# Digital Satellite Receiver

# User's Manual 720HDMI PVR





# **INDEX**

INDEX	3
Precautions	5
Important Safety Instructions	
Notice	
3. Copyright	
4. Disclaimer	
Before You Begin	7
1. Main Features	
2. Accessories	
Hardware Description	9
1. Front Panel Configuration	
2. Rear Panel Configuration	10
Remote Control Unit	11
Connection Diagram	
1. Receiver to TV	
Connecting to Dish	
2.1 Using Single DISH	
2.2 Using DiSEqC switch	
2.3 Using DiSEqC motor	16
Guide to Functions	17
Select Service	17
1.1 Using UP/DOWN buttons	17
1.2 Using NUMERIC buttons	
1.3 Using Service List	
2. Information Window	
Multi-Picture Display	
Electronic Program Guide (EPG)	
5. Satellite List	
6. Favorite Group	
7. Volume Control	
8. Pause	
9. Subtitle	
10. Audio Track	19

PVR (Personal Video Recorder) Function	
1. Recording	
1.1 Recording methods	
1.2 Instant Recording	
1.3 Recording Edit	21
1.4 Long Time Recording	21
1.5 Pause during Recording	22
2. Time Shifting	23
3. Playback (Play List)	24
4. Bookmarks	24
5. Trick mode	25
Guide to the Main Menu	26
1. Configuration	26
1.1 Time Setting	26
1.2 Timer Manager	26
1.3 UI (User Interface) Setting	27
1.4 Parental Control	27
1.5 Language Setting	28
1.6 A/V Output Setting	28
2. Installation	
2.1 Dish Setting	
2.2 Positioner Setting	
2.3 Service Search	
2.4 System Recovery	
2.5 System Information	
3. Utilities	
3.1 USB	
3.2 Data Transfer	
3.3 Recording Option	
3.4 Calendar	
3.5 Calculator	
4. Service List	
4.1 Service List manager	
4.2 Service List Option	34
Troubleshooting	35
Specifications	36

## **Precautions**

## 1. Important Safety Instructions

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, stoves, or other apparatus (including amplifiers) that produce heat.
- Protect the power cord from being walked on or pinched particularly at plugs, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



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

**WARNING:** To Prevent fire or shock hazard do not expose the set to rain or moisture.

## 2. Notice

- Do not attempt to service this product by yourself. Do not remove the cover. Refer all serving to qualified service agents.
- These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

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.

The mains plug is used as the disconnect device. The disconnect device shall remain readily operable.



To reduce the risk of electric shock, do not remove the cover (or back).

No user serviceable parts are inside. Refer servicing to qualified service personnel.



The Lightning Flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product

## 3. Copyright

This manual is protected by copyright laws.

Copy, use and reproduction of this manual in part or whole without Manufacturer's prior written approval are prohibited.

## 4. Disclaimer

The manufacturers, distributors and agents are not liable for any kind of damage caused by the use of the information contained in this manual.

The instruction and descriptions which this manual contains are based on the time of this manual's production.

The manufacturer may update it with new functions and technology.

All the specifications are subject to change without prior notice.

# **Before You Begin**

## 1. Main Features

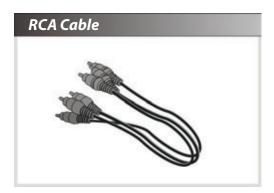
- ✓ Digital Satellite Receiver
- √ Time Shifting with External USB 2.0 Devices (Up to 2 Hours)
- ✓ Recording & Playback with External USB 2.0 Devices
- ✓ Event Recording by EPG
- √ Simultaneous Recording and Time Shifting
- √ Simultaneous Recording and Playback
- √ HDMI output (576i output only)
- ✓ MPEG-II Digital & Fully DVB Compliant
- ✓ Blind scan
- ✓ Multi-LNB controlled via DiSEqC 1.0, 1.1, 1.2 and USALS
- ✓ Multi-Satellite Search
- ✓ Supports EPG (Electronic Program Guide)
- ✓ On-Screen Display with high resolution 16bit Colour.
- ✓ Favorite Service Groups
- ✓ Service Sorting by Name, Transponder and CAS
- ✓ Multi-language Supported (OSD & Menu)
- ✓ Teletext Support
- ✓ Suppots upto 10,000 services
- ✓ Multi-picture Display
- ✓ USB 2.0 Host Support(MP3 Player & JPEG Viewer)
- ✓ Parental Lock / System Lock / Installation Lock
- ✓ CVBS, RGB and YPbPr Video & Audio Output via TV SCART
- ✓ Software & Service Database upgrade via USB

## 2. Accessories





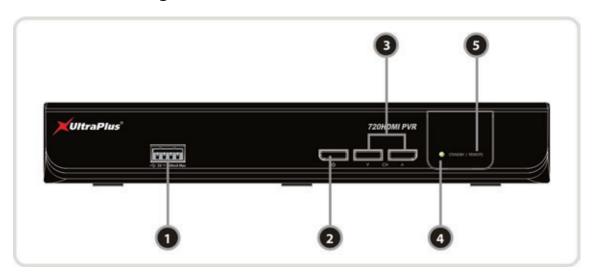




NOTE: If any accessories listed above are missing, contact the sales representative where you purchased this unit.

# **Hardware Description**

# 1. Front Panel Configuration



1. **USB (Front)**: Use it when connecting to external USB storage device.

## 2. POWER Button:

Press to switch between STANDBY and POWER ON modes.

## 3. CH Up/Down Button:

Press to change services in normal mode, to move the highlighted-bar UP/DOWN in menu mode.

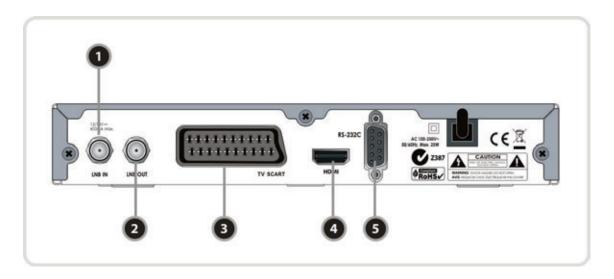
## 4. STANDBY / REMOTE Indication LED (RED / GREEN):

The LED lights RED in standby mode. / The LED lights GREEN when a key on the Remote Control is pressed.

#### 5. Remote Sensor:

Receives signal from remote controller.

# 2. Rear Panel Configuration



## 1. LNB IN:

Use to connect a satellite antenna.

## 2. LNB OUT:

Use it when connecting to another STB for loop-through.

## 3. TV SCART:

Use to connect to the TV via a SCART cable.

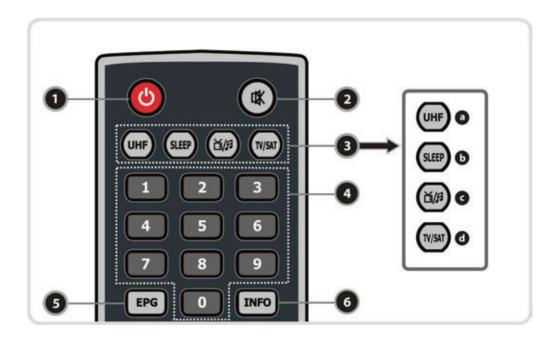
## 4. HDMI:

Use to connect to an HDMI input on a TV.

## 5. RS-232C:

Use it when connecting to your PC.

## 3. Remote Control Unit



1. POWER: Turns the STB On/Off.

2. MUTE: Turns the sound On/Off.

3. MODE

a. UHF: Reserved.

b.SLEEP: To adjust sleep timer.

c. TV/STB: Reserved.

d. TV/RADIO: Switches between TV and Radio.

4. **NUMERIC Keys:** Used to enter numerical data and zap to services directly.

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

**6. INFO:** Shows information relating to the current program. If you press it again, more detailed information will be shown.



- 7. **MENU:** To enter the main menu or to move to the previous menu.
- **8. EXIT:** Exit from the menu or pop-up window.
- **9. OK:** Shows the service list in non-menu mode and select an item or confirm an operation in menu mode.
- **10. ARROW:** Moves the selection bar in the menu, also used to change services (UP/DOWN) or change audio volume (LEFT/RIGHT).
- 11. PAGE UP/DOWN: Move to the next or previous page if more than one page is available. PAGE UP key is also used as a hot-key to move to the Timer Manager Menu (Refer to Page 26, 1.2 Timer Manager). And the PAGE DOWN key is also used as a hot-key to evoke the Picture Adjustment window (Refer to Page 28, 1.6 A/V Output Setting).
- 12. RECALL: Moves to previous service.
- 13. SAT: Shows the service list.
- 14. FAV: To change the favorite groups.
- **15. COLOR Keys:** Used for special functions in the menu. The **RED** key is used to add or delete the current position when setting bookmarks. The **GREEN** key is used to go to the next bookmark position. The **BLUE** key is used to display multiple pictures.



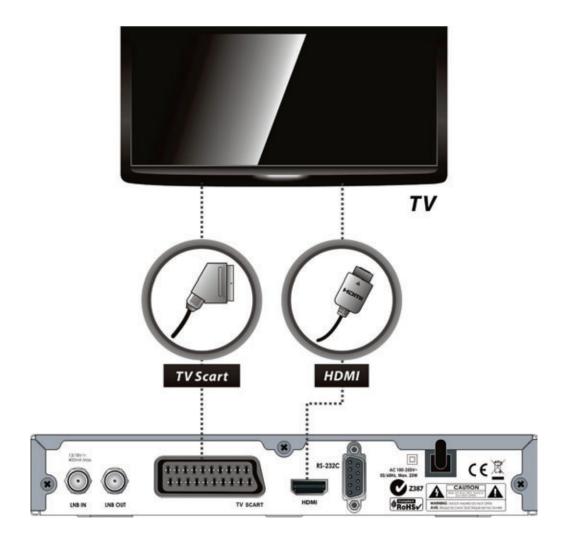
- **16. PLAY LIST:** To display recorded service list.
- 17. SUBTITLE: To show multilingual subtitles.
- 18. TELETEXT: To show the digital teletext.
- 19. PAUSE: This key is used to pause the video. Press once more to resume the video.
- 20. PREV FILE: To play the previous MP3 file in MP3 play mode.
- 21. NEXT FILE: To play the next MP3 file in MP3 play mode.
- **22. REWIND:** Rewind when the progress bar is displayed. This key starts reverse playback and can be used to change the speed of reverse playback.
- **23. FAST FORWARD:** Start fast forward or fast motion playback. It can also be used to change the speed of forward playback.
- 24. RECORD: To start recording.
- **25. PLAY:** Displays the playback progress bar when no progress bar is displayed. It can be used to start playback at normal speed or return to normal speed from trick mode.
- **26. STOP:** To stop time shifting, play back or recording.

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

# **Connection Diagram**

## 1. Receiver to TV

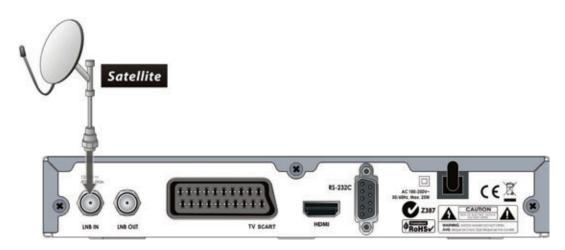
- Connect the satellite antenna cable to LNB IN.
- Connect the TV SCART to SCART of TV.
- If your TV have a HDMI input, connect the HDMI to TV



# 2. Connecting to Dish

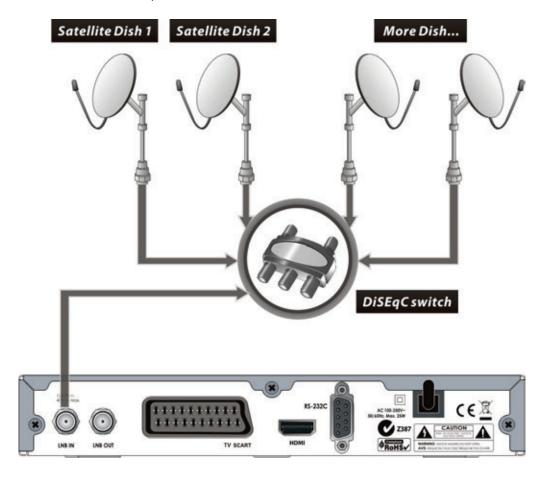
## 2.1 Using Single DISH

Connect the Satellite Antenna cable to LNB IN.



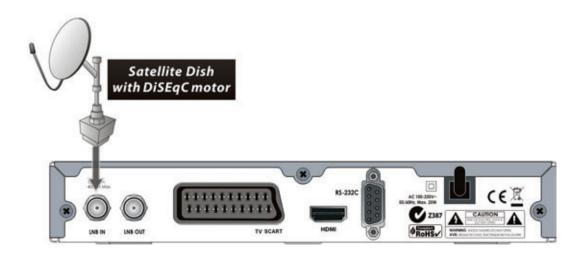
## 2.2 Using DiSEqC switch

Connect the cable of DiSEqC switch to LNB IN.



## 2.3 Using DiSEqC motor

Connect the cable of DiSEqC motor to LNB IN.



## **Guide to Functions**

## 1. Select Service

To select the desired service, you can use the methods detailed below.

## 1.1 Using UP/DOWN buttons

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

## 1.2 Using NUMERIC buttons

If you know the service number, enter the number directly using **NUMERIC** buttons.

## 1.3 Using Service List

To select the desired service in the service list, you should firstly display the service list using **OK** button. Use **ARROW** buttons to select a desired service and press **OK** button.



In the Service List window, you can also use additional functions via the **COLOUR** buttons. Pressing the **RED** button, allows you to sort the services by Name, Transponder, Group and CAS. Pressing the **GREEN** button, allows you to add the service to one of 10 favorites.

## 2. Information Window

If you want to view the current service information window press the **INFO** button. The Information window is automatically displayed when changing services. This window contains items such as service number, service name, and indicators for encrypted service, Teletext available, subtitles available, Dolby Digital, as well as duration information and other details. Press the **INFO** button once more, for more detailed information.



## 3. Multi-Picture Display.

Press the **BLUE** button to display multiple pictures and the **RED** button to toggle between 9 and 12 multi picture modes.



## 4. Electronic Program Guide (EPG)

The Electronic Program Guide (EPG) helps you navigate through all the possible viewing options.

The EPG supplies information such as program listings, start/end times and detailed information about the program listings for all available services. The availability and amount of these program details will vary, depending on the particular broadcaster.



- If you press the **EPG** button, the EPG menu will be displayed.
- Press the **ARROW** buttons to move to other services or to move to the previous/next program.
- Press the EPG button once to view the multichannel EPG (Electronic Program Guide) and press the EPG button twice to view only the selected channels EPG information. Press the EPG button again to toggle back and forth.
- Press the GREEN button to view next days EPG and the RED button to view the EPG for the previous day.
- Select the program you wish to schedule by using the ARROW buttons then set the timer by pressing OK.

## 5. Satellite List

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

## 6. Favorite Group

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

## 7. Volume Control

- To control the volume while you are watching a service, press the LEFT/RIGHT buttons to decrease or increase the volume.
- When the volume is being controlled the Volume control bar will appear at the top of the screen.
- When necessary, press the **MUTE** button to turn audio on/off.

## 8. Pause

The **PAUSE** button is used to freeze the video. Press the **PAUSE** button again to resume the video.

## 9. Subtitle

To display Subtitles press the **SUBTITLE** button on your remote control. Subtitles are based on the transmitted data.

## 10. Audio Track

You can display the audio language list by pressing the **AUDIO** button. Use the **ARROW** buttons to choose the audio track from the list then press **OK** to change.

# **PVR (Personal Video Recorder) Function**

## 1. Recording

## 1.1 Recording methods

There are two types of recording method.

(*Time Reserved Recording* / *Event Reserved Recording*).

#### Time Reserved Recording:

- In the Timer Manager you schedule a recording by setting the time and duration as well as the channel you wish to be recorded.

(Main Menu > Configuration > Timer Manager)



- Press **GREEN** button to activate a new timer edit screen.
- In the Timer Edit screen you may choose the start date/time, duration, service, type (Recording/Play) and simply press the Yes button to schedule your recording. Also, you must set the duration to a minimum of 3 minutes; and start time must be at least 3 minutes after the present time.



## • Event Reserved Recording:

The EPG screen allows you to choose the event you wish to reserve or record.

- During LIVE TV press the **EPG** button to access the EPG screen.



- Go to the event which you wish to view and then press **OK**. The event will be reserved with BLUE play icon. This BLUE play icon means that you want to just watch the event at the reserved time.



- Pressing the **RECORD** button will reserved the selected program for recording this will be shown with a RED record icon. This RED record icon means that you want to record the event at the reserved time.

RED record icon ◀



 When you set an event for recording in the EPG. It automatically sets a a timer in the Timer Manager in *Main Menu* > *Configuration* > *Timer Manager*.



## 1.2 Instant Recording

At anytime while watching TV, you may press the **RECORD** button to start recoding instantly.



## 1.3 Recording Edit

During recording, you may press the **RECORD** button to edit the recording duration. It will default to 2 hours but you may increase or decrease this as you desire.



## 1.4 Long Time Recording

During long time recording processes (4GB or more), additional files will be created every 4GB. (For example; aaa.ts, aaa.ts1, aaa.ts2... and so on) You must remember not to erase any of these files or you will not be able to watch the entire recording. These files are only able to be viewed with your PC not with the receiver.

## 1.5 Pause during Recording

 When the PAUSE button is pressed during recording, only the live video is paused, but recording is continued on the external USB2.0 stroage device.



 Press the PAUSE button once again and the program will resume from the paused time.



 During recording, press the PLAY/TIMESHIFT button to show the Play bar.



 While the Play bar is shown on your screen, you may use the LEFT/RIGHT buttons to move (forward & backward) freely within recorded time.



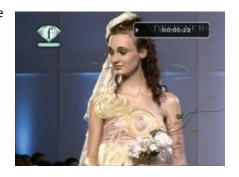
• If you press the **STOP** button, you will go to LIVE TV and you may press the **PREV FILE** button to view recorded file from the beginning.

# 2. Time Shifting

 Press the PAUSE button to pause the live TV (recording will continue to the external USB2.0 stroage device).



 Press the PAUSE button once again to resume from the pause time.



 While watching live TV, press the PLAY/TIMESHIFT button to show the play bar on your screen.



 When the play bar is displayed on your screen, you may use the LEFT/RIGHT buttons to move freely through recorded time.



• If you press the **STOP** button while time-shifting, you will be returned to live TV. You can also use the **PREV FILE** button to move to the start location of the Timeshift file.

## 3. Playback (Play List)

- Press the **PLAY LIST** button to activate the Play List screen.
- In the Play List you may choose any of the pre-recorded programs and play them by pressing the **OK** button.



 In the Play List screen, you may press the RED button to choose programs you wish to view in the order they are listed in the Play List. You may also press the GREEN button to choose all programs in the Play List.



- In the Play List screen, the BLUE button can be used to delete or rename programs.
- In the Play List screen, press the RIGHT/LEFT buttons to change to other lists. (MP3 Player, Image Viewer)



## 4. Bookmarks

- When the Play bar is displayed, you may move to a desired time and book mark it by pressing the RED button.
   Bookmark(s) are indicated with a Green line on the play bar.
- Also, you may press the RED button to activate the play bar to mark bookmark(s).



 When the play bar is on, You can move / jump between the bookmarks by pressing the GREEN button.



• If you wish to delete any Bookmarks, go to that bookmark by pressing green button, then press the **RED** button to delete that bookmark.

## 5. Trick mode

- During play, press the FAST FORWARD button once to move to 2X playback speed and once more to go to 3X playback speed.
- During 3X playback speed, pressing the REWIND button once will change to 2X playback speed again.



## Guide to the Main Menu

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



## 1. Configuration

## 1.1 Time Setting

## • Time Setting:

To set the current time, you can use two modes; Auto and Manual.

#### **Auto Time Setting**

- Local Offset: Enter the Local offset value e.g for New Zealand select +12:00.
- **Daylight Saving:** If you want to apply daylight savings, select the country you are in using the **ARROW** buttons.

#### **Manual Time Setting**

- **Date**: Enter the calendar date by using **ARROW** buttons then press **OK** to finish.
- **Time:** Enter the time by using the **NUMERIC** buttons.

#### Clock Mode:

Select the type of clock display(12 Hours or 24 Hours) using **ARROW** buttons.

## Wake Up Mode:

Enter the time for the receiver to automatically power ON.

And you can choose one the following Wake Up Modes: 'off' or 'Once' or 'Daily' or 'Weekly'.

- Wake Up Date: Select the date when the STB is to turn on.
  Wake Up Days: Select the day of the week when the STB is to turn on.
- Wake Up Time: Enter the turn-on time for the STB using the NUMERIC buttons.
- **Wake Up Service :** Select the service to be displayed when the STB is turns on. Press the **OK** button to display service list.

## Sleep Mode:

Enter the time for the receiver to automatically switch OFF and go to standby mode.

And you can choose one of the following Wake Up Modes: 'off' or 'Once' or 'Daily' or 'Weekly'.

- Sleep Date: Select the date when the STB is to turn off. Press OK button to display calendar.
- **Sleep Days:** Select the day of the week when the STB is to turn off.
- **Sleep Time:** Enter the turn-off time for the STB using **NUMERIC** buttons.

#### 1.2 Timer Manager

- To add new timer entry: Press the GREEN button, the Timer Edit window will popup. You can set the specific start date, time, duration and channel for reservation. You can also choose one of the following Timer Modes: 'Once' or 'Daily' or 'Weekly'. You can choose if you wish to 'Record' or just to 'Play'.
  - If you choose '*Record*', it will start recording at that time.
  - If you choose '*Play*', it will change to the channel at that time.





- To modify an existing timer entry: Choose the timer entry you want to modify and press the OK button.
- To delete an existing timer entry: Choose the timer entry you want to delete and press the RED button.

NOTE: If you reserve one or more events through the EPG menu, the reserved event(s) will be added to Timer Manager automatically.

## 1.3 UI (User Interface) Setting

- **OSD Transparency:** Sets the OSD transparent type.
- Info Box Position: Sets the information window position.
- Info Box Display Time: Sets the duration that the information window will be displayed on the screen after changing services.
- **Volume Bar Display Time :** Sets the duration that the volume bar is displayed on the screen after changing the volume.
- **EPG Time Range :** You can set the time range which is displayed in the EPG window.



You can set the zapping mode. Black screen means the display will show a black screen while the channel is changed.

Freeze means the display will pause the video while the channel is changed.

## 1.4 Parental Control

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

NOTE: The default PIN code is '0000'



- Censorship: Allows you to set the level at which access to programs is restricted. The parental level is given as age-based numbers.
- Change Pin code: To change your PIN code, input the new PIN code using NUMERIC buttons. To verify the new PIN code, input the new PIN code again.
- **System:** Sets the accessibility of system.
- **Installation**: Sets the accessibility of the Installation menu.
- **Configuration :** Sets the accessibility of the Configuration menu.
- **Edit Service**: Sets the accessibility of the Edit Services menu.



## 1.5 Language Setting

 Menu Language: Select the desired menu language by using the ARROW buttons.

NOTE: Languages are subject to change without prior notice.

- Audio Language: Select the default language for audio when changing services. If no language is provided, then the default language for that service will be automatically selected.
- Subtitle Language: Select the default language for subtitles when changing services.



## 1.6 A/V Output Setting

- TV Type: Select the TV type.(PAL/NTSC/Auto) In Auto mode, the STB is automatically selects NTSC or PAL according to the how a channel is broadcast.
- **TV Aspect Ratio**: Select the aspect ratio of the TV which is connected to STB.(4:3/16:9).
- Display Format: Select the format which the video is to be displayed on screen. (Letter Box/Pan Scan) In case of 16:9 mode, this option is not available.



Sound Mode: Set the audio mode which is output from the RCA jacks. (Stereo/Mono/Left/Right).

• Picture Adjust: Adjust brightness, contrast and colour of the screen.

## 2. Installation

## 2.1 Dish Setting

Select the dish and LNB settings for each connected satellite. The values that are set in this menu will be available for selection in other service searching menus.

- **Satellite**: Select the satellite that you want to configure.
  - Press the **LEFT/RIGHT** button to select the satellite.
  - Select the desired satellite.
  - If the desired satellite name is not listed then select User Defined.
- **Frequency :** Select frequency at which you want to check the signal.
- LNB Power: Select the LNB power.
- LNB Type: Select the LNB type.
- LNB Frequency: Select the L.O. frequency that corresponds to your LNB.
  - Use the **LEFT/RIGHT** buttons to select the LNB frequency.
  - If the required LNB frequency is not listed, then enter the frequency manually using the **NUMERIC** buttons.
  - If you select a Universal LNB type, both high and low L.O are supported and the LNB 22KHz setting is disabled as it is used to switch between the high and low local oscillators.



Dish Setting



- LNB 22 Khz: Used if you use a dual LNB or two LNBs connected to a 22 KHz tone switch box, enable the 22 KHz tone switch on one satellite and disable it for the second.
- **DISEQC 1.0 :** If you are using a DiSEqC 1.0 switch, select one of the DiSEqC inputs.
- **DisEqC 1.1:** If you are using a DisEqC 1.1 switch, select one of the DisEqC inputs.
- Service Search: Press the OK button to move to Service Search menu directly.

## 2.2 Positioner Setting

- **Satellite:** Select the satellite on which you which to search for services.
  - Press the **LEFT/RIGHT ARROW** button to select the satellite.
  - Select the desired satellite
  - If the desired satellite is not listed then select User Defined.
- **Frequency:** Select frequency at which you want to check the signal.
- **Positioner:** Select the positioner
  - None: (No Positioner)



## - Using DiSEqC 1.2:

**Move:** To move the dish, press the **LEFT/RIGHT** button. **Positioner Command:** To use various positioner commands, press the **OK** button. Then, available positioner commands will appear.



## - Using USALS:

*Move:* To move the dish, press the **LEFT/RIGHT** button. *Dish Longitude:* Enter your longitude using the **NUMERIC** buttons.

**Dish Latitude:** Enter your latitude using the **NUMERIC** buttons.

**Go To:** Press the **OK** button to rotate the dish to the configured position.



- **Dish Setting :** Press the **OK** button to move to the *Dish Setting* menu directly.
- **Service Search**: Press the **OK** button to move to the *Service Search* menu directly.

#### 2.3 Service Search

- **Satellite:** Select the target satellite for the search.
- **Search Mode:** Select one of the following search modes.

#### **Auto Search Mode**

- **Satellite:** Press the OK button to select a satellite.
- **Search Type**: Select the search type.
- **Network Search**: You can select Off or On. When you select 'On', The STB will find any transponders defined as using same home network. As it refers to the NIT during the search, if there is the frequency information for other transponders, the STB will search them also.
- Dish Setting: Press the OK button to go to the Dish Setting menu directly.
- **Positioner Setting:** Press the **OK** button to go to the Positioner Setting menu directly.
- **Start Search**: Press the **OK** button to start the search.

#### **Manual Search Mode**

- **Frequency:** Select a frequency to search.
- Symbol rate: Enter the symbol rate using the NUMERIC buttons.
- **Polarity:** Select the polarity.
- **Search Type:** Select the search type.
- **Network Search**: You can select Off or On. When you select 'On', The STB will find any transponders defined as using same home network. As it refers to the NIT during the search, if there is the frequency information for other transponders, the STB will search them also.
- **Dish Setting :** Press the **OK** button to go to the Dish Setting menu directly.
- **Start Search**: Press the **OK** button to start the search.

#### **Blind Search Mode**

- Frequency: Select Auto to search whole frequency range or Manual if you wish to seach a desired frequency range only.
- **Polarity**: Select the polarity you wish to search.
- **Search Type:** Select the search type.
- **Start Search**: Press the **OK** button to start search.
- Dish Setting: Press the OK button to go to the Dish Setting menu directly.

## **Advanced Search Mode**

- **Frequency** Select a frequency to search.
- **Symbol rate :** Enter the symbol rate using the **NUMERIC** buttons.
- **Polarity**: Select the polarity.(Vertical/Horizontal)
- **Video PID :** Enter the video PID using the **NUMERIC** buttons.
- Audio PID: Enter the audio PID using the NUMERIC buttons.
- PCR PID: Enter the PCR PID using the NUMERIC buttons.
- **Start Search:** Press the **OK** button to start search.



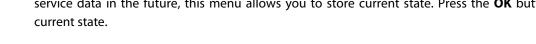






## 2.4 System Recovery

- System restore to factory default: This menu allows you to restore the factory default values in the case the user has encountered some problems after incorrectly setting values. Press the **OK** button to erase all services and restore default setting.
- System restore to stored position: This menu allows you to restore the stored values including service data and system parameters. Press the **OK** button to restore all data.
- Store system data: If you want to use system parameters and service data in the future, this menu allows you to store current state. Press the OK button to store



## 2.5 System Information

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

## 3. Utilities

#### 3.1 USB

• MP3 Player: Insert the external USB memory into the USB port on front panel. Once inserted, press the OK button to read the external USB memory stick and choose the MP3 file you want to play.

Press the **INFO** Button to show the **ID3 tag** information.



**Image Viewer:** You can display image files that are on the external USB memory stick on the screen. Select the image file (JPEG format) and press **OK** button to display the image.



- Playlist: You can play recorded files that are on the external USB memory stick on the screen (Refer to Play List)
- Format: Before you use your USB external device, we recommend for you to format it from the Format(USB) menu.

NOTE: If you format your memory stick, all data will be deleted.

#### 3.2 Data Transfer

- Transfer all System data to USB storage: If you want to transfer and use BOTH of the current system parameters and service data in the future, this menu will allow you to store both to your USB device. Press the OK button to store current data to external USB storage.
- Transfer Service data to USB storage: If you want to transfer and use ONLY the service data in the future, this menu allows you to store the current service data. Press the OK button to store the current service data to your external USB storage.
- Data download from USB storage: This menu allows you to download the stored data from the external USB storage to your STB. Press OK button to download data.



## 3.3 Recording Option

#### Recording Stop Message:

- **Set 'On'**: If you press the **STOP** button while recording, confirmation will be required.
- **Set 'Off':** If you press the **STOP** button while recording, the STB will stop recording immediately.

## • Time Shift(USB):

You can set the maximum length of the timeshift buffer to: 30 Min / 60 Min / 120 Min.

In this case, the time shift function works automatically up to the time you set, if the external USB device has enough space. If you set it to 'off' timeshift is disabled.



## 3.4 Calendar

To display the calendar, press the **OK** button. Use the **ARROW** buttons to choose a date, the **UP/DOWN** buttons will switch to past/next month.



#### 3.5 Calculator

To use the calculator, press the **OK** button.



## 4. Service List

## 4.1 Service List manager

The Service List Manager menu will appear when you press the **OK** button. You can select Edit Mode by pressing the **YELLOW** button.

 Lock Services: All service lists will be shown on the left, the right side will show services to be locked. By using the ARROW and OK buttons you may move the chosen service to right to lock the service.



• Move Services: All Service Lists will be shown on the left, Service Lists for moving will be shown to the right. Move a Service to the Right by using the ARROW and OK buttons, Pressing the Green button then moves the services to the position indicated by the arrow at the left.



Delete Services: All service lists will be shown on the left. By
using the ARROW and OK buttons you may select services to
delete. And pressing the GREEN button deletes the selected
services.



Skip Services: All service lists will be shown on the left. The
right side will show services that are to be skipped. By using
the ARROW and OK button you may move the chosen service
to right to skip service.



Set Favorite Services: Press the FAV button to select the favorite group. Once a favorite group is chosen, the left side will show all services and the right side will show only the selected favorites. Using the ARROW and OK buttons you may add any service to the favorite group or delete any service from the favorite group.



Edit Services: All service lists will be shown on left side. Move
the highlighted bar to the service that you want to edit and
press OK button. You will then see a virtual keyboard. Using
ARROW and OK buttons, you can edit the service name.



## 4.2 Service List Option

#### Service List Preview :

- Setting 'ON'

If you change services using the **ARROW** buttons and press **OK** button in the Service List, the selected service will be played. The Service List will remain on screen until you press the **OK** button again.

Setting 'OFF'

If you change services by pressing  $\mathbf{OK}$  in the Service List, the service will be played and the Service List will disappear at the same time.



## • Lock Favorite Popup:

- Setting 'ON'

If you press the **GREEN** button to open the Set Favorite menu, you must enter the PIN code.

Setting 'OFF'

The PIN code is not required.

## View Only Filtered List :

- Setting 'ON'

In the Service List, only filtered services will be shown on the Service List.

- Setting 'OFF'

All services will be shown on the Service List. And filtered services are highlighted in yellow.

# **Troubleshooting**

Problem	Solution		
Does not display anything on the front panel.	<ul> <li>✓ Check the main power cable and check that it is plugged into a suitable power outlet.</li> <li>✓ Check you have switched the STB main power switch ON at the rear of the STB.</li> </ul>		
No Picture	<ul> <li>✓ See 'Does not display anything on the front panel' above.</li> <li>✓ Check the video output port is firmly connected to the TV or VCR.</li> <li>✓ Check that you have selected the correct channel or Video Input on your TV.</li> <li>✓ Check the brightness level of the TV</li> </ul>		
Poor picture quality	<ul> <li>✓ See 'No Picture' above.</li> <li>✓ Check the signal level, if this is low then try adjusting the alignment of your dish.</li> </ul>		
No Sound	<ul> <li>✓ See 'No Picture' above.</li> <li>✓ Check the volume level of the TV and STB.</li> <li>✓ Check the Mute status of the TV and STB.</li> </ul>		
Remote Control does not operate			
No or Bad Signal	<ul> <li>✓ Check the LNB; Replace the LNB if necessary.</li> <li>✓ Check the cable from the LNB.</li> <li>✓ Check the position of the dish; realign the dish if necessary.</li> <li>✓ If you are using a DiSEqC 1.0 switch, check that you have connected the LNBs to the correct ports on the switch.</li> <li>✓ Check the 'Signal Level' and the 'Signal Quality'.</li> </ul>		

# **Specifications**

#### **Tuner & Channel Decoder**

 $\begin{tabular}{lll} \textbf{Input Connector} & F-type, IEC 169-24, Female \\ \textbf{Forquency Range} & F-type, IEC 169-24, Female \\ F-type, IEC 169-24, Female \\ 950MHz \sim 2150MHz \\ 75\Omega, unbalanced \\ -65 to -25dBm \\ \end{tabular}$ 

 LNB Power
 13/18VDC, max.400mA

 22KHz Tone
 (22±2)KHz, (0.6±0.2)V

 DiSEqC Control
 V1.0/1.2/USALS Compatible

**Demodulation** QPSK **Input Symbol Rate** 2 ~ 45 Ms/s

FEC Decoder 1/2, 2/3, 3/4, 5/6 and 7/8 with Constraint Length K=7

## **MPEG Transport Stream A/V Decoding**

Transport Stream MPEG-II ISO/IEC 13818

Profile Level MPEG-II MP@ML Input Rate Max. 15Mbit/s

Video Formats 4:3 LetterBox, 4:3 PanScan, 16:9

Video Resolution
Audio Decoding
Audio Mode
Sampling Rate

720 x 576, 720 x 480
MPEG/MusiCam Layer I & II
Stereo/Joint stereo/Mono
32KHz, 44.1KHz and 48KHz

## Audio / Video & Data IN/OUT

**HDMI** 576i Only

TV SCART YPbPr, RGB, CVBS Video, Audio L, R Output
RS-232C 9 pin D-SUB (Male) type, Transfer rate 115Kbps
USB 2.0 Host Support (5 V DC 500 mA Max)

## **Front Panel**

**Slot** 1 USB 2.0 Host Slot

**Buttons** 3 Buttons(Standby, CH UP/DOWN)

**Display** NONE

Indicators 1 LED (Standby, Power and Remote: DUAL TYPE)

## **Power Supply**

**Input Voltage** AC 100 ~ 250V, 50/60Hz

Type SMPS

Power Consumption Max. 25W Standby Power Max. 8W

**Protection** Separate Internal Fuse & Lighting protection

## **Physical Specification**

**Size (W x H x D)** 220mm X 35mm X 145mm

Weight (Net) 0.7 Kg
Operating Temp.  $0^{\circ}\text{C} \sim +45^{\circ}\text{C}$ Storage Temp.  $-10^{\circ}\text{C} \sim +70^{\circ}\text{C}$ 



Digital Satellite Receiver 720HDMI PVR