

# Contents

(A) Safety Instructions.....	2
(B) Packaging Contents .....	4
(C) Product Descriptions .....	5
(D) Smartcard Reader & CAM .....	8
(E) Remote Control .....	9
(F) Main Features .....	11
(G) Technical Data .....	12
I. Basic Installation .....	14
1. Connecting Satellite, Cable, Terrestrial Cables .....	14
2. Connecting the TV (and VCR).....	15
3. Connecting Power .....	18
4. Power ON/OFF .....	19
II. First Time Installation (using Wizard) .....	20
Step 1. Selecting Video Input .....	20
Step 2. Language Selection.....	21
Step 3. Configuring Satellite Connection .....	22
Step 4. Configuring Tuner A, Tuner B, Tuner C, and/or Tuner D (.....	22
III. Automatic and Manual Scan.....	23
A. Tuner Configuration .....	23
B. Automatic Scan of services .....	24
C. Manual Scan of services .....	25
(H) System Configuration– Network Setup .....	27
(I) How to replace tuner .....	28
(J) GNU GENERAL PUBLIC LICENSE .....	29
(K) Troubleshooting .....	34

## (A) Safety Instructions

This Linux Set-Top-Box has been designed and manufactured in compliance with EU consumer safety requirements (CE). Please read the following safety precautions carefully.

### 1. Connecting Power

- This product operates only in the range of AC 100V~250V and 50Hz/60Hz. Please check first your power supply to see if it fits this range.
- Please be noted that you need to disconnect from the mains before you start any maintenance or installation procedures.
- Make sure that the power cord is placed in a position where it is easy to unplug it from the mains in an emergency.

### 2. Overloading

- Do not overload a wall outlet, extension cord or adapter as this may cause electrical fire or shock.

### 3. Liquid

- This product is not water-proof and should not be exposed to dripping, splashing, or any type of liquid.
- No objects filled with liquid such as base shall be placed on the product.
- Please do not clean the product with wet cloth, which may cause a short circuit.
- No wet objects should be placed near the product.

### 4. Ventilation

- Allow a sufficient space between the product and other objects to make sure air ventilation of the product.
- Do not block the top or rear of the product with an object, which will close the ventilation holes and lead to a high temperature of the system. This may cause a failure of the product.
- Do not stack other electronic devices on top of the product.
- Do not insert any kind of pointed objects like screw, gimlet, etc. into the ventilation holes of the product. This will damage the product.

### 5. Connecting the Satellite Cable

- Disconnect the power of the product before you connect the satellite cable to the product. Otherwise, it may cause damage to the LNB.

### 6. Grounding

- The LNB must be earthed to the system earth for the satellite dish.

### 7. Location

- Place the product indoor.
- Do not expose the product to rain, sun or lightening.
- Do not place the product near any heat appliances as a radiator.
- Ensure that there is more than 10 cm distance from any electrical devices & wall.

### 8. Lightning, Storm or Not In Use

- Unplug the product and disconnect the antenna cable during a thunderstorm or lightening, especially when left unattended and unused for a long period of time. This will prevent possible damages from power surges or lightening.

## 9. Replacement of Parts

- Unauthorized part replacements, especially by one who is not a qualified technician may result in damage to the product.
- Ensure that when part replacements are necessary qualified technicians perform the task using the components specified by the manufacturer.

## 10. Hard Disk Drive

- Do not move the product or turn the power off suddenly while the Hard Disk Drive (HDD) is still running. This may result in damage to the HDD and thus the system.
- The company shall not be liable for any corruption of data on the HDD caused by careless use or misuse of users.

## 11. Battery

- There is danger of explosion if batteries are incorrectly replaced.
- Replace batteries only with the same or equivalent type.



### ***'WEEE' Symbol instructions***

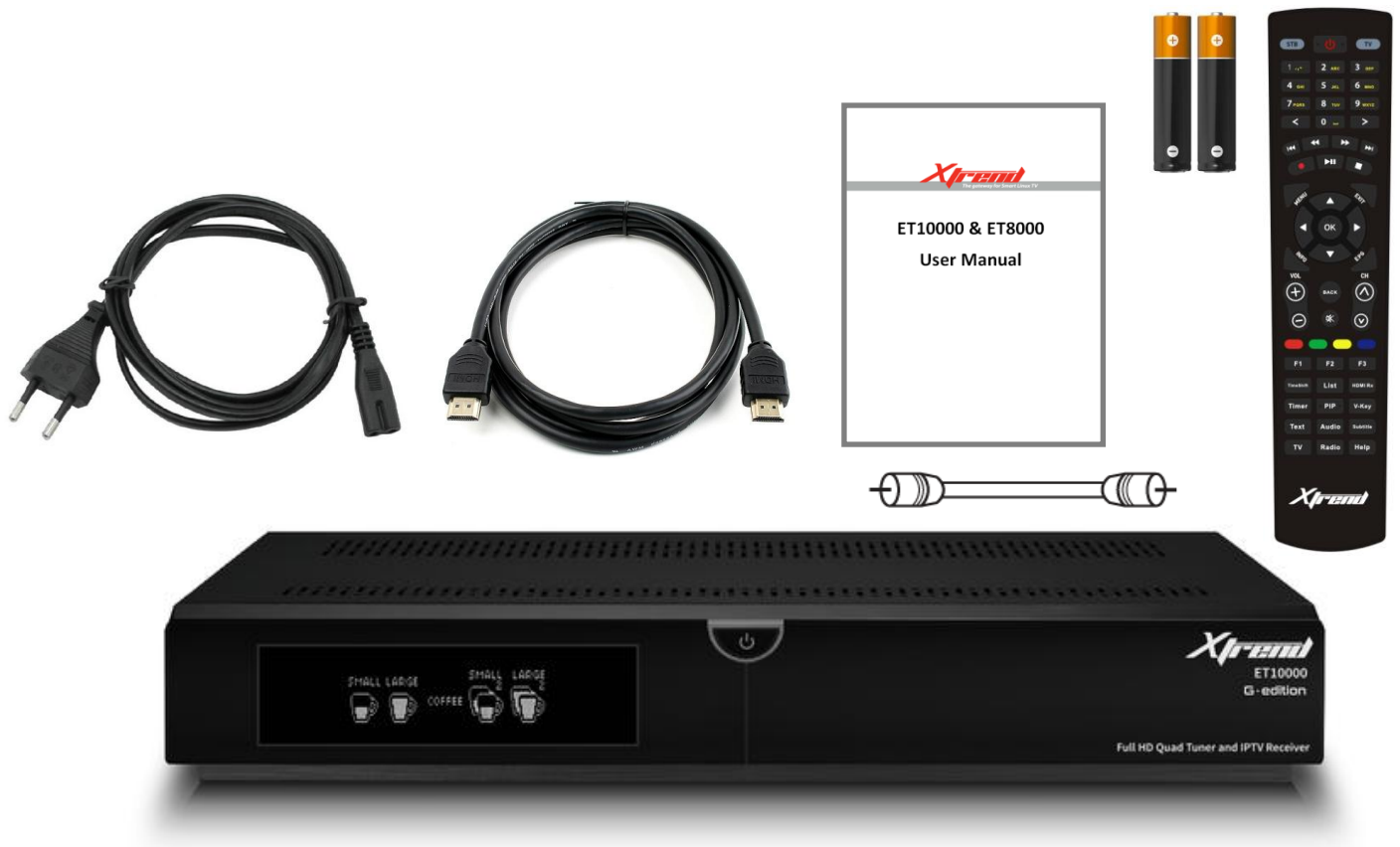
This product should not be disposed with other house hold wastes at the end of its working life.

Please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. This will help prevent harm to the environment or human health from uncontrolled waste disposal.

**Dolby Digital:** Manufactured under license from Dolby Laboratories. 'Dolby' and the 'double-D' symbol are trademarks of Dolby Laboratories.

**MP3:** MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson

## (B) Packaging Contents

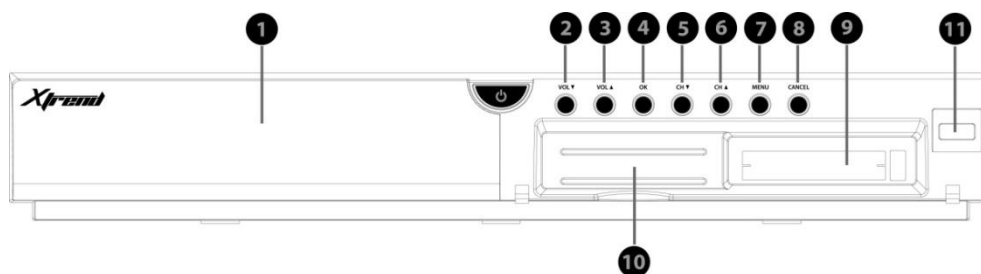


Please check all package contents before using your product.

- STB
- Remote Control
- Batteries
- HDMI cable
- Loop-through cable
- User Manual
- Power Cable
- Sata Cable
- Screws for HDD

## (C) Product Descriptions

### Front Panel



1. **Display** : Displays the current menu information. 12 character dot matrix VFD.

2-3. **VOL▲/ VOL▼** : Volume control

4. **OK** : Select

5-6. **CH▼/ CH▲** : Switches channel

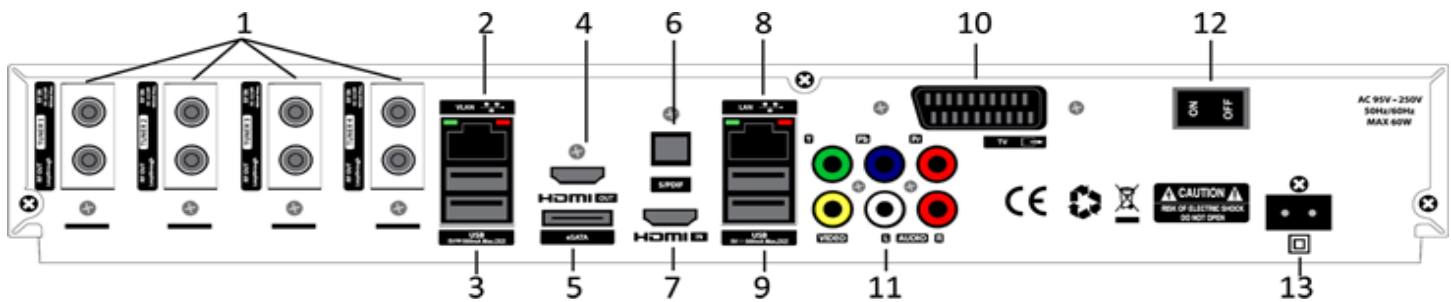
7. **Menu** : Shows main menu

8. **Cancel** : Cancel the menu

9. **CI Module slot**

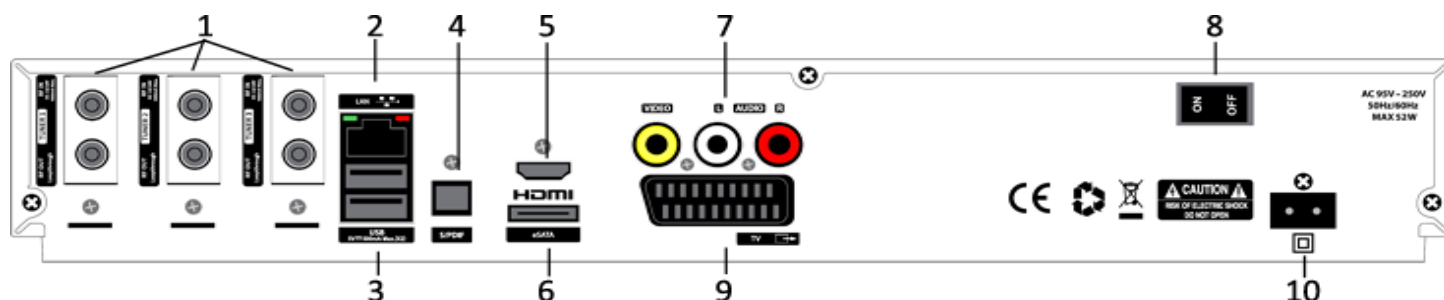
10. **Smartcard reader slot**

11. **USB**: Connect a USB storage device

**Rear Panel (ET10000)**

1. **TUNER 1 / TUNER 2 / TUNER 3 / TUNER 4** : Insert Plug & Play DVB-S/-S2, DVB-C, or Hybrid DVB-T/-T2 Tuner
2. **Ethernet Port (VLAN)**: Connect your LAN cable to access IPTV
3. **USB** : Connects the USB memory stick or external HDD.
4. **HDMI OUT**: Connects to TV using a HDMI cable for both audio and video signals.
5. **e-SATA** : Connects the external HDD using e-SATA cable.
6. **S/PDIF** : Connects to a digital audio system using S/PDIF cable.
7. **HDIM IN**: Connects external devices to ET10000.
8. **Ethernet Port (LAN)**: Connect your LAN cable to access internet.
9. **USB** : Connects the USB memory stick or external HDD.
10. **SCART** : Connect s to TV SCART
11. **Component (YPbPr)** : Connects to TV using a component cable.
12. **On/Off Switch** : Powers on/off.
13. **Power Inlet** : Connects the detachable power cord.

## Rear Panel (ET8000)



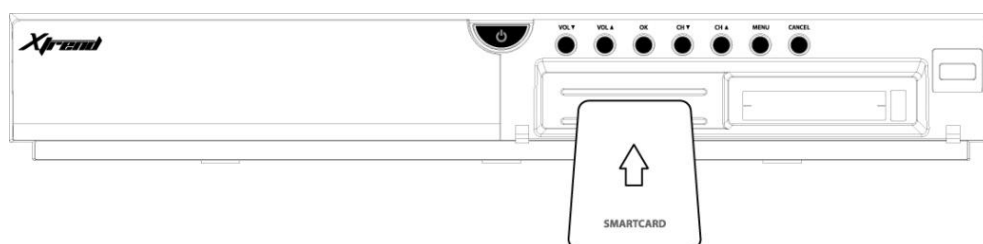
1. **TUNER 1 / TUNER 2 / TUNER 3** : Insert Plug & Play DVB-S/-S2, DVB-C, or Hybrid DVB-T/-T2 Tuner
2. **Ethernet Port (LAN)** : Connect your LAN cable to access internet
3. **USB** : Connects the USB memory stick or external HDD.
4. **S/PDIF** : Connects to a digital audio system using S/PDIF cable.
5. **HDMI**: Connects to TV using a HDMI cable for both audio and video signals.
6. **e-SATA** : Connects the external HDD using e-SATA cable.
7. **Video/Audio output** : Connects to TV using RCA cable.
8. **On/Off Switch** : Powers on/off.
9. **SCART** : Connect s to TV SCART
10. **Power Inlet** : Connects the detachable power cord.

## (D) Smartcard Reader & CAM

ET10000 & ET8000 provide two Smartcard Reader slots

### *Insertion of Smartcard*

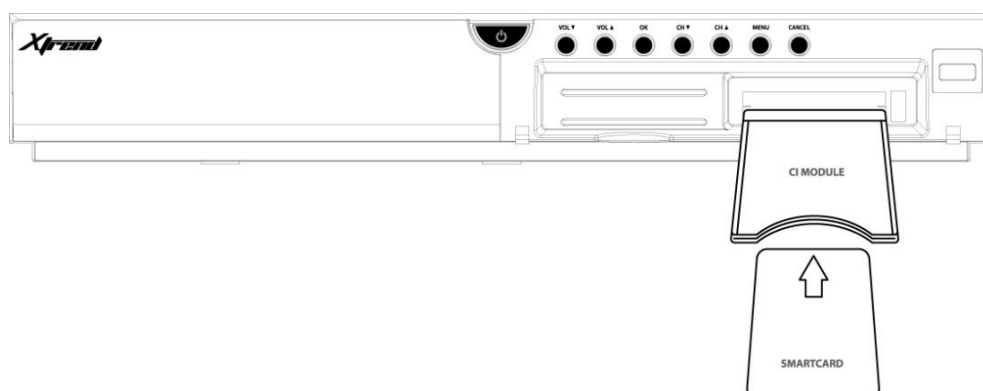
- ① Open the door on the right side.
- ② Insert Smartcard as in the following instruction.
- ③ Make sure that the Smartcard remains inserted



### *Insertion of CAM (Conditional Access Module)*

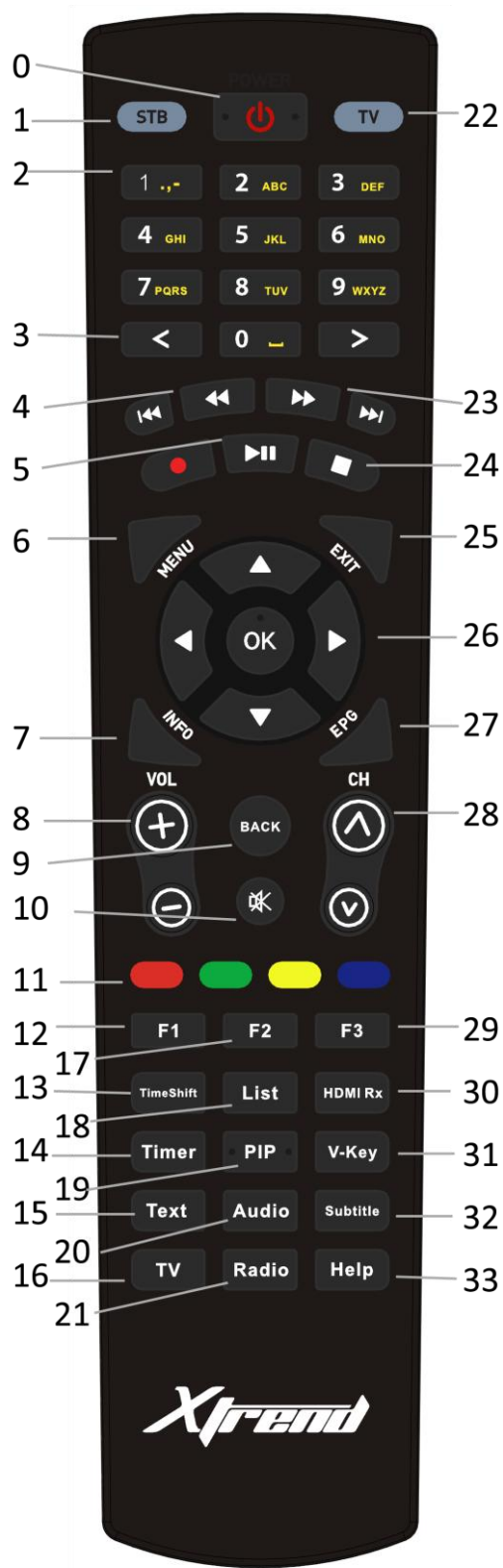
ET10000 & ET8000 provides two CI slots

- ① Insert a Smartcard into the CAM as in the below picture.
- ② Once the Smartcard inserted into the CAM, insert the CAM into the CI slot.
- ③ Make sure that the CAM remains inserted.





## (E) Remote Control



0. **Power:** To switch the receiver in and out of stand-by mode.
1. **STB:** switch the remote control to receiver mode.
2. **Numeric Keys:** Enters a service number for service change or to specify values for menu options.
3. **< :** Navigates left on the menu options.
4. **<< :** Fast Rewind  
Fast rewinds at up to 128 times faster than the normal speed  
(x2/4/8/16/32/64/128)
5. **▶|| :** Play and Pause
6. **MENU:** Displays the main menu.
7. **Information:** Displays the service information box. It is also used to display more information about a program.
8. **VOL +/- :** Adjusts the audio volume.
9. **BACK:** Moves to previous menu or shows history zap
10. **Mute:** Mutes the audio.
11. **4 Color Keys:** Each key is assigned a specific function that may be different in each menu.
  - Red - mainly used for REC, Cancel, etc.
  - Green - mainly used for OK
  - Yellow
  - Blue
12. **F1:** Assign a key function of your own
13. **Timeshift :** Used to start Timeshift function.
14. **Timer :** Sets sleep timer
15. **TEXT:** Displays the teletext information of the current channel, if the channel provides teletext data.
16. **TV :** Displays the TV channel list or change to TV mode
17. **F2:** Assign a key function of your own
18. **List:** Displays the list stored on HDD if any.
19. **PIP:** Activates Picture-in-Picture mode.
20. **Audio:** Displays the audio track option to choose (e.g. AC3, Stereo)
21. **Radio:** Displays the Radio channel list or changes to Radio mode.
22. **TV:** Switch the remote control to Television mode.
23. **>> :** Fast Forward  
Fast forwards at up to 128 times faster than the normal speed  
(x2/4/8/16/32/64/128)
24. **Stop:** Stops playing and goes to the live mode.
25. **EXIT:** Exits the current menu option into the live mode, or switches one step back of the menu.
26. **Navigation Keys:** Navigates Up/Down and Left/Right on the menu options. Up/down keys are used to call up the channel list.
27. **EPG:** Displays the Electronic Program Guide (EPG) information if provided.
28. **CH +/- :** Navigates through the channel list
29. **F3:** Assign a key function of your own
30. **HDMI Rx** (For ET10000 only): Switch to HDMI input mode
31. **V-Key:** Recalls Virtual Keyboard
32. **Subtitle:** Displays the subtitle of the current channel if the channel provides subtitle.
33. **Help:** Displays major important operation methods of STB. This provides users with a quick guide of using STB.

## (F) Main Features (ET10000)

- 1.3GHz Dual Core CPU Processor
- Plug & Play DVB-S/-S2/-C/-T/-T2 Quad Tuners
- Full HD
- HDMI IN port
- HDMI OUT port
- Linux Operating System
- Media Player
- Downloadable Plug-ins supported
- 2 x Smartcard Readers
- 2 x Common Interface
- MPEG2 / H.264 Hardware Decoding
- Full Dot Matrix VFD
- 1GB NAND Flash / 2GB DDR Memory
- External SATA supported
- Gigabit Ethernet Interface
- 10/100MB Ethernet Interface
- 5 x USB 2.0
- YPbPr
- Composite Video (RGB)
- SCART (TV)
- S/PDIF for digital bit stream out (optical)
- EPG support
- Automatic & Manual Service Scan support
- Multiple LNB control (DiSEqC) support
- Skin change support

## Main Features (ET8000)

- 1.3GHz Dual Core CPU Processor
- Plug & Play DVB-S/-S2/-C/-T/-T2 Triple Tuners
- Full HD
- HDMI
- Linux Operating System
- Media Player
- Downloadable Plug-ins supported
- 2 x Smartcard Readers
- 2 x Common Interface
- MPEG2 / H.264 Hardware Decoding
- 12 Digit Dot Matrix VFD
- 512MB NAND Flash / 1GB DDR Memory
- External SATA supported

- Gigabit Ethernet Interface
- 3 x USB 2.0
- YPbPr
- Composite Video (RGB)
- SCART (TV)
- S/PDIF for digital bit stream out (optical)
- EPG support
- Automatic & Manual Service Scan support
- Multiple LNB control (DiSEqC) support
- Skin change support

## (G) Technical Data

Xtrend	ET10000
CPU	MIPS (1.3GHz)
Performance	Dual 3,000 DMIPS
NAND FLASH	1GB
DDR	2GB
Linux Kernel	later than 3.11.x
TUNER	4 x P&P
ETHERNET (RJ45)	2 ( 1 Gigabit + 100M)
HDMI Output	1
HDMI Input	1
Transcoding	HD Hardware
Display	Full dot matrix VFD
USB	1 + 4
SMART CARD	2
CI SLOT	2
POWER	SMPS (60W)
Component	0
Composite	0
SCART	0
S/PDIF	Optical
FAN	0
HDD	2.5" / 3.5"
Dimension (width)	380mm

Xtrend	ET8000
CPU	MIPS (1.3GHz)
Performance	Dual 3,000 DMIPS
NAND FLASH	512MB
DDR	1GB
Linux Kernel	later than 3.11.x
TUNER	3 x P&P
ETHERNET (RJ45)	Gigabit
HDMI Output	1
Transcoding	-
Display	12 dot matrix VFD
USB	1 + 2
SMART CARD	2
CI SLOT	2
POWER	SMPS (52W)
Component	X
Composite	O
SCART	O
S/PDIF	Optical
FAN	O
HDD	2.5" / 3.5"
Dimension (width)	380mm

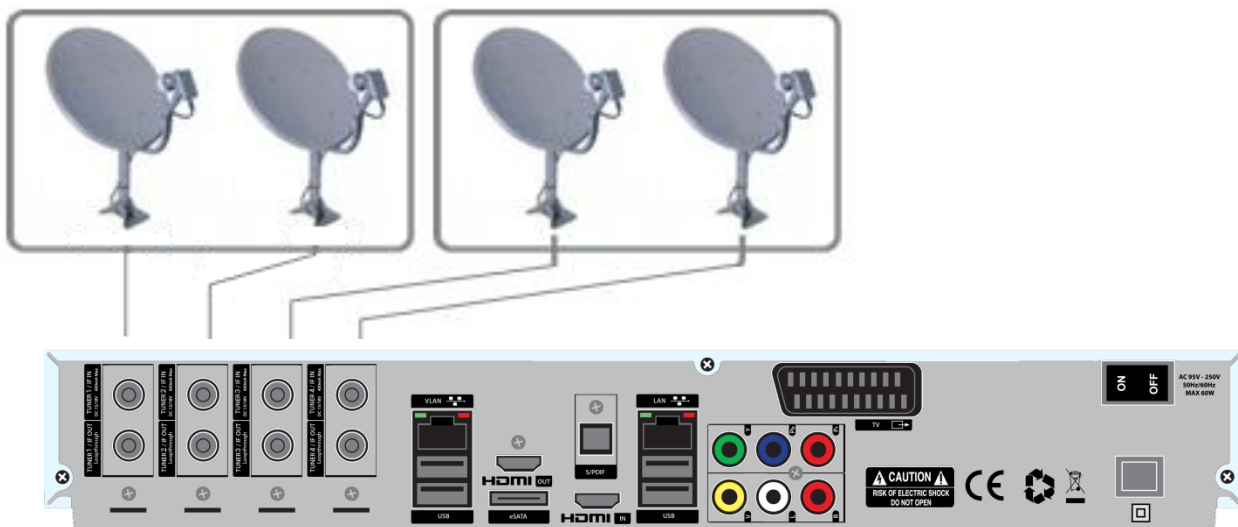
## I. Basic Installation

### 1. Connecting Satellite Cables

The ET10000 is a Quad Tuner STB which allows you to connect up to 4 satellite, cable, and/or terrestrial connections. One of the first steps is to connect satellite cable(s) to STB in order to gain optimal signal quality. You can either choose one of the following connection methods depending on the equipment you have.

#### A. Four Separate Satellite/Cable/Terrestrial Cables

In case you have four separate satellite, cable, or terrestrial cables providing different broadcast signals, you can configure TUNER 1 Input and TUNER 2-4 Input independently.



#### B. Internal Loop-through

In case you have only one satellite cable, connect the cable to TUNER 1 Input.

#### C. Combination of DVB-S/-S2/-C/-T/-T2

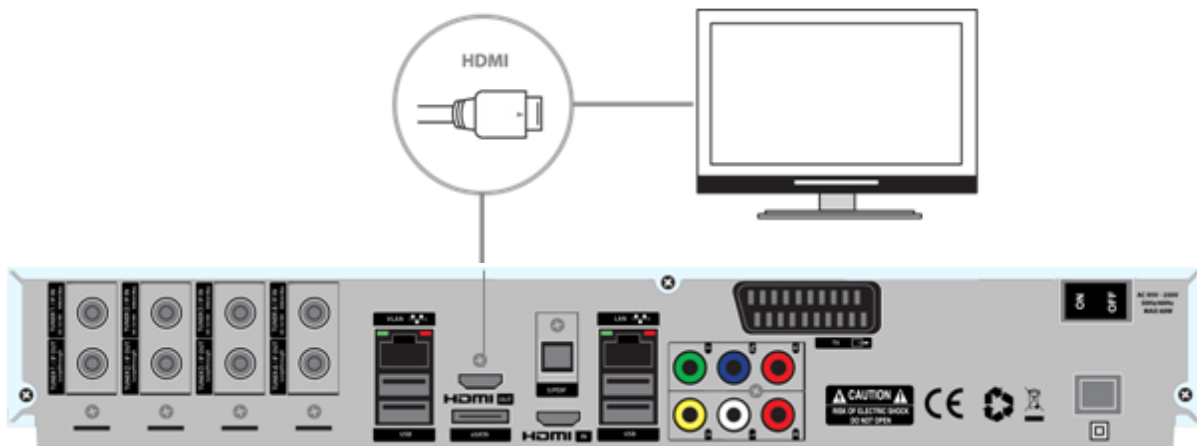
Connect a various combination of satellite, cable, and terrestrial connection to your TUNER 1-4.

## 2. Connecting the TV (and VCR)

STB provides a variety of audio/video connection methods.

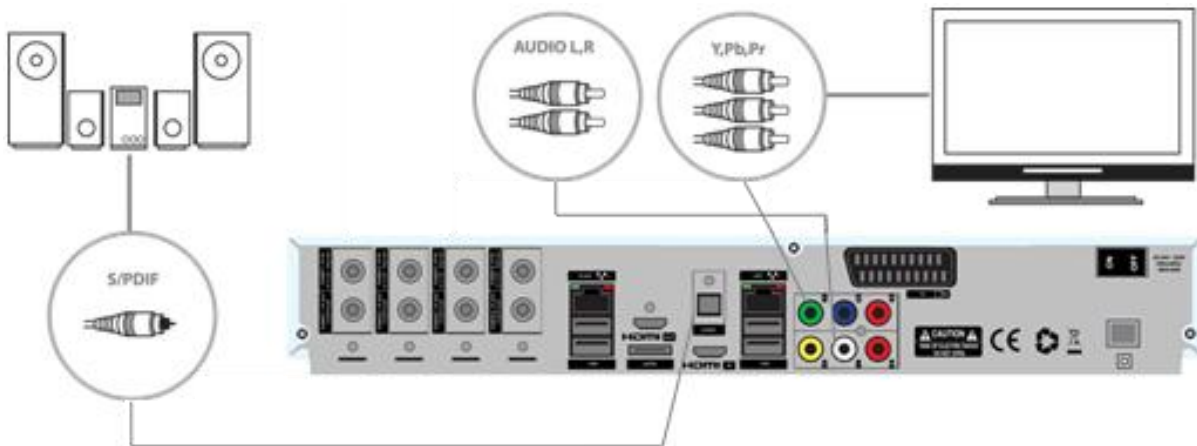
### A. Connecting TV via HDMI Cable (Highly recommended)

In order to enjoy the best picture quality, HDMI connection is strongly recommended. Most HDTVs have HDMI connectors to ensure the highest picture quality. In the rear panel of STB one HDMI OUT port is available for this purpose. Connect your TV to STB using a HDMI cable as follows.



### B. Connecting TV via Component Cable

The secondly recommend TV connection for digital TV is via component cable (YPbPr). However, unlike the HDMI connection which delivers audio and video signal at the same time, YPbPr connection requires additional audio connection either via RCA cable (Stereo L/R) or S/PDIF as follows.



### C. Connecting External Device via HDMI Cable on to your ET10000

If you have an external device such as PS3 or a DVD Player, you can connect your external device to your ET10000 by connecting the HDMI cable on to your HDMI IN port of your ET10000.

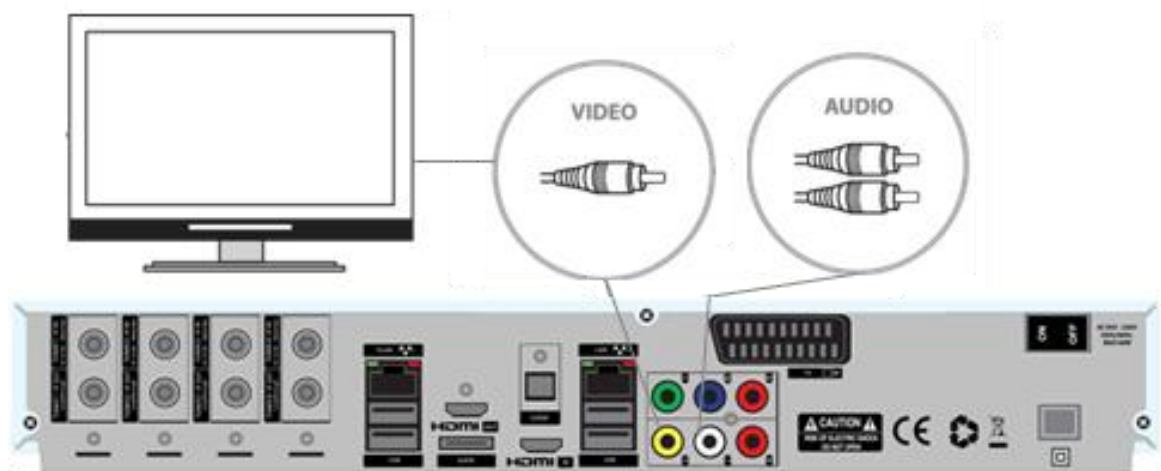


NOTE: When you have an A/V receiver with S/PDIF digital audio input, this connection is recommended to enjoy the best audio quality, especially for the Dolby Digital sound.

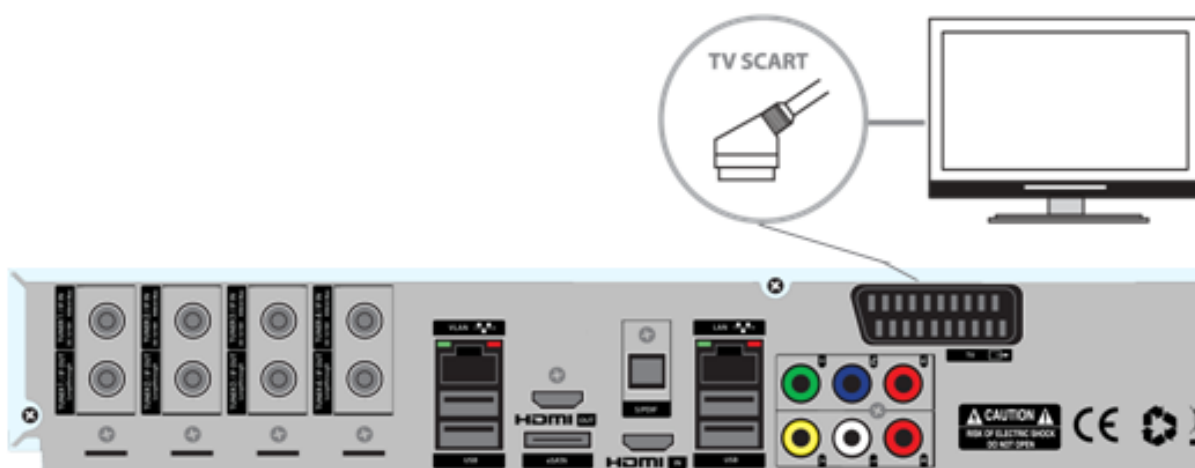


**D. Connecting TV via RCA (Video) Cable**

STB provides Composite video connection as well. Composite cable has normally three connectors at the both end; one Video (Yellow) and two Audio (White/Red). Connect your TV to STB as follows:

**E. Connecting TV with SCART Cable**

In case your TV is analogue TV, SCART cable is the most common method. Connect your TV to STB using SCART cable as follows



### **3. Connecting Power**

A power code is provided as one of the basic accessories of STB.

- Connect the power cord to the connector at the rear panel of STB.
- Connect the power cord to a power outlet.
- Turn on the power switch at the rear panel.

## 4. Power ON/OFF

There are several ways to turn your STB ON or OFF.

- **Complete Power Shutdown**

There is a Power Switch in the rear panel and once it is ON, you do not need to turn it on or off each time. It takes a longer time to boot the system if you turned it off by this switch.

- **Standby Mode**

POWER key is normally used to put your STB in standby mode. If you press POWER, it instantly puts your STB on standby mode. If you press the POWER button again, it will turn on. In this mode, the system is not completely shutdown and thus it takes a shorter time to turn it on and off.

- **Deep Standby Mode**

Deep Standby is used to reduce the standby power consumption. STB is designed to be energy efficient and to guarantee the power consumption to be under 1W in the deep standby mode.

Entering standby mode, deep standby mode, restart gui, or restart system by going to Menu -> Standby/Restart -> select your desired power mode.

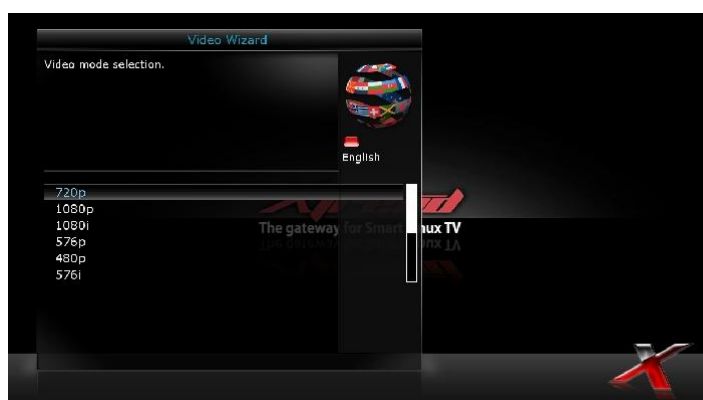
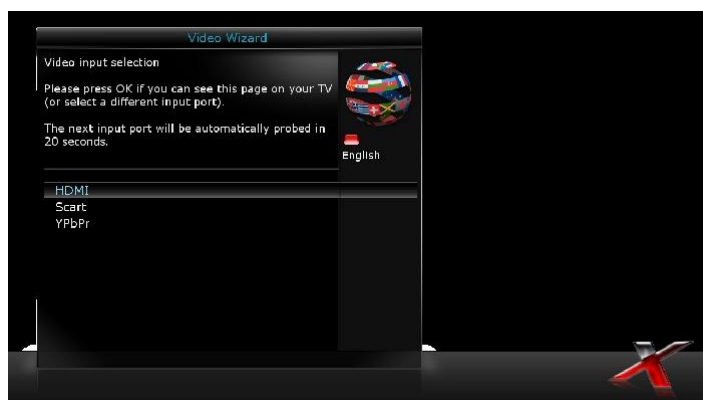


## II. First Time Installation (using Wizard)

When you turn on STB for the first time after purchase, an installation wizard will begin step by step.

### **Step 1. Select your Video Input Selection**

The first step of the Wizard Guide allows you to select your desired video input ranging from HDMI, Scart, or YPbPr. After you choose your video input, also configure your desired video mode. (Use the arrow up/down and OK button on your remote control to control the Wizard)



## Step 2. Language Selection

The Wizard guide provides various languages and here you can choose the main language for your Xtrend. Use UP/DOWN key to scroll up and down to find the language you want.



## Step 3. Configuring Satellite Connection

The next step of the Wizard guide allows you to easily configure the satellite connection. You have two options:

- Use wizard to setup basic features
- Exit wizard

You are strongly recommended to use wizard as it is designed to guide you through the configuration process.



#### Step 4. Configuring Tuner A, Tuner B, Tuner C, and/or Tuner D (in case of ET10000)

Using LEFT/RIGHT key, you can choose one of the following Configuration Modes:

- Not configured.
- Simple
- Loop-through to: mode to make the TUNER 1 be internally connected to the TUNER 2.
- Equal to: mode to use the same configuration as that of Tuner B.
- Advanced: for an advanced user configuration. (Here you can setup Unicable LNB)

If you choose Simple configuration mode, the following picture will appear.



**5 modes are available for the satellite connection between LNB and your STB as below:**

- **Single**

This option is used to receive a single satellite with a single LNB.

The cable from LNB is directly connected to STB.

- **ToneBurst A/B**

This option is used if you want to receive two satellites using a ToneBurst switch.

- **DiSEqC A/B**

This option allows you to configure two satellites in Port A and Port B. If you leave the settings to automatic, it will automatically find the installed satellite degree.

- **DiSEqC A/B/C/D**

This option allows you to configure four satellites in Port A, Port B, Port C and Port D. If you leave the settings to automatic, it will automatically find the installed satellite degree.

- **Positioner**

This option is used when you have a motorized satellite antenna.

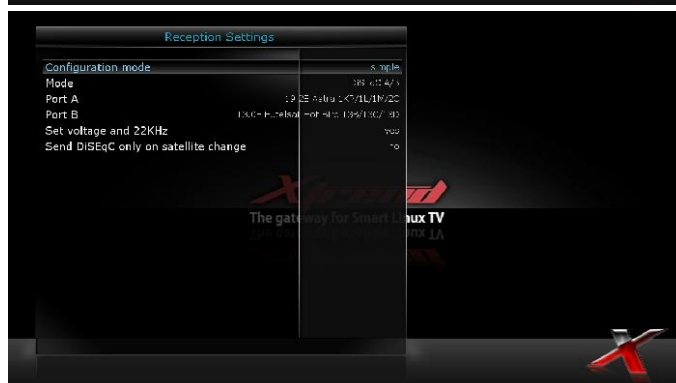
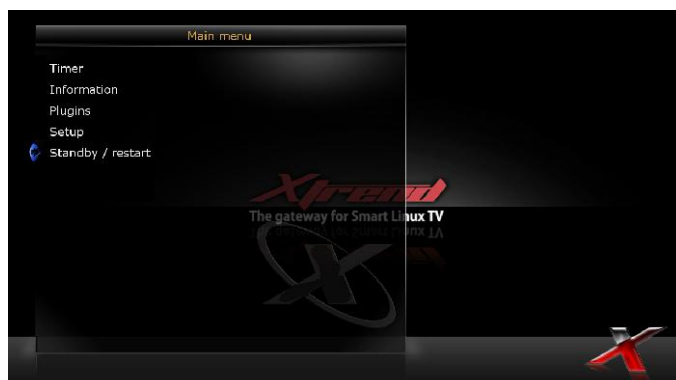
### III. Automatic and Manual Scan

This chapter will guide you through Automatic and Manual Scan

#### A. Tuner Configuration

If you run the First Time Installation process (refer to the page 18~22), the Tuner A is already configured. You can check the information of Tuner A and which satellites are scanned by Tuner A as follows.

[Menu -> Setup -> Service Searching -> Tuner configuration -> select your desired Tuner to configure.]



## B. Automatic Scan of Services

[Menu -> Setup -> Service Searching -> Automatic Scan]

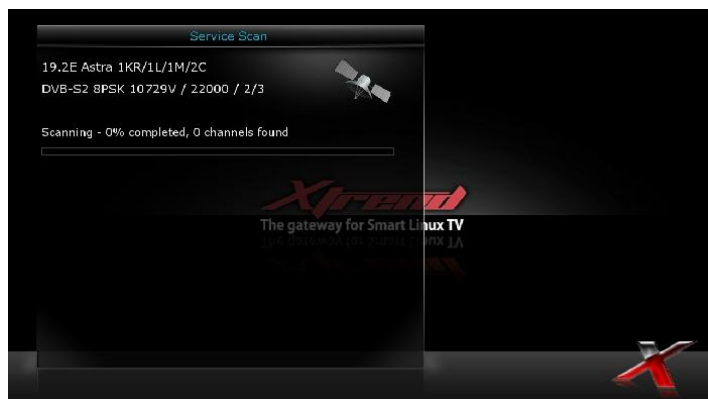
The easiest way to scan services is to use Automatic Scan. In the Automatic Scan menu, there are two options to choose from as below.



- **Clear Before Scan**

**YES** is used when you want to delete the existing channel list before you start the automatic scan. If you want to keep the existing list, select **NO**.

Press **OK** to activate the automatic scan. This will take some minutes. As the scan proceeds, you will see the progressive bar and the newly found services underneath.





## C. Manual Scan of Services

[Menu -> Setup -> Service Searching -> Manual Scan]

If you know well enough to configure each exact setting required for manual search of services, you can select manual scan as well. There are many parameter values that you need to configure as below.



Amongst other things, the below parameters are what you need to decide prior to performing manual scan.

### Tuner

You need to decide which tuner you want to use for manual scan.

### System

Here you have two options between DVB-S (SD) and DVB-S2 (HD).

### Frequency

You need to enter the exact frequency of the transponder that you want to scan.

### Symbol Rate

You need to enter the exact symbol rate of the transponder that you want to scan

### Polarity

Here, you have options for Horizontal, Vertical, Circular Left and Circular Right. You need to know the polarity of the transponder that you want to scan.

### FEC (Forward Error Correction)

You need to enter the exact FEC value of the transponder that you want to scan

### Modulation

Here you have two options for QPSK (SD) and 8PSK (HD).

### Network Scan

Here you have two options for **YES** and **NO**. **NO** is used to scan the transponder (TP) based on the data that your STB currently has. **YES** is used to scan the TP not just based on the existing TP data but also using new TP data, if there is TP data newly transported from the TP. Naturally, **YES** option takes longer while it may results in a better scan result.

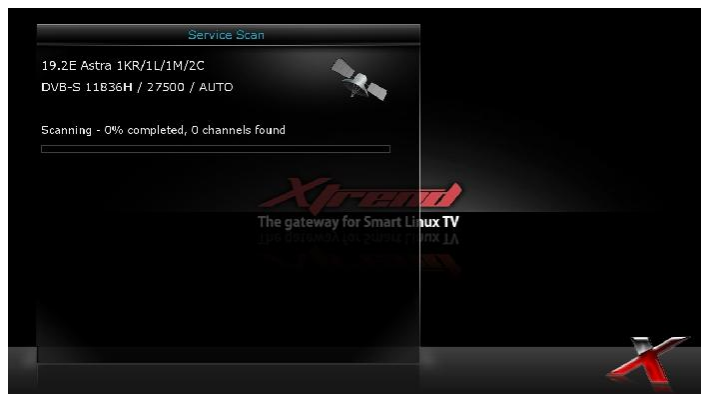
### Clear Before Scan

**YES** is used when you want to delete the existing channel list before you start the automatic scan. If you want to keep the existing list, select **NO**.

### Only Free Scan

Here you have two options for **YES** and **NO**. You want to scan only Free to Air channels without any encryption, select **YES**. Otherwise, select **NO** to scan all FTA and CAS channels.

Press **OK** to activate the manual scan. This will take some minutes. As the scan proceeds, you will see the progressive bar and the newly found services underneath.



## (H) System Configuration – Network Setup

Menu -> Setup -> System -> Network

STB is integrated with standard 10/100Mbps Ethernet with RJ 45 connector as well as an 1 Gigabit Ethernet port for the ET10000 as standard. The ET8000 provides just one Gigabit Ethernet port. You can setup the network settings through this **Network Configuration** menu.



### Adapter settings

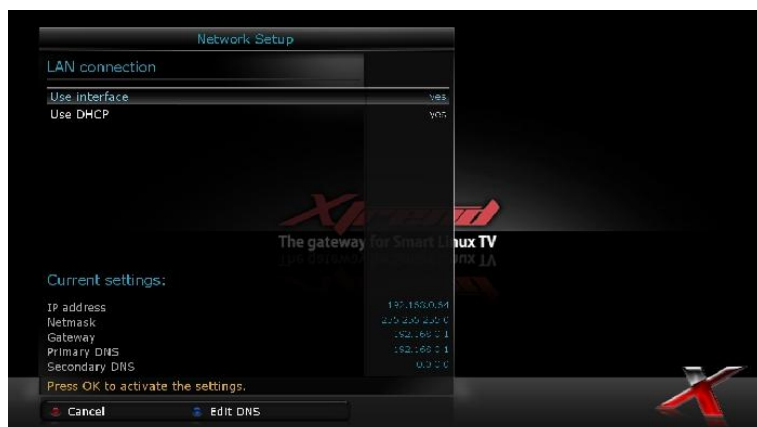
Through this menu, you can set the basic Ethernet configuration.

- **User Interface**

**YES** is used to activate the Ethernet. If you set this option at **NO**, the Ethernet will not work.

- **Use DHCP**

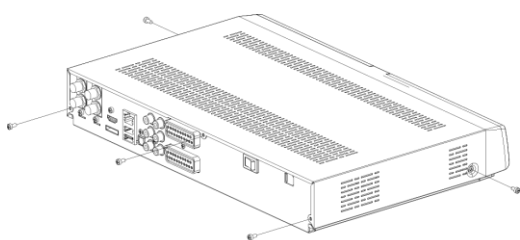
**YES** is used to use **DHCP (Dynamic Host Configuration Protocol)**. If you set this option at **YES**, it will automatically detect the correct IP address. **NO** is used when you want to use a certain fixed IP address. In this case, you need to enter correct addresses in each field.



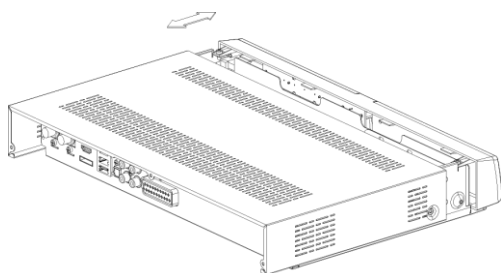
If for some reason, your Ethernet port is not active, select “Restart Network”  
This option is used when you want to reboot the Ethernet interface of your ET8000/ET10000.

## (I) How to replace tuner

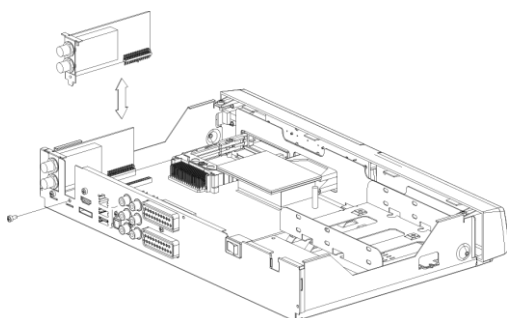
- I. Disconnect the power connection from your ET10000.
- VIII. Remove 5 screws of the top -> Remove the screws by turning them counterclockwise
- IX. Remove the top cover by sliding backwards.
- X. Remove screws of tuner bracket -> remove the screws by turning them counterclockwise
- XI. Gently remove the tuner from the main board.
- XII. After your desired DVB-S/-S2/-C/-T/-T2 tuner has been replaced, tighten the tuner and top cover with the removed screws -> tighten the screws by turning them clockwise.



(Figure1)



(Figure2)



(Figure3)

### **WARNING: DO NOT USE FOLLOWING COMBINATION:**

1. Tuner 1 : any tuner  
Tuner 2 : any tuner  
Tuner 3 : DVB-S2 tuner  
Tuner 4 : DVB-C tuner
2. Tuner 1 : any tuner  
Tuner 2 : any tuner  
Tuner 3 : DVB-C  
Tuner 4 : DVB-C

**Any other combination is supported.**

Copyright - GNU GPL

## GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The 'Program', below, refers to any such program or work, and a 'work based on the Program' means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term 'modification'.) Each licensee is addressed as 'you'.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.) These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it. Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances. It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and 'any later version', you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

**NO WARRANTY**

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT



HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM 'AS IS' WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

## (K)Troubleshooting

Before you contact your local service center, please read the following tips carefully.

NOTE: if the antenna is covered with snow or the RF signal is weakened by heavy rain, the quality of audio and video may become temporarily poor. If you experience poor audio and video quality due to bad weather conditions, please check if your satellite antenna is oriented in the original direction. And see if it is covered by snow. Also, check if your LNB is not damaged.

### 1. No Video on TV

- Check first if the product is powered on and in operation mode.
- Check if the video cable is properly connected between TV and STB.
- Check if the satellite cable is properly connected to STB.
- Check if the selected channel is currently on air.
- Check if the selected channel is encrypted and if you have a corresponding access smartcard.

### 2. Problem with audio quality

- Check if your audio cable is connected correctly.
- Check the volume level of your TV and the product.
- Check if the product or TV is on mute.
- Check the audio option if it is correctly selected for the program that you are currently watching.

### 3. Remote control problem

- Check if the batteries are correctly mounted.
- If your remote control has been used for long, change the batteries.
- Point the remote control directly toward the product.
- Make sure that nothing blocks the front panel display.

### 4. Channel search problem

- Make sure if tuner configurations are all correctly made.
- Check if the antenna cable(s) are properly connected.