

# User's Manual

Digital Terrestrial Receiver

O p e n T h e N e x t D i g i t a l



## ODT 3000FL / 3000F / 3000C

Free To Air / Conax Embedded Digital Terrestrial Receiver



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*Highest Tuning Speed!*  
*Quick Channel Shift!*  
*Easy Installation & Operation*

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## 1. SAFETY PRECAUTIONS

*This receiver has been manufactured to satisfy the international safety standards.  
Please read the following recommended safety precautions carefully.*

**MAINS SUPPLY :** 100~240V AC 50/60Hz

**LOCATION :** Locate the receiver indoor. Locate receiver away from potential hazards such as houseplants, lighting, raining and direct sunlight.

**OVERLOADING :** Do not overload wall outlets, extension cords or adapters as this can result in fire or electrical shock.

**LIQUIDS :** Keep liquids away from the receiver.

**CLEANING :** Before cleaning, disconnect the receiver from the wall socket. Use a cloth lightly dampened with water (no solvents) to clean the exterior.

**VENTILATION :** Do not block the receiver ventilation holes. Ensure that free airflow is maintained around the receiver. Never set the receiver on soft furnishings or carpets. Do not use or store the receiver where it is exposed to direct sunlight, or near heater. Never stack other electronic equipment on top of the receiver. Place the receiver at least 30mm from the wall.

**ATTACHMENTS :** Do not use any attachment that is not recommended by the manufacturer, as it may cause a hazard or damage the equipment.

**SERVICING :** Do not attempt to service this product yourself. Any attempt to do so will make the warranty invalid. Refer all servicing to a qualified service agent.

**LIGHTNING :** If the receiver is installed in an area subject to intense lighting activity, protection devices for the receiver mains connector and modem telephone line are essential. The individual manufacturer's instruction for safeguarding other equipment, such as TV set, Hi-Fi, etc., connected to the receiver, must also be followed during lightning storms.

## 2. GENERAL FEATURES

- Conax Embedded(option)
- Fully MPEG-2 & DVB-T Compliant
- Input Frequency 174 ~ 862 MHz
- 1 Input Tuner With Loop Through IF Signal
- Supports DVB-T modulation schemes : QPSK, 16-QAM and 64-QAM
- Implements non-hierarchical and hierarchical 2K and 8K system operation
- Fast Booting & Auto Scan
- Quick Channel Changing Speed Less than 1 sec
- Max. 2000 Channels Programmable
- User Friendly 256 Colors OSD & Easy GUI
- A lot of OSD Language supported
- Supports EPG, PIG
- Supports Teletext, Subtitle using OSD
- Favorite Channel List Programmable
- Master PIN Code Function & Parental Lock Function
- 20 Steps Volume Control
- Automatic NTSC / PAL Detection
- Window based S/W Download Program Supported by RS232 Serial Port
- Set to Set Download (Main Program, Channel Data)
- 4:3, 16:9 Letter Box
- 7 Segment-4 Digit Display
- Clock Display at Stand by
- 5 Buttons Keys on the Front Panel (Power On/Off, Channel Up/Down, Volume Up/Down)
- 2 SCART Output for TV & VCR
- 3 RCA Output for Video, Audio L/R
- Digital Audio Output : SPDIF

### 3. HOW TO CONNECT YOUR RECEIVER

*Please DO NOT plug in the main power supply cord until you have finished all the connections.*

#### 1) LOCATION OF THE RECEIVER

Your receiver should be placed under proper ventilation.  
Don't put in completely enclosed cabinet that will restrict the flow of air, Resulting overheating.  
The location should be safeguarded from direct sunlight, excess moisture, rough handling or household pets  
Avoid stacking other electronic components on the top of the receiver.  
The location should be safely accessible by the cable from your antenna system.

#### 2) CONNECTING THE RECEIVER WITH ANTENNA

connect the coaxial cable to "ANTENNA" terminal marked at the rear of the receiver.  
All cable connectors should be finger tightened ; do not use any kind of wrench on the cable over connectors.  
The cable should be 75Ω impedance coaxial twisted at the end with a 'IEC' type connector.

#### 3) CONNECTING THE RECEIVER TO TV

To connect the receiver with your television, you can follow two methods :  
through RF cable, and through SCART cable.

Connect the RF cable to the terminal marked "TV OUT" at the rear panel of the receiver and its other end to the TV RF input socket.  
In the case of connecting your TV through SCART cable, connect the SCART connector marked TV to respective SCART port in the TV.

#### 4) CONNECTING YOUR VCR

To connect a VCR, the receiver has been provided with SCART at the rear marked 'VCR'.  
Using a SCART connector, the VCR can be connected to the receiver.

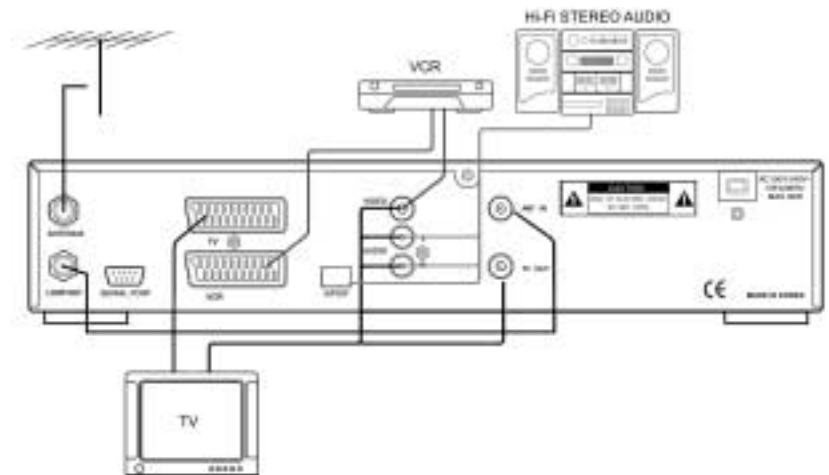
#### 5) CONNECTING EXTERNAL AUDIO HI-FI SYSTEM

To connect any external Audio Hi-Fi system, the receiver has been provided with two RCA connectors at the back of the receiver, marked with Audio L and R respectively to connect the left and Right Audio.

In case of Audio Hi-Fi system with digital audio input, please connect it to S/PDIF.

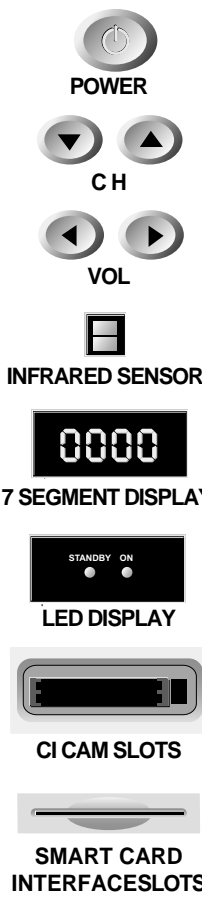
#### 6) CONNECTING YOUR ANALOG RECEIVER

To facilitate the user using analog receiver to view analog channels, the receiver has been provided with a loop through terminal marked as "LOOP OUT".  
Connect the coaxial cable from this terminal to the IF input terminal of your analog receiver. Now by keeping the receiver in standby, you will be able to tune and view analog channels from your analog receiver.



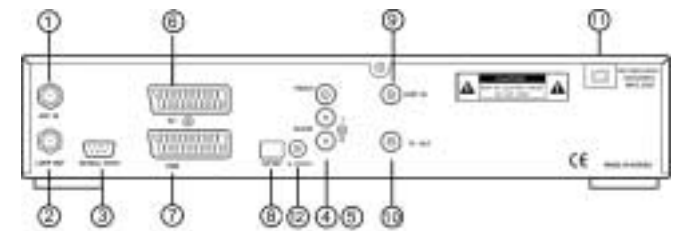
## 4. HARDWARE DESCRIPTION

### 4. A. FRONT PANEL

























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- The front panel features a power button at the top, followed by channel (CH) and volume (VOL) controls. Below these is an infrared sensor, a 7-segment display showing '0000', an LED display with 'STANDBY ON' indicator, CI CAM slots, and a smart card interface slot.
- 1) POWER :** This key is used to turn the receiver on and off (stand by).
  - 2) CH :** These keys are used to change the channels.
  - 3) VOL :** These keys are used to increase and decrease the volume level manually.
  - 4) INFRARED SENSOR :** This is to receive the IR commands from the RCU. Do not block the view of the sensor.
  - 5) 7 SEGMENT DISPLAY :** This SEGMENT display will show the current channel number. While the receiver is in stand by mode, the display will show the current time.
  - 6) LED DISPLAY:** This LED display will show the current power mode status. If receiver is in stand by mode, stand by mode LED will be on. and when receiver is in on mode, on mode LED will be on.  
(Option for LED display model only)
  - 7) CI CAMSLOTS :** 2 Slots for Common Interface CAM (VIACCESS, IRDETO, NAGRAVISION, CRYPTOWORKS, CONAX, SECA) with smart card. (Option for CI model only)
  - 8) SMART CARD INTERFACESLOTS :** To watch scrambled channels you should insert a smart card into Smart Card Interface issued the service provider whom you subscribes to. Therefore you can watch only a specific range of channels with entitlements in smart card. The smart card includes information to decipher parameters necessary for descrambling the program. Please note that the gold chip on the smart card should face download and inward when you insert when you insert it into Smart Card Interface. (Option for CAS model only)

### 4. B. REAR PANEL

- 1) ANT IN :** This port is to connect the coaxial cable. The IF input is provided through this port and the input frequency range is 174~85 MHz
- 2) LOOP OUT :** To enable the connection of an analog receiver, The receiver is provided with this port. Connect this port to ANTENNA port of the other receiver via RF Cable.
- 3) SERIAL PORT :** This is used to connect your receiver with computer through a serial cable. This port can be used for upgrading software.
- 4,5) VIDEO, AUDIO R/L :** These RCA connectors are used to connect any external video and audio.
- 6) TV SCART :** This is used to connect your TV through SCART
- 7) VCR SCART :** This is used to connect your VCR.  
(When you connect external sets to above two SCART sockets, always use fully featured SCART cables)
- 8) S/PDIF :** This is for digital audio output.
- 9) LOOP OUT :** This is used to connect your local RF channels to your TV through Loop.
- 10) TV OUT :** This is used to connect your TV through RF cable.
- 11) POWER INPUT :** This is to plug in the AC mains power cord.  
The input AC volts range is 100V to 240V, 50Hz/60Hz supply.
- 12) S-VIDEO :** The Socket is Connected with S-Video in TV (option)



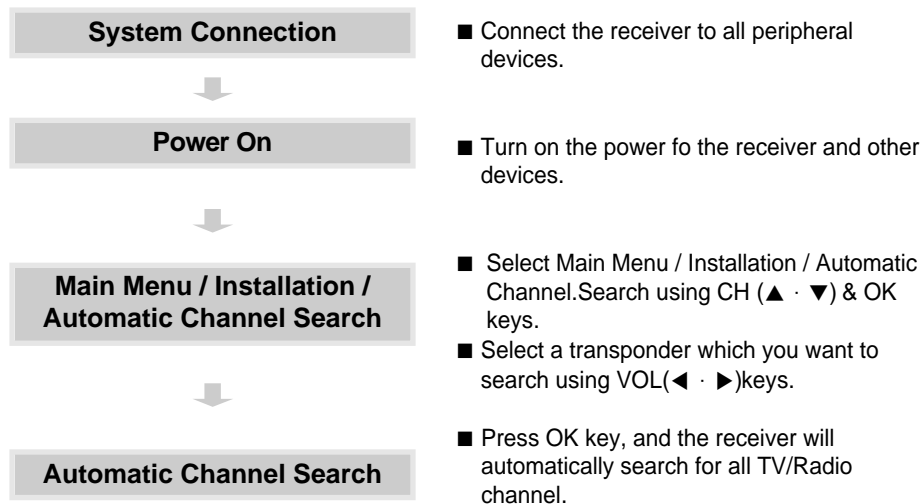
## 4. C. REMOTE CONTROL UNIT

-  1) **POWER** : This is used to switch the receiver to ON/STANDBY mode.
-  2) **MUTE** : This key is used to toggle between normal and muted audio.
-  3) **0-9 NUMERIC KEYS** : These keys are used to enter numeric values and to select the channel directly by entering its number.
-  4) **CH▲ · CH▼** : These keys are used to change channels and to browse the menu.
-  5) **VOL▶ · VOL◀** : These keys are used to vary the volume level and to change the cursor options in the menu.
-  6) **MENU** : This key is used to open up the menu.
-  7) **EXIT** : This key is used to exit from any menus.
-  8) **OK** : This key is used to enter and confirm any data to the receiver in the menu systems.  
The Channel list can be accessed directly by pressing this Key in the normal view mode.
-  9) **Page Up** : This key is used to page up the menu.
-  10) **Page Down** : This key is used to page down the menu.
-  11) **FAV** : This key is used to switch between favorite lists.
-  12) **GUIDE** : This key is used to open up the Electronic Program Guide.
-  13) **i** : This key is used to view the channel information.
-  14) : This key is used to toggle between the TV channel and the radio channel.
-  **15) LAST** : This key is used to return to the previous channel.
-  **16) AUDIO** : This key is used to select the soundtrack list for the current service and also used to select audio mode.
-  **17) PAUSE** : This key is used to pause the screen.
-  **18) NTSC/PAL** : This key is used to convert video mode.
-  **19) SAT** : This key is used to select the satellite.
-     **20) F1, F2, F3, F4** : Function Keys.
-  **21) TEXT** : This key is for Teletext.

## 5. SYSTEM SET-UP

### 5.A. Automatic channel search

You can automatically detect and save all TV and Radio channels as follows :



## 6. MENU OPERATION

The main menu is classified into six sub menus which will carry out the various operation individually.

### MAIN MENU

After installing your antenna and receiver with appropriate connectors, plug in the AC main power and turn on the receiver. Press the MENU key of the RCU. You will see the "Main Menu" on the TV screen as follow. You can move into the desired submenu using the up/down keys (▲ · ▼) or numeric keys. Press the "OK" key to confirm your selection. If the "Menu" is locked, note that you should enter the PIN code in order to move into the corresponding submenu in case of "Edit Channels" menu, "Edit Favorites" menu and "Installation" menu.



The default factory PIN code is "0000". Press the "menu" key or "exit" key to return to previous menu.

### 6.1. EDIT CHANNELS

You can edit channels on various channel lists - channel lock, delete channel, move channel, edit the name of a channel, and sort the channel list.



Select "Edit Channels" menu in main menu, and you will be asked to enter your PIN code. You can find the following "Edit Channels" screen by entering it.

#### 1. A. CHANNEL LOCK

Select the "Channel Lock" icon using the left/right keys (◀ · ▶). Select the channel that you want to lock or unlock from the channel list using the up/down keys (▲ · ▼) and the page up/down keys (▲ · ▼).

Press the "OK" key to confirm your selection.

Also, you can use the "🎵" key to select either TV channel list or Radio channel list.

Once the channel is locked, every time you try to watch the program, you will be asked to enter PIN code. Press the "menu" key or "exit" key to return to previous menu.

### 1. B. DELETE CHANNEL

Select the "Delete Channel" icon using the left/right keys(◀ · ▶)  
 Select the channel that you want to delete from the channel list using the up/down keys(▲ · ▼) and the page up/down keys(▲ · ▼).  
 Press the "OK" key to confirm your selection.  
 Also, you can use the "🎵" key to select either TV channel list or Radio channel list.  
 Press the "menu" key or "exit" key to return to previous menu.

### 1. C. MOVE CHANNEL

Select the "Move Channel" icon using the left/right keys(◀ · ▶)  
 Select the channel that you want to move from the channel list using the up/down keys(▲ · ▼) and the page up/down keys(▲ · ▼).  
 Press the "OK" key to confirm your selection.  
 Move it to the position where you want to place it using the up/down keys(▲ · ▼) and the page up/down keys(▲ · ▼).  
 Press the "OK" key to confirm.  
 Also, you can use the "🎵" key to select either TV channel list or Radio channel list.  
 Press the "menu" key or "exit" key to return to previous menu.

### 1. D. EDIT CHANNEL NAME

Select the "Edit Channel Name" icon using the left/right keys(◀ · ▶)  
 Select the channel that you want to edit from the channel list using the up/down keys(▲ · ▼) and the page up/down keys(▲ · ▼).  
 Press the "OK" key to confirm your selection.  
 Select the character which you want to edit using the browse keys(◀ · ▶, ▲ · ▼).  
 Press the "OK" key to confirm.  
 Save the character currently selected using the "F2" key.  
 Also, you can use the "🎵" key to select either TV channel list or Radio channel list.  
 Press the "menu" key or "exit" key to return to previous menu.

### 1. E. SORT CHANNEL LIST

Select the "Sort Channel List" icon using the left/right keys(◀ · ▶)  
 Press the "OK" key to confirm.  
 Select the sort type which you want to sort using the up/down keys(▲ · ▼)  
 Press the "OK" key to confirm.  
 Also, you can use the "🎵" key to select either TV channel list or Radio channel list.  
 Press the "menu" key or "exit" key to return to previous menu.  
 Press the "menu" key or "exit" key to return to previous menu.

## 6.2. EDIT FAVORITES

You can edit the favorite channel list, such as add/delete a channel or move its position, which facilitates you to easily find your favorite channel from the favorite channel list.

The favorite channel is classified into one of 8 favorite categories depending on its genre.

Select "Edit Favorites" menu in main menu, and you will be asked to enter your PIN code.

You can find the following "Edit Favorites" screen by entering it.

### 2. A. ADD FAVORITE CHANNEL



You can choose TV channel list or Radio channel list in an alternative way by pressing the "🎵" key on the RCU.

By pressing "FAV" key on the RCU, you can choose your favorite channel group out of 8 favorite groups.

Select the "Add Channel" icon using the left/right keys(◀ · ▶).

Select a channel that you want to add into the favorite channel list using the up/down keys(▲ · ▼) and the page up/down keys(▲ · ▼).

Press the "OK" key, and the selected channel will be added to the favorite channel list.  
 Press the "menu" key or "exit" key to return to previous menu.

### 2. B. DELETE FAVORITE CHANNEL

You can choose TV channel list or Radio channel list in an alternative way by pressing the "🎵" key on the RCU.

By pressing "FAV" key on the RCU, you can choose your favorite channel group out of 8 favorite groups.

Select the "Delete Channel" icon using the left/right keys(◀ · ▶).

Select a channel that you want to delete from the favorite channel list using the up/down keys(▲ · ▼) and the page up/down keys(▲ · ▼). Press the "OK" key, and the selected channel will disappear from the favorite channel list.

Press the "menu" key or "exit" key to return to previous menu.



## 2. B. MOVE FAVORITE CHANNEL

You can choose TV channel list or Radio channel list in an alternative way by pressing the "🎵" key on the RCU.

By pressing "FAV" key on the RCU, you can choose your favorite channel group out of 8 favorite groups.

Select the "Move Channel" icon using the left/right keys(◀ · ▶).

Select a channel that you want to move using the up/down keys(▲ · ▼) and the page up/down keys(⬆ · ⬇).

Press the "OK" key to confirm your selection.

Move it to the position where you want to place it using the up/down keys(▲ · ▼) and the page up/down keys(⬆ · ⬇).

Press the "OK" key to confirm.

Press the "menu" key or "exit" key to return to previous menu.

## 2. C. RENAME FAVORITE GROUP

You can choose TV channel list or Radio channel list in an alternative way by pressing the "🎵" key on the RCU.

By pressing "FAV" key on the RCU, you can choose your favorite channel group out of 8 favorite groups.

Select the "Rename Favorite Group" icon using the left/right keys(◀ · ▶).

Press the "OK" key and select the character which you want to edit using the browse keys(◀ · ▶, ▲ · ▼).

Press the "OK" key to confirm.

Save the character currently renamed using the "F2" key.

Press the "menu" key or "exit" key to return to previous menu.

## 2. D. SORT CHANNEL LIST

You can choose TV channel list or Radio channel list in an alternative way by pressing the "🎵" key on the RCU.

By pressing "FAV" key on the RCU, you can choose your favorite channel group out of 8 favorite groups.

Select the "Sort Favorite List" icon using the left/right keys(◀ · ▶).

Press the "OK" key to confirm.

Select the sort type which you want to sort using the up/down keys(▲ · ▼).

Press the "OK" key to confirm.

Press the "menu" key or "exit" key to return to previous menu.

## 6.3. INSTALLATION



"Installation" menu helps you to setup a variety of parameters necessary for receiving, signal, add new service, upgrade the new software and reset the channel data.

Select "Installation" menu in main menu, and you will be asked to enter your PIN code.

You can find the following "Installation" screen by entering it.

### 6.3.1 AUTOMATIC CHANNEL SEARCH



Your receiver includes the preprogrammed information of transponders.

Select "Automatic Channel Search" menu in "Installation" menu, and the following screen will be displayed.

Select the desired transponder using the left/right keys(◀ · ▶).

Set Frequency Search option fields to the appropriate value using the left/right keys(◀ · ▶) or number key at each field.

Check the signal strength. Press the "OK" key to start the "Automatic Channel Search" procedure.

You can see the progressive status of channel searching.

Please note that the "Automatic Channel Search" procedure may take a few minutes.

Press the "menu" key or "exit" key to return to previous menu.

### 6.3.2 PARENTAL CONTROL



This function prevents children or unauthorized persons from watching programs.

Also you can change PIN(Personal Identification Number) code.

Select "Parental Control" menu in "Installation" menu, and the following screen will be displayed.

#### 3. A. Receiver Lock

To lock the receiver, select "Receiver Lock" in the "Parental Control" menu and change it to "On" mode using the left/right keys(◀ · ▶).

#### 3. B. Menu Lock

To lock the Main Menu, select "Menu Lock" in the "Parental Control" menu and change it to "On" mode using the left/right keys(◀ · ▶).

#### 3. C. Change PIN Code

You can change your PIN code from factory default value "0000" as follows:

Select "Change PIN Code" in the "Parental Control" menu using the left/right keys(◀ · ▶).

Press the "OK" key. Then you will be asked for a new PIN code.

Once you enter a new PIN code, the receiver will ask you to enter in again.

After you enter a new PIN code twice, the PIN code is changed permanently.

If you forget the PIN code, you have to contact the distributor to find out it.

### 6.3.3 RECEIVER UPGRADE

You can upgrade the software of this receiver through serial port when the new software is released.

Please contact the distributor for receiver upgrade.

Distributor supports you useful information and new software for the receiver.

### 6.3.4 FACTORY DEFAULT

This is to restore the factory set values in case the user has encountered some problems after changing any new values of channel data and others which may be in error.

Select "Factory Default" menu in "Installation" menu, and press the "OK" key.

If you want to continue, select the "Yes" cell.

The receiver will be reset to settings automatically.

Please note that the "Factory Default" procedure may take a few minutes.



### 6.4. SYSTEM SETTINGS

This menu helps you to set up video output mode, language, screen type

Select "System settings" menu in main menu, and the following screen will be displayed.

TV Select	: Select video output mode - CVBS or RGB
RF Channel	: Select or change RF channel number when your receiver is connected to TV by RF connector. The factory preset value is channel 38.
RF Mode	: In the above case, you can choose PAL B/G mode or PAL I mode or PAL D/K mode.
Screen Type	: You can choose either 4:3 or 16:9 according to the TV type.
Menu Transparency	: You can select the transparency of the menu.
Menu Language	: You can select the menu language.
Audio Language	: You can select the audio language.
OSD Color	: You can choose the OSD color.

Press the "menu" key or "exit" key to return to previous menu.

## 6.6. CHANNEL LIST

This menu helps you to easily select the channel that you want to watch.



Press the "OK" key, and the following screen will be displayed.

You can get the information of channel number, channel name, and whether the program is scrambled or locked.

To watch a specific channel, first select it by pressing the up / down keys (▲ · ▼) and the page up / down keys (▲ ▼). Then, press the "OK" key. This enables you to move into that specific channel.

When you press the "🎵" key, you can alternatively select TV or radio channel list.

When you press "F1" key, you can see all channel list or FTA channel or favorite channel list.  
Press the "menu" key or "exit" key to return to previous menu.

## 6.7. CHANNEL GUIDE

Press "GUIDE" key, and the following screen will be displayed.



It will give the titles of the current and next programmes on different channels.

The information may include : current time / channel name, name of the current and next programme, the start and total time of the current programme, the start and total time of the next programme.

Programme information will be available only when it is included in the transmission.

When you press the "🎵" key, you can alternatively select TV or radio channel guide.

Press the "menu" key or "exit" key to return to previous menu.

## 6.8. AUDIO

Press "AUDIO" key.

Select the audio mode which you want using the left/right keys(◀ · ▶).

Some programs are broadcasted with one or more alternative language soundtracks.

You can select the preferred audio language for soundtrack using the up/down keys (▲ · ▼) .

## 7. TROUBLE SHOOTING

Problem	Solution
About the Receiver	
Does not display LED on the front panel or the receiver has no power.	Connect the power cord to the power outlet properly.
No pictures on the screen	Check if the receiver is in standby mode. Check if the the video output port is firmly connected to the TV. Check if you have selected the correct channel or video output on your TV.
No sound	Connect the audio cords properly. Check the volume level of the TV. Press "MUTE" key.
Remote Control does not operate	Point remote control directly towards the receiver. Check and replace batteries.
On - Screen Error Messages	
Searching Signal	Connect the cable properly. Check the signal strength in the "Automatic Channel Search" menu.
Unrecognized smartcard	Check the smartcard.
Please insert your smartcard	Insert the smartcard.

## 8. TECHNICAL SPECIFICATIONS

### I. Tuner

<b>Input Frequency</b>	UHF 470 ~ 862 MHz VHF 174 ~ 230 MHz
<b>Input Level</b>	-80 ~ -20 dBm
<b>Input Impedance</b>	75Ω Unbalanced
<b>Connector Type</b>	`IEC' Type Female
<b>Channel Selection</b>	PLL Synthesizer
<b>IF Band Width</b>	UHF/ 8 MHz, VHF/ 7 MHz

### 2. Demodulator

<b>OFDM Spectrum</b>	2K and 8K Carrier Modes non-hierarchical and hierarchical
<b>Modulation mode</b>	QPSK, 16QAM, 64QAM
<b>Guard Interval Mode</b>	1/32, 1/16, 1/8, 1/4
<b>Active symbol duration</b>	Active symbol duration
<b>FEC Decoder</b>	1/2, 2/3, 3/4, 5/6, 7/8

### 3. Video Decoder

<b>Video Decoder</b>	MPEG-2 ISO/IEC 13818-2
<b>Profile and Level</b>	MPEG-2 MP@ML
<b>Video Transfer Rate</b>	Up to 15 Mbps
<b>Video Formats</b>	4:3 & 16:9(Letterbox)

### 4. Audio Decoder

<b>Audio Decoding</b>	MPEG-1 Layer I & II
<b>Audio Channel</b>	Mono, Dual, Stereo, Joint Stereo
<b>Sampling Frequency</b>	32,44.1,48 KHz

### 5. Chip & Memory

<b>CPU</b>	32 Bit RISC CPU
<b>Memory</b>	1MB Flash 8MB SDRAM(Conax Embedded : 16MB) 2KB EEPROM

## 9. WARRANTY CARD

### 6. Demultiplexer

ISO/IEC 13818-1 Compliant

### 7. Audio/Video Connectors

TV SCART	CVBS, RGB, Audio L/R
VCR SCART	CVBS, Audio L/R
RCA Jack	Video, Audio L/R
Optic	Digital Audio (SPDIF)
S-Video	

### 8. Serial Data Interface

Signal	RS-232, 115.200 bps
Connector Type	9 Pin D-Sub (male)

### 9. Conditional Access System

Conax Embedded

### 10. Smart Card Interface

ISO 7816

### 11. Power Supply

Input Voltage	AC 95 to 240V, 0/60Hz
Type	SMPS
Power Consumption	Max. 30W

### 12. Physical Specification

Operating Temp	+5C ~ +40C
Net Weight	2.5 Kg
Dimensions	300(W) X 210(D) X 60(H)mm

#### Conditions

1. The Opentech Inc. warranty is valid for a period of one year from the date of the first purchase.
2. In the event that this product fails to function properly during the warranty period, the retailer or dealer will make this products capable of operating for the purpose of which it was designed, without charging for labor and parts.
3. This warranty will be honored only if the Certificate of Warranty has been duly completed by the purchaser and is presented to the dealer with the original invoice or receipt.
4. This warranty does not cover shipping or transportation charges from you to us.
5. The obligations of the dealer are limited to the repair of defect parts. Cost and risk of transport to the retailers as well as removal and installation of the product, and other costs directly or indirectly related to its repair, are not covered by the warranty.
6. All warranty repairs performed by non-authorized repair shop will not be reimbursed and if such repair damage this product, such damage will not be covered by this warranty.
7. This warranty is not applicable in case of than defects in materials or workmanship and, in particular, does not cover:
  - Periodic check-ups, adjustments, maintenance or conversions as well as replacement of parts due to normal wear and tear.
  - Damage caused by accidents, negligence, modifications, use of Non-Opentech parts, improper use, installation or packing.
  - Damage caused by lightning, water, fire, acts of war, public disturbances, Incorrect ventilation or any other cause beyond the control of the distributor.
  - Products where the label bearing the serial number has been removed, defaced or illegible.
8. This warranty is offered to any person who has legally obtained possession of this product within warranty period.
9. Opentech's maximum liability shall not exceed the actual purchase price paid by you for the product. In no event shall Opentech be liable for special, incidental, consequential or indirect damages.

**OPENTECH INC.**

#### CERTIFICATE OF WARRANTY



Opentech Inc., thanks you for your purchasing our Opentech products. For your benefit, we recommend that you record your serial number, found on the products, and other purchase information on this card and keep it with your personal records as a proof of purchase. This information will allow us to serve your need.

Model Name :	
Serial Number :	
Date of Purchase :	
Purchaser's Contact Information :	
- Name :	
- Address :	
Dealer's Contact Information :	
- Name :	
- Address & Tel. :	

#### IMPORTANT

Keep this Certificate of Warranty together with the original invoice or receipt in a safe place and show them to the dealers or place of purchase whenever a warranty repair is necessary.