



DVB

DIGITAL TERRESTRIAL RECEIVER

ESR-T121

INSTRUCTION MANUAL

CONTENT

| | |
|-------------------------|----|
| Safety Instruction..... | 1 |
| Front Panel..... | 2 |
| Rear Panel..... | 2 |
| Remote controller..... | 3 |
| System Connection..... | 5 |
| Power On..... | 5 |
| Menu Tree..... | 6 |
| Scan..... | 7 |
| Setting..... | 8 |
| Channel..... | 13 |
| Favorite..... | 13 |
| EPG..... | 14 |
| Specification..... | 15 |

SAFETY INSTRUCTION

Please read the following instructions carefully

Do not overload the following wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electrical shock

Never allow liquids, spray or other materials to come into contact with the inside of the STB.

Unplug the STB from the wall outlet before cleaning.

Use a soft cloth and a mild solution of washing-up liquid to clean the exterior of the STB.

Allow clear space around the STB for sufficient ventilation.

Do not use the STB where it is exposed to direct sunlight or near a heater.

Never stack other electronic equipment on top of the STB.

Locate the STB indoor place properly to prevent lightening, raining and direct sunlight.

Do not use any attachment that are not recommended as these may cause hazards or damage the equipment.

Do not connect or modify cables where the STB is plugged in.

The antenna signal cable must be earthed to the system earth

Do not cover the STB or place it on a unit that emits heat.



This symbol indicates "dangerous voltage" inside the product that present a risk of electric shock or personal injury



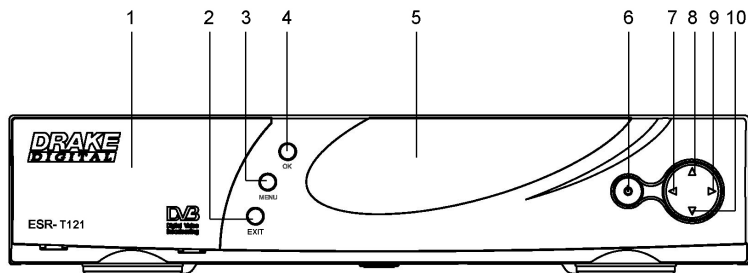
This symbol indicates important instructions accompanying the product

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

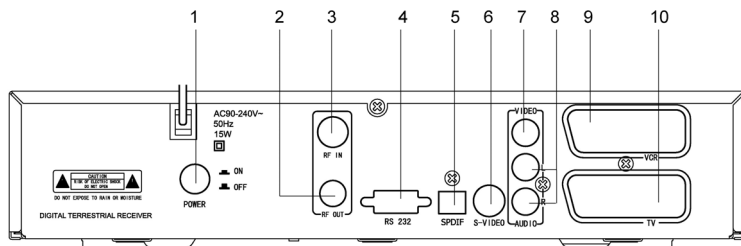
TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK)
NO USER SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

FRONT PANEL



- | | |
|------------------------------------------------|-----------------------------------|
| 1. Card slot (spare) | 6. Standby switch |
| 2. EXIT: return to the program-watching status | 7. Volume decrease/ left button |
| 3. MENU: Menu entry | 8. Channel increase/ up button |
| 4. OK: menu confirmation/ channel list | 9. Volume increase/ right button |
| 5. Remote receiver LED display window | 10. Channel decrease/ down button |

REAR PANEL



- | | |
|----------------------------------|---------------------------------|
| 1. Power switch | 6. S-VIDEO terminal |
| 2. Loop output terminal | 7. Video signal output terminal |
| 3. Antenna signal input terminal | 8. Audio signal output terminal |
| 4. Serial data interface | 9. VCR scart |
| 5. S/PDIF output terminal | 10. TV scart |

REMOTE CONTROLLER KEYS

Advice you operate each function of the STB using the button on the remote controller. Please read this section to help advance your understanding of the function of the STB



To mute the audio output



To instruct the unit to enter standby mode



Non-menu: To show the favorite type



Non-menu: to switch the STB TV Scart signal source from the STB or the VCR



Menu mode: to select or adjust the parameter
Non-menu: volume decrease/ increase



Menu mode: to move cursor up/down
Non-menu: to turn over the channel forward or backward



To return to the last grade menu interface



To show the menu instruction bar



Menu: to fill the parameter value; non-menu: to choose the channel number



Non-menu: to switch whether the caption appear or conceal



Non-menu: to show the present channel's related information



Non-menu: to shift the program from the present channel to the last one



Non-menu: to switch the scene state from active to still



LANG

Non-menu: to switch the output audio language category

TV/RAD

Non-menu: to switch the watching state from TV to Radio

OK

Non-menu mode: to show the stored channel list; menu mode: to confirm the operation

PRECAUTIONS ABOUT BATTERIES

Improper use of batteries may cause corrosion or fluid leakage. Please observe the following instructions for the safe use of batteries

1. Do not mistake the polarities of batteries
2. Never leave dead batteries in the remote control
3. Remove batteries from the remote controller if it is not going to be used for a certain time
4. Do not attempt to disassemble, short-circuit, heat, recharge or throw the batteries into the fire source
5. Do not use new batteries and old one together, or which is different type
6. Wipe away any electrolyte fluid inside the remote controller, and insert new batteries

SYSTEM CONNECTION

Connect the **AUDIO**, **VIDEO**, **SPDIF** and **Scarts** output terminals with the corresponding terminals of Television or Amplifier

Connect the antenna signal cable terminal to the **RF IN** signal terminal of the device and ensure the connection is tight

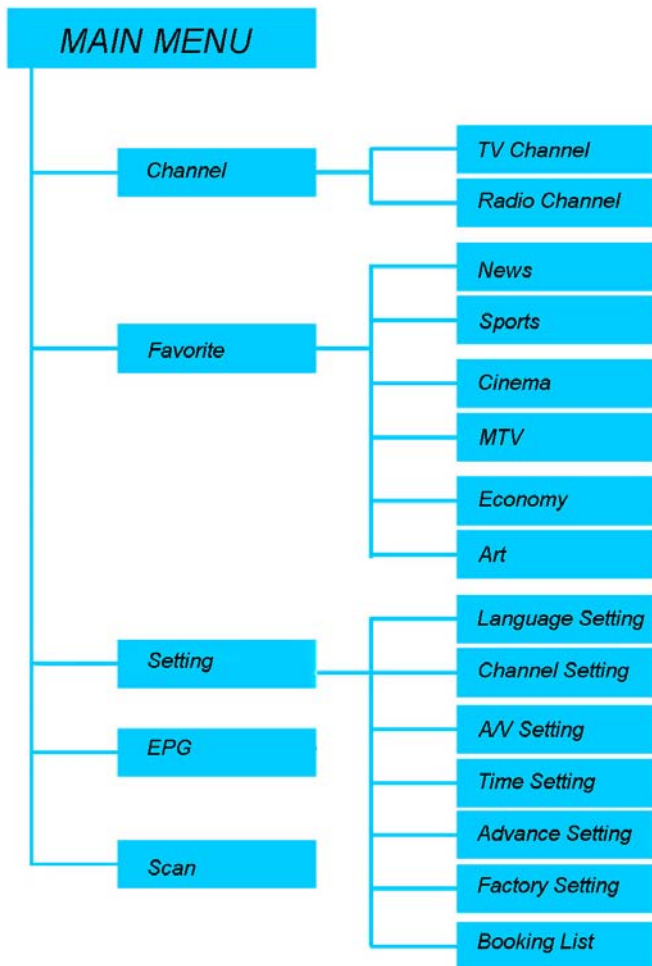
Connect the **RF OUT** signal terminal of the device to the **RF** input terminal of the Television to realize the loop watching

The **RS 232** serial data interface is used to update the software version and enrich the database of this device through box-to-box and pc-to -box

Do not tie the antenna signal cable (line) with power line in order to avoid causing the watching effect be affected

POWER ON

- Plug the machine and press its power switch to keep the "on" status, the unit enters its normal mode
- Press the **standby** key on the remote controller to the remote receiving window of the machine or the key on the set, which enters its standby mode. Re-press the key, the unit recovers to its normal
- If the channel has been locked, the lock light lights up



SCAN

Press the **MENU** key to the device and the screen shows the picture as:



Put the cursor on the **Scan** instruction and force down the **OK** key to enter the submenu interface as:



Three built-in software types of scanning: **Auto Scan**, **Manual Scan** and **NIT Scan**, Please ask for the numerical value along with the **Band width** from the local television station

Auto Scan: to start the scanning according the default frequency value of the device

Manual Scan: To start the scan directly by filling the **Channel Number** value by pressing the digital keys on the remote

NIT Scan: this type is used to take out the net information then according to which to go about the scanning

After the scanning, the device will save the scanned channel(s) automatically and return the interface to the program-watching status.



SETTING

Press the **MENU** key to spring out the instruction bar; put the cursor on the **Setting** instruction and force down the **OK** key to enter its sub interface and which shows as



Put the cursor on the first instruction and enter whose submenu, which shows as

Press the **▲▼** key to choose the object between **Menu** and **Audio**, press the **+/-** key to switch the type of language: Herein, what Audio language is chosen indicates that this language has the first priority in broadcasting



Put the cursor on the **Channel Setting** instruction and enter whose submenu

TV Channel: enter the submenu of TV Channel to show the instructions to edit the channels, therinto four instructions to edit the TV channel:

Sort: press the **red** key to spring out the instruction bar includes **name**, **Channel Number** and **encrypt**, etc. image shows as next page



Delete: pitch on one the channel name, press the **green** key to spring out a window "Sure to delete this channel?" to inquire

whether to cancel the channel, press the **OK** key to remove or the **EXIT** key to forgo

Rename: pitch on one the channel name then press the **yellow** key to show the soft-keyboard to rename the channel name. The image and usage of soft-keyboard are as follows:

Press the **yellow** key to switch the letters from capital and small letter, Use **▲▼, +/-** key to choose the letters and symbols, press the **OK** key to fill, press the **red** key to remove the input, press the **green** key to save the input to accomplish the rename

Clear: press the **blue** key to remove all the channel that have been stored in the device

Radio Channel: the same operation as above-mentioned

Put the cursor on the **A/V Setting** instruction to enter its submenu and the picture shows as

TV Shape: press the **+/-** key to choose the right Display aspect according to your monitor's actual size

Conversion: press the **+/-** key to select the suitable conversion type to fit the actual monitor size. For instance: provided that the aspect of your monitor is 4:3 type, the *fullframe* instruction is to display the image of the primary digital-dream in the proportion of 4:3 regardless of what the primary image is; the *Pan&Scan* instruction is to enlarge the image on the level direction by 4/3 of the primary picture; the instruction of *Letterbox* is to impact the image on the perpendicular direction by 3/4 of the primary picture



Standard: to choose the suitable display system

Audio Output: to choose the suitable audio system

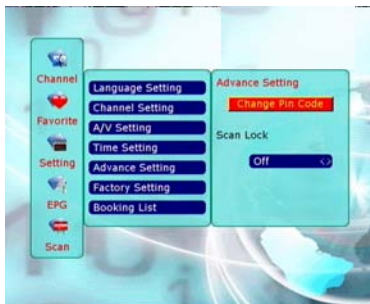
Put the cursor on the **Time Setting** instruction to enter its submenu and the picture shows as

Time zone: to select the right time zone refer to the GMT area according to the location you inhabiting

Current Time: to show the current time that sent from the local television station

Auto power off/ on: to set the auto power instructions to instruct this device when to turn on and to be standby

Use the **red key** to remove the parameter value and the **green key** to save the installation



Put the cursor on the **Advance Setting** instruction strip to enter its submenu that shows as:

Entry needs the right cipher

Enter the submenu of **Change Pin Code**, fill a group of digits and then refill which to produce the new code. If the set the status of **Scan Lock** instruction on "on" then the entry of the **Scan** instruction needs the code input (the default code is **8888**)

Put the cursor on the **Factory Setting** instruction to enter its submenu and which shows us as

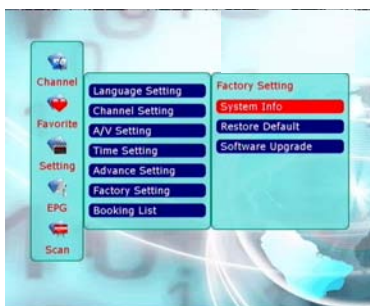


System info: to show the software version, date etc. related information

Restore default: to reset the installation. Note: all the data former your set will be cleared if you confirm the reset

Software update: to update your built-in software of the device through pc to box and box to box the two categories; the following is the operation steps of an instance:

Pc to box: connect the serial interfaces of pc and box with serial cable and make sure that the two interfaces are accordant; dbclick the



*.exe program upgrade.exe

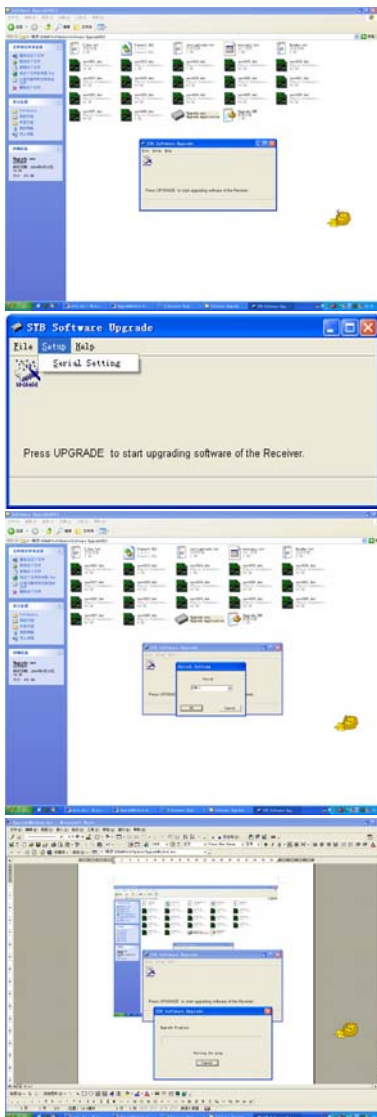
Open the setup menu and select the correct serial interface that using on your computer (as the illustration serial COM 1 is illustrated);

Press the OK character to pitch on the COM1

Force down the icon **UPGRADE** to spring out the window with words " upgrade progress"

Turn off the box and then turn it on to choose the pc to box instruction to start the upgrade and the upgrading program will be downloaded to the box

Restart the box to complete the upgrading.



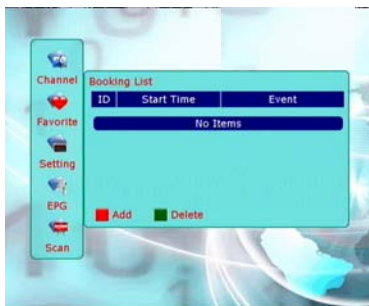
Box to box: do not connect the serial cable firstly. To pitch on the instruction of **Box to Box** in the menu of **Software Upgrade**, define one the box that has higher version software as the master and the other as the slave; to display the **Master Box** phrase on the master box, press the **OK** key to wait until the monitor display **"downloading..."** character, the same operation on the slave box to show the **"Receiving..."** character; then to connect the serial cable well to download the software and the screen shows the pace of download; after download, the monitor of the slave box shows **"Burning..."** ; after burning, the slave monitor turns into darkness; the upgrade has been accomplished

Note: The two descriptions above-mentioned just belong to the samples. Serve for the reference only. Attention that the process of upgrade does not allow the power cutting or will damage the STB

Put the cursor on the **Booking List** instruction to enter its window and which shows us as:

Press the **red key** to add one the item and meanwhile spring out the window as

Fill the order number of channel, date and time then press the **green key** to save the set
The set channel will be enjoyed when the installed time is up



CHANNEL

Put the cursor on the **Channel** instruction strip to enter its submenu

TV Channel: press the **OK** key to enter the sub interface to show the TV channel list, use the **▲▼** key to pitch on one the channel item, force down the **red** key to add one the “**lock**” symbol precede the item and repress the key to release the symbol

The appearance of the symbol shows us that the item has been locked and must input the right code to decode if you want to watch it



Radio Channel: the same operation as above -mentioned

FAVORITE

Put the cursor on the **Favorite** instruction strip to enter its submenu to list the favorite types

Use the **▲▼** key to move the cursor, press the **red** key to add the “**heart**” symbol precede the category name which include **News, Sports, Cinema, MTV, Economy and Art**

The type with the “**heart**” symbol means that when you press the **FAV** key to the device, the channel name(s) spring on the screen are belong to this type

Press the **OK** key to enter the submenu of the reddening type name, for example the **News** one, press the **red** key to show the channel list table, pitch on one the channel name and force down the **OK** key to add the channel name to **News** bar; press the **EXIT** key to return the cursor to the **News** bar, press the **green** key to spring out a window “Delete the Item?”, force down the **OK** key to remove or **EXIT** key to abandon; press the **yellow** key to show up the types list schedule according to which we sort the channel name, choose one object and press the **OK** key to sort the channel names; press the **blue** key to show the sentence “Add current



channel to this favorite?", press the **OK** key to add the present channel to the **News** type or the **EXIT** key to cancel

EPG

To show the related information of the playing channel program

Press the **red** key to show the current information title and instead the **green** key to show the next information title
Press the **yellow** key to read the particulars
Press the **blue** key to show the weekly information of the reddening channel name



SPECIFICATION

Tuner

| | |
|--------------------------|-----------------------------------------------|
| Input Frequency | UHF 470 MHz - 862 MHz VHF 174 MHz -230 MHz |
| RF Input Level | -78dBm ~ -20dBm (75Ω) |
| RF Input connector | IEC type Female |
| RF Output connector | IEC type Male |
| Nominal input impedance | 75 ohm |
| Channel selection system | Electronic tuning, PLL synthesizer |
| Step frequency | 166.67KHz |

Channel Decode

| | |
|--------------|-------|
| Demodulation | COFDM |
|--------------|-------|

Video

| | |
|-----------------|--------------------------|
| Profile Level | MPEG-II <i>MP@ML</i> |
| Output System | NTSC / PAL |
| Output Terminal | RCA, TV Scart, VCR scart |
| Output Level | 1Vp-p (75Ω) (RCA) |

Audio

| | |
|----------------|-----------------------------|
| Audio Decoding | MPEG-II layer I & II |
| Freq response | 20Hz ~ 20kHz |
| Output Level | Adjustable (600Ω unbalance) |

Workina condition

| | |
|----------------------|-------------------------|
| Power supply voltage | AC: 90-240V 50/60 Hz |
| Power consumption | About 15W |
| Temperature | 0°C - 40°C |
| Humidity | 10% -90% |
| Size | 300 X 210 X 64mm(L/W/H) |
| Weight | Approx. 2.4Kg |

PACKING LIST

| ITEMS | Qty. | REMARK |
|------------------------------|------|--------|
| DIGITAL TERRESTRIAL RECEIVER | 1 | |
| INSTRUCTION MANUAL | 1 | |
| REMOTE CONTROL | 1 | |
| AV CABLE | 1 | |

NOTE: Any changes will not be noticed in advance. Our company reserves the rights for the explanation of the discrepancy