DVB

DIGITAL SATELLITE RECEIVER

DRAKE
DIGITAL

ESR-D103

INSTRUCTION MANUAL

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 apace 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 LNB cable must be earthed to the system earth for the satellite dish.

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
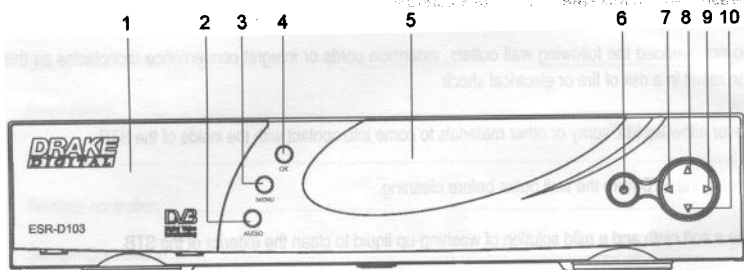
CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

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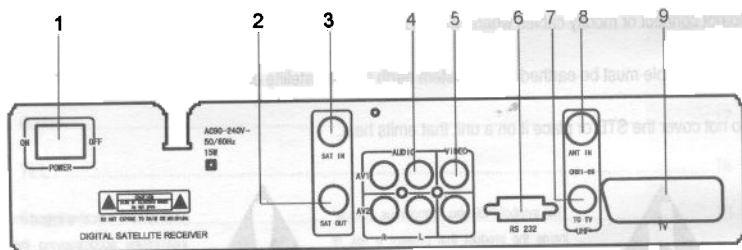DO NOT REMOVE COVER （OR BACK）
NO USER SERVICEABLE PARTS INSIDS
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

FRONT PANEL

1. Card slot (spare)
2. AUDIO: choose sound channel
3. MENU: Menu entry/ exit button
4. OK: menu confirmation/ channel list
5. Remote receiver
   LED display window

6. Standby switch
7. Volume decrease/ left button
8. Channel increase/ up button
9. Volume increase/ right button
10. Channel decrease/ down button

REAR PANEL

1. Power switch
2. Satellite signal output terminal
3. Satellite signal input terminal
4. Audio signal output terminal
5. Video signal output terminal

6. Serial data interface
7. CATV signal output terminal
8. CATV signal input terminal
9. TV scart

REMOTE CONTROLLER KEYS

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

MUTE — Non-menu: to mute the audio output

(power) — To instruct the unit to enter standby mode

FAV — Non-menu: to select the favorite installed channel

SAT — Non-menu: to show satellite list

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

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

EXIT — To return to the non-menu (program-watching mode)

MENU — To enter the **Main Menu** interface or return to the last grade interface

Number0-9 — Ln non-menu: to choose the channel

SCAN — To show the **Select Satellite** interface

ZOOM — Non-menu: Press once, press +/-, ? /? to move the selected area, press the **OK** key to magnify the area and press the key once more to recover the normal

EPG — Non-menu: to show the EPG Infor

(brightness icon) — Non-menu: to show the image's brightness, contrast, color and modify

AUDIO — Non-menu: To edit the audio channel

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

TIMER — To enter the timer edits function

T/R — To select the TV or radio mode

OK — Non-menu: to show the stored channel list, menu mode: to confirm the operation

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

GAME — Non-menu: to enter **Game** interface

STILL — Non-menu: to pause the active image and press twice recover the active image

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 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**, and **Scart** output terminals with the corresponding terminals of TV set.

Adjust the direction of the dish according to the antenna signal level display on the screen.

Connect **F** terminal to both ends of the cable, one end to **LNB** of satellite antenna and the other end to "**SAT IN**" input terminal of this unit.

Please make sure that the **F** terminals are connected well.

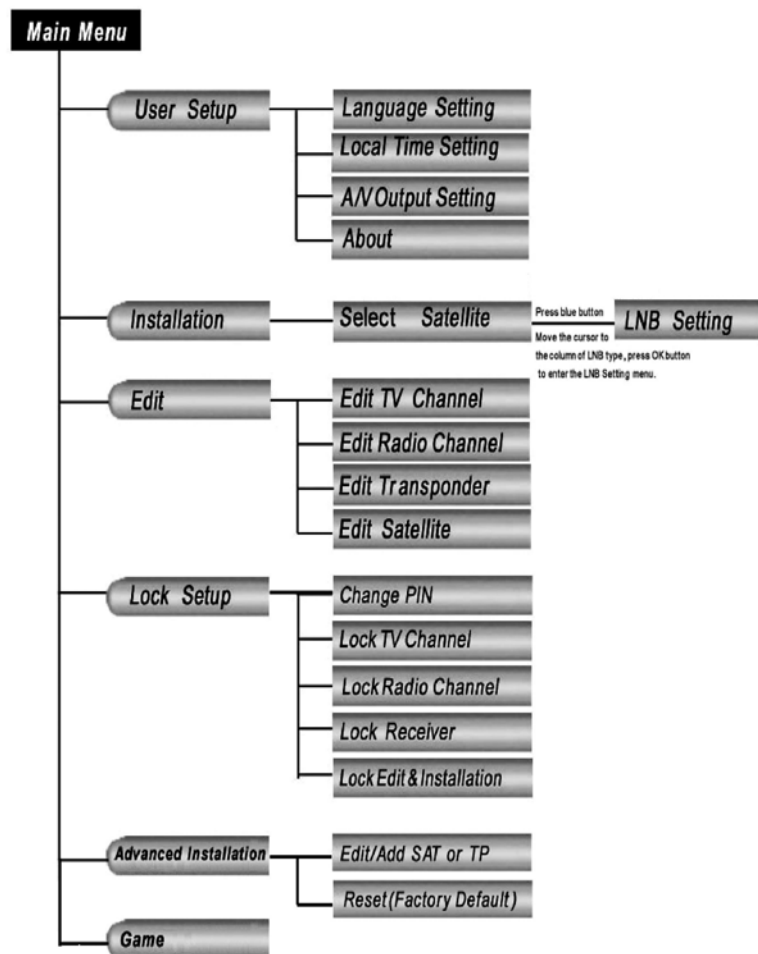Do not tie antenna cable with power line.

POWER ON

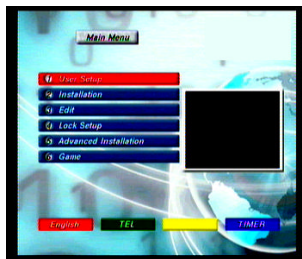- Plug the machine and press its power switch to keep the "**1**" status, the unit enters its normal mode
- Press the **standby** key on the remote controller to the remote receiving window of the machine or the key on the set, which enters its standby mode and the "**standby**" character appears on the screen for seconds. Re-press the key, the unit recovers to its normal
- If the channel has been locked, the lock light lights up

Main Menu

- **User Setup**
  - Language Setting
  - Local Time Setting
  - A/V Output Setting
  - About

- **Installation**
  - Select Satellite
    - Press blue button Move the cursor to the column of LNB type, press OK button to enter the LNB Setting menu. → **LNB Setting**

- **Edit**
  - Edit TV Channel
  - Edit Radio Channel
  - Edit Transponder
  - Edit Satellite

- **Lock Setup**
  - Change PIN
  - Lock TV Channel
  - Lock Radio Channel
  - Lock Receiver
  - Lock Edit & Installation

- **Advanced Installation**
  - Edit/Add SAT or TP
  - Reset (Factory Default)

- **Game**

INSTALLATION

Press the **MENU** key in non-menu mode and the image shows as
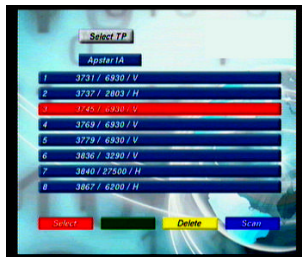

Move the cursor to the **Installation** menu strip and press the **OK key**, the image shows as:

Press the **OK key** to enter the lighting satellite name and the interface shows its transponders as:

Press the **red key** and   key to select the transponder or the transponders and then scan, press the **blue key** to scan the channels of which in the **Satellite** interface (next page)

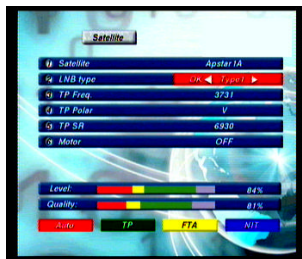Press the **yellow key** to delete the lighting transponder strip

Press the **blue key** to enter the **Satellite** menu interface (next page):

Press the **MENU** key to return to the **Select Satellite** interface, press the **red key** and   key to select one or more the satellites and press the **blue key** to enter the **Satellite** interface (right side) to scan the chosen satellite or satellites

Move the cursor to the **Satellite** strip, press the +/- key to select the chosen satellite (when have selected more than one satellite in **Select Satellite** interface) name which above-mentioned

Move the cursor to the **LNB type** strip, therein, eight types, press the +/- key to select the suitable one or, press the **OK key** to enter **LNB setting** interface, the image is:

Light the **LNB index (1.8)** to choose one type name (for example, **Type** 1 is as indication)

Light the **LNB Freq. Low** and **LNB Freq. High** menu strip, press the +/- key to install the parameter by referring to the frequency value of tuner on the antenna or the number keys to input the digits directly, finish installing, force down the **OK key** to save the installation
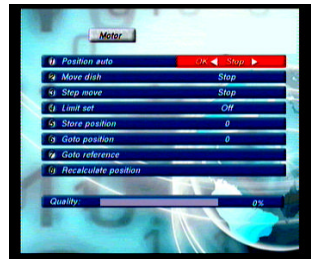
Light the **DiSEqC** strip to select the port through pressing the +/- key; the **DiSEqC** parameter of the port must be consistent with the actual input terminal of the present satellite antenna

Attention:
LNB Power: Single machine situation: keep the status on "**on**"
　　　　　　　　Loop situation: keep the status of the machine
　　　　　　　　　　　　　which connected the satellite sig
　　　　　　　　　　　　　-nal on the "**on**" and others on
　　　　　　　　　　　　　the "**off**"

Press the **MENU** key to return the interface to the **Satellite** one as above, light the **TP Freq.,** press the +/- key to choose the sui -table parameter of **TP Freq., TP Polar, TP SR** or, press the digi -tal keys to input the correct value which what we according to are either **Quality** or **Level** strips show together a certain length

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and whether the lock light lights up simultaneously.
Light the sixth strip; press the +/- key to switch the status between "on" and "off", press the **OK key** to enter the **motor** interface when the "on" status is chosen and the interface shows as

Light the seventh instruction strip; press the **OK key** to spring out a inquire window with a sentence **"ARE YOU SURE?"** Use pressing the **red key** to confirm and the **green one** to give up

Light the fourth instruction strip to press the +/- key to choose one of the three instructions: **Off, West,** and **East**. Press the **OK key** to confirm. Therein:

1. **West**: to limit the westward limit of the dish-adjustment
2. **East**: to limit the eastward limit of the dish-adjustment
3. **Off**: to give up the limit set

Light the **Position auto**, **Move dish**, **Step Move**; the functions of these three instructions are to adjust the direction and angle of dish, hereinto:

1. **Position auto**: the drive instruction will not be stopped until to press the **OK key**
2. **Move dish**: to drive the dish to adjust a relative biggish range
3. **Step Move** instruction is to modify a relative minor range.

What we according to of adjustment is the **Quality** strip show its longest length, in which:

=>**E**: to drive the dish to the east direction
=>**W**: to drive the dish to the west direction
=>**Stop**: to stop the adjustment

After adjustment

1. Light the fifth instruction strip **Store position**, force down the number keys to input the adjusted situation (position) code and then press the **OK key** to save the code
2. Light the sixth instruction strip **Goto position**, use input the code value to drive the dish to the situation where has saved

The function of eighth instruction strip **Recalculate position** is to send an instruction to the motor, and calculate the

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suitable situation by itself

Press the **MENU** key to return to the **Satellite** interface to start the scan, there four modes to search the satellite channels, they are: **Auto, TP, FTA, NIT**. In which:

Auto: to scan all the channels in the selected satellite name.

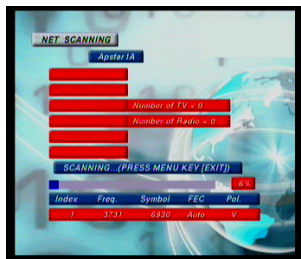**TP**: to scan the channels which in the chosen transponder

FTA: to scan the channels, which are, belong to the free to air

NIT: to scan the channels, which are, belong to the network

For example: press the **blue key** to search the FTA channels and the image shows as:

Finish scanning, if the channel has been searched then the machine will auto save all the scanned channels and turn the image to program-watching mode, or, return to the **Select Satellite** interface

USER SETUP

Force down the **MENU** key on program-watching mode, light and press the **User Setup** strip, the image shows:

LANGUAGE SETTING

Light the **Language Setting** strip and press the **OK key** to enter its sub-menu, the picture shows

Language Setting: press the +/- key to select the appropriate language. Therein, **Audio Language**: what language is chosen means which is used for owning the priority in broadcasting. The function which rest with the support of satellite service

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LOCAL TIME SETTING

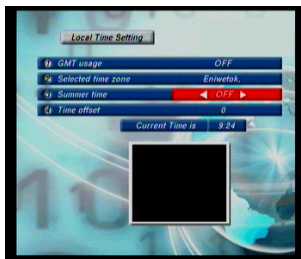Light the **Local Time Setting** and enters its sub-menu:

GMT: the Greenwich Meantime-central Europe time

Selected time zone: to choose the appropriate location

Summer time: daylight saving time

Time offset: to modify the time
What the **Current Time** appears is the synchro-time which
is sent by the satellite signal

A/V OUTPUT SETTING
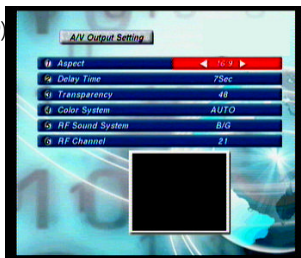
Light the **A/V Output Setting** menu strip and enters
Aspect: use the +/- key to select the window style (4:3; 16:9)
Delay Time: use the +/- key to select 2-7second, always
etc.; the magnitude of value decide the length of time of
channel info strip stay on the screen when switch the
channel.
Always: the instruction means the info strip will stay on the
screen until press the **EXIT** key when switching
Transparency: use the +/- key to modify the value and the
magnitude of it decide the transparency degree of menu
Light the **About** menu strip and press the **OK key** to enter
its sub-menu, the interface shows the model and software
of the machine:

EDIT

Return to the **Main Menu** interface then light the **Edit**
menu strip and force down, the image shows as:
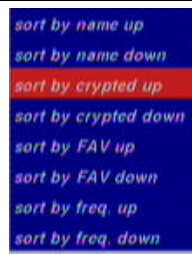
EDIT TV CHANNEL

Light **Edit TV Channel** and enters its interface:

Press the **green key** repeatedly to change the mode and which will be shown on the yellow strip correspondingly, the status includes**: MOVE, FAVOR1-4, SORT, DELETE**

1. **Move**: when the yellow strip shows the "move" character, press the **yellow key**, press the _____ key to move the channel name strip to the suitable location and press the **yellow key** once more to release.

2. **Favor**: when the yellow strip shows "favor1… favor4" character, press the **yellow key** and press the _____ key to add the "heart" symbol on the end of channel name strip, the symbol shows the channel has been added in the present favor mode. The same operation in turn to finish the rest of three favor modes

3. **Delete**: to remove the chosen channel name, press the **yellow key** when the yellow strip shows the "delete" word, the window with "**YES**" and "**NO**" springs out, press the **red key** once more to delete or **green key** to give up

4. **Sort**: when the yellow strip shows the "sort" word, press the **yellow key**, the list which what we according to sort the channels spring out, press the _____ key to choose one suitable instruction to complete the sorting

Force down the **red key** to switch the list mode between TV and radio

Force down the **blue key** to show the satellite name list

EDIT RADIO CHANNEL
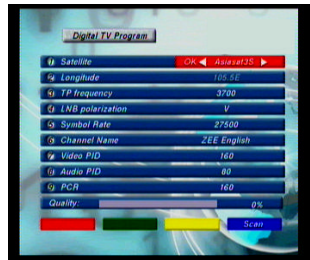
The same operation as above-mentioned

EDIT RADIO CHANNEL

Return to the **Edit** interface and enter the **Edit Satellite** interface the image shows:

Delete: press the **red key**, the window with "**YES**" and "**NO**" Instructions springs out, force down the **red key** again to delete the selected satellite name and the green one to give up

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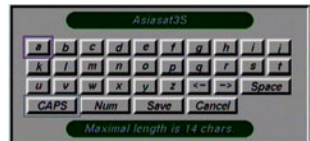**Change**: press the **yellow key**, the picture shows:

Light the **Satellite** strip and press the **OK key** to enter the
soft-keyboard interface:

Use the   , +/- key to move the cursor and the **OK key**
to confirm the input
Use **CAPS** instruction to switch the letter state between
capital and miniscule
Use **NUM** instruction to switch the mode from letter to digit
and special symbol
After inputting, move the cursor to the **Save** instruction and
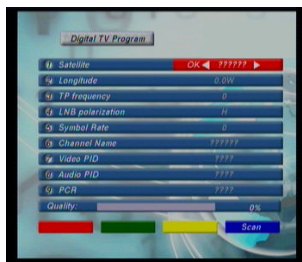press the **OK key** to save the installation

Light the **TP frequency**, press the +/- key to choose the appropr
-iate stored transponder parameter of **TP frequency, LNB pol
-arization, Symbol Rate** which belong to the selected satellite
or, directly, press the **digital keys** to complete the value input of
TP frequency, LNB polarization, Symbol Rate

Light the **Channel Name** menu strip; press the +/- key to choose
the channel's name which belong to the chosen transponder,
press the **OK key** to appear the **soft-keyboard** to rename the

channel name which operation just as above-mentioned about **soft-keyboard** introduction. Light the **Video PID, Audio PID,** and **PCR** instruction strip and press the digital keys to input the correct value,

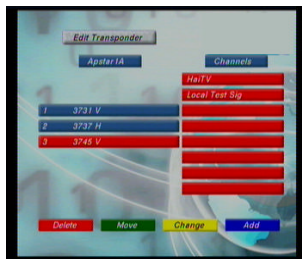**Add**: return to the **Edit Satellite** interface and press the **blue key**, the picture shows as:

Press the **OK key** to spring out the **soft-keyboard** to define the satellite name, finish the definition, input one-group parameter of **TP frequency, LNB polarization and Symbol Rate**, press the **OK key** to save the installation and the new satellite will be added meanwhile. Check the added satellite in **Select Satellite** menu interface pls

EDIT TRANSPONDER

Return the interface to the **Edit** and light the **Edit Transponder** menu strip, the image shows

Delete: press the ⬆⬇ key to move the cursor up or down, press the **red key** and the window with "**YES**" and "**NO**" springs out, press the **red key** to delete it and the **green one** to exit
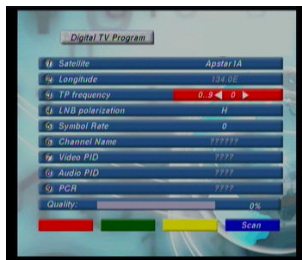
Press the **green key** to add the "up/ down" symbol on the end of the transponder parameter strip turn yellow, press the ⬆⬇ key to move the strip to the suitable situation and release

Change: refer to the relative introduction segment of **Edit Sat -ellite**

Add: return to the **Edit Transponder** and force down the **blue key** to enter the image:

Press the **digital keys** to finish the input of parameter of **TP frequency, LNB polarization, Symbol Rate,** press **the OK key** to save the new added transponder and which can be detected in the interface of **Select Transponder** of **Select Satellite**
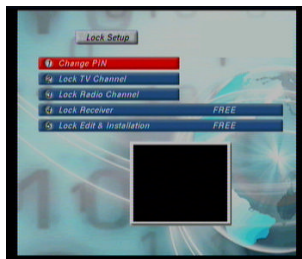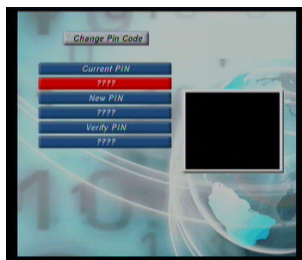
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Return the interface to the **Main Menu**, light the **Lock Setup** menu strip and the image shows:
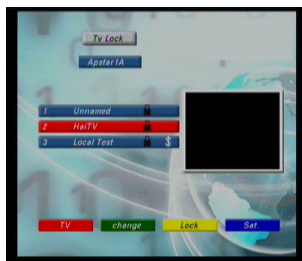

Light the **Change PIN** instruction strip and press the **OK key** to enter its interface

To realize create one new private code by this instruction: the default or primary code is "**0000**". First, input the correct current code and then the new one and verify it. The verified code will become the current one and the information window with "**password changed!**" phrase flash on the screen for seconds; the information window shows the operation is successful

Lock TV Channel: return the **Lock Setup** interface and light the **Lock TV Channel** instruction, the image shows

Press the **OK key** to enter its interface which is similar with the **Edit TV Channel,** press the   key to select the channel name which will be locked and press the **yellow key** to add one "lock" symbol on the end of installing channel name strip. Just as the right side image indicates. Press the **yellow key** once more to unlock the lock installation

Lock Radio Channel: as same as above-mentioned

Lock Receiver: move the cursor to the forth instruction strip, press the +/- key to switch the receiver mode between locked and free. When the machine has been locked, start machine

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from standby or power-on status needs the code input

Lock Edit & Installation: move the cursor to the fifth instructi
-on strip, press the +/- key to switch the receiver mode betwee
-n locked and free, when the mode is locked, enter the sub-m
-enu of **Installation, Edit, etc.** need the code input

ADVANCED SETTING

Return to the **Main Menu** interface and light the **Advanced
Installation** menu, press the **OK key** to enter its sub-menu
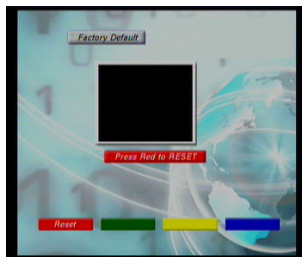and the image shows:

The relative introduction of **Edit/Add SAT/TP** refer to the
relative segment in **EDIT**

Move the cursor to the **Reset (Factory Default)** and press
the **OK key**, the image shows as
Press the **red key** to complete the **Reset** instruction
Attention: all the installation and parameter former set will
be cleared completely

TIMER

Press the **blue key** in either non-menu or **Main Menu** interface, the interface enters **TIMER** function, the image shows as

The strip on the top shows the present date and time which are sent by satellite

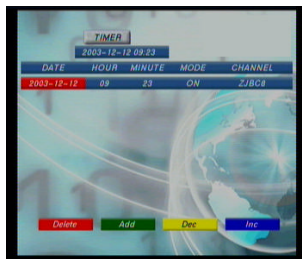Press the **digital keys** directly to modify the showing date and time, hereinto:

Input 12 digits is to modify either the date or the time
Input 8 digits is to modify the date only
(All the digits are 0 is useless)

The **red key** is to delete the timer instruction strip, and instead, the **green key** is to add one. Press the   , +/- key to move the cursor up/ down, press the **yellow** and **blue** keys to adjust the parameter of the timer instruction. Thereinto: mod->mode;
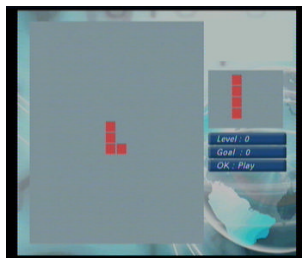
A-> audio

GAME

Press the **GAME** key in program-watching state to enter the game playing status, their three kinds of game to provide for entertainment: **Snake, Gobang, Tetris**
Use pressing the   key to select the game strip and **OK key** to enter which interface

For example, choose the Tetris:

Press the   key to adjust the game level and the highest grade is 7, then press the OK key to enter playing interface

Press   key to deform the shape, + key to move the shape to the right direction , the - key to the left, the   key to accelerate the falling and the **MENU** key to pause the action
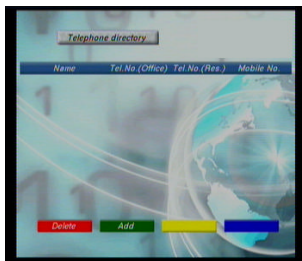
TELEPHONE DIRECTORY

Either in non-menu mode to press the **TEL key** or **MAIN MENU** to press the **green key,** the interface enters the **Telephone directory** one

Press the **green key** to add the telephone list, and instead the **red key** to remove which.

Press the +/-, key to redden the item of the telephone list which as **Name, Tel.No.(Office), Tel.No.(Res), Mobile No.** to edit, Therein:

1. Use the **soft-keyboard** to complete the name definition
2. Press the **digital keys** to complete input of the rest three items

FEATURE

Advanced Feature

Multi-Mode auto search satellite programs (AUTO/FTA/NIT/TP)
Maximum storage 3000 Channels, 2000 Transponders, 150 Satellites
4 users defined Favorite groups with user-friendly editing functions
Teletext by VBI insertion
Real-time antenna signal strength indicator
Multi-satellite/transponder searching at one time
ZOOM / EPG / Recall / Timer / Still Picture

Basic Feature

Free-To-Air Compatible
High Sensitiveness, Low Eb/No Tuner
4-digital 7-segment LED
Fully DVB-S/MPEG2 Compliant
SCPC/MCPC, C-band/Ku-band Compatible
Multi-Language OSD
Automatic PAL / NTSC Detection
Satellite signal loop through
RF output, RF in, AV output, TV Scart
Convenient software up-grade (DFU&DFA) - PC to Receiver, Receiver to Receiver
256 color graphic menu
Powerful edit abilities (rename, add, delete, move) channels, transponders & satellites edit
Timer function
Editable TEL Directory
Selectable Three kinds of game

Note:
Rest with the availability of satellite service

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SPECIFICATION

Tuner

Input Frequency	950 ~ 2,150 MHz
Signal Level	-25dBm ~ -65dBm (75Ω)
LNB Control	DiSEqC1.0/ 22KHz
LNB Power & Polarization	13V/18V (Max. 400mA)

Channel Decode

Demodulation	QPSK (SCPC, MCPC)
Input Symbol Rate	2~30MSPS

Video

Profile Level	MPEG-II *MP@ ML*
Output System	NTSC / PAL
Output Terminal	RCA, TV Scart
Output Level	1Vp-p (75Ω) (RCA)

Audio

Audio Decoding	MPEG-II layer I & II
Sampling Rate	32/44.1/48Khz
Freq response	20Hz ~ 20kHz
Output Level	Adjustable (600Ω unbalance)

Working condition

Power supply voltage	AC: 90~240/250V 50/60 Hz
Power consumption	About 15W
Temperature	0 ~ 40
Humidity	10% ~90%
Size	370 X 242 X 70mm(L/W/H)
Weight	Approx. 2.4Kg