
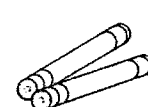
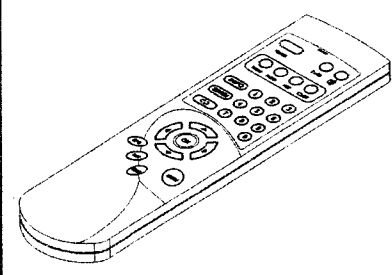
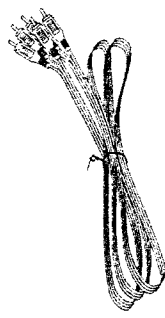


# PREFACE

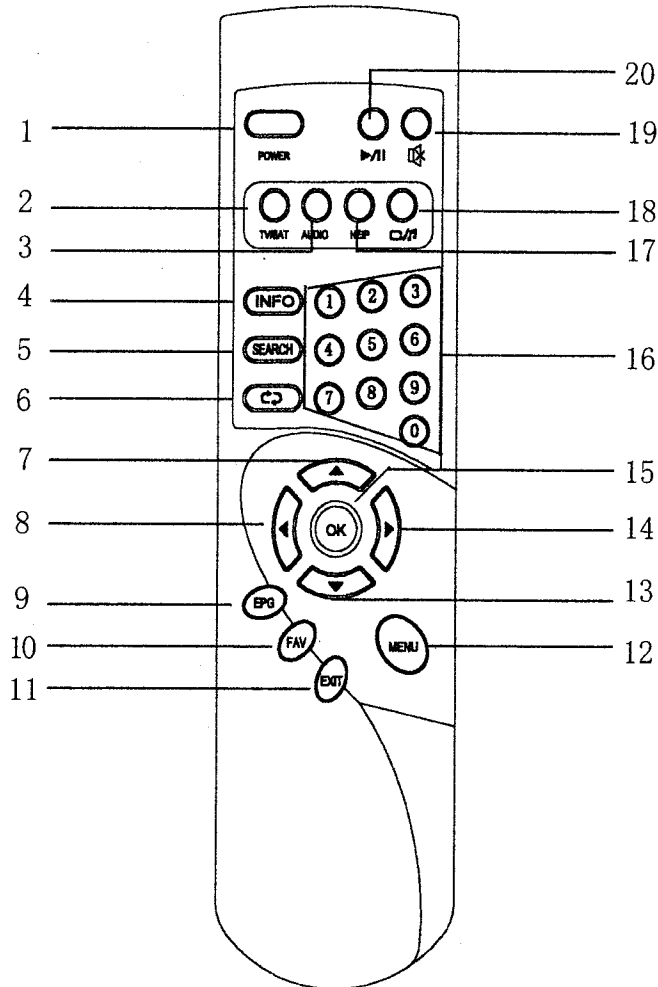
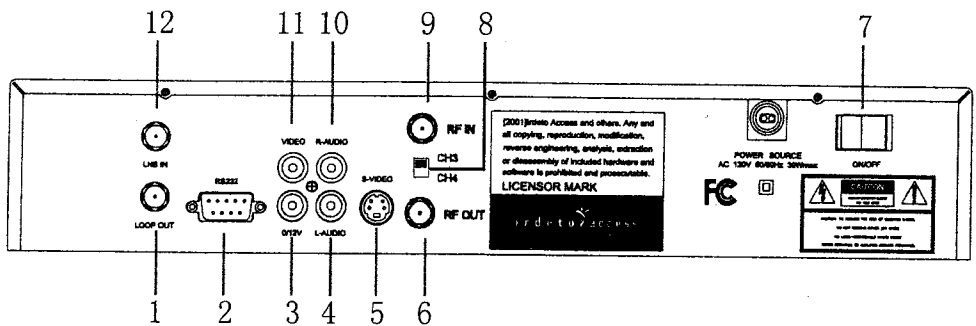
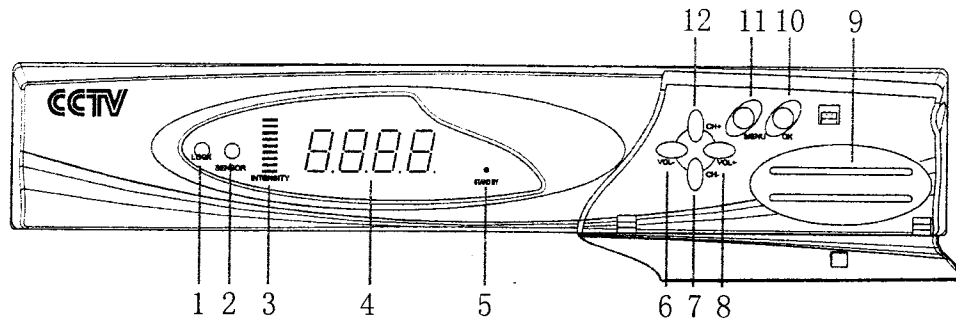
Congratulation!

Thank you for purchasing CDVB2000 Digital Satellite Receiver, which can transfer digital satellite signal into high quality video and audio signal for entertainment. For the sake of this receiver's powerful function, please read this user's manual carefully before starting any operation of this unit.

Please make sure to check the following accessories are packed with the receiver together.

	User's manual : 1
	SIZE AAA batteries : 2
	RCU : 1
	Video and audio cable : 1

# HARDWARE DESCRIPTION



# HARDWARE DESCRIPTION

## Front Panel

1	Signal Lock Lamp:	To reflect the lock status
2	Remoter Sensor:	To detect infrared signal from remoter
3	Signal Strength Indicator:	To reflect the signal strength
4	Display(4-Digit/7-Segment):	To indicate operating status of the receiver
5	Stand By:	To reflect the ready status
6	VOL - :	To decrease volume
7	CH▼ :	To change channel or to move cursor in the menu
8	VOL+ :	To increase volume
9	Smart Card Slot:	To insert Smart Card
10	OK:	To see program list or to confirm in the menu
11	MENU:	To enter into <b>System Main Menu</b>
12	CH▲ :	To change channel or to move cursor in the menu




## Rear Panel

1	LOOP OUT:	IF loop through output from digital tuner
2	RS-232:	Serial port to upgrade software
3	0/12V:	To connect 12V to an external 0V/12V switch
4	L-AUDIO:	Left audio output
5	S-VIDEO:	S-VIDEO output to TV or VCR
6	RF OUT:	Radio Frequency output
7	ON/OFF:	Main power switch
8	CH3/CH4:	RF output channel switch
9	RF IN:	Radio Frequency input
10	R-AUDIO:	Right audio output
11	VIDEO:	CVBS output to TV
12	LNB IN :	IF input from LNB to digital tuner


## Remote Control Unit

1	POWER :	To switch power (If users turn off the receiver by pressing "power" button on the RCU ,please press "power" button to wake it up When power on again.)
2	TV/SAT :	Reserved Key
3	AUDIO:	To set audio mode
4	INFO :	To see channel information
5	SEARCH :	To view Add program menu
6	↶ :	To return to previous channel
7	▲ :	To increase channel number or to move cursor up
8	◀ :	To decrease volume or to move cursor left
9	EPG:	To view electronic program guide
10	FAV:	Reserved key
11	EXIT:	To cancel or save your setting or exit from the menu
12	MENU:	To enter into the <b>System Main Menu</b>
13	▼ :	To decrease channel number or to move cursor down
14	▶ :	To increase volume or to move cursor right

# HARDWARE DESCRIPTION

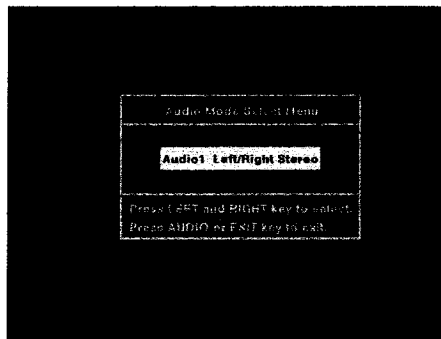
15	OK :	To see program list or to confirm in the menu
16	0 -9:	To select channel or to input data
17	HELP:	Reserved Key
18	 :	To alter the channel between TV and Radio
19	 :	To mute the audio output
20	 :	To still the picture in TV mode


## For more information of the keys of RCU, please read this part before operation:

- Under the main menu, press  to alter the language directly. It can not be changed under other sub-menu.
- You can press numeric keys 1-9 to enter the sub-menu directly.
- Current program information will show on the bottom of the screen after pressing **INFO** key.



**NOTE :** Under non-menu mode, press **AUDIO** directly. You will see the following figure :

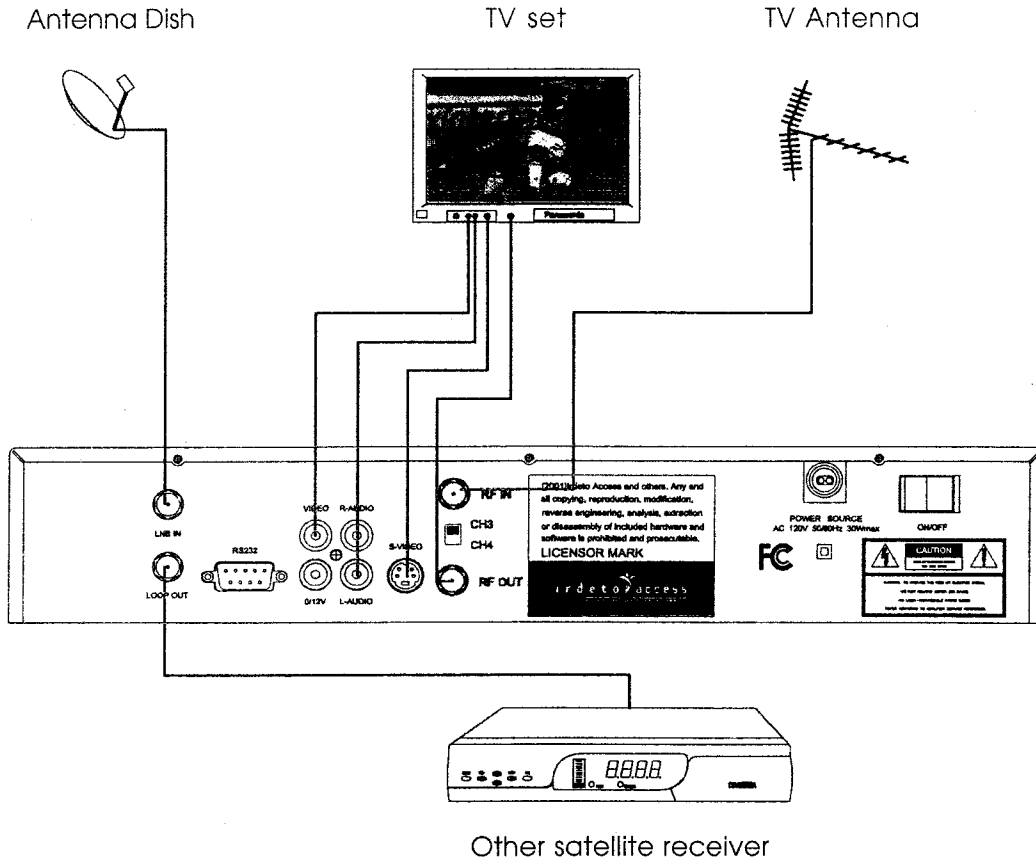


- Move cursor to select the audio channel you want with using .
- Press **EXIT** or **AUDIO** to complete the setting.

# SYSTEM CONNECTION



The following figure shows cable connections required for satellite LNB, TV and other related electrical equipment. If you need any assistance for specific equipment connection, please contact your distributor.



**NOTE:** This connection figure is for reference only. Connectors on the rear panel may be in different places or even be omitted due to different receiver models. Details may refer to the hardware description on section 1.

# STB STARTUP AND MAIN MENU

**STEP 1: Check System Connection**

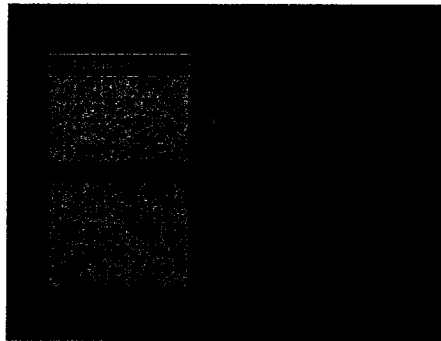
Check your receiver is correctly installed and connected to satellite antenna LNB, A/V equipment and the power socket, referring to system connection.

**STEP 2: Power on Receiver**

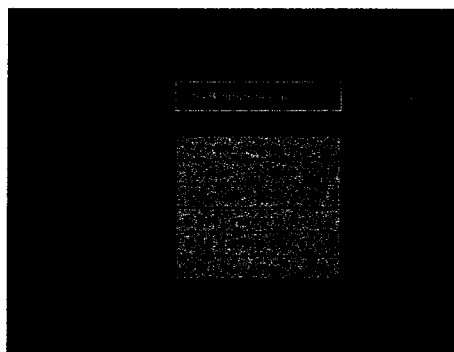
Turn on power switch on the rear panel of your receiver.

**STEP 3: Choose TV or Radio channel**

1. To see TV channel list, press **OK** at non-menu mode. You will see the **TV channel List** as shown in the following figure. Using **▲▼** to select the channel you want and press **OK**. Furthermore, **◀▶** can be used for fast page up and down. **EXIT** for ending the operation.
2. To see **Radio Channel List**, press **Ⓜ** button on the remote control. Other operation will be the same as above.



Press **MENU**, and the **STB Main Menu** will appear as shown in the following figure.



# STB STARTUP AND MAIN MENU

STB Main Menu Consists of :

TV Channels	TV Program List
Radio Channels	Radio Program List
Set Programs	Edit and Add Programs, Modify LNB Frequency, Parameters, Default Value
System Config	Set System Parameters
Set Password	System Password, Channel Password
RF Setting	Set RF output channel by CH3/CH4 switch
IRD Message	CA, Loader, IRD Status, Program, Mail and Announcement Infor

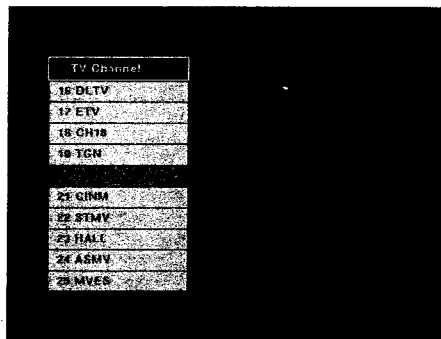
- Press ▲▼ to move cursor, and highlight the item you want to operate. Press **OK** to enter the sub-menu.

# GUIDE OF MAIN MENU

## 1. TV Channels



Select **TV channels** under **Main Menu** and press **OK**. You will see the sub-menu as shown in the following figure :



- To choose a TV program, press **▲▼** and **OK**.



### **NOTE: 1. Choose TV Channel**

**Method One:** Select **TV Channels** under the **Main Menu**, and press **OK** to confirm. You can choose the channel that you like with using **▲▼**.

**Method Two:** Under non-menu mode, press **OK** directly to pop out **TV channel List** and to select.

**Method Three:** Under non-menu mode, press numeric keys 0-9 directly on remote control continuously.

**Method Four:** Under non-menu mode, press **▲▼** to plus or minus channels one by one.

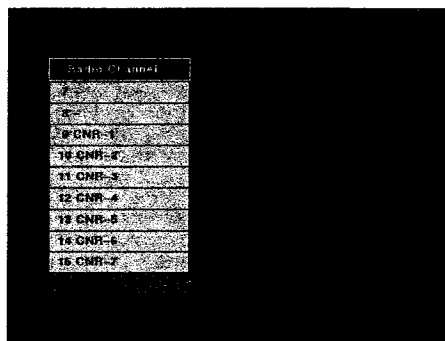
**2. This unit can distinguish between PAL and NTSC video automatically.**

**3. Numbers can not be more than 3 digits. The time gap when input program number is limited to be within 3 seconds. Otherwise system will auto start the program you have already input. If the input number can not be found in the list of TV channel, system will remain the existing program.**

## 2. Radio Channels



Select **Radio Channels** on **Main Menu** and press **OK** to enter the sub-menu.



- Select radio channel that you want with using **▲▼** and press **OK**.



# GUIDE OF MAIN MENU

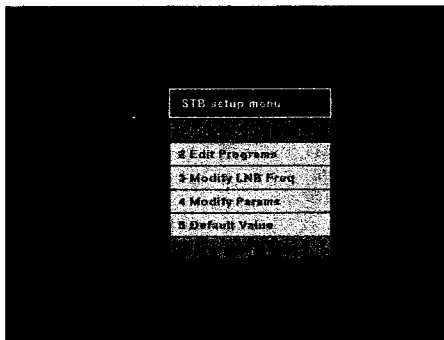


**NOTE:** The selection method of Radio channel is the same as TV program. However, you must make sure of the channel type: TV or Radio.

## 3. Setup Programs



Move cursor to highlight **Setup Programs** under the **Main Menu** and pop out the following window:

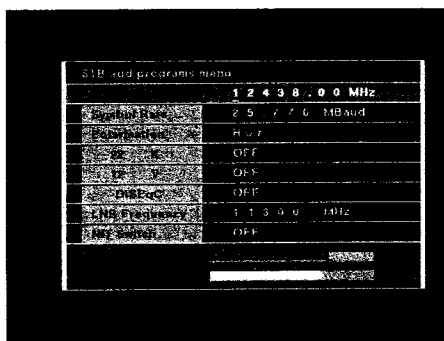


- Press **▲▼** to highlight the item you want to operate. Press **OK** to enter the sub-menu.

### 3.1 Add Programs



Select **Add Programs** under the sub-menu **Setup menu**, and the following figure will appear after pressing **OK**:



#### 1. Trans Frequency

- Press numeric keys 0-9 to set transponder's frequency and **▲▼** is available.

#### 2. Symbol Rate

- Press numeric keys 0-9 to set transponder's symbol rate and **▲▼** is available.

#### 3. Polarisation

- Modify transponder's polarization between **HORIZONTAL** and **VERTICAL** with using **▲▼**.

#### 4. 22k

- In case you need to supply 22k tone to your LNB or antenna switch, select ON with using **▲▼**. Default value is OFF.

#### 5. 12V

- In case you are using 0/12V antenna switch box, select 12V ON and OFF with using **▲▼**. Default value is OFF.

# GUIDE OF MAIN MENU

## 6. DiSEqC

- In case you are using DiSEqC box, select antenna input LNB1, LNB2, LNB3, LNB4 with using ▲▼ . Default value is **OFF**.

## 7. LNB Frequency

- To modify the LNB frequency value, press numeric keys 0-9 or ▲▼ directly. Generally, whether to adopt the local frequency of C band or of KU band depends on the transponder's down link frequency. So you need think about it carefully when changing it.

## 8.NIT Switch

- To search NIT table. When **ON**, if you input one parameter, the system will auto search all of them in the same NIT table.



**NOTE:**1. Under non-menu mode, press **SEARCH** directly to pop out the sub-menu **Add Programs**.

2. Suppose the system has searched programs, it will play the first searched channel after 1-2 seconds. Otherwise "No signal" will appear on the screen.

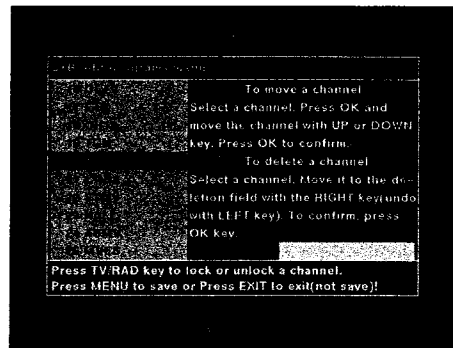
3. After searching finished, new searched programs will be added to TV or Radio List automatically. Otherwise "No satellite signal" will come out.



4. During the searching procedure, if the signal lock lamp "LOCK" on the front panel light, as well as QPSK Eb/No indication, it shows that the program is locked.

## 3.2 Edit Programs

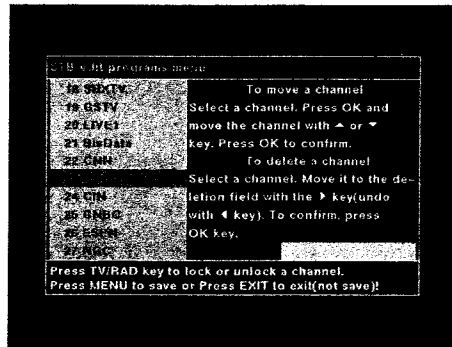


You can select **Edit Programs** under the sub-menu **Setup programs** and press **OK** to enter it.

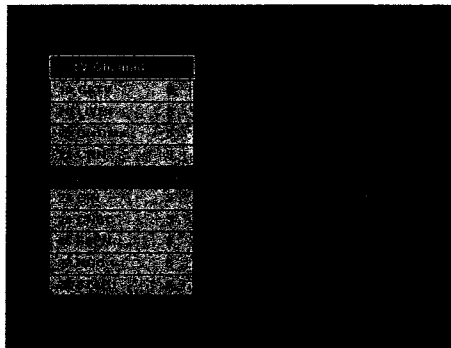


- You can move, delete and lock channel according to what system prompt you. Operation instructions is also available on the bottom block of this menu.
- If you want to lock or unlock the channel, Move ▲▼ cursor to select the channel ,press TV/RAD,which mentioned in the menu is the same as  on the RCU, an icon of a lock will be on the selected channel bar .To release, just press  again.Window will be as shown in the following figure.

# GUIDE OF MAIN MENU



- Press **MENU** or **EXIT** to save the parameters and exit this edit channel menu.
- After locking channel ,you will see an icon of a lock on the channel bar in the TV list.Window will be as shown in the following figure:



- Before you watch the locked program,you will be asked to input correct password. To make your locking efficiency,you should set up the parental lock in advance.For password setting ,please refer to section 5 on page 35.



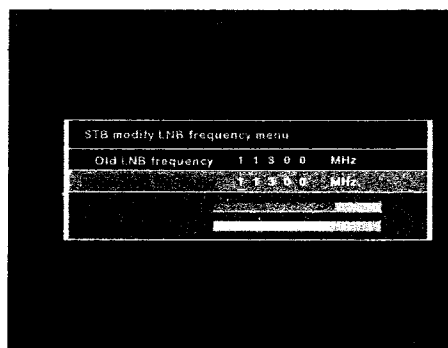
**NOTE:** After the program lock, you should select the system password ON under the Password menu, then the setting will be valid. When you watch the program again, you should input the correct password. Default password is 9949.

## 3.3 Modify LNB Freq



On the sub-menu **Setup menu**, highlight **Modify LNB Freq**. Window as shown in the following figure pops out once you press **OK**.

# GUIDE OF MAIN MENU



- Press numeric keys 0-9 or ▲▼ keys to modify new local frequency oscillator.
- Remain primary local frequency via pressing **EXIT** or **MENU**. Press **OK** twice to adopt new local frequency.



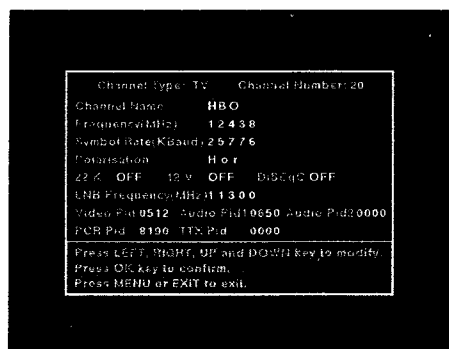
**NOTE:** All LNB parameters will be changed with the same LNB local frequency once you modified the primary frequency.

**WARNING:** Don't modify the frequency unless a specific circumstance.

## 3.4 Modify Parameters



Move cursor to select the sub-menu **Modify Parameters** and press **OK** to enter it.



### 1. Channel Name

- In order to modify the program name, use ▲▼ to input capital or small letter, figure and a part of symbols. Press ◀ to point to the back letter and ▶ to move the cursor right. You can edit any name if you like.

### 2. PID

- Press numeric keys 0-9 or ▲▼ keys directly to input PID value.



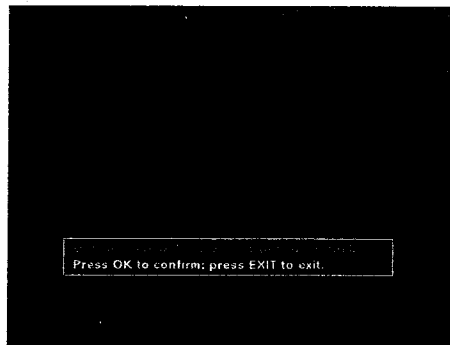
**NOTE:** You can set each other item on this sub-menu according to the details in section 3.1, such as Frequency, Symbol rate, Polarization, 22K, 12V, DiSeqC and Local Frequency.

## 3.5 Default Value



Select **Default Value** under **Setup menu** and press **OK**. The following window will pop out.

# GUIDE OF MAIN MENU



**WARNING:** After Default Value setting, all programs you have searched will be erased and the whole parameters will return to the factory status. So setting by this menu only applied for special necessary situation.

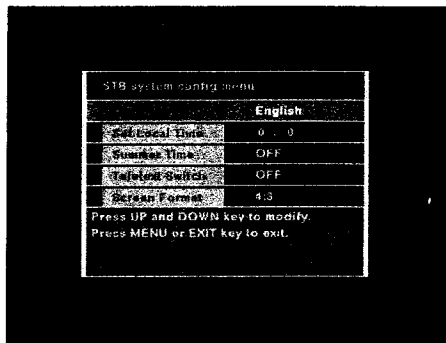


**NOTE:** This function can be used if wrong codes or numbers present on the list of programs.

## 4. System Config



Select **System Config** under the **Main Menu** and press **OK**. You will see the following picture as shown in the figure.



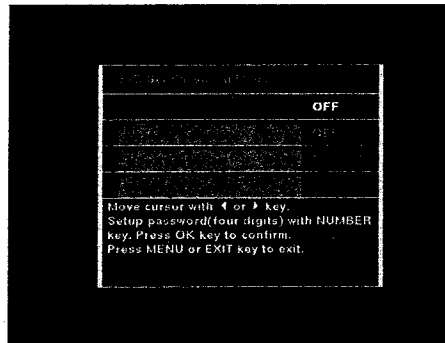
- Please complete the setting referring to the message in the bottom bar of this menu.
- 1. OSD language**
- This receiver supports Chinese and English . You can select one as menu language.
- 2. Set Local Time**
- This item will help you transferring the time of source program. You can set it per the difference between local time and source time of the received programs.
- 3. Summer Time**
- Press ◀▶ to choose ON/OFF. When ON, summer time by the government is available.
- 4. Teletext Switch**
- Press ◀▶ to choose ON/OFF. When ON, the unit can receive teletext message.
- 5. Screen Format**
- aspect ratio 4 : 3 is to be compatible with your TV.

# GUIDE OF MAIN MENU

## 5. Set Password



You can select **Set Password** under the **Main Menu**. Press **OK** to pop out the following picture:



### 1. System Password

- You can select **ON/OFF** with using **▲▼**. If selected **ON**, system will pop out a window which prompt you to input correct password as you want to do any operation on system main menu. So system don't response anykey except **MENU** once you set system password.

### 2. Channel Password

- Select **ON/OFF** with using **▲▼**. If selected **ON**, system will pop out a window which prompt you to input correct password as you want to do any operation on setting program. Generally, locking program will be set in company with Channel Password.

### 3. Input Password

- Press numeric keys 0-9 directly to input password. **▶** is for next space and **◀** for previous location. After inputing identical New Password and Confirm Password, System and Channel password will be effective. Default password is 9949.



**NOTE: 1. Please set System Password when locking the whole system.**

**2. Channel Password is the same as parent lock. You can set the limited class for televisew.**

## 6. RF Setting(Inefficacy)



**NOTE:CDVB2000 RF Modulator (Channel 3/4) Instructions are as follows:**

1. Link Mode: Link the RF line connector(FEMALE) with CDVB2000's modulator's RF OUT port (number 6 of the rear panel instruction chart on Page 23),the other end of the RF line is inserted into the RF IN port of Television; then Link the out door aerial or local cable television ANT signal line with the RF IN port of the CDVB2000.(number 9 of the rear panel instruction chart on Page 23)

# GUIDE OF MAIN MENU

NOTE: The ports of CDVB2000's function pls check the rear panel illustration on the Page 24 of User's Manual.

2. Use the channel switch on the rear side of CDVB2000(number 8 of the rear panel instruction chart on Page 23),to choose RF output channel CH3 or CH4.
3. The RF Output Menu need the hardware support, and is only compatible for fix channel modulator(Under this situation, the RF Output Menu don't need to be set.)
4. Switch the IRD's power supply to On, then set your TV to searching program status till the programs are searched.

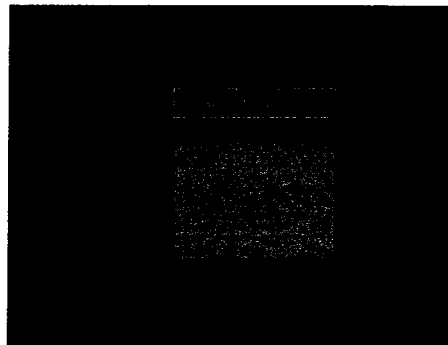


**NOTE: For users of different countries, maybe the programs have video, but frizzle audio. Under this circumstances, pls check the TV's audio mode and make sure that your TV is compatible with this audio mode.**

## 7. IRD Message



This function is used to browse some useful information. The following figure will appear if you select **IRD Message** under the **Main Menu**.



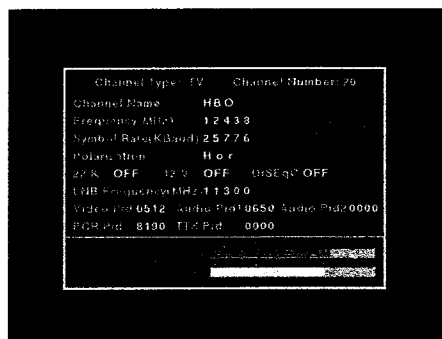
- Press **▲▼** and **OK** to choose interested information.
- You can check conditional access system and IRD status or some other information, such as program, mail and announcement message.

# GUIDE OF MAIN MENU

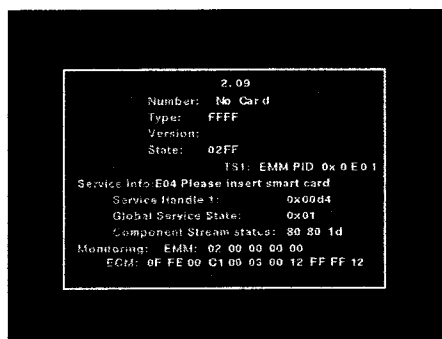
## 1. Prog Message



**NOTE:** Under non-menu mode, press **INFO** directly to enter it.

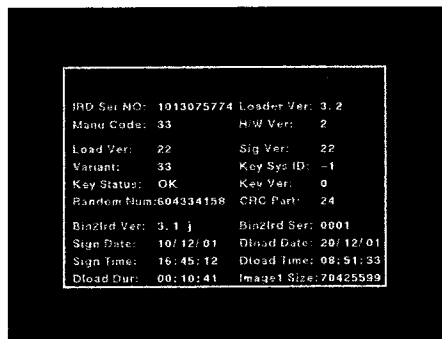


## 2. CA Status



- You can check the information on Conditional Access Module which will help you to solve some problems during receiving encrypted programs.

## 3. Loader Status

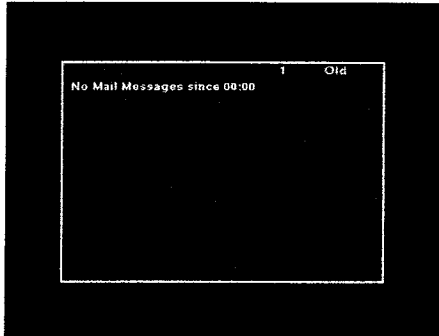


- You will see Loader information if you want.



# GUIDE OF MAIN MENU

## 4. Mail Message



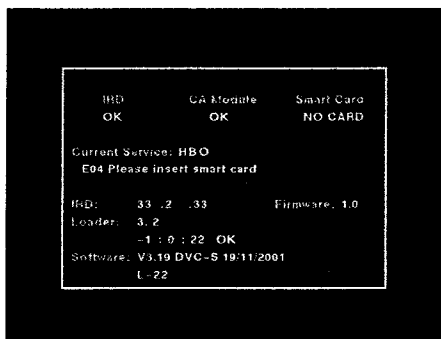
- You are informed whether to receive mails or not. You can browse the mail content.

## 5. Announcement




- The programs provider will give you some announcement.

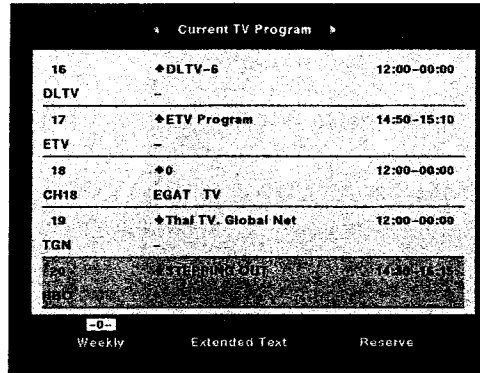
## 6. IRD Status



- The professionals need IRD information to ensure regular work.


# GUIDE TO EPG

 Under normal mode(no menu mode),press **EPG** on the RCU to pop out the following message:



Current TV Program		
16	DLTV-5	12:00-00:00
DLTV	-	
17	ETV Program	14:50-15:10
ETV	-	
18	0	12:00-00:00
CH18	EGAT TV	
19	Thai TV. Global Net	12:00-00:00
TGN	-	


Weekly   Extended Text   Reserve

 This menu shows the current programs and next programs of each channel. You can do the operations below with specified keys under EPG menu.

**(EXIT)**: To exit from EPG menu and return to normal watching.


**(EPG)/(MENU)**: To switch between "Current TV Program" and "Next TV Program".




**()**: To toggle between TV and Radio.

**()**: To move the cursor up or down to view the whole list.


**()**: To page up and down.

**(OK)**: To watch the selected channel.

**(7)**: To reserve some program. For any channel, if there is a program that you want to see and you are afraid of forgetting the time, please set this item properly. First move the cursor to select the channel you want and then press "7". When the icon  appears, it means you are successful. When time comes, it will remind you to watch it. One more attention is that this function is just used in "Next TV Program".

**(8)**: To search more details of selected channel. When you press (8), the icon  will display on the channel item and the system starts to search more content about the program. After several seconds, the information will display on the screen. Under this mode, you can use ( ) to view the details and (EXIT) to EPG main menu.

**(0)**: To enter TV newspaper menu. When you selected one channel, the system will auto search the corresponding TV newspaper after pressing (0).


**()**: To alter the language of EPG. If the service provider offers multi-language program, it will take some time to update. Press any key to exit from the language menu.

 Function keys under TV newspaper menu:

**(EXIT)/(EPG)**: To exit from sub-menu and return to EPG main menu.

**(OK)**: To return to the 1st page of TV newspaper.

**()**: To view TV newspaper from Monday to Sunday.

**()**: To move the cursor and browse the content.

# ENCRYPTED PROG RECEPTION



If you have got the SMART CARD by IRDETO accredited and insert it into the slot on the right of the front panel, the unit can receive all the programs encrypted by IRDETO CA system. Generally, SMART CARD dealer will provide you the reception range.

## 1. How to insert SMART CARD

- Make the metal interface down to the ground and insert the slot according to the arrow direction drew on the SMART CARD.

### **WARNING:**

Please do not insert metal or alien substance into the slots for the Modules and SMART CARDS. In doing so can cause damage to the STB and reduce its life span.

## 2. Add Encrypted programs

**STEP 1:** Select the transponder which the encrypted programs belong to. You must aim your antenna dish to the satellite accurately.

**STEP 2:** In the sub-menu **Add programs**, set LNB parameters such as down-link frequency, symbol rate, polarization and local frequency etc.

**STEP 3:** System will auto scan all the programs on the transponder.

- System will play the first searched channel on the transponder if successful searching. New searched programs will be added to the **TV or RADIO LIST** automatically.



**NOTE:** You can check IRD status and browse some helpful information about CA system in IRD Message. If any question during the searching procedure, these information will instruct you how to operate the unit.

## 3. Play Encrypted programs

- Details refer to the **TV Channels** in section 1.

# TECHNICAL SPECIFICATIONS

Section	Item	Description
System	System capabilities	Fully DVB-S compliant
Tuner	Input connector	2 x F-type female
	Input level	-65 ~ -25 dBm
	Demodulation	QPSK
	Symbol rate	2 ~ 45MS/s
	FEC decoder rate	1/2, 2/3, 3/4, 5/6, 7/8
	Reed Solomon	(204, 188, 8)
	LNB power	13/18V, 400mA; Current overload protection
	Tone Switch	22KHz
	DiSEqC control	Version 1.0 compatible
Video	Decoder	MPEG-2 Main Profile @ Main Level; ISO/IEC 13818
	Impedance	75 $\Omega$
	Output level	1.0V p-p
Audio	Decoder	MPEG-1 layer I, II ISO/IEC 11172-3
	Impedance	600 $\Omega$
RF	Connector	75 $\Omega$
Modulator	Frequency	470MHz~860MHz
	Modulation	PAL B, PAL B/G, PAL I, PAL D/K, NTSC
	Preset channel	CH.25(CCCIR 38)
General	Input voltage	AC120V 50/60Hz
	Dimension	300 x 45 x 220mm
	(D x H x W)	



**NOTE:** For purpose of improvement, specifications and design are subject to change without notice.

# TROUBLESHOOTING

Symptom	Cause	Measures
No sound, no any display	Power cord not plugged in securely	Check the insertion of the power cord plug.
	No power in the socket.	Check the socket power
No signal displayed when searching	Antenna dish out of position	Correct the dish position
	LNB local frequency setting	Set correct LNB local frequency
	No power to LNB	Set LNB power on
	No signal from TV station	Try other channel
	Cable to tuner disconnected	Connect cable to tuner securely
Sound only but no picture	Video cable not securely connected	Connect securely
	System in radio channel	Normal
Picture only but no sound	Audio cable not securely connected	Connect securely
	Set in MUTE mode	Switch off MUTE
	Volume control set to minimum	Turn volume up to suitable level
Abnormal sound or contents between video and audio mismatch	Multi-language program	Try the other audio channel
	Different audio contents on stereo	Set audio mode in either L mono or R mono

If this unit is not operating properly, check the items listed in the table above. Should the problem persist, there may be a malfunction. Disconnect the power immediately and contact your store of purchase.