

Personal Video Recorder
Personlig digital videospelare

CONAX embedded
Inbyggd CONAX

CXC-2000PVR

User's Manual
Användarhandbok



HUMAX
your prime time

Notice

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Thank you for purchasing a HUMAX Personal Video Recorder. Please read this user manual carefully to be able to safely install, use and maintain the product at maximum performance. Keep this user manual next to your product for future reference.

Notice

Read this manual carefully and make sure you understand the provided instructions. For your safety, check what the result each action will be.

Warnings, Cautions and Notes

Throughout the whole manual, pay special attention to the following marks that indicate hazardous situations.

- **Warning**
Indicates a hazardous situation which, if not avoided, could result in (serious) injury.
- **Caution**
Indicates a situation which, if not avoided, could damage the equipment or other apparatus.
- **Note**
Indicates additional information to the user to make the user aware of possible problems and information of any importance to help the user to understand, to use and to maintain the installation.



To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.



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



This symbol indicates important instructions accompanying the product.

Safety and Warning

This Personal Video Recorder has been manufactured to comply with international safety standards. Please read the following safety precautions carefully.

Safety Instructions and Precautions

1. MAINS SUPPLY

90 - 250V AC 50/60Hz

Operate your product only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your local power company. Disconnect the product from the mains before you start any maintenance or installation procedures

2. OVERLOADING

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

3. LIQUIDS

The product should not be exposed to any liquids such as dripping or splashing. In addition, no objects filled with liquids, such as vase, should be placed on the apparatus.

4. CLEANING

Disconnect the product from the wall outlet before cleaning.
Use a light damp cloth (no solvents) to dust the product.

5. VENTILATION

The slots on top of the product must be left uncovered to allow proper airflow to the unit. Do not stand the product on soft furnishings or carpets. Do not stack electronic equipment on top of the product.

6. ATTACHMENTS

Do not use any unsupported attachments as these may be hazardous or cause damage the product.

7. CONNECTION TO THE CABLE TV SIGNAL AND TV

Connect all components before plugging any power cords into the wall outlet. Always turn off the product, TV and other components before you connect or disconnect any cables.

8. LOCATION

Place the product indoors to avoid exposing it to lightning, rain or sun. Do not place it near a radiator or heat register.

Make sure it has more than 10 cm clearance from any appliances susceptible to electromagnetic influences, such as a TV or a VCR.

Do not block these openings with any object, and do not place the product on a bed, sofa, rug, or other similar surface.

If you place the product on a rack or bookcase, ensure that there is adequate ventilation and that you have followed the manufacturer's instructions for mounting.

Do not place the product on an unstable cart, stand, tripod, bracket or table from where it can fall. A falling product can cause serious injury to a child or adult, and serious damage to the appliance

Safety and Warning

9. LIGHTNING, STORM, or NOT IN USE

Unplug the product from the wall outlet and disconnect the cable during a thunderstorm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-surges.

10. EXTRANEIOUS OBJECTS

Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts

11. REPLACEMENT of PARTS

When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer, or those that have the same characteristics as the original part.

Unauthorized substitution may result in additional damage to the unit.

Warning

1. Follow these directions in order not to damage the power cord or plug.
Do not modify or process the power cord or plug arbitrarily.
Do not bend or twist the power cord too much.
Make sure to disconnect the power cord with the plug held.
Keep heating appliances as far as possible from the power cord in order to prevent the cover vinyl from melting.
2. Follow these directions. Failure to follow one of them may cause electrical shock.
Do not open the main body.
Do not insert metals or inflammable objects inside the product.
Do not touch the power plug with wet hands.
Disconnect the power cord in case of lightning.
3. Do not use the product when it is out of order. If you continue to use the product when defective, a serious damage can be caused to it. Make sure to contact your local product distributor if the product is out of order.
4. Please do not insert metal or alien substance into the slots for the modules and smart cards. In doing so can cause damage to the product and reduce its life span.
5. **Hard Disk Drive**
Do not move the product or turn the power off suddenly while the hard disk drive is running. The company shall not be liable for any corruption of data on the hard disk drive caused by the carelessness or misuse of users.
Do not separate the hard disk drive from the main body.

Contents

1. Before Using the Recorder	GB8
1.1 Package Contents	GB8
1.2 Front Panel	GB9
1.3 Rear Panel	GB10
1.4 Conditional Access	GB11
1.5 Remote Control Unit	GB12
2. Setup	GB14
2.1 Connecting the Cable	GB14
2.2 Powering On	GB17
3. Installation Wizard	GB18
3.1 Language	GB18
3.2 Area Setting	GB18
3.3 Channel Search	GB19
3.4 Time Setting	GB20
3.5 Result	GB20
4. Basic Operation	GB21
4.1 Switching Channel	GB21
4.2 Volume Control	GB21
4.3 Teletext	GB21
4.4 Changing the Subtitle Language	GB23
4.5 Changing an Audio Language	GB23
4.6 Programme Information (I- plate)	GB24
4.7 Option List	GB26
5. Time Shifted Recording	GB28
5.1 Time Bar	GB28
5.2 Pause	GB28
5.3 Rewind to Previous Scene	GB29
5.4 Fast Forward to the Next Scene	GB29
5.5 Recording	GB29
5.6 Additional Time Shift Operations Using Time Bar	GB30

Contents

6. Recording and Playback	GB31
6.1 Instant Recording	GB31
6.2 Recording Reservation	GB31
6.3 Programme Playback	GB33
6.4 Editing Recorded Programmes	GB33
6.5 Checking Hard Disk Drive	GB35
7. Channel List	GB36
7.1 Displaying and Switching Channel List	GB36
7.2 Changing Channel List Group	GB37
7.3 Edit Channels	GB38
7.4 Edit Favourite Channels	GB40
7.5 Channel Change Mode	GB43
8. Programme Guide	GB44
8.1 Viewing Programme Guide Information	GB44
8.2 Finding a Programme	GB46
8.3 Viewing Reserved Programme	GB47
9. Setting Preferences	GB49
9.1 Parental Control	GB49
9.2 Language Setting	GB51
9.3 Time Setting	GB53
9.4 A/V Control	GB55
9.5 UHF Tuning	GB57
9.6 Miscellaneous Settings	GB58

10. Installation	GB59
10.1 Channel Search	GB59
10.2 Linear Search	GB62
10.3 Default Setting	GB64
11. Software Update	GB65
11.1 OTA (Over the Air)	GB65
12. System Information	GB68
12.1 Status	GB68
12.2 Signal Detection	GB68
12.3 Conditional Access (for Conax embedded)	GB69
13. Games	GB70
14. Menu Map	GB71
15. Troubleshooting	GB72
15.1 Troubleshooting	GB72
15.2 Error Message	GB73
16. Specification	GB74
17. Glossary	GB76
18. Service and Support	GB77

1. Before Using the Recorder

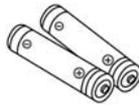
This chapter provides detailed instructions on the product and its accessories.

1.1 Package Contents

Please check all package contents before using your product.



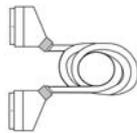
Remote Control Unit



Batteries



User's Manual



SCART Cable



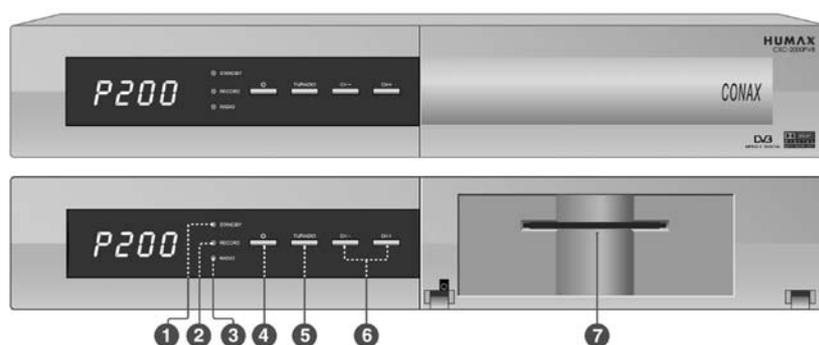
RF Cable

Note: Since faults may occur if the remote controller is being left without a battery for a long time, always keep the battery inserted in the remote controller.

Warning:

- To install a hard disk drive, contact your product provider.
- The company shall not be liable for problems caused by installing a hard disk drive by user.
- This product provides best performance with Seagate ST380012ACE(80G) or Maxtor 4R080L0(80G) Hard Disk Drive.
- This product provides only 80GB of hard disk drive. The company shall not be liable for problems caused by the installation of hard discs bigger than 80GB.

1.2 Front Panel

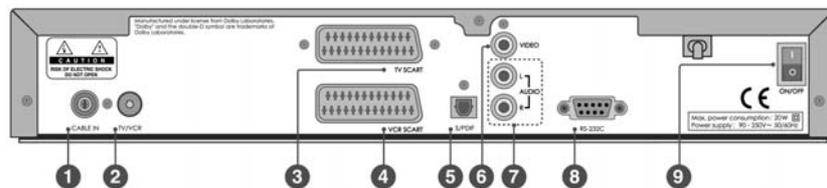


- 1. STANDBY LED**
Red light is displayed when the product is in the standby mode.
- 2. RECORD LED**
Green light is displayed when the product is in recording.
- 3. RADIO LED**
Yellow light is displayed when the recorder is in radio mode.
- 4. STANDBY Button**
Switches between operation and standby modes.
- 5. TV/RADIO Button**
Switches between TV and Radio.
- 6. CH - / CH +**
Moves the TV/Radio channel up/down.
- 7. SMART CARD SLOT**
Slot for a smart card.

Note: See 1.4 Conditional Access when you insert the smartcard.

1. Before Using the Recorder

1.3 Rear Panel



- 1. CABLE IN**
Connects a cable to a CABLE input jack on the Recorder.
- 2. TV/VCR**
Connects a RF signal from your recorder to RF(ANT) input jack on your TV or VCR.
- 3. TV SCART**
Connects a TV SCART cable.
- 4. VCR SCART**
Connects a VCR SCART cable.
- 5. S/PDIF**
Outputs the digital audio signals.
- 6. VIDEO**
Connects to your TV or VCR and output Video signals.
- 7. AUDIO L/R**
Connects to your TV or VCR and output Audio signals.
- 8. RS-232C**
Connects to your PC to upgrade product's software programme.
- 9. ON/OFF**
Power on/off.

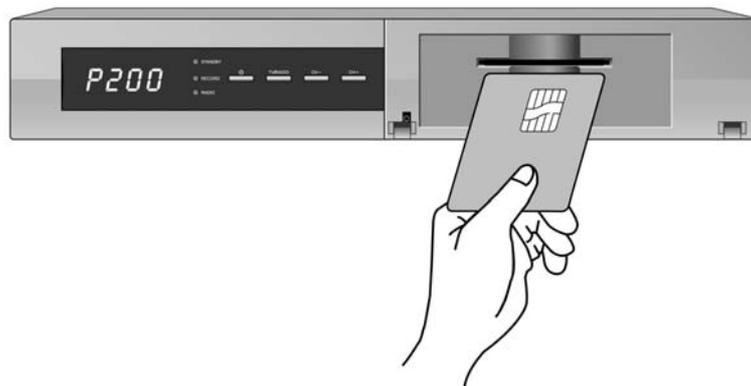
1.4 Conditional Access

Although some TV and Radio channels are free to air, most TV and Radio/Music channels are available on a subscription basis and can only be enjoyed via Conditional Access component. The Conditional Access component is removable Smartcard.

Inserting Smartcard

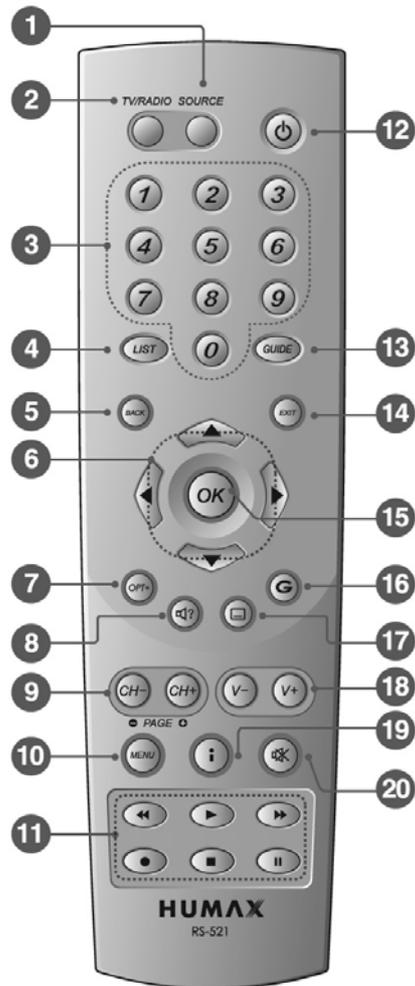
A Smartcard looks similar to a credit card and entitles you to view and listen to all the channels you choose to subscribe to. The Smartcard slot on the product can be used for Conax Smartcard only.

1. Open the right-hand flap on the front panel of the product.
2. Hold the Smartcard horizontally with the electronic chip (generally small square, gold in colour) facing upwards.
3. Insert the Smartcard into the top slot until the card is completely in.



1. Before Using the Recorder

1.5 Remote Control Unit



- 1. SOURCE**
Selects the input source between TV and recorder.
- 2. TV/RADIO**
Switches between TV and Radio modes.
- 3. NUMERICAL (0-9) BUTTONS**
Enters a TV/Radio channel number or menu option number.
- 4. LIST**
Displays the channel list.
- 5. BACK**
Returns to the previous menu and screen.
- 6. ARROW BUTTONS**
Changes the channel or move the cursor to the up, down, left or right menu option.
- 7. OPT+ (OPTION)**
Displays the channel attributes during watching a programme.
- 8. AUDIO**
Displays the Audio list.
- 9. CH-/CH+ and PAGE-/PAGE+**
Changes the Channel or Page.
- 10. MENU**
Displays the main menu.
- 11. PLAYBACK CONTROL BUTTONS**
Includes fast rewind, play, fast forward, record, stop, pause buttons.
- 12. STANDBY**
Switches between Operation and Standby modes.
- 13. GUIDE**
Displays the Programme Guide.
- 14. EXIT**
Exits the main menu or Guide screen.
- 15. OK**
Selects a menu, or confirms the selected operation. And displays the channel list during watching a programme.
- 16. G (Game)**
Displays the Game.
- 17. SUBTITLE**
Changes the subtitle language.
- 18. V-/V+**
Adjusts the audio volume.
- 19. i (INFORMATION)**
Displays the information about the channel and programme.
- 20. MUTE**
Pauses the audio temporarily. That is, volumes on/off temporarily.

2. Setup

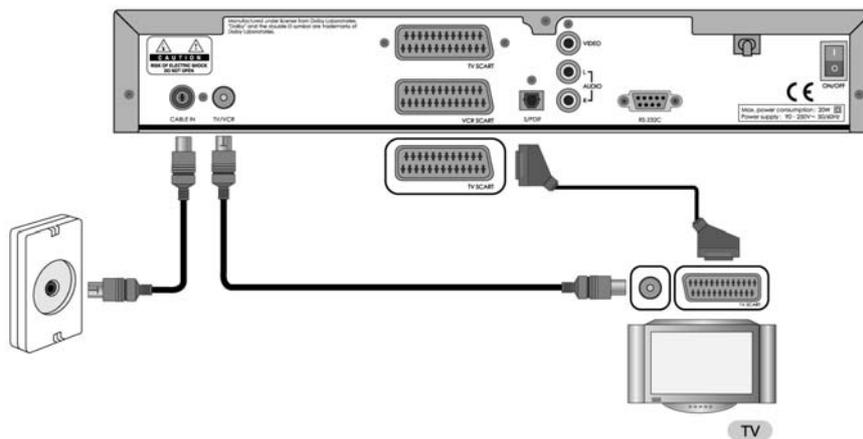
This chapter describes how to set up the Recorder. Select the most appropriate procedure depending on your requirements.

Note: If you encounter any problem when setting up the Recorder, please contact your local product distributor.

2.1 Connecting the Cable

1. Connecting TV

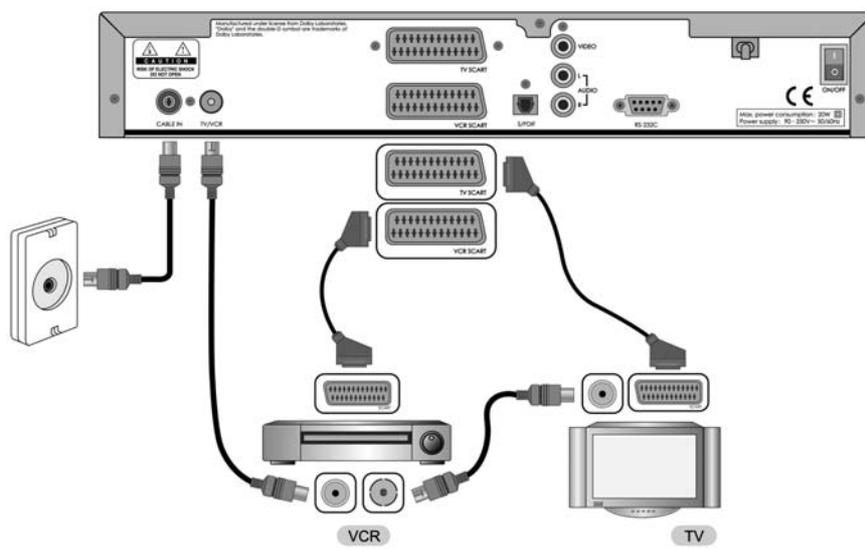
This is the most simple setup mode.



- Connect your CATV line to the CABLE IN socket on the Recorder for receiving cable services.
- TV Scart are connected as in the figure above.

2. Connecting TV/VCR with 2 SCARTs

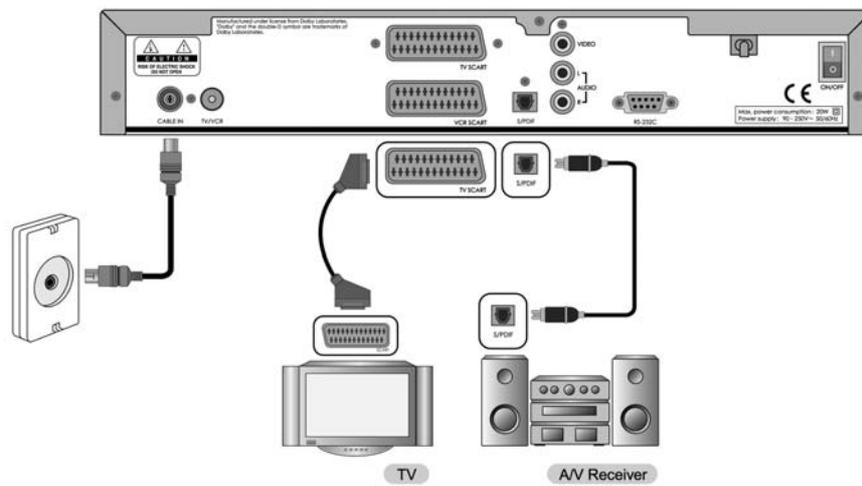
This is the optimal way to connect the Recorder.



2. Setup

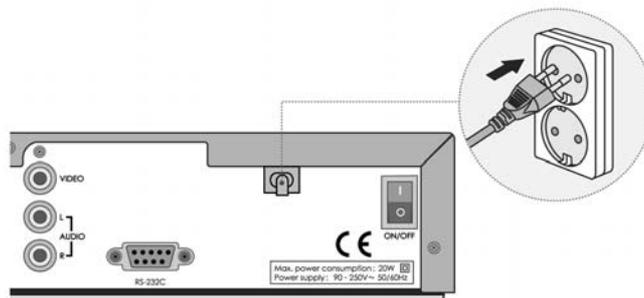
3. Connecting Hi-Fi system

If you wish to connect S/PDIF to the optical S/PDIF terminal and Dolby digital decoder to listen digital audio, connect as following.



2.2 Powering On

1. Connect the power cord of the recorder to a wall outlet.
2. Turn on the power switch, located at the left on the back of the recorder. Make sure that the Standby LED indicator is turned on Red.



3. Power on by pressing the **STANDBY** (⏻) button at Remote Controller.



3. Installation Wizard

When powering on your product for the first time after purchasing, the Installation Wizard is automatically started.

You can easily set-up using simple organisation and options, and watch the broadcasting after completing the set-up procedure. You can select items using the **NUMERICAL** (0-9) button.

Note: If you press the **BACK** (⏪) button or select **Back** and press the **OK** (⏹) button while running the Installation Wizard, you can return to the previous screen.

3.1 Language

Select the appropriate language from the list using the ▲/▼ button and press the **OK** (⏹) button to save the selected language as a default language for Menu, Subtitle, and Audio.



3.2 Area Setting

The country is fixed to Sweden.



3.3 Channel Search

You can set parameters to search channels.

Select the following item using the ▲/▼ button, and press the OK (OK) or ► button.

- **Frequency:** The default value is set to **362000**. If you wish to set your desired frequency value, select **User Define**, and enter the value using the **NUMERICAL** (0~9) button.
- **Symbol Rate:** The default value is set to 6875. Select your desired symbol rate using the ▲/▼ button, and press the OK (OK) or ► button. If the desired value is not listed, then select **User Define**, and enter the value using the **NUMERICAL** (0~9) button.
- **Network Search:** The default value is set to Enable. Select **Enable** or **Disable** using the OK (OK) or ► button. When using the network search, select **Enable**. You can also disable the network search by selecting **Disable**.
- **Network ID :** Select your desired Network ID using the ▲/▼ button, and press the OK (OK) or ► button. If the desired value is not listed, then select **User Define** , and enter the value using the **NUMERICAL** (0~9) button.



Select **Next** and press the OK (OK) button to start channel search.

Please wait for finishing the Channel Search. If you want to stop the operation during search, press the OK (OK) button.

If the Channel Search is stopped or finished, you can edit the found channels.

- **Select All:** Select all the found channels.
- **Unselect All:** Unselect all the found channels.
- **Delete:** Delete the selected channels.



Select **Save**, and press the OK (OK) button to save the result and go to the next step.

3. Installation Wizard

3.4 Time Setting

You can set the current time.

Press the **OK** (OK) or **▶** button to display the values for **GMT Offset**.

Select the appropriate GMT Offset value using the **▲/▼** button and press the **OK** (OK) button to set the current time.

Note: The default item is Auto. If GMT Offset is Auto, it is automatically set depending on your country. However, if the time is NOT set properly, you can change GMT Offset to fit your local time.

Select **Next** using the **▲/▼** button and press the **OK** (OK) button to go to the next step.



3.5 Result

It displays the default language, country, time offset, network id, and channel search result.

Select **Finish** using the **▲/▼** button and press the **OK** (OK) button to complete the Installation Wizard.



4. Basic Operation

This chapter describes functions such as switching channel, volume control, and basic features for watching programmes.

4.1 Switching Channel

You can switch the current channel using one of the following methods.

1. Press the **CH-/CH+** (CH-/CH+) or ▲/▼ buttons.
2. Enter your desired channel numeric using the **NUMERICAL** (0-9) buttons to move to the channel directly.
3. Press the **TV/RADIO** (TV/RADIO) button to switch between TV channel and Radio channel.

Note: You can switch channel using the Channel List or Programme Guide. Please refer to Chapter 7 and 8 for more information.

4.2 Volume Control

1. Press the **V-/V+** (V-/V+) or ◀/▶ buttons to adjust the audio volume.
2. Press the **MUTE** (MUTE) button to stop the sound temporarily.

Note: The mute function keeps enabled while you change the channel.

4.3 Teletext

When the channel supports teletext, the teletext icon (TT) is displayed on the I-plate. To enter Teletext mode, press the **SUBTITLE** (SUBTITLE) button to display teletext.

1. Using Teletext Menu

1. Press the **MENU** (MENU) button to display teletext menu in teletext mode.
2. Select your desired teletext function using the ◀/▶ button.
3. Press the **OK** (OK) button.



4. Basic Operation

Teletext Functions

	Index	Return to index page. If there is no index page, jump to page 100.
	Sub-page	Search the sub-page using the sub-code written by users. If it's not in the teletext mode, display the current time.
	MIX	Adjusts transparency of teletext screen.
	Cancel	Hides the teletext except page number.
	Reveal	Displays the concealed information.
	Double Size	Displays the text size as double size.
	Page Hold	Holds the current page not updating it.

2. Viewing Teletext Page

1. Enter your desired page number using the **NUMERICAL** (0-9) buttons to move to the page directly.
2. Press the ▲ button to move to the next page in increased number.
3. Press the ▼ button to move to the previous page in decreased number.
4. Press the **CH-/CH+** (CH-/CH+) buttons to move to previous/next page.
5. Press the **BACK** (←) button to move back up to 7 recently viewed pages in sequence.



4.4 Changing the Subtitle Language

If the current programme provides Subtitle information, you can select the language for the Subtitle.

1. Press the **SUBTITLE** (Ⓜ) button to display the subtitle language list.
2. Select your desired subtitle language using the ▲/▼ button, and press the **OK** (Ⓚ) button. Then the subtitle will be displayed in the selected language at the bottom of the screen.
3. Select **OFF** from the subtitle language list not to display subtitle from the screen.



Note: You can select a default subtitle language by selecting **MENU - Preferences - Language Setting - Subtitle Language**.

4.5 Changing an Audio Language

If the current programme is available in multiple audio languages, you can select the language that you wish to listen in.

1. Press the **AUDIO** (Ⓜ) button to display **Audio list**.
2. Select your desired audio language using the ▲/▼ button to change Audio immediately.
3. Select Audio Direction(left, right, stereo) using the ◀/▶ button.



Note: You can select your desired default audio language by selecting **MENU - Preferences - Language Setting - Audio Language**.

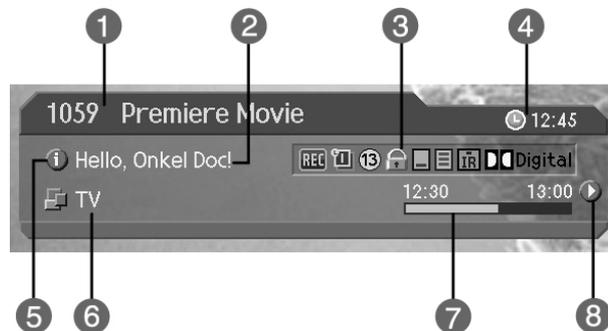
4. Basic Operation

4.6 Programme Information (I- plate)

Programme information is displayed for a specific period of time whenever you switch channels. You can view the programme information by pressing the **i** (i) button while watching a programme. Press the **EXIT** (EXIT) button to hide the I-plate.

1. General Information

General Information is displayed as follows on the screen.



1. Channel number and channel name
2. Programme name
3. Icons

	Displayed only if this programme is recording.
	Displayed only if this programme is reserved.
	Represents parental level. It indicates the minimum level of ages that the programme is targeted at.
	Displayed only when the channel is a locked channel.
	Displayed only when the channel is a scrambled channel.
	Displayed only when subtitle information is available.
	Displayed only when there is any teletext information.
	Displayed only when the programme is a dolby digital one.

4. Current time
5. Detail programme information: displayed if detailed programme information is provided.
6. Channel looping mode and Channel List Name : if you select **Within the current channel list** by selecting **MENU - Edit Channels - Channel Change Mode**, the Icon of Channel looping mode is displayed. And channel list, which you selected, is displayed.
7. Programme broadcasting time and progress bar: displays programme playing time and progress bar.
8. Next programme Information : displayed if next programme information is provided. Press the **▶** button to display the next programme information.

Note: If there is no available programme information, programme information is not displayed.

2. Detailed Programme Information

You can see detailed information about the current programme. Press the **i** (**i**) button where I-plate is displayed to view detailed information.

Note:

- Press the **i** (**i**) button again to hide the information box.
- If the Detailed programme information is more than one page, use the **▲/▼** button to move to the previous or next page.



4. Basic Operation

4.7 Option List

You can view and confirm detailed information about the current channel and change the information.

Note: Press the **OPT+** (OPT) button when the channel list is displayed to view **Option List**. Then the following functions in the option list are performed to the current channel where cursor is located.

1. Add a channel to favourite group

You can add current channels to the favourite group immediately. Also, you can add a channel to multiple Favourite groups.

1. Press the **OPT+** (OPT) button.
2. Select **Favourite** using the **▲/▼** button, and press the **▶** or **OK** (OK) button.
3. Select **favourite group** using the **▲/▼** button and press the **OK** (OK) button to register for Favourite Group.
4. Press the **OK** (OK) button again on the selected **Favourite Group** to release the registered channel.
5. Move to the parent menu using the **◀** button to save the changes automatically.

Note: For detailed information about how to change Favourite Group's name and how to register Favourite Channel for the whole channels, refer to **Chapter 7**.



2. Lock/Unlock a Channel

You can lock or unlock the current channel while watching a programme.

1. Press the **OPT+** (OPT) button.
2. Select **Lock** using the **▲/▼** button, and press the **▶** or **OK** (OK) button.
3. Select **Lock** option using the **▲/▼** button, and press the **OK** (OK) button.
4. Select **Unlock** option using the **▲/▼** button, and press the **OK** (OK) button.
5. You will be prompted to enter your Password. Enter your password to unlock the channel.
6. Move to the parent menu using the **◀** button to save the changes automatically.

Note: When switching to the Locked Channel, you must enter the password to watch a programme. The Default Password is '0000'.



3. Delete a Channel

You can delete the current channel while watching a programme.

1. Press the **OPT+** (OPT) button.
2. Select **Delete** using the **▲/▼** button, and press the **OK** (OK) or **▶** button.
3. Select **Yes** in the confirmation message and press the **OK** (OK) button.
4. Enter password using the **NUMERICAL** (0-9) button to delete the current channel and move to the next channel.

Note:

- The Default Password is '0000'.
- The channel will be permanently deleted. If you would like to get it back, you should search channels again using the Installation menu.

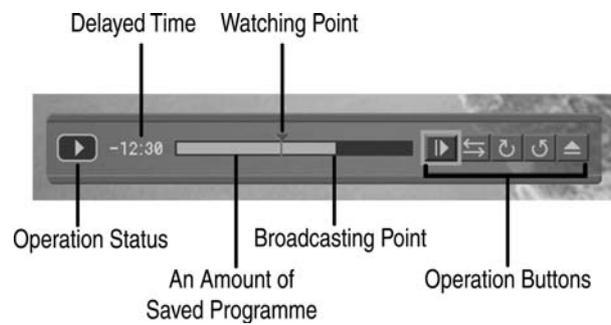


5. Time Shifted Recording

This unit automatically saves the programme on air so that users can watch programmes as they watch a video tape using functions such as rewind, fast forward, replay and pause.

5.1 Time Bar

If you press playback control buttons while watching TV, the Time bar appears on the bottom of the screen.



Time bar displays the current operation status, the time difference between the broadcasting point and watching point, and an amount of temporarily saved programme. Time bar also provides 5 operation buttons on the right side for additional time shift operations.

5.2 Pause

If you press the **PAUSE** (⏸) button on the remote controller, the current programme is paused. If you press the **PLAY** (▶) or **PAUSE** (⏸) button once again, the programme is resumed from that point.

Note:

Pause makes the time difference or delay between the broadcasting point and watching point. The time difference is equal to the paused time period. You can check the time difference in the Time bar. Other operations such as slow motion and rewind also make the time difference.

Press the **STOP** (■) button to remove the time difference, and watch the programme on air presently.



5.3 Rewind to Previous Scene

Press the **REWIND** (⏮) button on the remote controller to watch the scene passed by. Whenever you press the **REWIND** (⏮) button, the rewind speed increases by 3 steps.

If you press the **PLAY** (▶) button, the rewinding operation stops, and the programme is played at normal speed.

Note: You can rewind to the point when you have changed to the current channel. If the watching point reaches the start point during rewinding, the programme is played at normal speed from the point.



5.4 Fast Forward to the Next Scene

Press the **FORWARD** (⏭) button on the remote controller to fast forward the programme. Whenever you press the **FORWARD** (⏭) button, the speed increases by 3 steps.

If you press the **PLAY** (▶) button, the fast forward operation stops, and the programme is played at normal speed.

Note: You can use the fast forward operation only when there is a time difference between the current watching and the broadcasting point caused by some previous operations such as pause, slow motion, and rewind. You can fast forward to the current broadcasting point. If the watching point reaches to the broadcasting point, the programme is played at normal speed.



5.5 Recording

Press the **REC** (📹) button on the remote controller to start recording the current programme. While the time shift operation records the programme temporarily, record operation records the programme permanently so you can playback the recorded programme at any time. For more information about recording, refer to **Chapter 6**.

5. Time Shifted Recording

5.6 Additional Time Shift Operations Using Time Bar

You can perform additional time shift operations using the 5 operation buttons on the right side of the time bar.

1. Slow Motion

Select **SLOW MOTION** (▶) and then press the **OK** (OK) button to play the current programme in slow motion. Press **SLOW MOTION** (▶) once again to play the programme at normal speed.

2. Direct Jump

Select **DIRECT JUMP** (⇐⇒) and then press the **OK** (OK) button. A moving arrow appears in progress bar. Move this arrow to a desired time point using the ◀▶ button, and then press the **OK** (OK) button to play the programme from the specified time point.

3. Replay

Select **REPLAY** (↺) and press the **OK** (OK) button, to replay the current programme from the 7 seconds before. When the replay has been completed, the programme is normally played from the point.

4. Skip

Select **SKIP** (⏭) and then press the **OK** (OK) button to play the programme from the time point 30 seconds forward from the current watching point.

You can use the skip operation only when there is a time difference between the current watching and the broadcasting point while you use the fast forward operation. If the time difference is less than 30 seconds, the programme is played from the current broadcasting point.

5. Displaying a Playlist

Select **PLAYLIST** (📄) and press the **OK** (OK) button to display the currently saved programme list.

Select desired programme and then press the **OK** (OK) button to playback the programme.

You can perform the time shift operations like VCR functions using the Playback control buttons while playing a programme.

Press the **STOP** (⏹) button to stop playing the current saved programme, and watch the current programme on air.



6. Recording and Playback

You can record a programme without an external media device such as a VCR.

6.1 Instant Recording

Press the **REC** (●) button on the remote controller to record the current programme instantly.

Press the **STOP** (■) button to stop recording.

Note:

- You cannot change channels during the recording operation.
- Ensure that there is enough free space before recording, because if the free space on the hard disk drive is insufficient, recording will stop. Recording 1 hour of programme may require up to 3GB of free space of hard disk space. The space for recording 1 hour of programme may be different depending on the programme recorded.

6.2 Recording Reservation

You can reserve recording to record your desired programme automatically. You can reserve recording of a programme using **Menu - Record - Recording Schedule** and **Guide**. For detailed information on recording reservation using Guide, refer to **Chapter 8**.

1. Press the **MENU** (☰) button.
2. Select **Record** using the ▲/▼ button and press the **OK** (OK) or ► button.
3. Select **Recording Schedule** using the ▲/▼ button and press the **OK** (OK) or ► button to display the reserved recording list on the screen.
4. Select a blank list and press the **OK** (OK) button to add a new recording reservation.
5. Select the reserved list and press the **OK** (OK) button to edit the existing reservation information.



1. Adding Recording Reservations

1. Enter **Channel Number** using the **NUMERICAL** (0~9) buttons. The channel name changes automatically according to the input channel number
2. Enter **Recording Start Time** using the ◀/▶ button, and **NUMERICAL** (0~9) buttons.
3. Enter **Recording End Time** using the ◀/▶ button, and **NUMERICAL** (0~9) buttons.
4. Select **Repeat** mode from Once/Daily/Weekly using the ◀/▶ button.



6. Recording and Playback

5. Select **Programme Lock** mode using the ◀/▶ button.
6. When you have finished, select **Save**, and then press the **OK** (OK) button.
7. Select **Cancel**, and then press the **OK** (OK) button to cancel the reservation.

Note:

- You can reserve 20 programmes for recording.
- If the programme to reserve overlaps with the existing one, adjust the reservation so as not to overlap.
- If the target channel is locked, restricted by watching time or parental control, you have to enter a password for reservation.

2. Editing Recording Reservations

1. Change **Recording Start Time** using the ◀/▶ button, and **Numerical** (0–9) buttons.
2. Change **Recording End Time** using the ◀/▶ button, and **Numerical** (0–9) buttons.
3. Change **Repeat** mode using the ◀/▶ button. You can select from Once, Daily, and Weekly.
4. Change **Programme Lock** mode using the ◀/▶ button.
5. Select **Delete**, and then press the **OK** (OK) button to delete a reservation.
6. Select **Cancel**, and then press the **OK** (OK) button to cancel an edit operation.
7. Select **Save**, and then press the **OK** (OK) button to finish editing operation.



Note: If you have configured **Lock** on a recording reservation, you have to enter a password to playback the recorded programme.

6.3 Programme Playback

Select your desired programme from the recorded programme list, and then press the **PLAY** (▶) button to playback the recorded programme.

You can view the programme list recorded by instant recording or recording reservation by selecting **Menu - Record - Recorded Programme**. Otherwise, you can easily view the recorded programme list using **PLAYLIST** (▶) on the right side of the Time bar while you are watching a programme.

1. Press the **MENU** (☰) button.
2. Select **Record** using the ▲/▼ button, and press the **OK** (⊙) or ▶ button.
3. Select **Recorded Programme** using the ▲/▼ button, and press the **OK** (⊙) or ▶ button to display the record programme list.
4. Select the desired programme to playback using the ▲/▼ button, and then press the **PLAY** (▶) button to playback the programme.
5. Press the **STOP** (■) button to stop the current programme, and watch the current programme on air.
6. You can perform time shift operations like VCR functions such as rewind, forward, slow motion, pause, skip, and replay using the Playback control buttons on the remote controller or the additional buttons on the right side of the time bar while you are playing back a programme.



Note: For more information on the time shift operations like VCR functions, refer to **Chapter 5**.

6.4 Editing Recorded Programmes

Select **Menu - Record - Recorded Programme**, and then select the desired recorded programme to edit the information of the programme.

1. Press the **MENU** (☰) button.
2. Select **Record** using the ▲/▼ button, and press the **OK** (⊙) or ▶ button.
3. Select **Recorded Programme** using the ▲/▼ button, and press the **OK** (⊙) or ▶ button. The recorded programme list appears.
4. Select the desired programme, and then press **OK** (⊙) to display the edit screen.



Note: If you press the **i** (i) button while playing a programme, a screen appears showing the information on the recorded programme.

6. Recording and Playback

1. Deleting a Recorded Programme

Select **Delete** in the edit screen, and then press the **OK** (OK) button.

2. Changing The Name of a Recorded Programme

1. Select **Programme** in the edit screen, and then press the **OK** (OK) button to display a keyboard on the screen.
2. Enter the desired programme name on the screen keyboard using the **▲/▼**, and **OK** (OK) button.
3. Select **OK**, and then press the **OK** (OK) button to complete.



3. Protecting Recorded Programmes from Deletion

1. Select **Protect** in the edit screen, and then press the **OK** (OK) or **▶** button to change **Enable** or **Disable**.
2. You have to enter a password to change the status from Enable to Disable.

Note: If the protect option of the programme is configured to **Enable**, you cannot delete the programme. Therefore, you have to change the protect option to **Disable** to delete a protected programme.

4. Locking a Recorded programme

1. Select **Lock** in the edit screen, and then press the **OK** (OK) or **▶** button to change **Enable** or **Disable**.
2. You have to enter a password to change the status from Enable to Disable.

Note: If the Lock option of a programme is configured to **Enable**, you have to enter a password to playback the programme.

6.5 Checking Hard Disk Drive

You can check the free space of the hard disk drive, and can format the disk drive if necessary.

1. Press the **MENU** (☰) button.
2. Select **Record** using the ▲/▼ button, and press the **OK** (⊙) or ► button.
3. Select **HDD Control** using the ▲/▼ button, and press the **OK** (⊙) or ► button.
4. You can check the used and free space of the HDD.
5. Select **Format** and press the **OK** (⊙) button to remove all the recorded programmes saved on the HDD, and initialise the HDD.
6. Select **OK** for the format confirm message, and enter a password to start formatting the HDD.



Note:

- You have to be careful because performing format deletes all the recorded programmes saved on the HDD.
- Even if you have removed the HDD because it is out of order, you can still watch programmes.

7. Channel List

Three types of channel lists are provided for easy and quick channel searching.

- TV** The list of all TV channels with 2 sub-groups: one is sorted by channel number, the other is sorted by channel name.
- Radio** The list of all Radio channels with 2 sub-groups: one is sorted by channel number, the other is sorted by channel name.
- Favourite** The list of the favourite channels with 5 sub-groups that you can organise channels by your private taste.

7.1 Displaying and Switching Channel List

You can display channel list using the **LIST** (LIST) button and switch into other channel on the channel list.

1. Press the **LIST** (LIST) button while watching a programme to display the selected channel list.
2. Select your desired channel using the ▲/▼ button and press the **OK** (OK) button to change the channel.
3. Enter the channel numeric directly using the **NUMERICAL** (0-9) buttons to move cursor into your desired channel. And then press the **OK** (OK) button to change into the selected channel.



Note:

- If there are multiple channels, press the **PAGE-/PAGE+** (CH-/CH+) button to move by channel.
- Whenever you press the **TV/RADIO** (TV/RADIO) button while the channel list is displayed, the channel list will be switched between TV and Radio channel list.
- To display scramble icon () in the channel list, select **ON** by going to **MENU - Preferences - Miscellaneous Settings - Option in CH List**.

7.2 Changing Channel List Group

You can select channel list by group.

1. Press the ► button while the channel list is displayed to view the group list.
2. Select your desired channel group using the ▲/▼ button to display its sub-groups.
3. Press the OK (OK) or ► button, select your desired sub-group using the ▲/▼ button, and then press the OK (OK) button.
4. The channel list for the selected sub-group is displayed.



Note:

- The sub-group of Favourite channel list may exist or not depending on your configuration.
- If **Within the Current Channel List** option is selected from **MENU - Edit channels - Channel Change Mode menu**, you can only change programme within the selected channel list using the CH-/CH+ (CH-/CH+) while your watching a programme.

7. Channel List

7.3 Edit Channels

You can edit all channels or each channel by channel list group.

1. Press the **MENU** (MENU) button.
2. Select **Edit Channels** using the ▲/▼ button, and press the **OK** (OK) or ► button.
3. Select **Edit Channel Lists** using the ▲/▼ button, and press the **OK** (OK) or ► button.
4. You will be prompted to enter your password. Enter your password using **NUMERICAL** (0~9) button.



Note:

- Press the **BACK** (BACK) or ◀ button to save the changes and return to the previous menu. Press the **MENU** (MENU) or **EXIT** (EXIT) button to exit the Menu screen.
- You can easily navigate all menus using the assigned numeric for each menu. Press the **NUMERICAL** (0~9) buttons for each menu. Press the **MENU - 3 - 1** in that order on the remote controller to select the **Edit Channel Lists** menu.

1. Select a Channel Group

You can select the channel list group to edit. TV and Radio are included as Channel List Groups.

1. Press the **OK** (OK) or ► button in group to display **Channel List Group**.
2. Select your desired **Channel List Group** using the ▲/▼ button, and press the **OK** (OK) button.



Note:

- Press the **TV/RADIO** (TV/RADIO) button to move to **TV** or **RADIO channel list** directly.
- For editing **Favourite channel list**, move to **MENU - Edit Channels - Edit Favourite Channels** menu.

2. Delete Channels

You can delete one or more channels.

1. Move the cursor to the channel list using the ▲/▼ button.
2. Select your desired channel, and then press the **OK** (OK) button to delete the channel(s). You can select multiple channels.
3. Select **Delete** on the right using the ► button, and press the **OK** (OK) button.



3. Lock/Unlock Channels

You can lock or unlock one or more channels.

1. Move the cursor to the channel list using the ▲/▼ button.
2. Select your desired channel, and then press the **OK** (OK) button to lock/unlock the channel(s). You can select multiple channels.
3. Select **Lock** in the right using the ► button, and press the **OK** (OK) button.



Note:

- Only if locked channel(s) is selected or all channels are locked, **Lock** is switched into **Unlock**. When you press **Unlock**, locked channel is switched into unlocked channel.
- Enter password using the **NUMERICAL** (0~9) button to watch locked channel.



4. Select/Unselect All Channels

You can select/unselect all channels at a time.

1. Select **Select All** in the right and press the **OK** (OK) button to select all channels.
2. Select **Unselect All** in the right and press the **OK** (OK) button to unselect all the selected channels.

7. Channel List

7.4 Edit Favourite Channels

You can edit Favourite channel or Favourite channel list.

1. Press the **MENU** (MENU) button.
2. Select **Edit Channels** using the ▲/▼ button, and press the **OK** (OK) button.
3. Select **Edit Favourite Channels** using the ▲/▼ button, and press the **OK** (OK) or ► button.



Note:

- Press the **BACK** (BACK) or ◀ button to save the changes and return to the previous menu. Press the **MENU** (MENU) or **EXIT** (EXIT) button to exit the Menu screen.
- You can easily navigate all menu items using the assigned numerical button for each menu. Press the **MENU - 3 - 2** in order on the remote controller to select the **Edit Favourite Channels** menu.

The buttons for editing the Favourite channel list are described in the following table.

	Add	Adds Favourite channel.
	Remove	Removes from the Favourite channel.
	TV/Radio	Switches between TV and Radio channel list.
	Fav.Group	Changes Favourite channel list group.
	Move	Moves the order of channel list within the Favourite channel list.
	Rename	Renames the name of Favourite channel list.
	Sort	Sorts channels by number or name in all TV/Radio channel list.
	Unselect All	Unselect all the selected channel.

1. Add/Remove favourite channels

You can add favourite channel(s) to a specific Favourite channel list or remove the added favourite channel(s) from the list.

1. Select **Favourite Group** using **F6**.
2. Select your desired channel(s) in all TV/Radio channel list, and press **▶** to add Favourite channel(s).
3. Select your desired channel(s) in Favourite channel list, and press **◀** to remove Favourite channel(s).

Note: You can switch between TV and Radio channel list using **TV/RADIO** () button or **⏮**.



2. Move favourite channels

You can move favourite channel(s) to your desired location within the Favourite channel list.

1. Select **Favourite Group** using **F6**.
2. Select your desired channel to move within the Favourite channel list and press the **OK** () button.
3. Select , and press the **OK** () button.
4. Move the cursor to your desired location using the **▲/▼** button, and press the **OK** () button.
5. The selected channel(s) is moved to the desired location you selected.



7. Channel List

3. Rename a favourite channel list

You can rename Favourite channel list.

1. Select Favourite group to rename using **F2**.
2. Select **F4**, and press the **OK** (OK) button.
3. Enter the **Favourite channel list** name using the keyboard displayed on the screen.
4. When finishing entering the Favourite channel list name, select **OK**, and press the **OK** (OK) button.



4. Additional Features

Additional Features provides many useful functions which are necessary to add Favourite Channel.

Change between TV and Radio channel list

You can add not only TV channel(s) but also Radio channel(s) to Favourite channel list. Press **F12** to switch all channel list into TV or Radio channels.

Note: You can also change into TV or Radio channel by pressing **TV/RADIO** (TV/RADIO) button at remote controller.

Select a favourite channel list

You can select your desired Favourite channel list to edit. Press **F12** to display the Favourite channel list. Then select your desired channel list using the **▲/▼** button, and press the **OK** (OK) button.



Sort a channel list

You can sort all TV or Radio channel lists by channel number or name for easy Favourite channel searching. If channel lists are sorted by channel number, **abc** is displayed. When you press this button, all the channel lists are sorted by name. Or, if channel lists are sorted by channel name, **abc** is switched into **123**. Press this button to order channels by number.

Unselect all the selected channels

Press  button to unselect all the selected channel.

7.5 Channel Change Mode

You can change the channel either in the group or in the entire groups while watching a programme.

1. Press the **MENU** () button.
2. Select **Edit Channels** using the  button, and press the **OK** () button.
3. Select **Channel Change Mode** using the  button, and press the **OK** () or  button.
4. Select **All Channels** or **Within the Current Channel List** using the  button, and press the **OK** () button.



Note: When **Within the current channel list** in **Favourite Group** option is selected, you can only change the channel within the current channel list. To change the channel in another channel list in which the current channel list is not located, change the channel list or select **All channels** option.

8. Programme Guide

The Programme Guide displays programme information about each channel, based on the date and time. You can also schedule your watching using the information given.

8.1 Viewing Programme Guide Information

You can view programme information for all channels.

1. Press the **GUIDE** (GUIDE) button.
2. Move to previous or next programme within the same channel using the ◀/▶ button.
3. Move to another desired channel using the ▲/▼ button. If there are multiple channels, use **PAGE-/PAGE+** (CH-/CH+) button to move to channels by page. Also, you can enter your desired channel number using the **NUMERICAL** (0-9) button on the remote controller to move to the channel directly.
4. Select your desired programme, and press the **OK** (OK) button. Then you can watch the programme if it is on air, or you can reserve it if it is the following programme.
5. Press the **i** (i) button in the selected programme to view **Extended Information** for the selected channel.



1. Viewing Guide Information by Groups

You can view programme information for desired channel list by groups.

1. Press the **GUIDE** (GUIDE) button.
2. Press the **Red** button to display the channel list group.
3. Select your desired channel list group using the ▲/▼ button to display the appropriate sub-group.
4. Move the cursor to the sub-group using the ▶ button, select your desired sub-group using the ▲/▼ button, and then press the **OK** (OK) button.
5. The Programme Guide for selected channel list is displayed.



2. Viewing Programme Information Using Time Bar

You can quickly search for your desired time zone using the Time bar.

1. Press the **GUIDE** (GUIDE) button.
2. Press the **Green** button to display **Time Bar**.
3. Select the **Time Bar** button using the ◀/▶ button, and press the **OK** (OK) button to move as your desired amount of time. If you press the button repeatedly, the same operation is repeated.
4. Each button functions as follows.



Now Moves to the current programme where the cursor is located.

◀ Moves to the previous programme or 30 minutes before.

▶ Moves to the next programme or 30 minutes after.

◀◀ Moves to 2 hours before.

▶▶ Moves to 2 hours after.

◀Day Moves to one day before.

Day▶ Moves to one day after.

5. Select **Exit** button and press the **OK** (OK) button to exit the Time Bar.

Note: Guide provides programme information from the previous day up to 7 days depending on the broadcasting company.

3. Reserving a Recording

You can automatically reserve your desired programme by selecting the scheduled programme and pressing the **OK** (OK) button.

1. Select the desired programme and press the **OK** (OK) button. The following message will be displayed.
2. Select **OK** and press the **OK** (OK) button to reserve the programme. When a reservation has been completed, the **TV** icon is displayed on the reserved programme.
3. Select **CANCEL** and press the **OK** (OK) button to not reserve the programme.
4. If the channel is locked, parental controlled or restricted by watching time, you will be prompted to enter your Password. Enter your Password to complete the reservation.



8. Programme Guide

8.2 Finding a Programme

You can find your desired programme by programme name or genre easily.

1. Press the **GUIDE** (GUIDE) button.
2. Press the **Blue** button to display **Find** screen.
3. Enter the programme name directly using the keyboard displayed on the screen.

Note: If you press **Previous** or **Next** button on the Keyboard displayed on the screen, the keyboard layout is switched.

4. When completing entering programme name, select the **Find** button, and press the **OK** (OK) button.
5. If you select your desired programme from the results of finding programme screen and press the **OK** (OK) button, you can watch the programme if it is on air, or you can reserve your programme if it is scheduled (the following programme).
6. Select **By Genre** and press the **OK** (OK) button to search programme by genre.
7. Select your desired genre and press the **OK** (OK) button.
8. As the result screen of Find programme by Name, select your desired programme from the Results of Finding Programme screen and press the **OK** (OK) button to watch the programme immediately or reserve the programme.



Note: The results of the finding programme may differ depending on the provided programme information.

8.3 Viewing Reserved Programme

You can add or edit reserved programmes by viewing the reserved programme list.

1. Press the **GUIDE** (GUIDE) button.
2. Press the **Yellow** button to display the **Schedule** screen.
3. Select the scheduled programme and press the **OK** (OK) button to edit the reservation information.
4. Select blank list and press the **OK** (OK) button to add a new reservation schedule.



1. Editing a Reserved Programme

1. Change reserved **Start Time** using the ◀/▶ button and the **NUMERICAL** (0~9) buttons.
2. Change reserved **End Time** using the ◀/▶ button and the **NUMERICAL** (0~9) buttons.
3. Change Repeat mode using the ◀/▶ button. The options are **Once**, **Daily**, and **Weekly**.
4. Change **Programme Lock** mode using the ◀/▶ button.
5. Select **Delete** and press the **OK** (OK) button to delete the reserved programme.
6. Select **Cancel** and press the **OK** (OK) button to cancel the editing.
7. Select **Save** and press the **OK** (OK) button to complete the editing.



Note: If the Lock option of a programme is configured to Enable, you have to enter a password to playback the programme.

8. Programme Guide

2. Adding a Reservation

1. Enter your desired **Channel Number** using the **NUMERICAL** (0~9) button. The channel name is automatically displayed by channel number.
2. Enter your desired **Start Time** using the **◀/▶** button and the **NUMERICAL** (0~9) button.
3. Enter your desired **End Time** using the **◀/▶** button and the **NUMERICAL** (0~9) button.
4. Select one of repeat mode options among **Once**, **Daily**, and **Weekly** using the **◀/▶** button.
5. Select **Programme Lock** mode using the **◀/▶** button.
6. Select **Save** and press the **OK (OK)** button to complete entering.
7. Select **Cancel** and press the **OK (OK)** button to cancel the reservation.



Note:

- You can reserve up to 20 programmes.
- If your desired programme is already reserved, adjust the reservation appropriately.
- If the channel is locked, restricted by watching time, you will be prompted to enter your Password to complete the reservation.

9. Setting Preferences

You can set censorship, watching time, and all other items suitable for your environment.

Note:

- Press the **BACK** (⏪) or ◀ button to save the changes and return to the previous menu. Press the **MENU** (☰) or **EXIT** (⏻) button to exit the Menu screen.
- You can easily select any item from the menu using the **NUMERICAL** (0-9) buttons.

9.1 Parental Control

You can set parental control for each programme and watching time. You can also change your Password.

1. Press the **MENU** (☰) button.
2. Select **Preferences** using the ▲/▼ button, and press the **OK** (OK) or ► button.
3. Select **Parental Control** using the ▲/▼ button, and press the **OK** (OK) or ► button.
4. When a prompting message is displayed to request your password, enter the password using the **NUMERICAL** (0-9) button.



1. Set Censorship

Censorship Classification allows you to block programmes according to the age level you have set.

1. Select **Censorship Classification** using the ▲/▼ button, and press the **OK** (OK) or ► button.
2. Select your desired **age level** using the ▲/▼ button, and press the **OK** (OK) button.



9. Setting Preferences

View All	All programmes can be watched because there is no age limitation.
7	Programmes are blocked for children under the age of 7.
12	Programmes are blocked for children under the age of 12.
15	Programmes are blocked for children under the age of 15.
18	Programmes are blocked for children under the age of 18.
Lock All	Programmes are blocked without considering the age level.

Note:

- You have to enter Password to watch the programme which is blocked by the age level.
- Some broadcasting companies do not broadcast the censorship classification information.

2. Set Allow Watch Time

You can block programmes according to the watching time for all the channels.

1. Select **Allow Time Control** using the ▲/▼ button.
2. Select Enable or Disable **Allow Time Control** using the ► or **OK** (OK) button.

Disable You can watch a programme whenever you want regardless of Allow Time.

Enable You can watch a programme only while the time specified by Allow Time.

3. When you have selected **Enable**, set the Start and End Time using the **NUMERICAL** (0-9) buttons, and press the **OK** (OK) button.
4. If you wish to cancel the entered time, select **Cancel** button, and press the **OK** (OK) button.

Note: Once the setting has been completed, you can watch programme only during the time specified by Allow Time. Otherwise you will need to enter the Password to watch any programme during unspecified time.



3. Change Password

You can change the existing password into new one.

1. Select **Change Password** using the ▲/▼ button, and press the ► or **OK** (OK) button.
2. Enter **New Password** using the **NUMERICAL** (0-9) button, and select **OK** and press the **OK** (OK) button.
3. Enter **New Password** again to confirm **Verify Password**, and press the **OK** (OK) button.

Note: The Default Password is "0000". If you have forgotten your Password, please contact your local product distributor.



9.2 Language Setting

You can set Language for Menu, Audio, and Subtitle.

1. Press the **MENU** (MENU) button.
2. Select **Preferences** using the ▲/▼ button, and press the **OK** (OK) or ► button.
3. Select **Language Setting** using the ▲/▼ button, and press the **OK** (OK) or ► button.



1. Menu/Audio/Subtitle Language

You can set the language for Menu, Audio and Subtitle.

1. Select **Menu/Audio/Subtitle Language** using the ▲/▼ button.
2. Press the ► or **OK** (OK) button to display the available **Language List**.
3. Select your desired language using the ▲/▼ button, and press the **OK** (OK) button.

9. Setting Preferences

2. Audio Priority

You can select the priority of audio.

1. Select **Audio Priority** using the ▲/▼ button.
2. Select one option from **Dolby Digital** or **PCM** using the ► or OK (OK) button.

Dolby Digital	This is used when the audio output is connected to 5.1-channel digital audio system.
PCM	This is used when the audio output is connected to general audio system including TV.

3. Subtitle Display

You can select whether or not to display the Subtitle automatically if provided.

1. Select **Subtitle Display** using the ▲/▼ button.
2. Select one option from **Auto** or **Manual** using the ► or OK (OK) button.

Auto	Subtitles are displayed automatically in the predefined subtitle language.
Manual	Subtitles are displayed in the language when you select the subtitle language by pressing the SUBTITLE (SUBTITLE) button on the remote controller.

4. Subtitle Font

You can select the Subtitle font.

1. Select **Subtitle Font** using the ▲/▼ button.
2. Select one option from **Variable** or **Fixed** using the ► or OK (OK) button.

Variable	Uses the horizontally variable Subtitle Font.
Fixed	Uses the fixed Subtitle Font.

9.3 Time Setting

You can specify the current time and Power On/Off time.

1. Press the **MENU** (⏏) button.
2. Select **Preferences** using the **▲/▼** button, and press the **OK** (⏏) or **▶** button.
3. Select **Time Setting** using the **▲/▼** button, and press the **OK** (⏏) or **▶** button.



1. Set Current Time

You can set the GMT Offset for current time.

1. Select **GMT Offset** using the **▲/▼** button.
2. Press the **▶** or **OK** (⏏) button to display **GMT list**. GMT is changed by from 30 minutes to 1 hour.
3. Select your GMT offset using the **▲/▼** buttons, and press the **OK** (⏏) button.



Note: The current time is set automatically whenever GMT Offset changes.

The default item is **Auto**.

If GMT offset is Auto, it is automatically set depending on your country. However, if the time is NOT set properly, you can change GMT Offset to fit your local time.

9. Setting Preferences

2. Power On

You can set the time when the product is automatically powered on.

1. Select **Power On** using the ▲/▼ button.
2. Select either **Enable** or **Disable** the Power On using the ► or OK (OK) button.

Enable Uses the Power On and sets the Power On time.

Disable Does not use the Power On.

3. When you have selected **Enable**, enter **Channel No** and **Time** using the **NUMERICAL** (0-9) buttons, and press the OK (OK) button.



3. Power Off

You can set the time when the product is automatically powered off.

1. Select **Power Off** using the ▲/▼ button.
2. Select either **Enable** or **Disable** **Power Off** using the ► or OK (OK) button.

Enable Uses the Power Off and sets the Power Off time.

Disable Does not use the Power Off.

3. When you have selected **Enable**, enter the **Time** using the **NUMERICAL** (0-9) button, and press the OK (OK) button.

Note: Once Power On/Off is specified, it is repeated everyday.

9.4 A/V Control

You can set Audio or Video Output Control.

1. Press the **MENU** (⏏) button.
2. Select **Preferences** using the ▲/▼ button, and press the **OK** (⏏) or ► button.
3. Select **A/V Control** using the ▲/▼ button, and press the **OK** (⏏) or ► button.



1. TV-SCART

You can set TV SCART Output.

1. Select **TV-SCART** using the ▲/▼ button.
2. Select one option among **CVBS/RGB/S-Video** using the **OK** (⏏) or ► button.

2. VCR SCART

You can set VCR-SCART Output.

1. Select **VCR-SCART** using the ▲/▼ button, and press the **OK** (⏏) or ► button.
2. Select one option from **CVBS/S-Video** using the **OK** (⏏) or ► button.

3. Audio Output

You can set the Audio Output.

1. Select **Audio Output** using the ▲/▼ button.
2. Select one option from **Stereo or Mono** using the ► or **OK** (⏏) button.

9. Setting Preferences

4. Screen Ratio

You can set the aspect ratio of your TV.

1. Select **Screen Ratio** using the ▲/▼ button.
2. Select one option from **4:3 or 16:9** using the ► or OK (OK) button.

5. Display Format

You can select the Display Format according to TV Screen Ratio.

1. Select **Display Format** using the ▲/▼ button, and press the OK (OK) or ► button.
2. If the Screen Ratio is set to '**4:3**', you can select one among **Auto/Letter box/Center Mode** using the ▲/▼ button, and press the OK (OK) button.
3. If the Screen Ratio is set to '**16:9**', you can select one among **Auto/Pillar box/Full mode** using the ▲/▼ button, and press the OK (OK) button.

9.5 UHF Tuning

You can set the UHF channel.

1. Press the **MENU** (⏏) button.
2. Select **Preferences** using the ▲/▼ button, and press the **OK** (⊙) or ► button.
3. Select **UHF Tuning** using the ▲/▼ button, and press the **OK** (⊙) or ► button.



1. UHF Channel

You can select UHF Channels for the TV. The Channel range and Frequency change according to PAL Standard.

1. Select **UHF Channel** using the ▲/▼ button, and press the **OK** (⊙) or ► button.
2. Select channel range based on the following channel criteria using the ▲/▼ button, and press the **OK** (⊙) button.

CH21-CH69	PAL I/G for Europe
CH28-CH69	PAL B for Europe/Australia

2. PAL

You can select the PAL standard.

1. Select **PAL** using the ▲/▼ button, and press the **OK** (⊙) or ► button.
2. Select one option among **PAL I / PAL G / PAL B** using the ▲/▼ button, and press the **OK** (⊙) button.

3. UHF Offset

You can adjust fine tuning setting.

1. Select **UHF Offset** using the ▲/▼ button, and press the **OK** (⊙) or ► button.
2. Select a range between **-4 ~ +4** using the ▲/▼ button, and press the **OK** (⊙) button.

9. Setting Preferences

9.6 Miscellaneous Settings

1. Press the **MENU** (Ⓜ) button.
2. Select **Preferences** using the ▲/▼ button, and press the **OK** (Ⓞ) or ► button.
3. Select **Miscellaneous Settings** using the ▲/▼ button, and press the **OK** (Ⓞ) or ► button.



1. i-Plate Display Time

You can set the duration during which the Information box is to be displayed when you switch the channel.

1. Select **i-Plate Display Time** using the ▲/▼ button, and press the **OK** (Ⓞ) or ► button.
2. Select a value between 1~20 seconds using the ▲/▼ button, and press the **OK** (Ⓞ) button.

Note: When it is set to **Disable**, the i-Plate will not be displayed when you switch the channel.

2. OSD Transparency

You can set the transparency of On Screen Display (OSD).

1. Select **OSD Transparency** using the ▲/▼ button, and press the **OK** (Ⓞ) or ► button.
2. Select one option among **Disable / 25 / 50 / 75** using the ▲/▼ button, and press the **OK** (Ⓞ) button.

Disable	Fully opaque screen
25, 50, 75	As the number is bigger, the screen is more transparent.

3. Option in CH List

You can set whether or not to display the scrambled icon in channel list.

1. Select **Option in CH List** using the ▲/▼ button.
2. Select one option from **On/Off** using the ► or **OK** (Ⓞ) button.

On	Scramble icon displays in the channel list.
Off	Scramble icon disappears in the channel list.

10. Installation

This chapter describes how to search for channels and a series of procedures.

10.1. Channel Search

If your product is connected to the cable and television, you can search channels manually by searching parameters, if you know the MUX information.

1. Press the **MENU** (☰) button.
2. Select **Installation** using the ▲/▼ button, and press the **OK** (⊙) button. You will be prompted to enter your password.
3. Select **Channel Search** using the ▲/▼ button, and press the **OK** (⊙) or ► button.



1. Frequency

1. Select **Frequency** using the ▲/▼ button, and press the **OK** (⊙) or ► button.
2. Select frequency value using the ▲/▼ button, and press the **OK** (⊙) button.
3. When you select **User Define** to set frequency manually, enter frequency value using the **NUMERICAL** (0~9) button.



2. Symbol Rate

1. Select **Symbol Rate** using the ▲/▼ button, and press the **OK** (⊙) or ► button.
2. Select desired symbol rate value using the ▲/▼ button, and press the **OK** (⊙) button.
3. When you select **User Define** to set symbol rate manually, enter symbol rate value using the **NUMERICAL** (0~9) button.



10. Installation

3. Network Search

1. Select **Network Search** using the ▲/▼ button, and press the OK (OK) or ► button.
2. Select **Disable** or **Enable** using the OK (OK) or ► button.

Note: Enable allows you to use Network ID.



4. Network ID

1. Select **Network ID** using the ▲/▼ button, and press the OK (OK) or ► button.
2. Select desired Network ID using the ▲/▼ button, and press the OK (OK) or ► button.
3. If the desired value is not listed, then select **User Define**, and enter the value using the NUMERICAL (0~9) button.



5. Search

You can complete the setting and start searching.

1. Select **Search** and press the **OK** (OK) button to start Channel Search.
2. Wait while the recorder searches for the channels, this may take a few minutes.
3. During operating search, the cursor is located at **Stop**. Therefore, if you press the **OK** (OK) button during searching, the operation is stopped and only the channels found so far will be displayed.
4. If the search operation is successfully completed, and no channels are found, press the **OK** (OK) button and try to reset the search operation again if necessary.
5. You can delete unnecessary channels from the searched channels. Select your desired channels to delete and press the **OK** (OK) button. Then select **Delete** and press the **OK** (OK) button. To delete all channels, select **Select All** to select all channels, select **Delete**, and press the **OK** (OK) button.
6. When completing channel search and deleting unnecessary channels, select **Save**, and press the **OK** (OK) button to save the changes.



10. Installation

10.2 Linear Search

You can search channels by setting the range of frequencies and other parameters.

1. Start Frequency and End Frequency

1. Select **Start / End Frequency** using the ▲/▼ button, and press the **OK** (OK) or ► button.
2. Set the Start/End Frequency which the Linear Search start from/to in order to set the frequency range to seek.



2. Step

1. Select **Step** using the ▲/▼ button, and press the **OK** (OK) or ► button.
2. Set the step frequency that will be added start frequency. Your product will search channels at the increasing frequency by step frequency. If you don't know the value, please select Auto



3. Append Symbol Rate

1. Select **Append Symbol Rate** using the ▲/▼ button, and press the **OK** (OK) or ► button.
2. Select the symbol rate using the ▲/▼ button, and press the **OK** (OK) button.
3. It will be displayed symbol rates that you selected. Product will search channels by all of symbol rates that you selected.



4. Search

You can complete the setting and start searching.

1. Select **Search** and press the **OK** (OK) button to start Linear Search.
2. The next procedures are the same as those for Channel Search. Please refer to Channel Search.

10. Installation

10.3 Default Setting

Default Setting restores the product to the default settings

Warning: Please note that once you perform Default Setting, all data such as Channel List and User Configured data are deleted.

To perform Factory Default:

1. Press the **MENU** (☰) button.
2. Select **Installation** using the ▲/▼ button, and press the **OK** (⊙) or ► button.
3. Enter **Password** using the **NUMERICAL** (0~9) button.
4. Select **Default Setting** using the ▲/▼ button, press the **OK** (⊙) or ► button.
5. Select **Yes** and press the **OK** (⊙) button to restore all setting to Factory Default. Select **No** and press the **OK** (⊙) or **BACK** (◀) button to return to the previous menu.
6. Confirm again to start loading default setting. Enter **Password** using the **NUMERICAL** (0~9) button to perform restoring.
7. When completing the default setting, the **Installation Wizard** will run automatically. For detailed information about Installation Wizard, refer to 3. Installation Wizard.



11. Software Update

In order to maintain proper performance of this product, it is essential to have the most up-to-date software.

Whenever new software is released, com hem will upgrade your product via OTA.

11.1 OTA (Over the Air)

OTA, an abbreviation of "**over-the-air**", means that the software can be downloaded where the manufacturer reserves the right to decide when and where to release through cable.

Over the Air (OTA) is simply an alternative method for downloading software versions. However, the manufacturer reserves the right to decide when and where this software update can take place by latest software versions over the cable. The software update will only occur under the following circumstances.

1. The equipment should have appropriate loader software.

Caution: Please note that if you don't have normal loader software, the equipment may not be updated or work after software update.

2. The manufacturer decides to release software downloading.

Caution:

- Please be careful to keep the power on and the power cord plugged in during software update. If the power is off during software update, it may cause fatal damage to the product.
- Please be careful not to pull out the Signal line during software update. Update may be interrupted and the product may not work.

Note:

- The product cannot work at all during software update.
- It may take 5-10 minutes to update software.
- Scheduling operation cannot work during software update.

11. Software Update

1. If new software is found when powering on

1. A message will be displayed to notify that new software is found.
2. Select **Yes** and press the **OK** (OK) button to update the software.
3. Starts downloading new software. Please wait until the update is completed.
4. When completing the software update, the equipment is automatically powered off and on again.

2. If a new version of software is detected during watching a programme

1. A message will be displayed to notify that new software is found.
2. Select **Yes** and press the **OK** (OK) button to start upgrading. Select **No** and press the **OK** (OK) button to return to the previous screen.



3. If using Software Update

You can perform Software Update only if you know MUX information of software update correctly.

1. Press the **MENU** (☰) button.
2. Select **Installation** using the ▲/▼ button, and press the **OK** (OK) or ► button.
3. Enter **Password** using the **NUMERICAL** (0~9) buttons.
4. Select **Software Update** using the ▲/▼ button, and press the **OK** (OK) or ► button.
5. Set the **Frequency** which provides update software.
6. Select the **Symbol Rate**. You can enter the specific value by selecting **User Define**

Note: How to setting parameters in **Software Update** is the same as how to set parameters in **Channel Search**. Refer to **Channel Search**.

7. Select **Search** and press the **OK** (OK) button to search software.
8. It is displayed whether or not New Software exist. If new software does not exist, press the **OK** (OK) button to return to the Software Update Menu.
9. Select **Yes** and press the **OK** (OK) button to start updating. Select **No** and press the **OK** (OK) button to return to the previous menu.
10. Performs Software Update. Please wait until it is completed.
11. When completing the software update, the product is automatically powered off and on again.



12. System Information

You can view all system information, signal strength, and smart card information.

1. Press the **MENU** (Ⓜ) button.
2. Select **System** using the ▲/▼ button, and press the **OK** (Ⓞ) or ► button.



12.1 Status

You can view System information

1. Select **Status** using the ▲/▼ button, and press the **OK** (Ⓞ) or ► button.
2. Confirm the information about **Hardware version, Software version, Loader version, System ID, Update Date.**



12.2 Signal Detection

You can view the signal strength and signal quality.

1. Select **Signal Detection** using the ▲/▼ button, and press the **OK** (Ⓞ) or ► button.
2. Display information about the graphs and percentage of Signal Strength and Quality of the channel.



12.3 Conditional Access (for Conax embedded)

1. Product Ordering

This item is for IPPV and it will be reserved until software is updated. When the cursor is located in this menu, there will be no action even after selecting.



2. Subscription Status

This shows the authorised list of Conax channels in the smart card.

3. Event Status

This menu shows the channel ordered using PPV.

4. Change CA PIN

This lets you change the Smart Card PIN code.

5. Maturity Rating

This menu lets you set the level of authorization to watch the Conax scrambled channel. To watch the event beyond the set level, you should enter the Smart Card PIN code.

6. About Conax CA

It displays information about Conax CA - software version, interface version, card number, number of session, language, and conditional access system identification.

Note: The supported functions vary depending on CAS version.

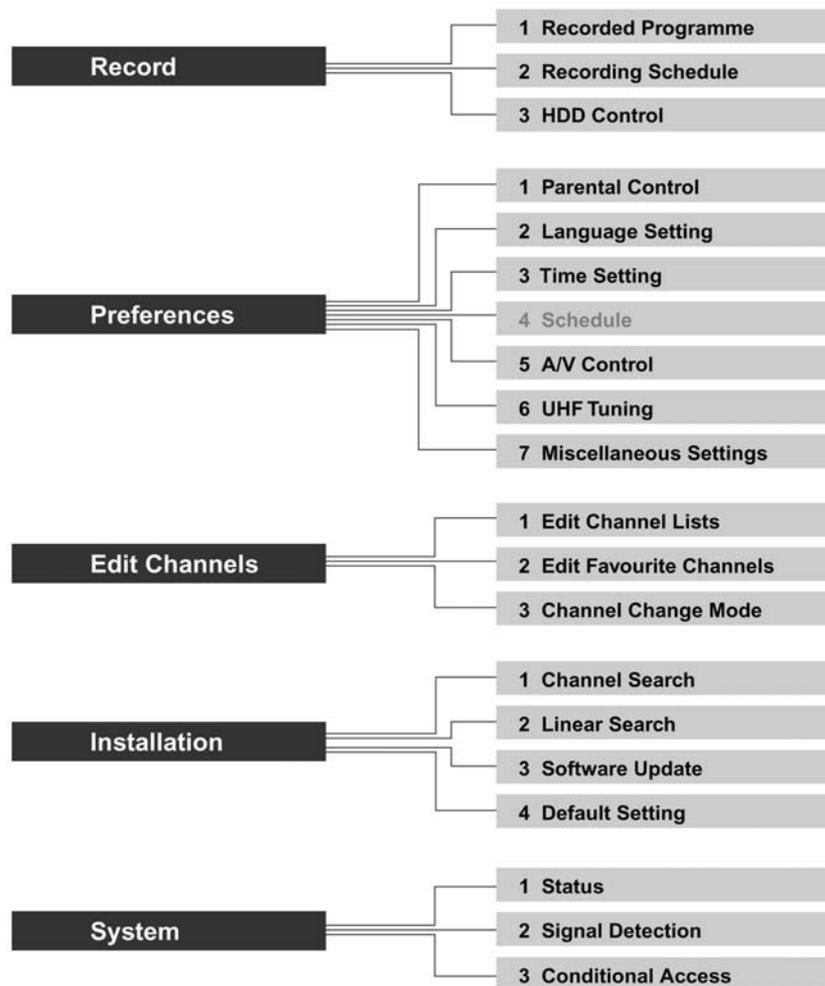
13. Games

This product provides various games for user's entertainment.

1. Press the **GAME** () button.
2. According to the instruction displayed on screen, you can enjoy the game using using the  button, and **OK** () button.

Note: Press the **EXIT** () or **BACK** () button to exit the game.

14. Menu Map



This recorder doesn't support a gray item.

15. Troubleshooting

15.1 Troubleshooting

Before contacting your local service, please read the following instructions. If the product does not work normally after completing the following troubleshooting, please contact your local product distributor or service centre.

1. The LED on the front panel does not light.
 - Check the main power cable and check that it is plugged into a suitable power outlet.
2. No picture
 - Make sure that the product is in Operation Mode.
 - Make sure that the AV Cable is firmly connected to the TV.
 - Make sure that Cable line is correctly connected to the equipment.
 - Check the brightness level of TV.
 - Check the channel is on air.
3. Poor picture & sound quality
 - Make sure there is no mobile phone or microwave oven near the equipment.
4. No or poor sound
 - Check the volume level of the TV and product.
 - Check the Mute status of the TV and product.
 - Press the Audio button to change the audio type.
5. Remote controller does not operate
 - To manipulate the equipment with remote controller, the remote controller's emitting part should directly point towards the receiving part of product's remote controller.
 - Check the battery of Remote controller.
6. Reservation is unavailable
 - Check whether it is not overlapped with other reservation.
 - Check whether the power switch is off.
7. Watching scrambled channel is not available
 - Check the correct Smart Card is plugged in.
 - Check the correct smart card is plugged in, and correctly plug the smart card again.
 - Check whether the Smart Card is damaged.
 - Make sure you subscribe to the channel.
 - If the recorder has been turned off for a longer time (standby or power off), please wait for authorization, up to 60 minutes.

15.2 Error Message

Error message	Possible causes	What to do
No or bad signal	The cable is not connected. The cable may be damaged or defective. The channel is not broadcasting.	Make sure the cable is connected properly. Exchange the cable.
The channel is scrambled or not available.	The channel has signal, but no video. The channel is deleted by broadcasting company. The channel is for data broadcasting.	Confirm if the channel is currently on air. Cannot watch the channel in usual way.
The audio is not available.	The channel has signal, but no Audio.	Press the AUDIO button to confirm if the channel has Audio.
No access	No subscription to this channel. No authorization.	Make sure you subscribe to the channel. If the recorder has been turned off for a longer time (standby or power off), please wait for authorization, up to 60 minutes.
No card inserted.	Smart card is not plugged in.	Plug in Smart Card.
Incorrect card	Wrong Smart Card is plugged in. Smart Card is not correctly plugged in. Smart Card is broken.	Plug in suitable Smart Card. Pull out the Smart Card, and plug it in again. Replace the Smart Card.

16. Specification

Tuner and Channel	
Input Connector	IEC-type, IEC-169-2, Female
Frequency Range	47MHz to 862MHz
Input Impedance	75 Ω
Signal Level	-13 to +15 dBm
Demodulation	QAM
Input Symbol Rate	1.5-7Ms/s
Constellation	16-QAM, 32-QAM, 64-QAM, 128-QAM, 256-QAM
MPEG Transport Stream A/V Decoding	
Transport Stream	MPEG-2 ISO/IEC 13818 Transport Stream Specification
Profile Level	MPEG2 MP@ML
Input Rate	15 Mbit/s Max
Aspect Ratio	4:3, 16:9, Letter Box
Video Resolution	720 x 576
Audio Decoding	MPEG/MusiCam Layer I and II
Audio Mode	Single channel/Dual channel/Joint Stereo/Stereo
RF Modulator	
RF/Loop-through Output Connector	75 Ω , IEC 169-2
Output Channel	CH 21 ~ 69
TV standard	PAL I/G/B
Preset Channel	CH 36
Memory / HDD	
Flash Memory	2M bytes
Graphic (MPEG) DRAM	24M bytes
EEPROM	8K bytes
HDD	80G bytes

A/V and Data In/Out	
Video	RCA/SCART Video Output (CVBS, S-Video, RGB)
Audio R/L	RCA/SCART Volume and Mute Control (Resolution: 20 bits DAC, MAX, 2Vrms)
S/PDIF	Digital Audio Output, Fiber-Optic (Resolution: 20 bits)
RS-232C	Transfer Rate : 115,200bps, 9 pin Socket type
Power Supply	
Input Voltage	90~250V AC, 50/60Hz
Type	SMPS
Power Consumption	Max. 20 W
Standby Power	Max. 10W
Protection	Separate Internal Fuse. The input should be protected against lightning
Physical Specifications	
Size	370 mm x 60 mm x 262 mm
Weight (Net)	Around 3.5Kg
Operating Temp	0 °C to + 45 °C
Storage Humidity	5% ~ 95% RH(Non-Condensing)

17. Glossary

Frequency

The number of cycles or events per one second, which is expressed in the unit of hertz

FTA (Free-To-Air)

An unscrambled broadcast, which you can view without additional payments to a service provider.

Hi-Fi (High Fidelity)

The characteristics of audio devices that can play back all the audio frequencies of the human, which is the range of 16Hz~20KHz, uniformly from the low frequency to high frequency. Sometimes it is used to indicate good quality of an audio device such as stereo tape recorder.

OSD (On Screen Display)

The function that displays the information about the monitor that the user needs or has to know on the screen directly. OSD information includes brightness, contrast, tuning, RGB adjustment, and screen size and positions (top, left, width, and height), and so on.

OTA (Over The Air)

Means that software downloads where the manufacturer reserves the right to decide when and where to release them.

Programme Guide (Electronic Programme Guide, EPG)

An electronic programme guide provides on-screen listing of current and scheduled programmes. Multi-functional Set Top Box such as Personal Video Recorder allows the viewer to record an upcoming programme.

SCART

A 21-pin connector used for connection of this product, VCR and TV. Also called Euroconnector or Peritel connector.

S/PDIF (Sony/Philips Digital Interface format)

Standard format for digital audio output. It outputs audio signals directly as digital audio signals without changing into analog signals because conversion into analog signals can degrade signal quality.

18. Service and Support

You can get information such as a troubleshooting guide, software upgrades and product support guide from the following web sites and call center (Hotline).

Please try to contact to your local dealers first when you have any problem.

Web site and e-mail

Homepage

http://www.humaxdigital.com	English
http://www.humaxdigital.com/Deutsch/	Deutsch
http://www.humaxarabia.com	Arabic

HCSA (Humax Customer Service Area)

Software Download, Information and Technical Q&A

http://www.humaxdigital.com/hcsa/	English
http://www.humaxdigital.com/Deutsch/hcsa/	Deutsch

E-mail (Technical Q&A)

tech-info@humax-digital.co.uk	Europe & North Africa
techinfo@humax-digital.de	Germany
callcenterME@humaxdigital.com	Middle East
Webmaster@humaxdigital.com	Asia & Other area

18. Service and Support

Call Center

Humax Middle East Call Center (Dubai, UAE)

Tel: +971 (0)4 359 2323 (Open: 9:00 - 20:00 / close on Friday)
E-mail: callcenterME@humaxdigital.com
Open: Local Time in Dubai (GMT+4)
9:00 - 20:00 (Saturday - Thursday, close on Friday)
Support Language: English/Arabic

Humax Hotline (Germany)

Germany: 01805 778 870 (€ 0,12/Min)
Other Countries: + 49 1805 778 870 (€ 0,12/Min+ International Call Charge)
Open: Local Time in Germany (GMT+1)
8:00 - 20:00 (Monday - Friday)
8:00 - 18:00 (Saturday)
Support Language: Deutsch/English

Humax BTCI Hotline (Premiere Model)

Germany: 01805-778900 (€ 0,12/Min)
Austria: 0900-900633 (€ 0,33/Min)

For hardware repair, please refer to support website. (Homepage or HCSA)

www.humaxdigital.com

HNCXC2000PVRCH.100GB/SV