CAM and smart card. The fast/slow motion descrambling is possible by fast/slow motion playback.
5. Start recording by \text{RECORD}\( \text{ ( )} \) button.
6. The video displayed on TV will be recorded.
7. Press \text{STOP}\( \text{ ( )} \) button to stop recording.
8. Press \text{STOP}\( \text{ ( )} \) button again to stop playback.
9. You can playback the multi-service(Pay TV) in sequence. For detailed explanation, refer to **Playback a Recorded service**.
Caution: If the descrambling time is less than about 1 minute, the recorded file will not be saved.

Repeated Playback mode

The repeated Playback mode works only in playback mode. It does not work in time shifting mode. There are two repeated Playback modes.

1. Repeating the whole selected service.
   a. Start playback a recorded service.
   b. Press button without the progress bar to repeat the whole selected service.
   c. Press button once more to cancel the repeating playback.

2. Repeating the selected region.
   a. Start playback a recorded service.
   b. Press button to display Playback progress bar.
   c. To specify one end of region, press the button with the progress bar.
   d. Move the cursor by pressing (or ) or (or ) button.
   e. To specify the other end of region, press the button once more. The color of the selected region will be changed to green.
   f. Press button once more to cancel the repeating playback.

Copying from Recorded Services
**FUNCTION GUIDE**

1. Select and playback a service to copy.
2. Press \( \rightarrow \) button to display Playback progress bar.
3. To go to the desired position, press \( \leftarrow \) button or \( \rightarrow \) button.
4. Start playback the recorded video you want to copy. The fast/slow motion copying is possible by fast/slow motion playback.
5. Start copying by \( \rightarrow \) button.
6. The video displayed on TV will be copied.
7. Press \( \leftarrow \) button to stop copying.
8. Press \( \rightarrow \) button again to stop playback.

**Caution:** If the copying time is less than about 1 minute, copying will not be done successfully. It is recommended not to change the playback speed.

**Cut Out / Save Selected Region**

1. Start playback a recorded service.
2. Press \( \rightarrow \) button to display Playback progress bar.
3. To specify one end of region, press the \( \rightarrow \) button with the progress bar.
4. Move the cursor by pressing \( \rightarrow \) (or \( \leftarrow \)) or \( \uparrow \) (or \( \downarrow \)) button.
5. Press \( \rightarrow \) button to cut or save the selected region. Then, a message box appears.
6. To cut out selected region, press the \( \rightarrow \) button at cut item in the message box.
7. To save the selected region, press \( \rightarrow \) button at save item in the message box.
**FUNCTION GUIDE**

**Time Shifting while Recording**

During single recording, Time Shifting is possible. But, if you are recording 2 services at the same time, Time Shifting is possible only in the recorded service.

**Zapping while Recording**

For the tuner being recorded with, all the services in the same Service can be selected. For the other tuner, all the scanned services can be selected.

**Picture In Picture (PIP)**

1. Press **RED** button to display PIP. Press **RED** button repeatedly to change the size of sub-picture or to remove the sub-picture.
2. At PIP screen, press **( )** button to exchange main-picture with sub-picture.
   Remarks: It is not possible to exchange main-picture with sub-picture when a recorded service is in playback in main-picture and a live service plays in sub-picture.
3. Press **( )** button to move the position of sub-picture.
4. To display the service list of main-picture, press **OK** button. You can select a service in the service list.
   To display the service list of sub-picture, press **( )** button.
5. If the both of main and sub-picture are scrambled, only the main-picture will be played.
FUNCTION GUIDE

Dual Recording

1. Press button to start Recording.
2. You can use the Time-shifting function while recording another service. It is possible to record two services at the same time, too.
3. To record the 2nd service, press button at the service you want to record.
4. You can check the status of recordings in the recorded service list. To check it, move the cursor to the file that is being recorded.
   You can stop the recording there, too. To stop the recording, press button at the selected recording file.
5. It is possible to stop the recording in the live picture. To do it, press button and press button after selecting the recording by button.

Progress Icon

There will be Icons during Playback, Time Shifting, Recording and Copying. They will be displayed for a seconds. To display it again, press button.

<table>
<thead>
<tr>
<th>Icon (color)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Red)</td>
<td>Recording.</td>
</tr>
<tr>
<td></td>
<td>- Small Circle in the large circle means the current service you are watching is being recorded.</td>
</tr>
<tr>
<td></td>
<td>- The number in the large circle means recording number. And, the service being recorded is not the service you are watching.</td>
</tr>
<tr>
<td></td>
<td>- The outer circle mean displays the rate of progress.</td>
</tr>
<tr>
<td>(Green)</td>
<td>Playback.</td>
</tr>
<tr>
<td></td>
<td>- The figure in the circle shows you the playback speed.</td>
</tr>
<tr>
<td></td>
<td>- The outer circle displays the rate of progress.</td>
</tr>
<tr>
<td>(Red)</td>
<td>Copying.</td>
</tr>
<tr>
<td></td>
<td>- The character C in the circle means copying.</td>
</tr>
<tr>
<td></td>
<td>- The outer circle displays the rate of progress.</td>
</tr>
</tbody>
</table>
Software Upgrade

The PVR has stable and convenience software to use. But, to improve the PVR the new software of the PVR may be released. Whenever a problem is found or functions are added or modified, the software in the PVR has to be upgraded to enjoy better function.

The latest news, software, utility, driver, product and manual will be found at Topfield website [http://www.i-topfield.com](http://www.i-topfield.com).

There are some methods to download the new software.

(a) PVR to PVR download via RS232C

   It is possible to download the firmware or channel data from PVR to another PVR.

(b) PC to PVR download via RS232C

   You need the `TFD-down.exe` to download the software.
   Start download at PC and turn on the PVR.

(c) PC to PVR download USB

   You need to the `TFDN_USB.exe` to download the software.
   Start download at PC and turn on the PVR.

(d) OTA

   You can download the latest PVR software from Satellite by OTA. To upgrade your PVR by OTA, you should receive the signal from Hotbird or Astra.
   The satellite and TP can be added or changed. You can get the information at [www.i-topfield.com](http://www.i-topfield.com)

For more information, refer to the transfer firmware chapter of Menu Operations.
## SOFTWARE UPGRADE AND PC INTERFACE

### File download and upload via USB

You can upload or download the TAP (Topfield Application Program), MP3 and the recorded services to or from your PC. You need to the Altair.exe to enjoy it.

You can download the TFD-down.exe, TFDN_USB.exe, Altair.exe at Topfield website http://www.i-topfield.com

The TAP application can be developed and used by users. The users can make their own functions by TAP. Topfield does not confirm the TAP developed by users, and does not have any responsibility.
MENU MAP

- File List
  - LNB Setting
    - Satellite Name
    - Tuner Select
    - Connection Type
    - LNB Frequency
    - LNB Power
    - 22Khz
    - DiSEqC 1.1
    - DiSEqC 1.0
    - Service Search
  - Service Search
  - Service Copy
    - Motorized DiSEqC 1.2
    - USALS Setting
    - Factory Setting
    - Format Hard Disk
    - Transfer Firmware
    - Firmware Upgrade
      - Transfer Program to...
      - Transfer Data to...

- Installation
  - Organizing Services
    - IRD Status
    - Calendar
    - Common Interface
    - Game
    - Organizing Favorites
      - Browse
      - Rename
      - Move
      - Lock
      - Skip
      - Delete
      - Sort
### Tuner & Service Decoder

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Tuners</td>
<td>Decoding &amp; recording/or decoding</td>
</tr>
<tr>
<td>Input/Loop through Connector</td>
<td>75Ω, IEC 169-24, Female</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>950 ~ 2150MHz</td>
</tr>
<tr>
<td>Signal Level Input</td>
<td>-65 ~ -25dBm</td>
</tr>
<tr>
<td>LNB Power &amp; Polarisation</td>
<td>Vertical:+13.5VDC</td>
</tr>
<tr>
<td></td>
<td>Horizontal:+18VDC</td>
</tr>
<tr>
<td></td>
<td>Current:Max. 500mA with Overload protection</td>
</tr>
<tr>
<td>22KHz Tone</td>
<td>Frequency:22±1KHz</td>
</tr>
<tr>
<td></td>
<td>Amplitude:0.6±0.2V</td>
</tr>
<tr>
<td>Modulation</td>
<td>QPSK</td>
</tr>
<tr>
<td>Input Symbol Rate</td>
<td>1 ~ 45MS/s</td>
</tr>
<tr>
<td>Code Rate</td>
<td>1/2, 2/3, 3/4, 5/6 and 7/8</td>
</tr>
</tbody>
</table>

### MPEG Transport Stream A/V Decoding

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport Stream</td>
<td>ISO/IEC 13818-1 MPEG-2</td>
</tr>
<tr>
<td>Profile Level</td>
<td>2 x MPEG-2 MP@ML (PIP)</td>
</tr>
<tr>
<td>Aspect Ratio</td>
<td>4:3, 16:9, Pan &amp; scan, Letterbox</td>
</tr>
<tr>
<td>Video Resolution</td>
<td>720 x 576</td>
</tr>
<tr>
<td>Audio Decoding</td>
<td>MPEG-1 Layer 1, 2 &amp; 3</td>
</tr>
</tbody>
</table>

### Main System

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Processor</td>
<td>RISC CPU</td>
</tr>
<tr>
<td>HDD</td>
<td>80GB, 120/160GB (optional)</td>
</tr>
<tr>
<td>RTC</td>
<td>Real Time Clock</td>
</tr>
</tbody>
</table>

### Front Panel & RCU

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Keys</td>
<td>CH+/+, VOL+/+, STANDBY</td>
</tr>
<tr>
<td>VFD</td>
<td>Service name and other information display</td>
</tr>
<tr>
<td>RCU</td>
<td>48 Keys</td>
</tr>
</tbody>
</table>

### Conditional Access Interface

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCMCIA</td>
<td>2 slots</td>
</tr>
<tr>
<td></td>
<td>DVB Common Interface Standard</td>
</tr>
</tbody>
</table>
### SPECIFICATIONS

#### A/V & Data In/Out

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV-SCART</td>
<td>Video CVBS/S-VIDEO/RGB/YUV output</td>
</tr>
<tr>
<td></td>
<td>Audio L/R output</td>
</tr>
<tr>
<td>VCR-SCART</td>
<td>Video CVBS output</td>
</tr>
<tr>
<td></td>
<td>Audio L/R output</td>
</tr>
<tr>
<td></td>
<td>Video CVBS/S-VIDEO/RGB/YUV input bypass</td>
</tr>
<tr>
<td></td>
<td>Audio L/R input bypass</td>
</tr>
<tr>
<td>S-VIDEO</td>
<td>Video S-VIDEO output</td>
</tr>
<tr>
<td>RCA A/V</td>
<td>Video CVBS output</td>
</tr>
<tr>
<td></td>
<td>Audio L/R output</td>
</tr>
<tr>
<td>S/PDIF</td>
<td>Digital audio or Dolby AC-3 bitstream output</td>
</tr>
<tr>
<td>RS-232C</td>
<td>9 pin D-sub type</td>
</tr>
<tr>
<td>USB</td>
<td>USB2.0 Device</td>
</tr>
</tbody>
</table>

#### RF-Modulator

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF-Connector</td>
<td>75Ω, IEC 169-2, Female/Male</td>
</tr>
<tr>
<td>Output Service</td>
<td>CH21 ~ 69(PAL) / CH14 ~ 83(NTSC)</td>
</tr>
<tr>
<td>TV standard</td>
<td>PAL G/I/K/NTSC-M selectable by Menu</td>
</tr>
</tbody>
</table>

#### Power Supply

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>90 ~ 250VAC, 50/60Hz</td>
</tr>
<tr>
<td>Type</td>
<td>SMPS</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>Running: Max. 45W, Standby: 8W</td>
</tr>
<tr>
<td>Protection</td>
<td>Separate internal fuse. The input shall have lightning protection.</td>
</tr>
</tbody>
</table>

#### Physical Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size(W x H x D)</td>
<td>430 x 60 x 265 mm</td>
</tr>
<tr>
<td>Weight(Net)</td>
<td>4.2Kg</td>
</tr>
</tbody>
</table>

* Specifications and functions may be changed for improvement without notice in advance.*