PART I

INSTALLATIONS

Before installing your receiver, please copy the serial number (S/N) of the receiver and of the smartcard in the blanks below.

<table>
<thead>
<tr>
<th>S/N of the Receiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/N of the Smart card</td>
</tr>
</tbody>
</table>
PART I – Safety Instructions

⚠️ WARNING
This indicates a hazardous situation which, if not avoided, could result in serious injury.

⚠️ CAUTION
This indicates a situation which, if not avoided, could damage the equipment or other properties.

- Always follow these instructions to avoid the risk of injury to yourself or damage to your equipment.
- Unplug the receiver from the AC power outlet before cleaning. Use only a damp cloth for cleaning the exterior of the receiver.
- Do not use accessories or attachments not recommended by the receiver manufacturer, as they may cause hazards and will void the warranty.
- Do not operate the receiver in high-humidity areas, or expose it to water or moisture.
- Do not place the receiver on an unstable cart, stand, tripod, bracket, or table. The receiver may fall, causing serious personal injury and damage to the receiver.
- Do not block or cover slots and openings in the receiver. These are provided for ventilation and protection from overheating. Never place the receiver near or over a radiator or heat register. Do not place the receiver in an enclosure such as a cabinet without proper ventilation.
- Do not stack the receiver on top of or below other electronic devices.
- Operate the receiver using only the type of power source indicated on the marking label.
- Unplug the receiver power cord by gripping the power plug, not the cord.
- Route power supply cords so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords of plugs, convenience receptacles, and the point where they exit from the unit.
- Use an outlet that contains surge suppression or ground fault protection. For added protection during a lightning storm, or when the receiver is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the lines between the receiver and the antenna. This will provide some protection against damage caused by lightning or power line surges.
- Do not attempt to service the receiver yourself, as opening or removing covers may expose you to dangerous voltage and will void the warranty. Refer all servicing to authorized service personnel.
- Unplug the receiver from the wall outlet and refer servicing to authorized service personnel whenever the following occurs:
  - The power supply cord or plug is damaged;
  - Liquid has been spilt, or objects have fallen into the receiver;
  - The receiver has been exposed to rain or water;
  - The receiver has been dropped or the chassis has been damaged;
  - The receiver exhibits a distinct change in performance.
1. Slot for CI Module
   : Insert the proper CI module fully into the slot.

2. Smart Card Slot
   : After copying smartcard serial number onto the second page of this manual, insert a smartcard into the slot.
   Important Notice: If the Smartcard is lost, both the STB and the Smartcard must be replaced. Please contact your service provider.

3. Up/ Down or Channel Up/ Down
   : Navigate Up/ Down through the selectable options or Channel Up/ down.

4. ON/ OFF
   : Switch the receiver to On or Off.
1. SERIAL PORT
   : Connect this to the serial communication port of a PC.

2. AUDIO RCA
   : Connect this to a stereo set (TV, VCR, Audio).

3. VIDEO RCA
   : Connect this to the composite video input of the TV.

4. S/PDIF
   : Connect this to Dolby Digital compatible audio equipment through S/PDIF cable.

5. VCR SCART
   : Connect this to a connector of the VCR with the use of a fully-featured SCART cable.

6. TV SCART
   : Connect this to a connector of the TV with the use of a fully-featured SCART cable.

7. LOOP OUT
   : Use this for Loop-through cable.

8. CABLE IN
   : Connect this to a digital cable antenna.
PART I – Remote Control Unit

1. POWER
2. MUTE
3. NUMBER / ALPHABET
4. PAGE DOWN
5. PAGE UP
6. EPG
7. MENU
8. EXIT
9. CHANNEL UP / DOWN
10. OK / STORE
11. VOLUME UP / DOWN
12. TV / RADIO
13. FAVORITE
14. GROUP
15. ALL CHANNEL
16. FUNCTION
17. RECALL
18. SUBTITLE
19. ASPECT RATIO
20. TELETEXT
21. MULTI VIDEO
22. SLEEP TIMER
23. ALT AUDIO
24. PAUSE
25. INFO
26. ZOOM
# PART I – Remote Control Unit

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. POWER</td>
<td>Switches the Receiver ON or Stand-by.</td>
</tr>
<tr>
<td>2. MUTE</td>
<td>Switches the sound ON/OFF.</td>
</tr>
<tr>
<td>3. NUMBER/</td>
<td>Direct choice of TV / Radio channel and other commands by</td>
</tr>
<tr>
<td>ALPHABET</td>
<td>number keys, Or input a character.</td>
</tr>
<tr>
<td>4. PAGE DOWN</td>
<td>Used to move down a page in the channel list.</td>
</tr>
<tr>
<td>5. PAGE UP</td>
<td>Used to move up a page in the channel list.</td>
</tr>
<tr>
<td>6. EPG</td>
<td>Electronic Program Guide. Move to the EPG menu directly showing program</td>
</tr>
<tr>
<td></td>
<td>information of channels.</td>
</tr>
<tr>
<td>7. MENU</td>
<td>Display the Main menu or return to the previous menu.</td>
</tr>
<tr>
<td>8. EXIT</td>
<td>Return to the current video viewing at any time.</td>
</tr>
<tr>
<td>10. OK/ STORE</td>
<td>Used to select a program, a highlighted line or parameter value.</td>
</tr>
<tr>
<td></td>
<td>Displays the channel list on live signal status.</td>
</tr>
<tr>
<td>12. TV/ RADIO</td>
<td>The TV/RAD(Radio) key switches between TV and radio mode.</td>
</tr>
<tr>
<td>13. FAVORITE</td>
<td>The <strong>FAV</strong> key shows a list of your selected favorite channels.</td>
</tr>
<tr>
<td>14. GROUP</td>
<td>Enables you to group a list of channels.</td>
</tr>
<tr>
<td>15. ALL CHANNEL</td>
<td>Shows the channel list.</td>
</tr>
<tr>
<td>16. FUNCTION</td>
<td>Use for an updated additional function.</td>
</tr>
<tr>
<td>17. RECALL</td>
<td>Selects the previously viewed channel.</td>
</tr>
<tr>
<td>18. SUBTITLE</td>
<td>Shows Subtitle menu to select the subtitle language if available.</td>
</tr>
<tr>
<td>19. ASPECT RATIO</td>
<td>Choose the Aspect Ratio for the TV screen.</td>
</tr>
<tr>
<td>20. TELETEXT</td>
<td>Shows a teletext provided by the broadcaster.</td>
</tr>
<tr>
<td>21. MULTI VIDEO</td>
<td>Select a video mode when provided by operator.</td>
</tr>
<tr>
<td>22. SLEEP TIMER</td>
<td>Shows Sleep timer bar. You can set the sleep timer between 15min and 180min</td>
</tr>
<tr>
<td></td>
<td>with 15min interval.</td>
</tr>
<tr>
<td>23. ALT AUDIO</td>
<td>Select the audio language or soundtrack you desire when this option is</td>
</tr>
<tr>
<td></td>
<td>provided by the Broadcaster.</td>
</tr>
<tr>
<td>24. PAUSE</td>
<td>Make the picture freeze temporarily in a play mode.</td>
</tr>
<tr>
<td>25. INFO</td>
<td>Shows program information provided by the operator.</td>
</tr>
<tr>
<td>26. ZOOM</td>
<td>Enlarge the current picture.</td>
</tr>
</tbody>
</table>
**PART I - Set-Top Box Connections**

◆ **DO NOT PLUG** the receiver into the Main Power Outlet, until you complete all the connections to the receiver.

◆ Before you make a connections with the cables, you should first connect the CABLE IN connector of the receiver to the digital cable signal.

---

**TV & VCR with SCART Cables**

![Diagram of TV & VCR with SCART Cables]
**1. Connect the receiver to TV & VCR sets with the SCART cables**

- Connect the SCART cable of the TV set to the SCART connector of the receiver.
- Connect the SCART cable of the VCR set to the SCART connector of the receiver.

**2. Connect the receiver to TV with the SCART cable and the HiFi system with the S/PDIF cable**

- Connect the SCART connector of the receiver to the SCART connector of a TV set.
- Connect the S/PDIF connector of the receiver to the Dolby Digital Audio compatible equipment.
To watch payable program channels, a CI Module and a smartcard are necessary. You can ask for these to the shop which you had purchased the receiver.

When you subscribed to more than one service provider, you should insert proper Smartcard or CI Module with matching smartcard to get access to each bouquet. This receiver can accept one Smartcard and one CI Modules with smartcard at the same time.

If any Smartcard or CI Module with smartcard is not inserted in the receiver, only free (FTA; free-to-air) programs are available.

Here’s how to get access to the pay channels after your subscription to the provider and your purchase of the Smartcard and CI Module.

1) **The main plug must not be plugged in before inserting the Smartcard or CI module with smartcard.**

2) Insert proper CI Module or Smartcard fully into the slot behind the lid inside of the front door of the receiver, towards the arrow on the module or smartcard facing upwards and inwards. (In case of CI module, you have to insert the smartcard fully into the slot on the CI module towards the arrow on the smartcard facing upwards and inwards)

3) CI Module and smartcard may give special menus or information which are not described in this manual.

4) Smartcard can only give access to the program channels from specific service provider of your subscription.
PART II

MENU GUIDE
PART II – Search Channels

Because the receiver is supplied with standard factory settings, you need to install the receiver. The installation will start up with the “Language Setting” menu. Follow the instructions below to install the receiver properly. Press the MENU key every time you go to the next setup menu.

Language Setting

To select the language of your choice for the Menu, Audio, Subtitle and Teletext:

• Press the ◀,▶ keys to move to the desired language or use the pull down menu by pressing the OK key on the language bar you want to select.

• When using the pull down menu, press the OK key on the selected language.

• Use the ▲,▼ keys to move to the next language settings.

Menu Language
This is used to select the OSD (On Screen Display) language of the menu.

Main Audio
This is used to select the main audio language of a channel which has multi audio languages.

Second Audio
This is used to select the second audio language of a channel which has multi audio languages when the selected main audio language is not provided by the broadcaster.

Main Subtitle
This is used to select the subtitle language of a channel which has multi subtitle language.

Second Subtitle
This is used to select the second subtitle language of a channel which has multi subtitle language when the selected main subtitle language is not provided by the broadcaster.

Teletext
This is used to select the OSD language of the teletext.
PART II – Search Channels

TV Output

Aspect Ratio
This is for selecting the aspect ratio of TV screen (width to height).
Press the ◀,▶ keys or use the pull down menu.
1) 4:3 for normal screen TV
   - [Full]
   - [Center]
   - [Letter Box]
2) 16:9 for wide screen TV

Contrast
This enables you to adjust the screen brightness.
   - 0 : Darkest
   - 10 : Brightest

Dolby Digital
If this parameter is set as [On], you can enjoy the Dolby Digital sound on any channel providing this function.
Note: To enjoy this sound, you should first connect the S/PDIF socket of the receiver to Digital Audio Amplifier.

Video Output
You can select the video output from RGB, CVBS and S-VIDEO.
PART II – Search Channels

Local Time Setup

If GMT is provided by the broadcaster, you may get the time using the GMT provided by broadcaster (or) you may get your own time. (Please be aware that the GMT information provided by the broadcaster may not be correct sometimes.)

- If GMT is provided, select “Yes” for GMT usage. Then, select the location where you are (time zone) and summer time On/Off. You can adjust the time from +59 to -59 minutes by using the Time offset.

- If GMT is not provided or you want to set the time by yourself, select “No” for GMT usage. In this case, you can set your own time with the calendar. Press the OK key on Date, and the calendar is displayed. Use the ◀,▶ keys or the numerical keys to set the time.
PART II – Search Channels

Auto Search

If you want to search channels automatically, press the OK key on [Start Search] bar.

Manual Search

It is a method to search channels manually. After setting each bar according to your configuration, press the OK key on the [Start Search] bar.

While searching channels, you can find the status of the channel search as well as the channel name of TV or Radio.

When the Channel Search is completed, a message box, ‘Saving the Information’, is displayed. Press the OK key when the message, ‘Press the OK key to complete the search’, is displayed.
**PART II – Menu Guide**

**NOTE**

- Press the OK key to select or confirm the changes.
- Press the OK key on the menu bar, which has many options that are selectable, and the pull down menu will be displayed.
- Press the MENU key to go to the previous menu.
- Press the EXIT key to exit the menu or go to the live signal.

The main menu consists of 6 submenus.
- User Setting
- Installation
- Edit
- Timer Function
- System Information
- Conditional Access

- Use the ◀,▶ keys to move the cursor on the main menu.
- Use the ▲,▼ keys to move in the submenu.

**User Setting**

**Language Setting**

To select the language of your choice for the Menu, Audio, Subtitle and Teletext:
- Press the ◀,▶ keys to move to the desired language or use the pull down menu by pressing the OK key on the language bar you want to select.
- When using the pull down menu, press the OK key on the selected language.
- Use the ▲,▼ keys to move to the next language settings.
**Menu Language**
This is used to select the OSD (On Screen Display) language of the menu.

**Main Audio**
This is used to select the main audio language of a channel which has multi audio languages.

**Second Audio**
This is used to select the second audio language of a channel which has multi audio languages when the selected main audio language is not provided by the broadcaster.

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This is used to select the subtitle language of a channel which has multi subtitle language.

**Second Subtitle**
This is used to select the second subtitle language of a channel which has multi subtitle language when the selected main subtitle language is not provided by the broadcaster.

**Teletext**
This is used to select the OSD language of the teletext.
PART II – Menu Guide

Parental Lock

With Parental Lock you can prevent a TV channel from being watched, a Radio channel from being heard, an unauthorized change in the installation from being performed or the receiver setting from being changed.

To enter the Parental Lock menu, you have to enter the correct PIN code first.
The initial PIN code is set as [0000].

Channel Lock

If the Channel Lock is set to “Yes”, you have to enter the PIN code whenever you watch or listen to the locked channel.
• Use the ◀, ▶ keys to select “Yes” or “No”.

Install Lock

If the Installation Lock is set to “Yes”, you have to enter the PIN code whenever you enter the Main menu.
• Use the ◀, ▶ keys to select “Yes” or “No”.

STB Lock

If the STB Lock is set to “Yes”, you have to enter the PIN code whenever you start the receiver from the stand-by mode.
• Use the ◀, ▶ keys to select “Yes” or “No”.
PART II — Menu Guide

User Profile

Banner Timeout
You can select the ‘timeout’ time of the banner information (1~10).
• Press the ◀,▶ keys or use the pull down menu to select the banner ‘timeout’.

TV Output

Aspect Ratio
This is for selecting the aspect ratio of TV screen (width to height).

Press the ◀,▶ keys or use the pull down menu.

1) 4 : 3 for normal screen TV

![Full] [Center] [Letter Box]

2) 16: 9 for wide screen TV
**Contrast**
This enables you to adjust the screen brightness.
- 0 : Darkest
- 10 : Brightest

**Dolby Digital**
If this parameter is set as [On], you can enjoy the Dolby Digital sound on any channel providing this function.
Note: To enjoy this sound, you should first connect the S/PDIF socket of the receiver to Digital Audio Amplifier.

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You can select the video output from RGB, CVBS and S-VIDEO.
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It is a method to search channels manually. After setting each bar according to your configuration, press the OK key on the [Start Search] bar.

While searching channels, you can find the status of the channel search as well as the channel name of TV or Radio.

When the Channel Search is completed, a message box, ‘Saving the Information’, is displayed. Press the OK key when the message, ‘Press the OK key to complete the search’, is displayed.
**Rename Channel**

You can rename the channel name.

- Press the **OK** key on the channel you want to edit then the submenu will be displayed as left picture.
- Enter the new name with the alphabet keys or color keys.
- Press the **OK** key after all modification is done.
- Press the **WHITE** or **EXIT** key to exit the Rename Channel mode.

**Delete All Channels**

You can delete all the searched channels. In this case, all installation settings remain but all of the searched channels are removed.

- Use the ◀,▶ keys to select the Yes or No.
- Press the OK key on the [Start].

Note> If you do the software upgrade of the receiver after having edited the Channel List or the Edit menu, the edited information can be initialized.
Local Time Setup

If GMT is provided by the broadcaster, you may get the time using the GMT provided by broadcaster (or) you may get your own time. (Please be aware that the GMT information provided by the broadcaster may not be correct sometimes.)

- If GMT is provided, select “Yes” for GMT usage. Then, select the location where you are (time zone) and summer time On/Off. You can adjust the time from +59 to -59 minutes by using the Time offset.

- If GMT is not provided or you want to set the time by yourself, select “No” for GMT usage. In this case, you can set your own time with the calendar.

Press the OK key on Date, and the calendar is displayed.

Use the ◀,▶ keys or the numerical keys to set the time.

Timer Setup

You can set the [Turn ON] or [Turn OFF] time.
You can also set the [Sleep timer] from this menu.
- Use the ◀,▶ keys to select the [ON] or [OFF].
- Use the numerical keys to set the time.
VCR Timer Setup

You can set the VCR timer or Reminder. You can use the VCR timer function only if the receiver is connected to VCR through the VCR SCART, and you can use the Reminder only if the receiver is connected to TV through the TV SCART.

VCR Timer: You can make a reservation to record a program on VCR by setting the time and the channel of the program. Even if you are not watching TV, the receiver will give a command to start recording at the appointed time.

Reminder: If you set a time and a channel in Reminder, the TV channel will be changed to the appointed channel automatically. You can use this function only when you are watching TV.

A total of 20 events are programmable.

The available operation types are Once, Daily, Weekly and Monthly.

- Once – Timer is operated for the specified time only once.
- Daily – Timer is operated daily.
- Weekly – Timer is operated weekly.
- Monthly – Timer is operated monthly.

- Select the timer number and mode with the ◀,▶ keys.
- Set the channel with the ◀,▶ keys or pull down menu.
- Set Start date and Stop date with the calendar. (Press the OK key to display the calendar.)
- Set the Start time and Stop time with the numerical keys.
- The cursor will move automatically.
- Select the type with the ◀,▶ keys.
**PART II – Menu Guide**

**System Information**

### Software Upgrade

You can upgrade the receiver with new software provided by the operator.
- After selecting (or inputting) the correct data provided by the operator, press the **OK** key on the **Start** bar.
  - Factory 1 / Factory 2: The MUX data is fixed.
  - User Setting: You can choose the terrestrial multiplex data according to your selection.

### Factory Reset

If you do the Factory Reset, all the edited information will be initialized.
- If you want to do the Factory Reset, select **Yes** and press the **OK** key on the **Start**.
- Before exit the delete mode, the message box is displayed to make a confirmation of your decision.

### STB Version

You can find the detailed information of the Hardware (H/W) version and Software (S/W) version of the receiver.
PART II — Menu Guide

Conditional Access

Common Interface

You can get the information of the CI module. This information may vary a lot depending on the service provider. This receiver can accept two different kinds of CI modules and you can select the module by pressing the OK key.

Smartcard Information

Insert the CONAX smart card into the Smart Card slot on the Front Panel. The chip should be faced upwards.

Subscription Status

You can find the information of CONAX subscription status.

Event Status

You can find the information of the CONAX PPV(Pay Per View).
PART II — Menu Guide

Change PIN Code

Follow the procedure as shown on the menu to change PIN code.
Initial PIN code is set as [1234].

Enter current PIN code - Enter new PIN code – Confirm new PIN code

Maturity Rating

You should enter the PIN code to modify.
Select the Maturity Rating as below.
G: General Audience
PG: Parental Guidance
A: Over 18
X: Erotic
PART II – Channel Lists

Press the OK key to display the channel list while you are watching a channel.

In this channel list, you can have several possibilities to format the present channel list according to your choice. The formation is done by using the color keys on the Remote Control Unit (RCU).

1) Mode Switch (RED key)
   • TV / Radio

2) Favorite Group (GREEN key)
   • FAV 1 Group – FAV 8 Group

3) Group (BLUE key)
   • Network / Conditional Access System (CAS) / Lock/Unlock / A to Z

4) Edit mode (WHITE key)
   • FAV Selection
   • Lock / Unlock
   • Volume Offset
   • Rename Channel

You can also move to a channel directly in this channel list menu.

When a color key is pressed, the pull down menu is shown with appropriate selections. Press a color key and then choose one selection to make a desired channel list formation.

Note:
If you want to see the channel list directly while watching the channel, press the OK key on the RCU.
1) Mode Switch
• Press the RED key and select one mode out of TV/Radio.

2) Favorite Group
• Press the GREEN key and select one FAV group out of FAV 1 ~ FAV 8.
• When you select a FAV group, appropriate channels to the FAV group will be displayed on the channel list.

Note:
To see the FAV channels, you must first set the FAV groups in the FAV Selection menu of the Edit Mode.

In the FAV group mode, you can edit the present FAV group according to your choice.
• Press the WHITE key, and the FAV Edit menu will be displayed as follows:
  FAV Selection / Lock/Unlock / Volume Offset
  Move FAV / Rename FAV List / Rename Channel
**PART II – Channel Lists**

**FAV Selection**
You can modify the FAV group of the present FAV channels.
Modifying this is the same as selecting the FAV group in the FAV selection menu of the Edit mode.
• Press the **WHITE** or **EXIT** key to exit the FAV selection mode.

**Lock / Unlock**
To lock/unlock a channel of your choice:
• When you choose the Lock/Unlock mode, a message box requiring the PIN code is displayed. Enter the correct PIN code.
• Press the **OK** key on the channel you want to Lock, and the lock mark is displayed on the selected channel.
• To unlock the channel, press the **OK** key again on the locked channel in the Lock mode.
• Press the **WHITE** or **EXIT** key to exit the Lock/Unlock mode.

**Volume Offset**
You can regulate the volume level per channel.
• Use the ◀,▶ keys to select the volume offset per channel.
• Press the **WHITE** or **EXIT** key to exit the Volume Offset mode.
PART II – Channel Lists

Move FAV
• Press the OK key on the FAV channel you want to move.
• Decide the position to which you want to move with the ▲,▼ keys.
• Press the OK key to confirm the new position.
• Press the WHITE or EXIT key to exit the Move FAV mode.

Rename FAV List
To rename your current FAV List:
• Enter the new name with the alphabet keys or color keys.
• Press the OK key after all modification is done.
• Press the WHITE or EXIT key to exit the Rename FAV List mode.

Rename Channel
To rename the channel:
• Press the OK key on the channel you want to edit and the submenu will be displayed as left picture.
• Enter the new name with the alphabet keys or color keys.
• Press the OK key after all modification is done.
• Press the WHITE or EXIT key to exit the Rename Channel mode.
3) Group
To reorganise the channel list according to your choice:
• Press the **BLUE** key and select one of the following:
  Network / CAS / Lock / A to Z .

4) Edit Mode
**FAV Selection**
When choosing the FAV selection mode you can find the 8 possible options on the left hand side of the screen. The left to right order of the 8 options means the FAV 1 to FAV 8 order.
• Press the **OK** key on the desired position(out of the 8 options) of the selected channel. The selected position is the FAV group no.of the selected channel.
For example, if you want to add DWTV as a FAV 6 group, press the **OK** key on the 6th position of the DWTV channel.
• Press the **WHITE** key to exit the FAV selection mode.
PART II – Channel Lists

Lock / Unlock
To lock/unlock a channel of your choice:
• Press the OK key on the channel you want to Lock, and the lock mark will be displayed on the selected channel.
• To unlock the channel, press the OK key again on the locked channel in the Lock mode.
• Press the WHITE key to exit the Lock mode.

Volume Offset
To regulate the volume:
Use the ◀,▶ keys to select the volume offset per channel.
• Press the WHITE key to exit the Volume Offset mode.

Rename Channel
• Press the OK key on the channel you want to edit, and the submenu will be displayed as shown in left picture.
• Enter the new name with the alphabet keys or color keys.
• Press the OK key after all modification is done.
The Electronic Program Guide (EPG) will allow you to see the TV/Radio Program guides of the channels, as long as the information is provided by the broadcaster.

To view the EPG whilst watching TV or listening to the radio, press the EPG button on the Remote Control Unit (RCU).

The channel list is displayed at the left hand side of the screen.
The EPG window showing the live signal of the selected channel is displayed at the right hand side of the screen.
The date and the time interval is displayed at the top.
When you press the OK key, the time, title and summary of the selected program is displayed on the screen.

• Press the ▲,▼ keys to move the channel.
• Press the ◀,▶ keys to move the program with EPG.

You can switch the TV Guide to Radio Guide directly by pressing the key on the RCU.

If you press the key on the RCU, you can move to the VCR Timer Setup menu and reserve the program.

The date and time interval of the EPG display can be changed by using the COLOR Keys on the RCU, as follows:

• Green : changes the date of EPG display from the current to the previous day.
• Yellow : changes the date of EPG display from current to the next day.
• Blue : switches the time interval of EPG display to 30min. or 60min.
• Recall : returns to the current time zone of EPG display.
When you press the 📢 key on the RCU, the teletext information will be displayed.

- Use the ▲,▼ keys to move to the teletext which you want to see and press the OK key.

- When the teletext has sub pages, use the P−, P+ keys to move to the sub pages.

  P−: moves to the previous page
  P+: moves to the next page
<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution to the problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forgot your secret PIN code.</td>
<td></td>
<td>Contact your Service Provider.</td>
</tr>
<tr>
<td>Time Setting is wrong.</td>
<td>The time is not set correctly.</td>
<td>Adjust the Time on the Menu.</td>
</tr>
<tr>
<td>No display LED on the front panel / No power supply</td>
<td>Power cord not plugged in correctly.</td>
<td>Plug in the power cord correctly.</td>
</tr>
<tr>
<td>No picture on the screen.</td>
<td>Receiver in Standby mode</td>
<td>Set the receiver to [ON]</td>
</tr>
<tr>
<td></td>
<td>AV Output not connected tightly to video output of TV</td>
<td>Check the connection and correct.</td>
</tr>
<tr>
<td></td>
<td>Incorrect channel or video output selected on TV.</td>
<td>Check channel and video output and correct.</td>
</tr>
<tr>
<td>No Sound</td>
<td>Audio cord connected incorrectly.</td>
<td>Check connection and correct.</td>
</tr>
<tr>
<td></td>
<td>Volume level is 0.</td>
<td>Increase volume on TV set. Press the MUTE key.</td>
</tr>
<tr>
<td>Remote Control Unit is not operating correctly.</td>
<td>Incorrect operation</td>
<td>Point remote control towards the receiver.</td>
</tr>
<tr>
<td></td>
<td>Batteries dead or inserted incorrectly.</td>
<td>Replace batteries or insert correctly.</td>
</tr>
<tr>
<td>Poor picture quality.</td>
<td>Signal strength too low.</td>
<td>Check the signal strength in the [Installation] menu. Check cable signal from cable network.</td>
</tr>
<tr>
<td>The smartcard is not working.</td>
<td>The smartcard is not installed correctly.</td>
<td>Check that the smartcard has been correctly inserted.</td>
</tr>
<tr>
<td></td>
<td>The smartcard is damaged.</td>
<td>Contact your service provider.</td>
</tr>
</tbody>
</table>
• MPEG-II video(MP@ML)
• MPEG-I audio layer 1, layer 2
• MPEG-II digital & fully DVB compliant
• Capable of Interfacing the CAM of DVB Common Interface standard
• Embedded CONAX with one smart card reader
• Automatic channel set-up for CATV network
• Capable of auto scanning the frequency for QPSK to QAM conversion system
• QAM demodulation
• LD quality video, CD quality audio
• On-screen graphic menu with 256-colors full-resolution
• Plug & play installation
• Parental lock control
• RS232C port for additional information service and updating IRD control software
• Power recovery function
• 64-step volume control
• User friendly OSG menu and Channel List – Sort/ Group/ FAV
• Variable Edit Mode
• Favorite channel function
• User friendly OSG menu with full function
• IR remote control
• Last channel memory function
• Turn On/ Off Timer, Sleep Timer, VCR Timer
• Variable aspect ratio - 4:3(Full, Center, Letter Box), 16:9
• EPG for on screen channel information
• DVB Subtitle supported
• Subtitle function supported
• Receiver to receiver function for operating program and data transfer
### 1. Tuner & Channel

- **RF input range**: 64MHz - 858MHz
- **Input dynamic range**: -15dBmV to +15dBmV
- **Channel selection**: PLL Synthesizer
  - Step Size: 62.5KHz
  - IF: 36.125MHz
- **Supporting system**: DVB-C(QAM) Compliant
- **IF Bandwidth**: 8MHz
- **Frequency Range**:
  - VHF Low band: 64 - 149.5MHz
  - VHF high band: 156.5 - 442 MHz
  - UHF band: 450 - 858 MHz
- **C/N ratio**:
  - 16QAM: 18.8dB
  - 64QAM: 26.5dB
- **ANT normal impedance**:
  - ANT IN: 75 Ohm unbalance
  - TV OUT: 75 Ohm unbalance

### 2. MPEG transport stream A/V decoding

- **Transport stream**: MPEG-2 ISO/IEC 13818 Transport stream specification
- **Profile & level**: MPEG-2 MP @ ML
- **Input T/S data rate**: 80Mbit/S max.
- **Aspect ratio**: 4:3(Full, Center, Letter Box), 16:9
- **Video resolution**: 720 x 576 (PAL), 720 x 480 (NTSC)
- **Audio decoding**: MPEG audio layer 1 & 2, musicam
- **Audio mode**: Stereo, dual channel, joint stereo, mono
- **Sampling rate**: 32, 44.1 and 48kHz

### 3. Memory

- **Flash memory**: 2M bytes
- **Program DRAM**: 16M byte
- **EEPROM**: 2K bytes

### 4. A/V & Data in/out

- **SCART**: TV x 1, VCR x 1
- **RGB video out**: TV SCART x 1
- **CVBS video out**: RCA x 1, SCART x 2 (TV, VCR)
- **S/PDIF**: RCA x 1
### Analog audio out
- RCA x 2 (L-CH x 1, R-CH x 1)
- SCART x 2 (TV, VCR)
- Resolution: 16bit DAC
- Output Level: 2Vrms Max
- Volume & mute control

### Data interface
- RS232C, Baud Rate 9600 ~ 115200, 9 Pin D-Sub

### 5. Conditional Access
- Embedded CONAX
- 1 smart card reader

### 6. PCMCIA
- **Number of Slot**: 1
- **Type**: I, II DVB Common Interface Standard

### 7. Power Supply
- **Input voltage**: AC 230V~, 50Hz
- **Type**: SMPS
- **Power consumption**: 20W max.
  (Below 7W max. for stand-by mode)
- **Protection**: Separate internal fuse and chassis grounding and the input shall have lighting or electric shock protection.

### 8. Physical Specifications
- **Size (W x H x D)**: 250mm x 40mm x 200mm
- **Weight**: about 1.5 Kg

### 9. Environment
- **Operating temperature**: +5°C ~ +40°C
- **Storage temperature**: -40°C ~ +65°C