

EMC MANUAL

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

Note : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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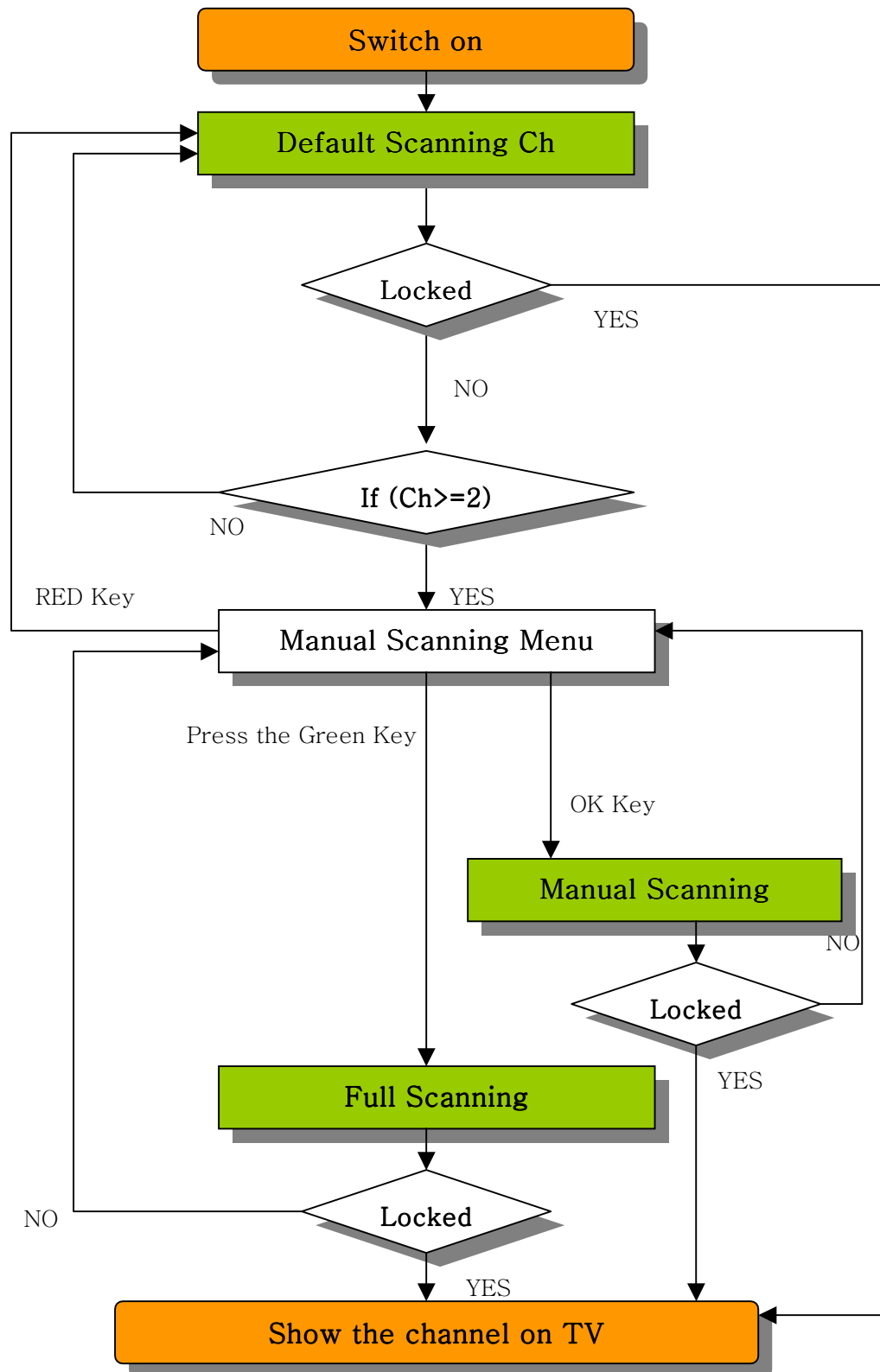
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After installing your antenna system and DCATV-3000 with appropriate connectors,

- plug in the AC main power and
- switch on the receiver

1. SCANNING

As soon as the STB(DCATV-3000) is switched on, the Scanning functions start with the ***Default Scanning***. The progress of the Scanning functions is as the Figure 1. The ***Default Scanning*** will be processed twice because two default channels are set initially.



<Figure 1>

When each function progress a popup message is shown up and simply by pressing the EXIT Key on the remote controller you can exit any Scanning function. The layout of the *Manual Scan Setting* is as below, Figure 2.

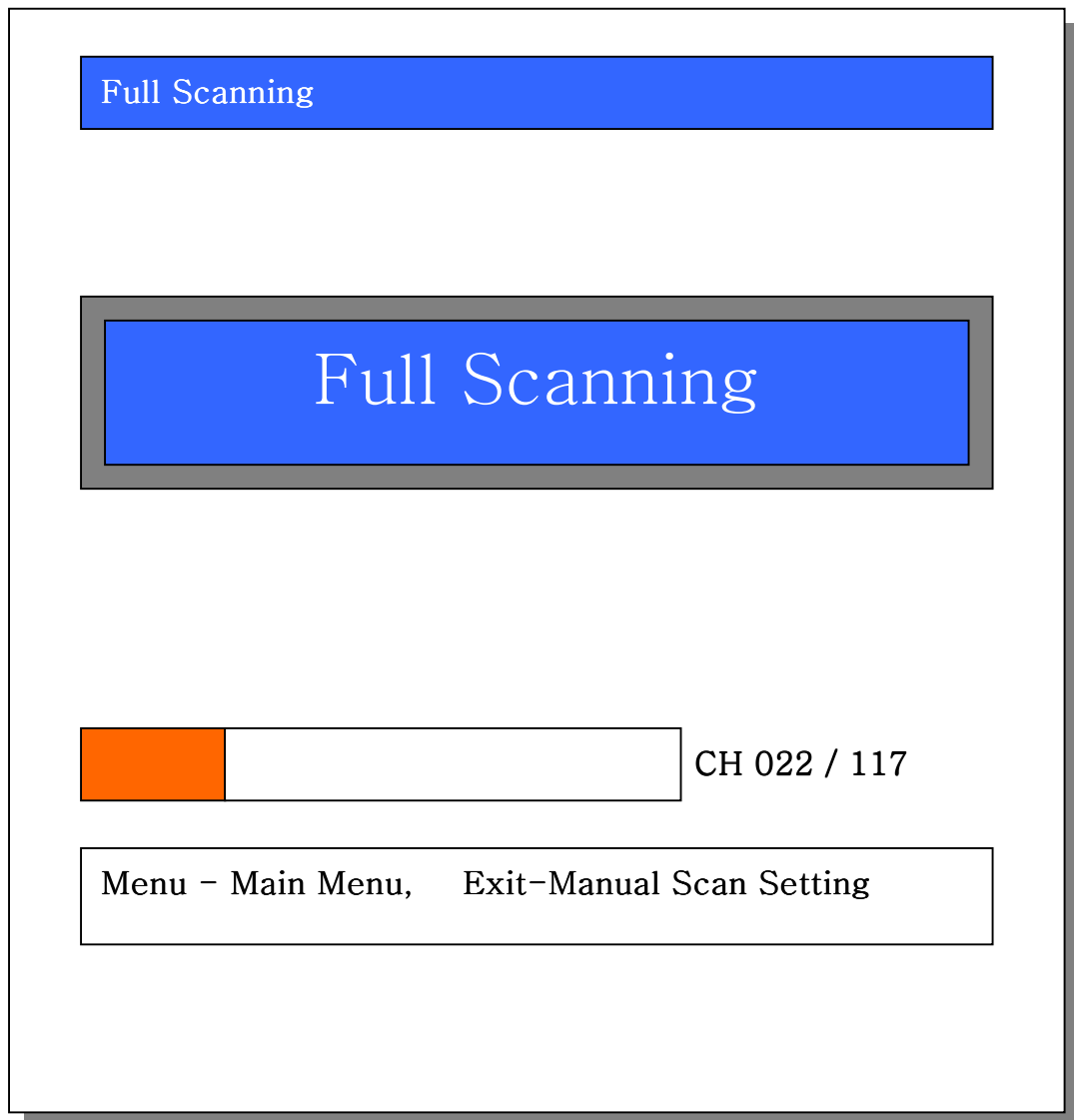
Manual Scan Setting

CH NO.	88
Frequency	750000
Symbol Rate	60267
QAM TYPE	256QAM

OK - Manual Scanning, Red - default Scanning,
Yellow - Full Scanning

<Figure 2>

The *Full Scanning* progress takes quite a long time, so the confirming message appears before the progress is continued.



<Figure 3>

The progress bar shows the Scanning rate and also the current channel and total channel are shown next the bar. Currently we have set 117 channels in the channel table.

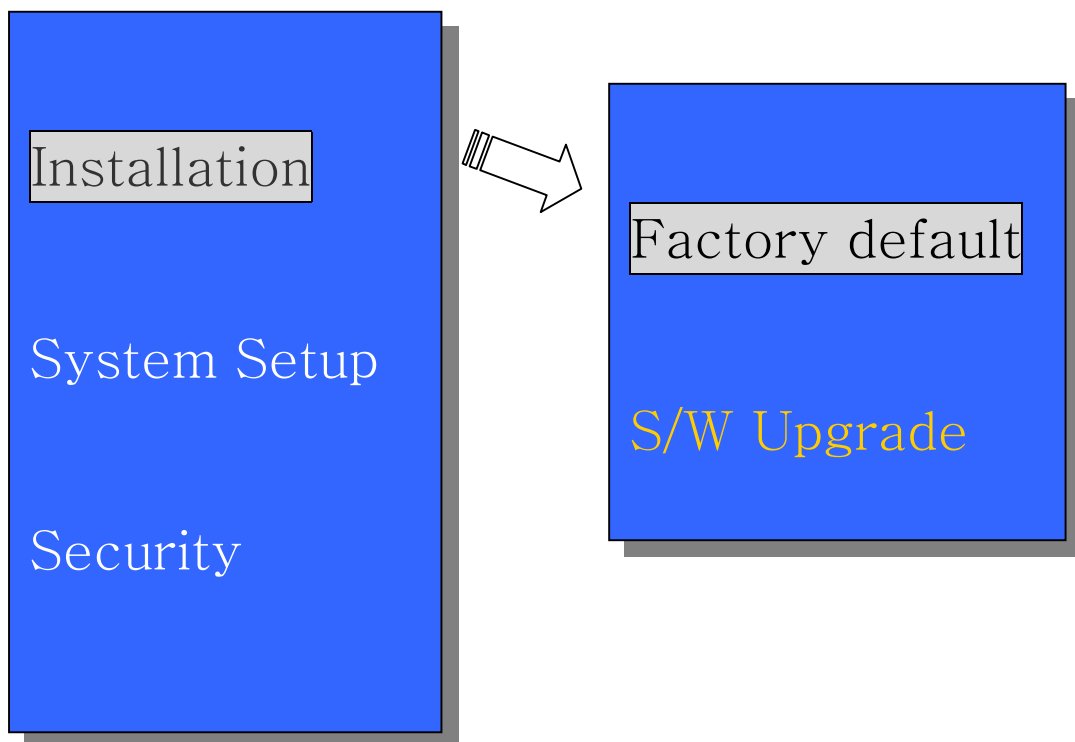
Press the EXIT Key to go into the Main Menu even though the channel is unlocked. The Figure 4 will be displayed on the screen.



<Figure 4>

Before you begin with the “*Installation*” menu, you should check the 2nd menu “*System Setup*” to know if the system setting is applicable for you.

When the user moves the cursor on the *Installation* menu and press the OK button, a pop-up message will appear to get the PIN from the user. If the PIN which the user has entered is correct, the *Installation* sub-menu will be shown on the screen as Figure 5.



<Figure 5>

2. INSTALLATION

This menu provides settings for customizing, adding new services and displaying the status of the receiver.

- Select “*Installation*” in the main menu mode to select the sub menu.
- Enter the PIN code.

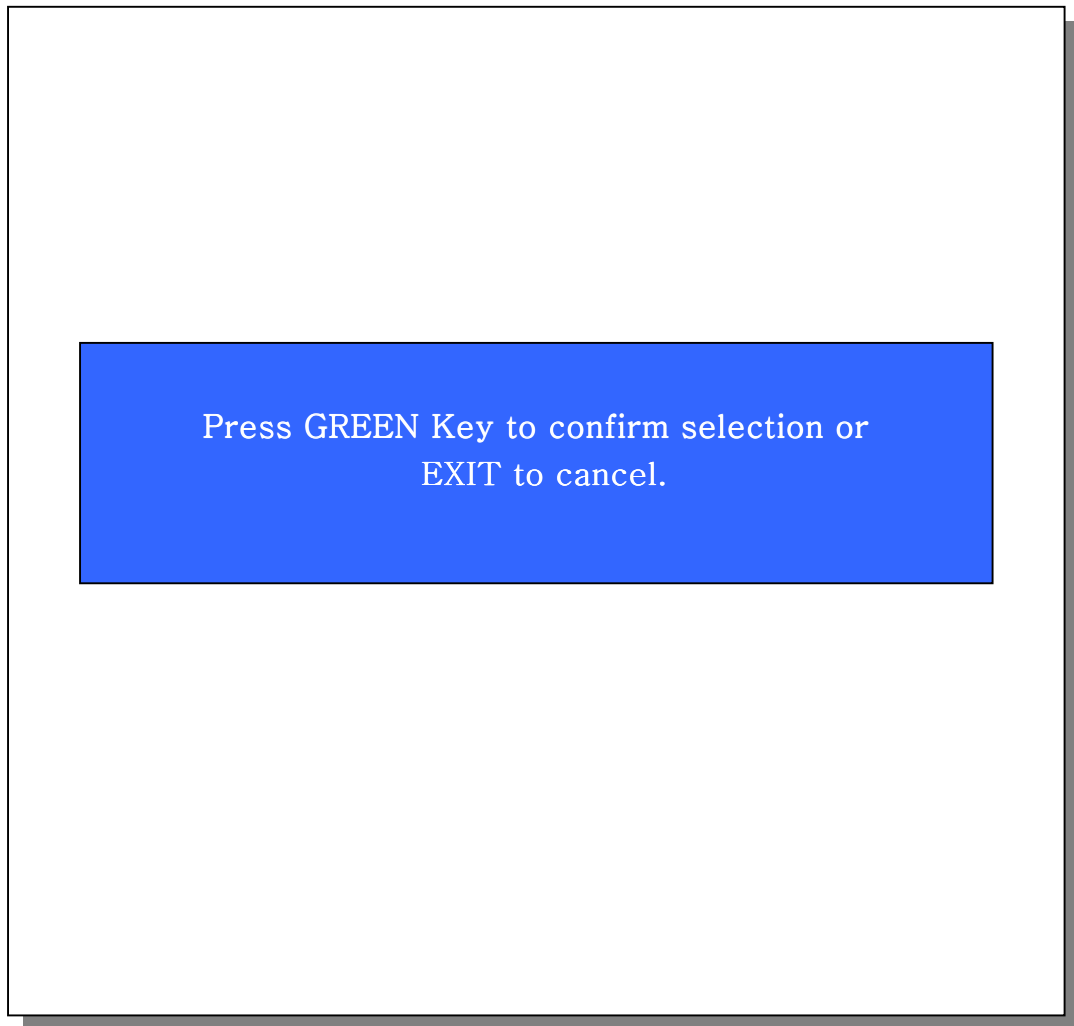
If you have not entered your own PIN code

Then the PIN code 0000 applies, which was set at the factory.

The first sub-menu for the *Installation* is consisted of two Items as *Factory default* and *S/W Upgrade*

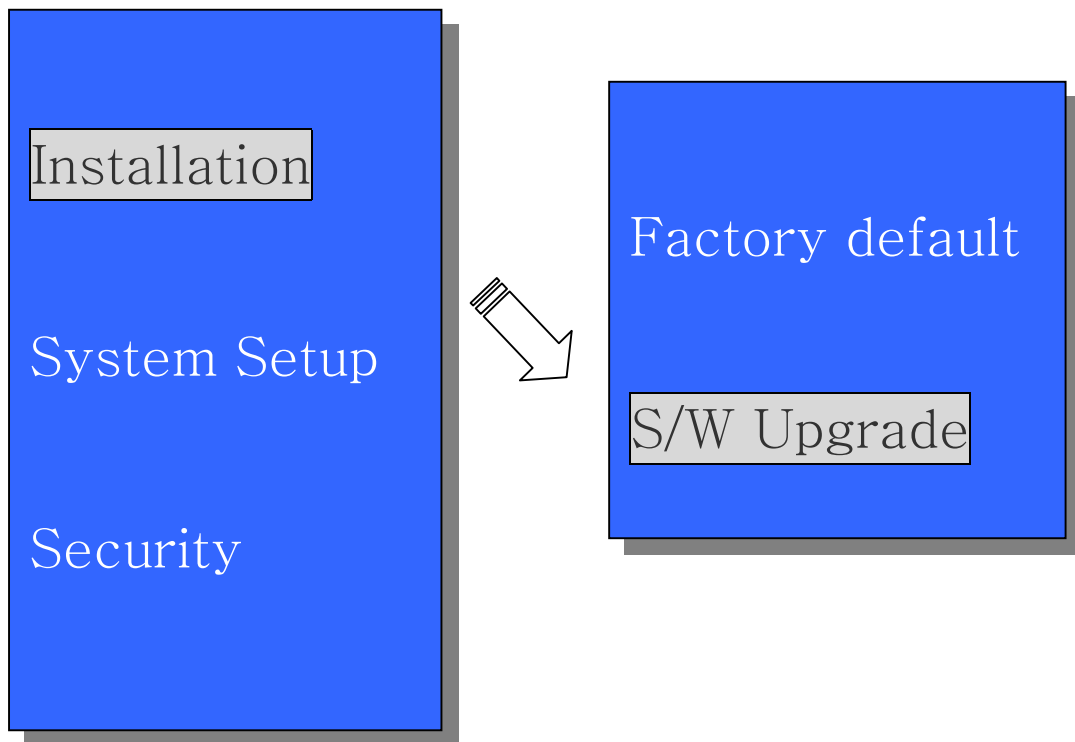
The *Factory default* is to restore the factory set values in case the user has encountered some problems after changing any values of

channel data and others which may be in error. When the user presses the OK Key a pop-up message will appear to confirm (see Figure 6)



<Figure 6>

At the request window, if you press **OK** key, the receiver will be reset to *factory default* settings automatically

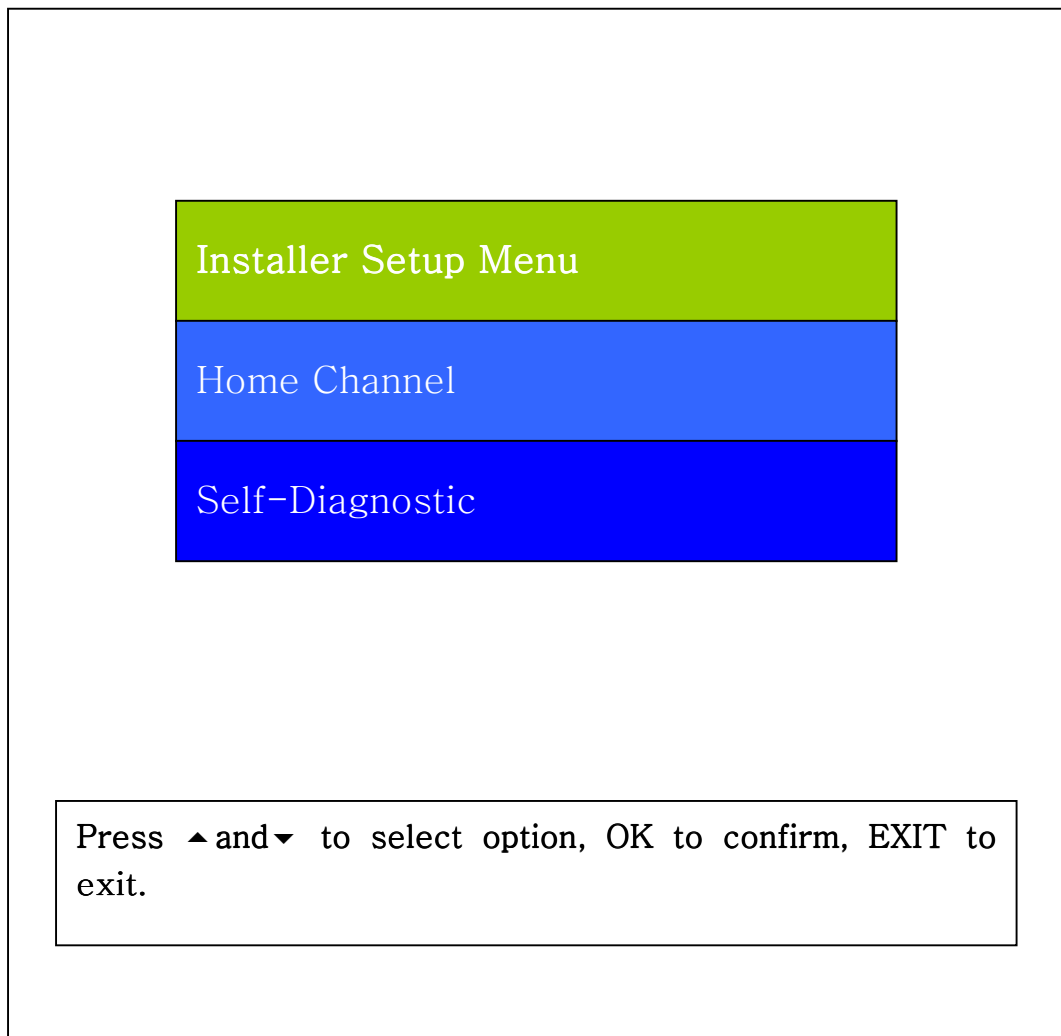


<Figure 7>

The last sub-menu for the *Installation* is the *S/W Upgrade*. This menu has not been done. It will be prepared very soon later on.

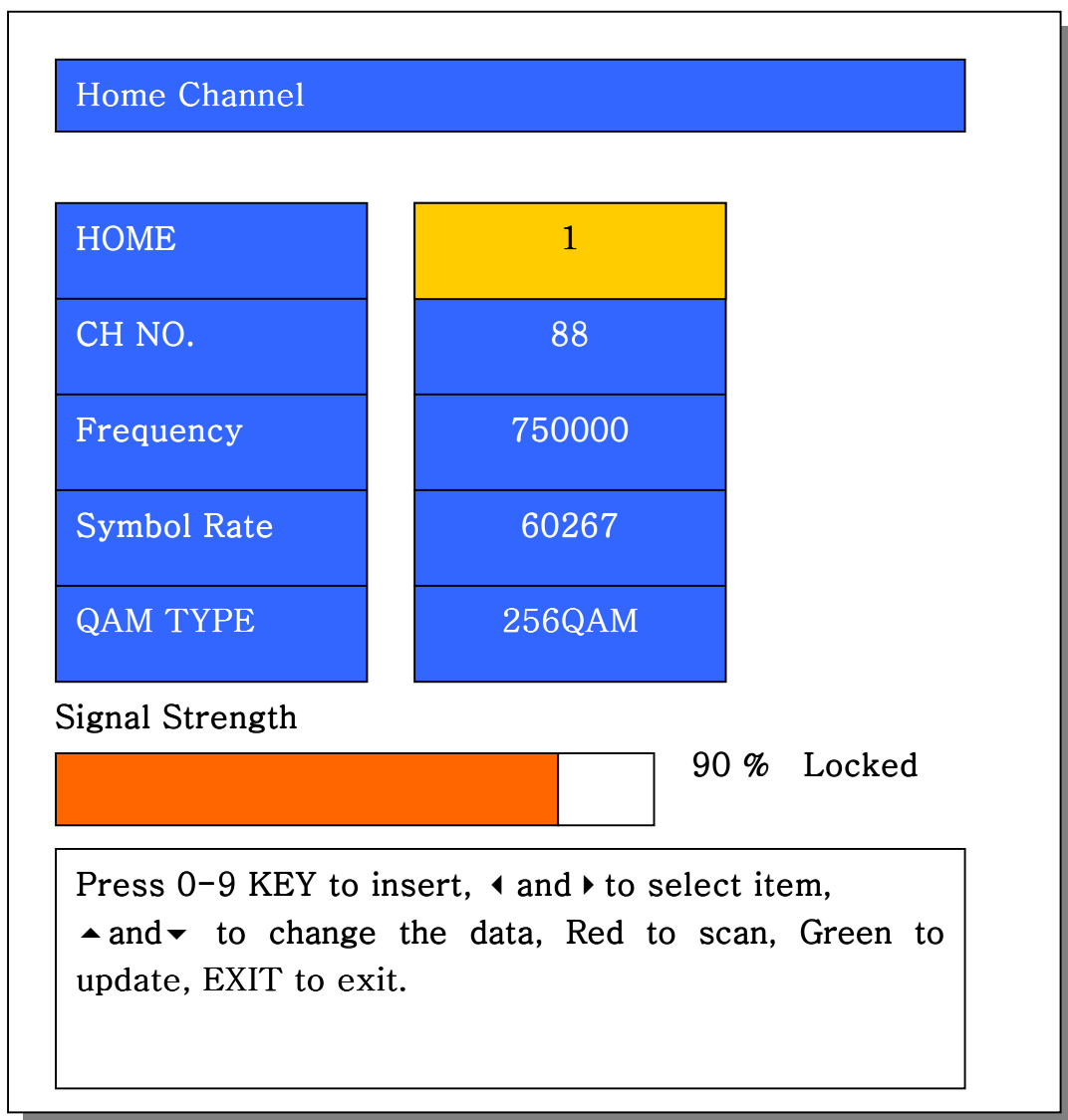
3. INSTALLER SETUP

When the Figure 5 or 7 is shown on the screen, press the GREEN Key and then Key 1, 2, 3 by turns to go into the Installer Setup menu. Only the installer should know this Key combination to prevent the user from setting the box incorrectly. After the four keys are pressed by turns the Figure 8 will appear on the screen.



<Figure 8>

If the user moves the cursor on the *Home Channel* and press the OK button the Figure 9 will appear.



<Figure 9>

Two *Home-channels* have been set by default. Each Home has the CH NO.(channel number), Frequency, Symbol Rate and QAM Type , and it is changed by pressing the volume up/down key. User can also change the Channel number with Frequency or QAM Type by placing the cursor on the each sub-menu and pressing the volume up/down key.

If you want to scan the channel, simply press the RED Key and in order to update the new Home-channel press the GREEN Key.

The *Self Diagnostic* menu displays whether all the drivers are working properly as the Figure 10

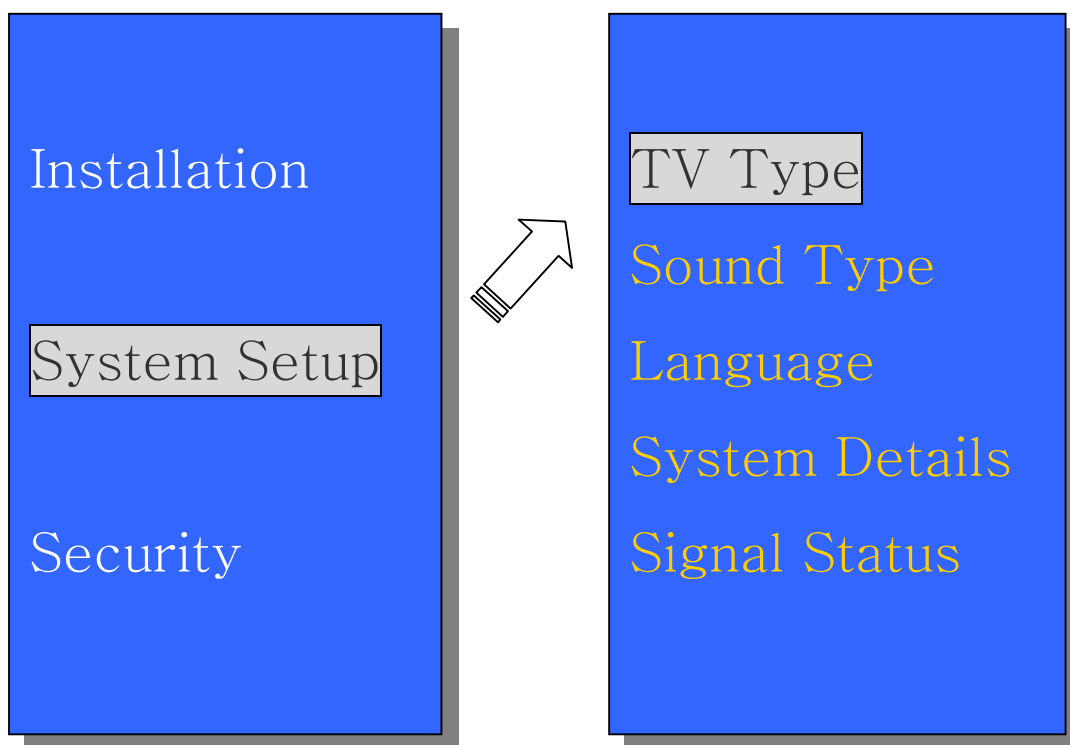
Self Diagnostic

LED	OK	TV mode	4:3
Qam IC	OK	RF	OK
Smart Card	IN	Ext Modem	OK
Sound	OK	Reserved	
Reserved		Reserved	
Reserved		Reserved	
Reserved		Reserved	

EXIT to exit.

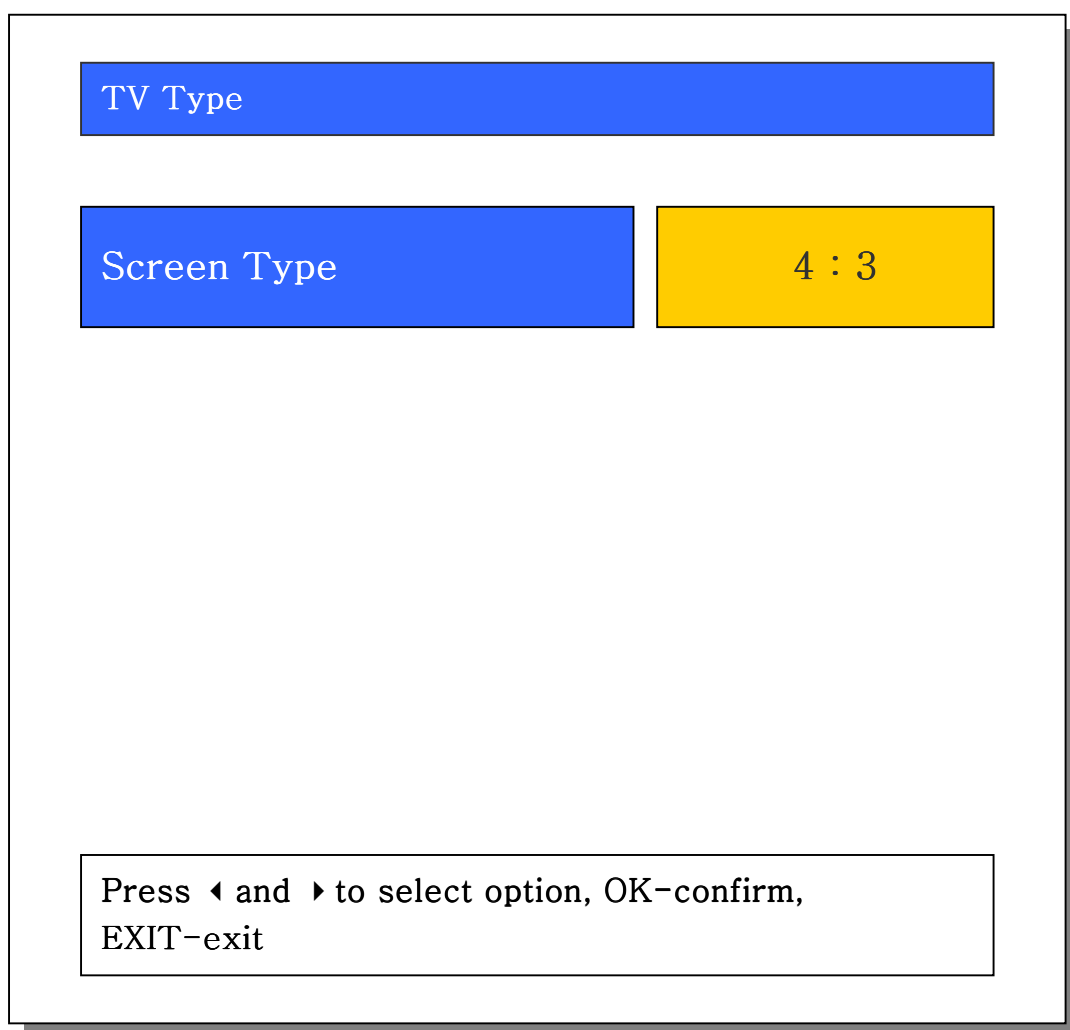
<Figure 10>

4. SYSTEM SETUP



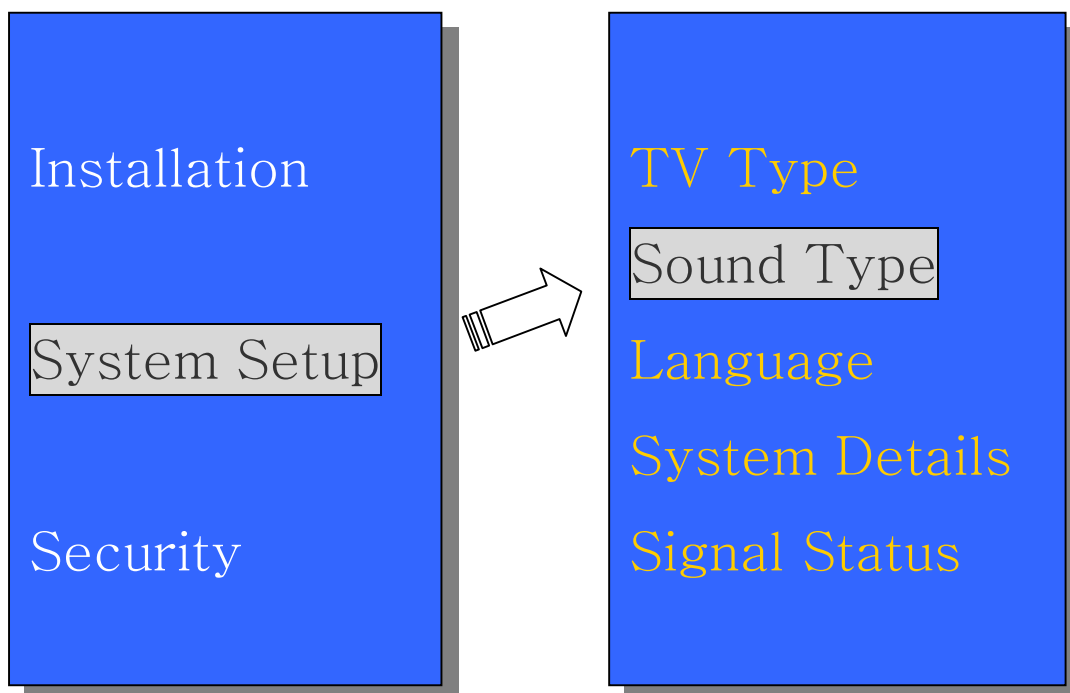
<Figure 11>

This *System Setup* menu enables you to set the DCATV-3000 with your existing systems and has five sub-menus.

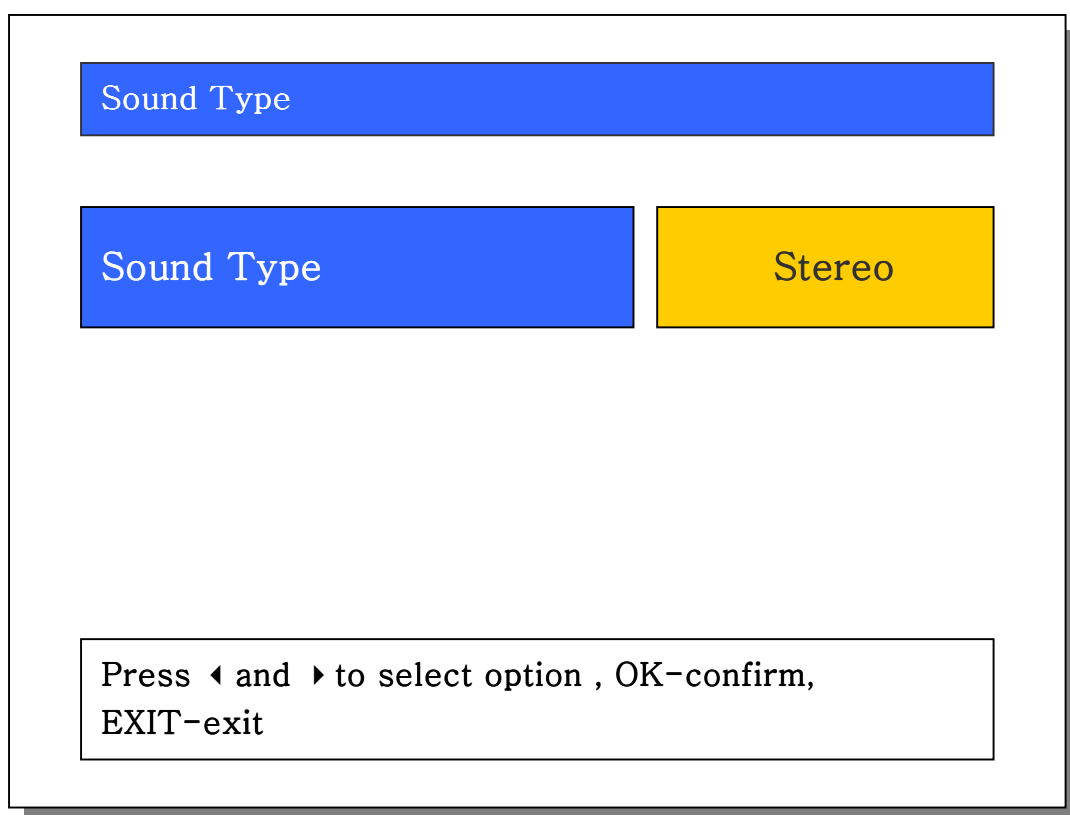


<Figure 12>

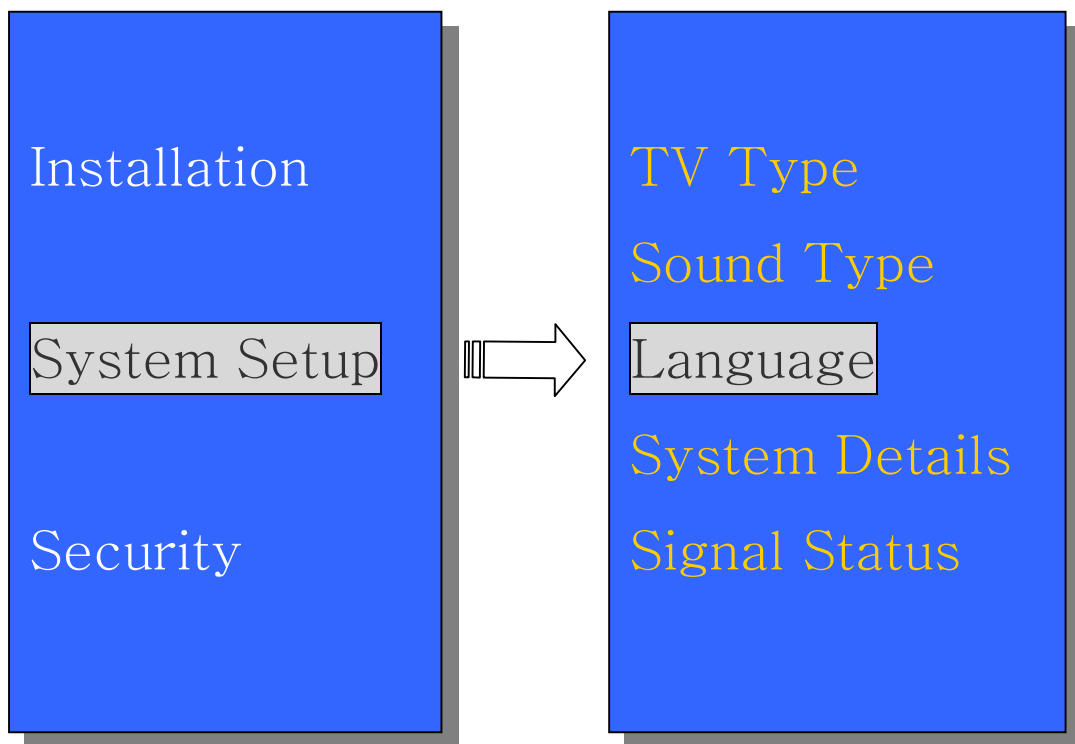
Select the *TV type* ; either STANDARD 4:3 ratio or WIDE SCREEN 16:9 ratio type.



<Figure 13>

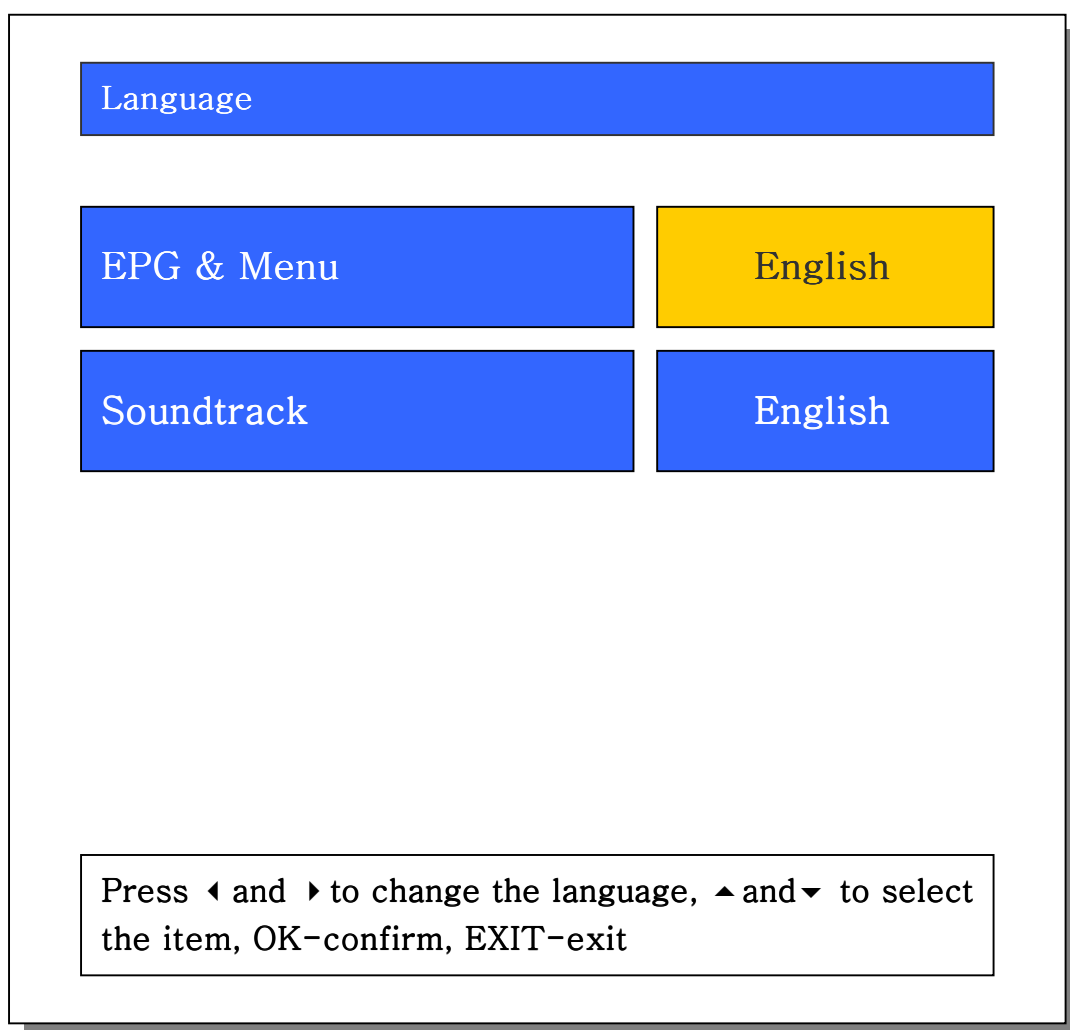


<Figure 14>



<Figure 15>

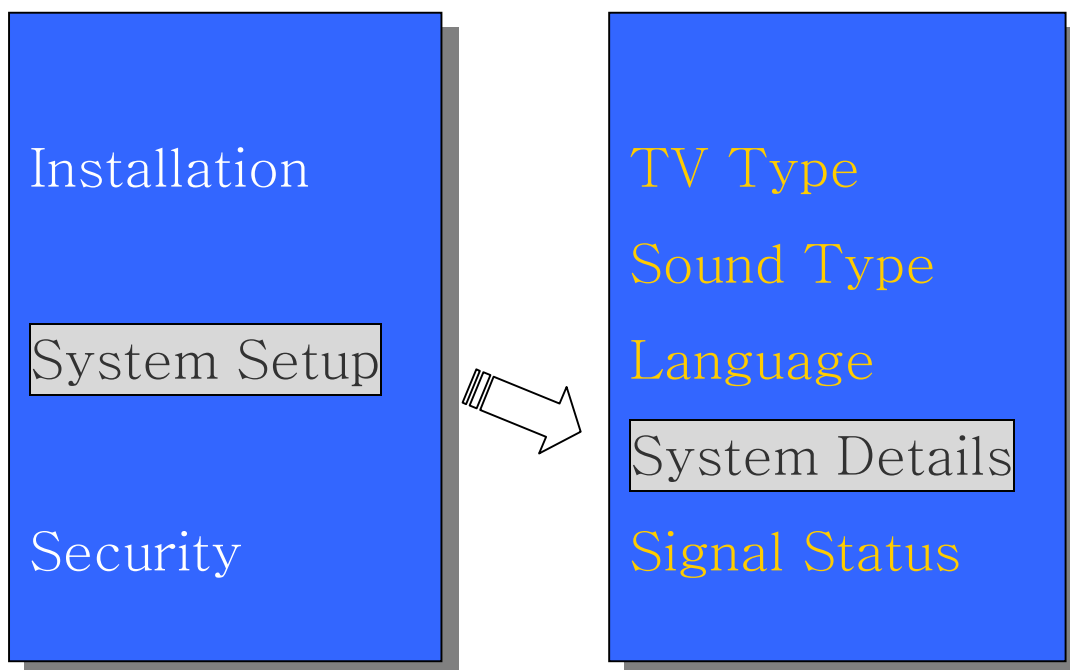
The ***Language*** menu is to select the desired language of the EPG & Menu display or Soundtrack. Place the cursor on this sub menu and press **OK**. The following **figure 16** will be the on-screen display:



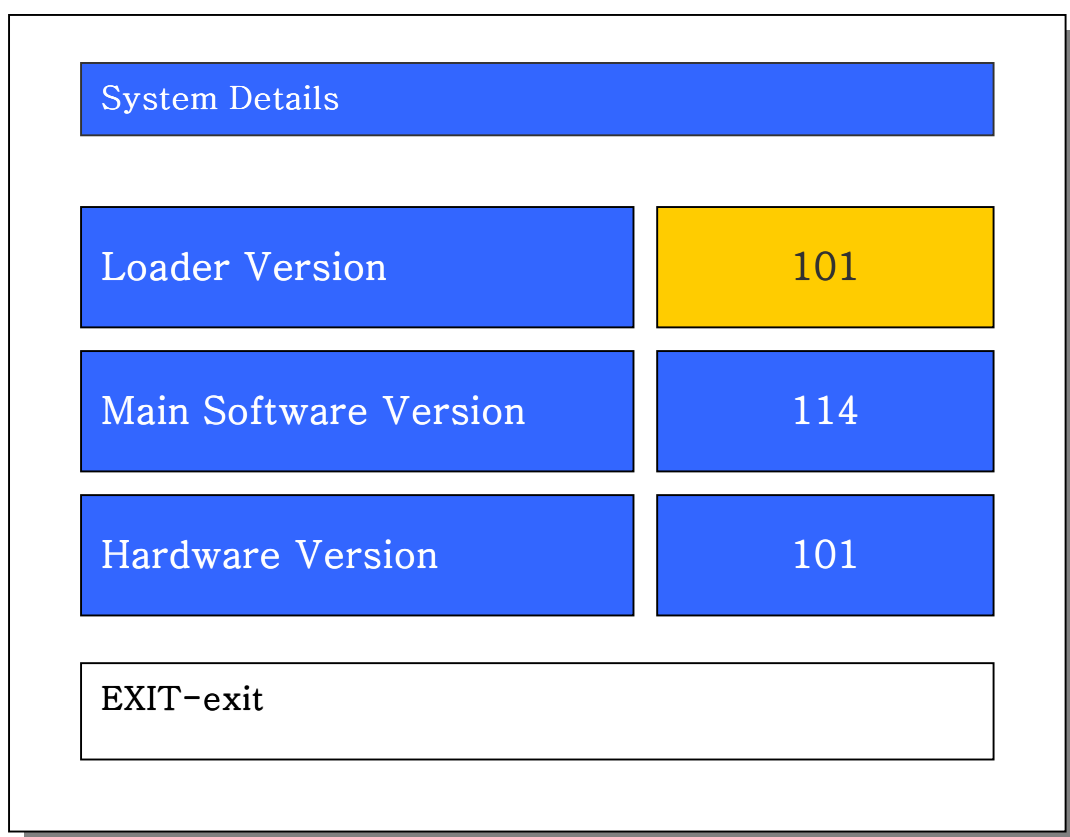
<Figure 16>

To accommodate users from different regions speaking different languages, the menu display is currently available two languages which are English and Chinese. To select the desired language menu: Press ▶ or ◀, to change language and press **OK**.

The EPG & menu or Soundtrack will change to the selected language.

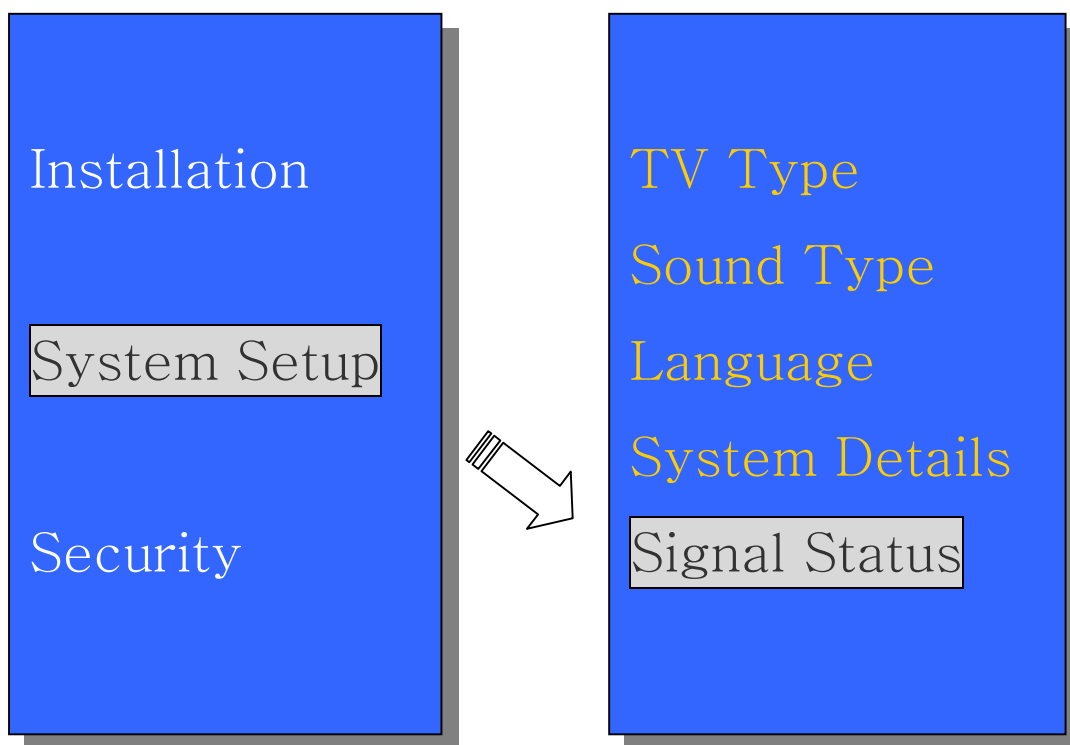


<Figure 17>



<Figure 18>

The ***System Details*** menu shows the Loader Version, Main Software Version and Hardware Version.



<Figure 19>



<Figure 20>

When the LOCK status is 'YES' the Signal Strength rate will be around 77% and the Signal Quality rate will be around 100 %. The rate will be changed continuously and it depends on the signal.

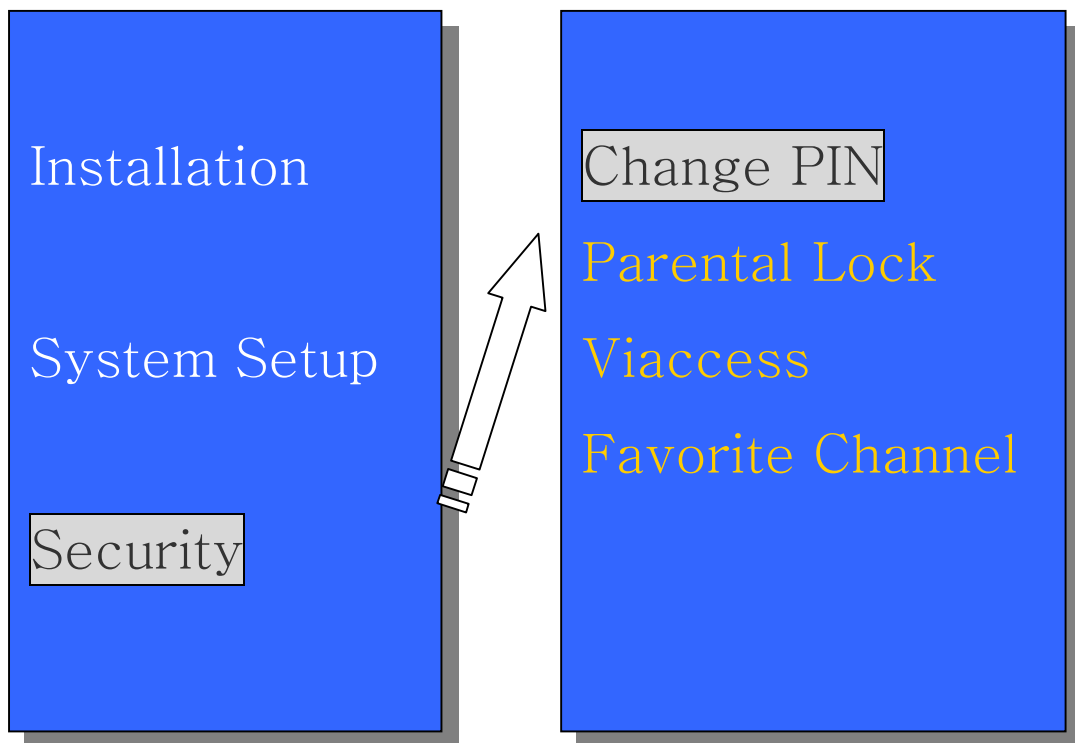
5. SECURITY

- Select “***Security***” in the main menu mode to select the sub menu.
- Enter the PIN code.

If you have not entered your own PIN code

Then the PIN code 0000 applies, which was set at the factory.

When the PIN is correct the Figure 21 will appear on the screen.



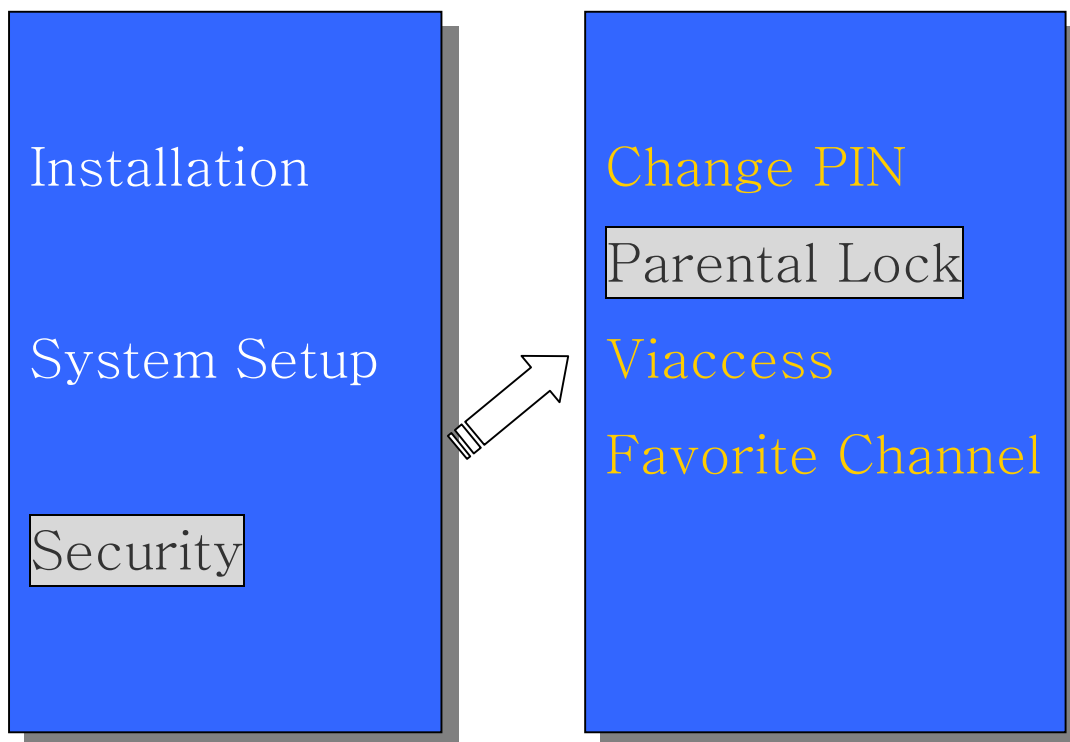
<Figure 21>

The ***Security*** option has four sub-menus as Figure 21. Firstly, In order to ***change the PIN***, select the second option “ ***Change PIN***”. The Figure 22 will be shown on the screen:

Change PIN Code	
Enter old PIN code	****
Enter new PIN code	****
Confirm new PIN code	****
Press 0-9KEY to input PIN code, EXIT to exit	

<Figure 22>

After the user inserts the right old PIN code successfully the cursor will go down for the new PIN code automatically. If it is wrong it will inform the user that the PIN is wrong using a pop-up window and the cursor will be kept at the same position for the old PIN.



<Figure 23>

This “*Parental Lock*” feature sets viewing restrictions and prevents unauthorized access to your DCATV-3000 through the PIN (Personal Identification Number), which is a 4-digit number. While the user is changing the channel if the channel is locked by this function, the channel up/down Key(▲P+ / ▼P-), MENU and POWER Key will work.

Parental Lock

TV

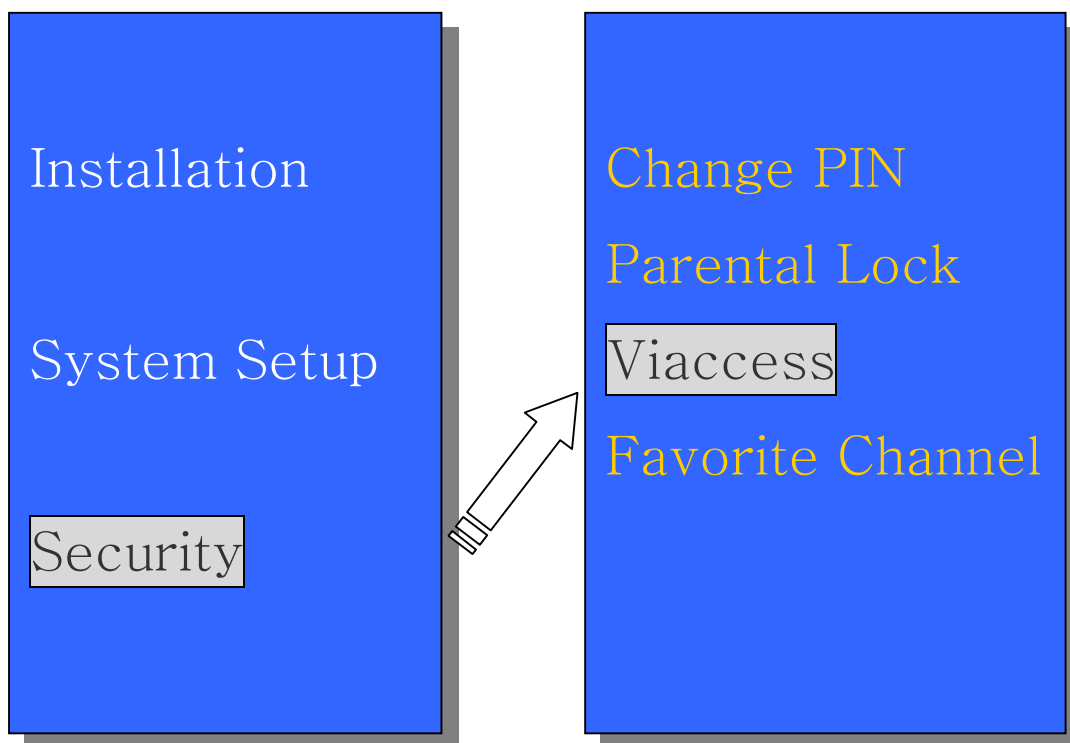
Radio

F 0001 DWtv	X
F 0002 MCM	
F 0003 RAI Internat	
F 0004 TVE	X
F 0005 TV5-Asia	
F 0001 RTPi	

F 0006 DW1	
F 0007 DW2	X
F 0008 DW8	
F 0009 YLE	
F 0010 WRN	
F 0011 REE	
F 0012 RFI 1-AC	X

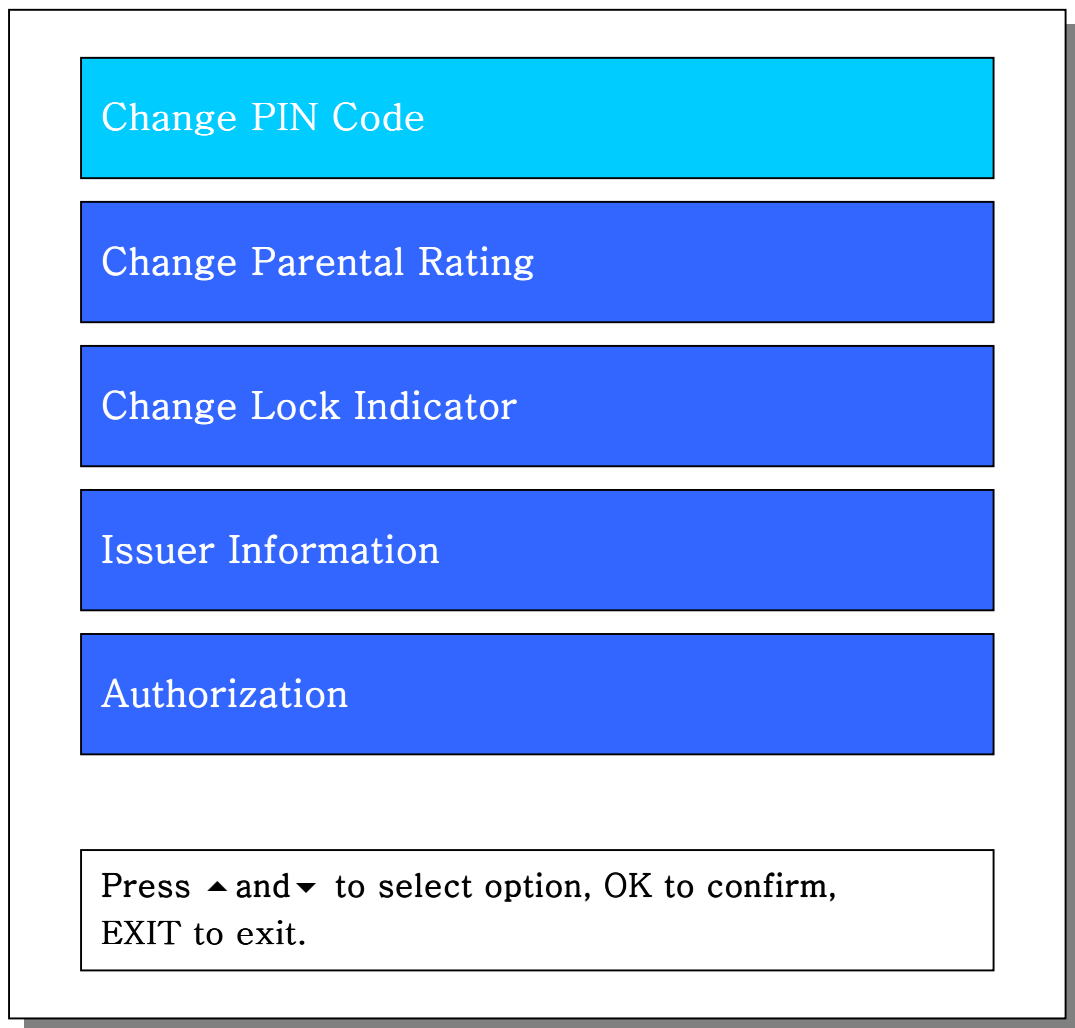
Press ◀ and ▶ to select option, Red- Lock or Unlock,
Yellow(Pg+), Blue(Pg-), OK-confirm, EXIT-exit.

<Figure 24>

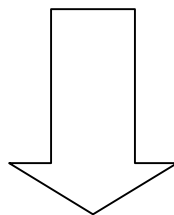


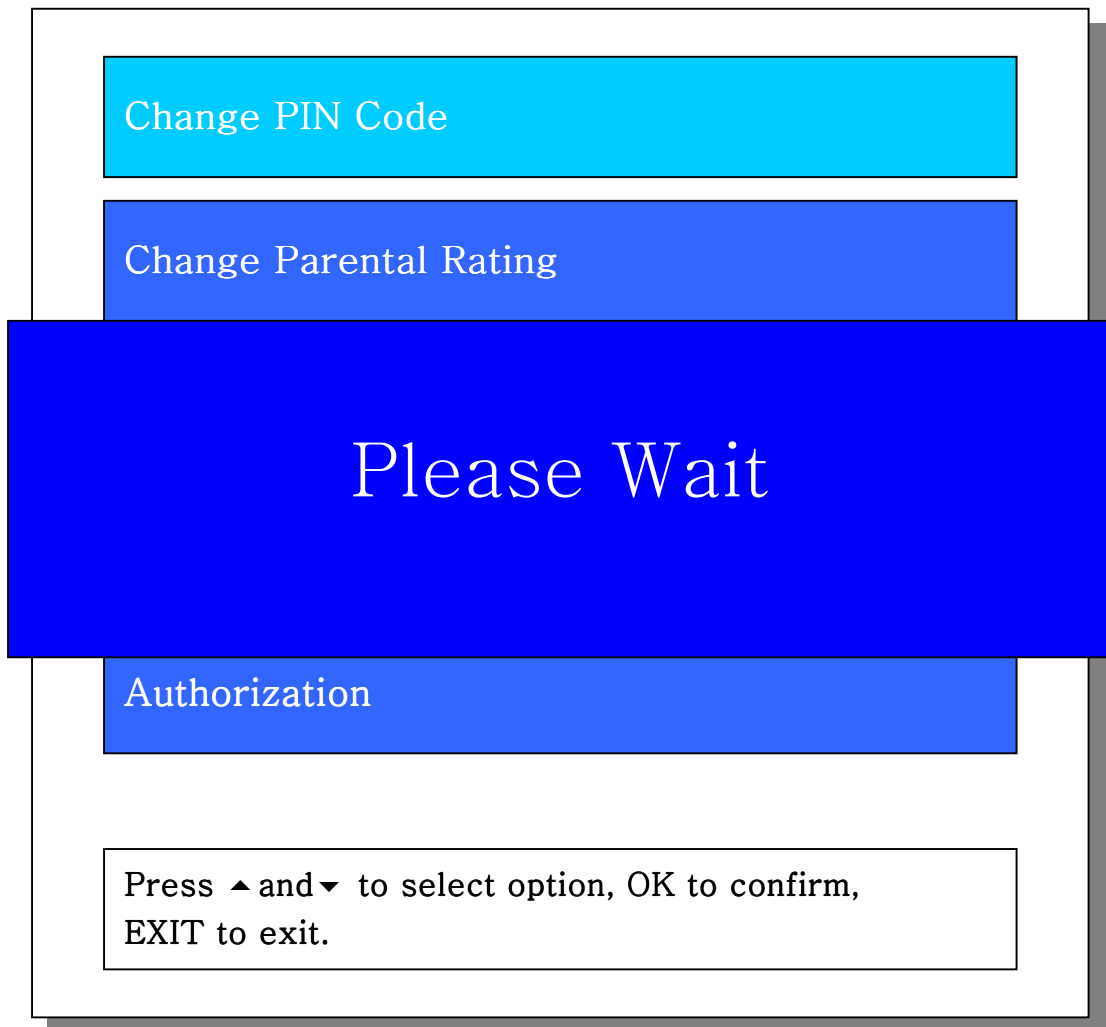
<Figure 25>

For the ***Viaccess*** menu, the smart card should be inserted, otherwise the pop-up screen which says “Please Insert the smart card!” will be shown on the screen for 2 seconds. When the smart card is inserted the following Figure 26 will appear on the screen.



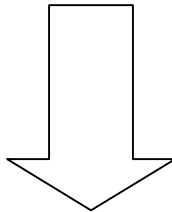
<Figure 26>

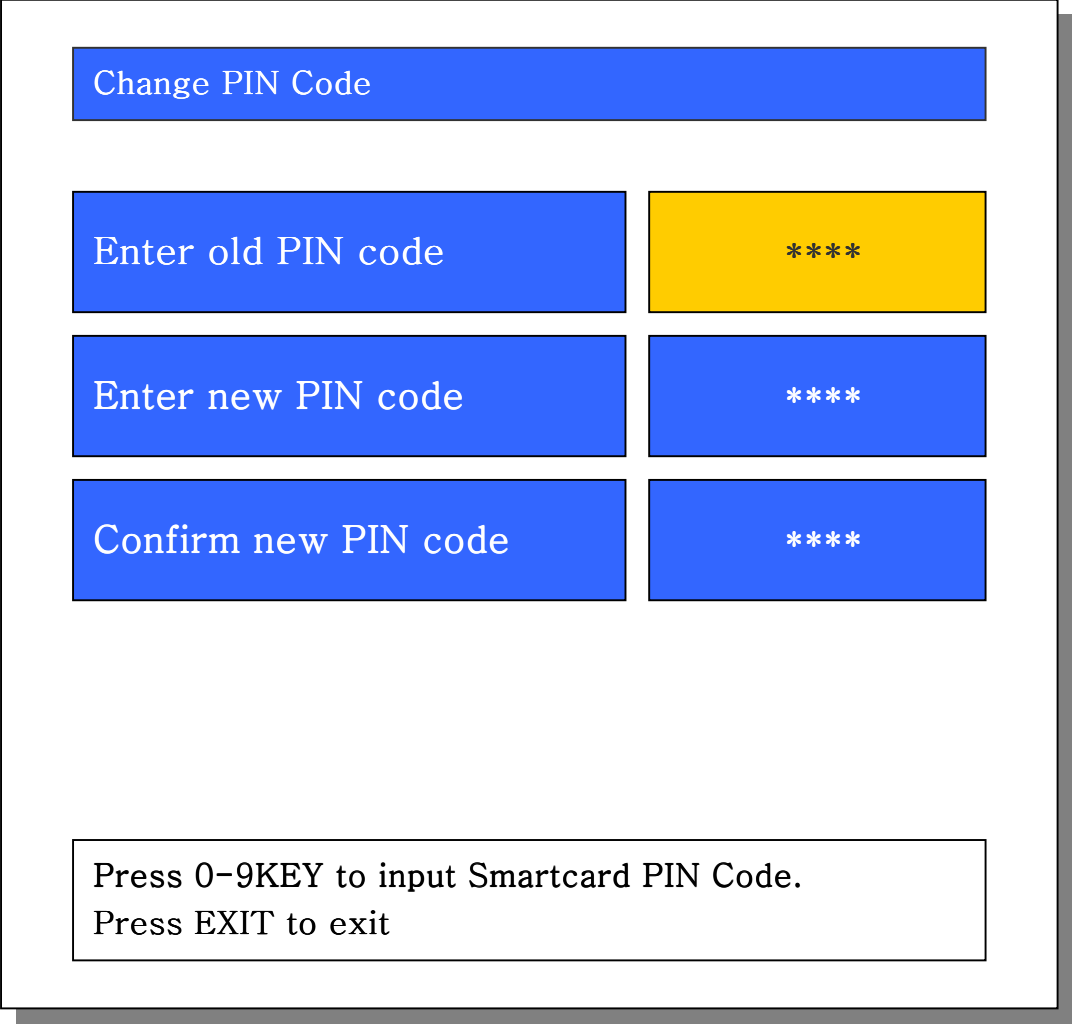




<Figure 27>

Whenever any *Viaccess* sub-menu item is selected by the user the above pop-up message will appear on the sub-menu.



The image shows a screen for changing a PIN code. At the top is a blue button labeled "Change PIN Code". Below it are three rows of input fields. The first row has a blue button "Enter old PIN code" and a yellow box with "****". The second row has a blue button "Enter new PIN code" and a blue box with "****". The third row has a blue button "Confirm new PIN code" and a blue box with "****". At the bottom is a white box with the text "Press 0-9KEY to input Smartcard PIN Code." and "Press EXIT to exit".

Change PIN Code	
Enter old PIN code	****
Enter new PIN code	****
Confirm new PIN code	****
Press 0-9KEY to input Smartcard PIN Code. Press EXIT to exit	

<Figure 28>

To change the PIN code of the Smartcard, if necessary. **Figure 28** is the same as **Figure 22**. If the user inserts the wrong PIN, the pop-up window which says “The PIN code is wrong” will appear on the screen.

Change Parental Rating

Maturity level

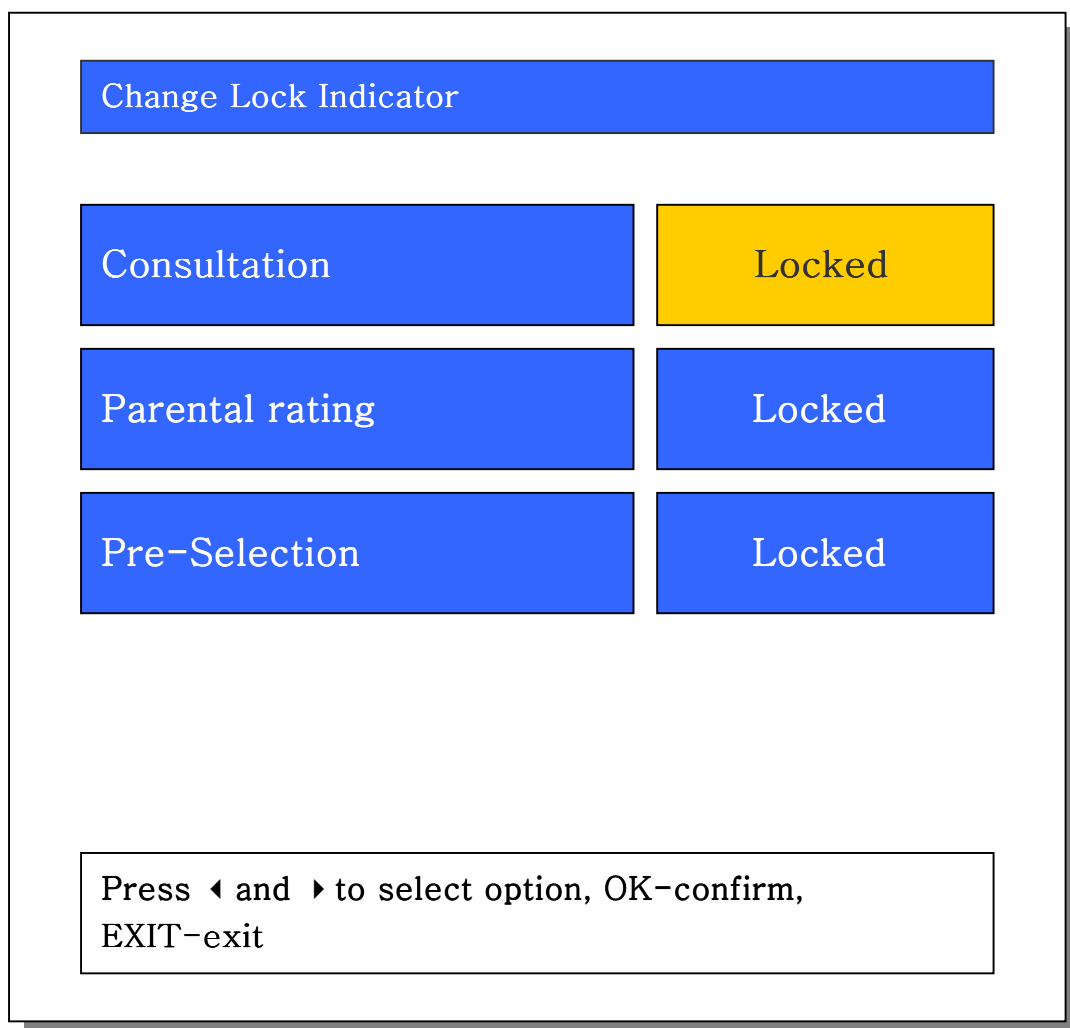
7

[0 : Most restrictive 15: All categories]

Press ◀ and ▶ to select option, OK-confirm,
EXIT-exit

<Figure 29>

This item is to change the setting for the family filter, if necessary



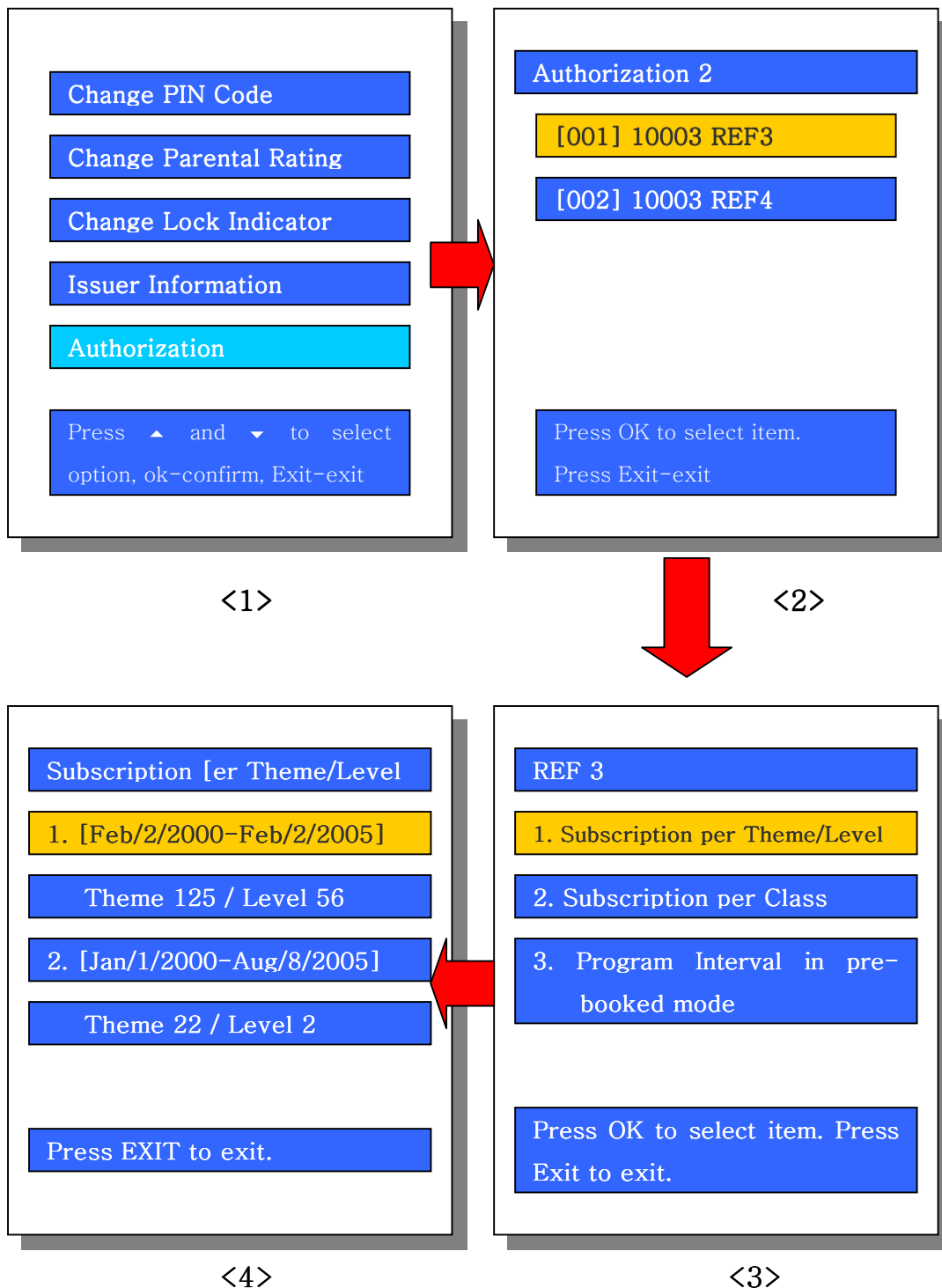
<Figure 30>

Using this item the user can change the lock status of the *Viaccess* smart card.

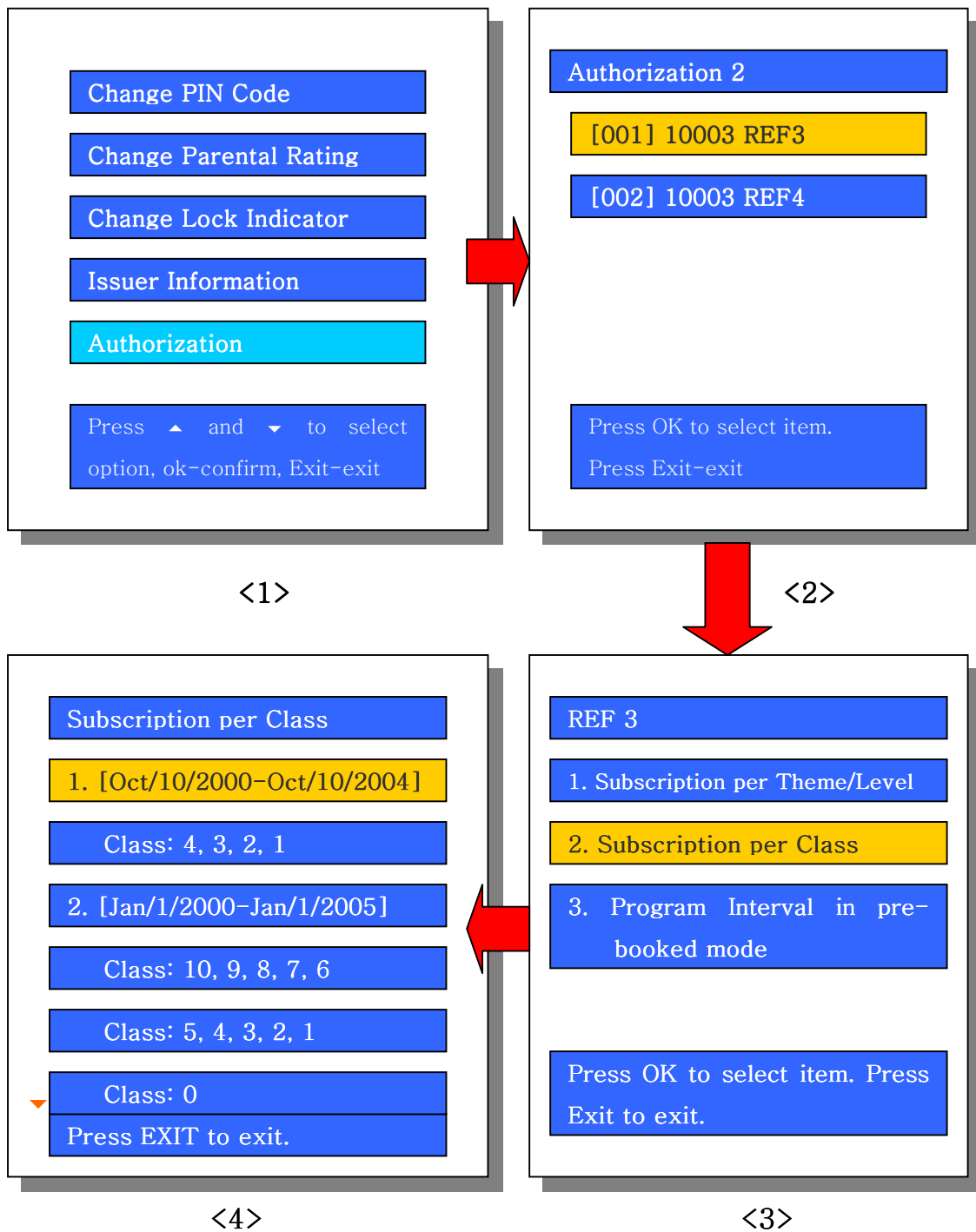
Issuer Information	
Card Number	0000000179
Label	ISSUER
Parental rating -Lock Indicators	7
Consultation	Locked
Parental Rating	Locked
Program pre-selection	Locked
Press EXIT to exit this menu	

<Figure 31>

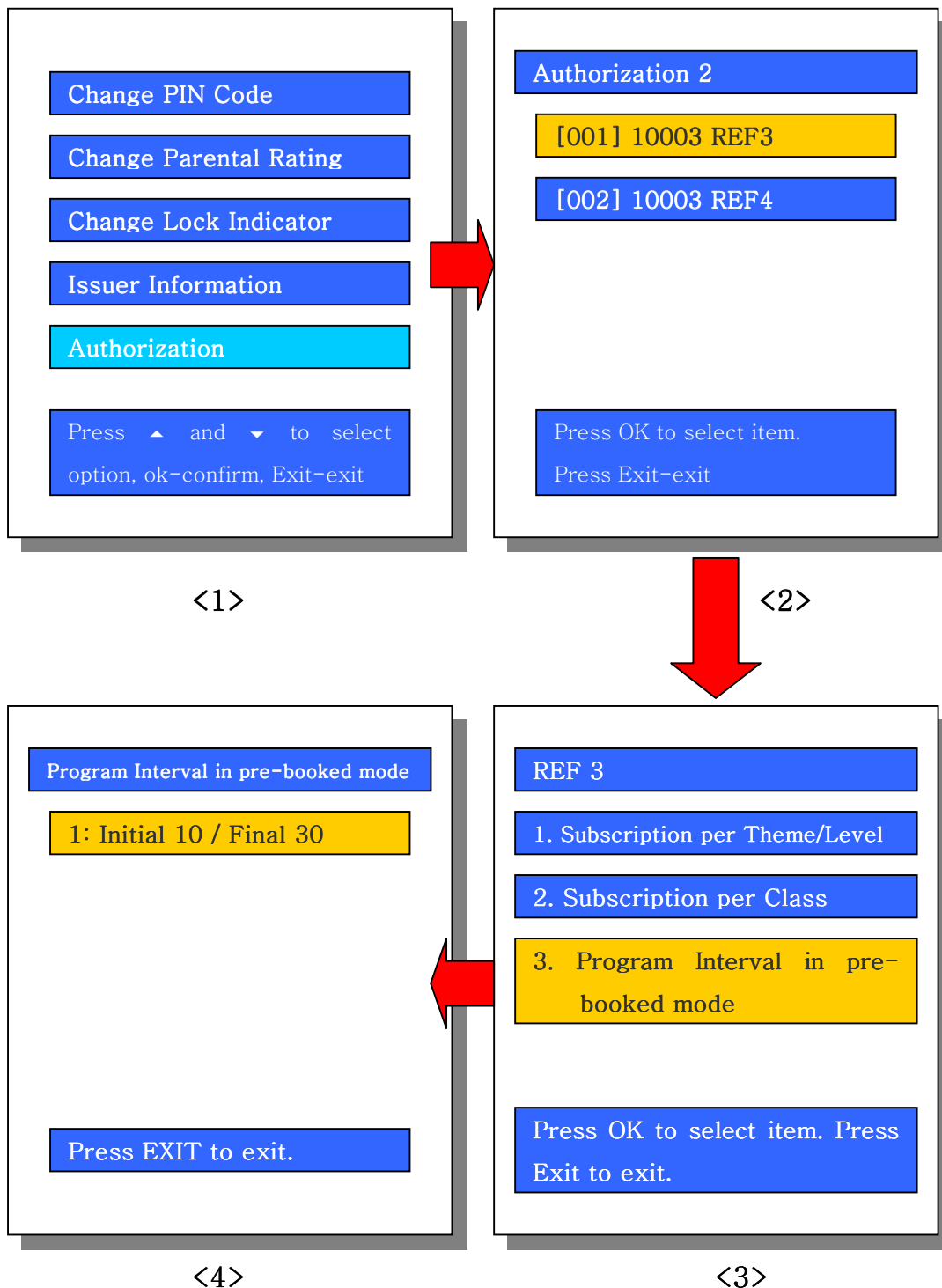
Here you can call up all information stored on the Smart card by the publisher



<Figure 32>



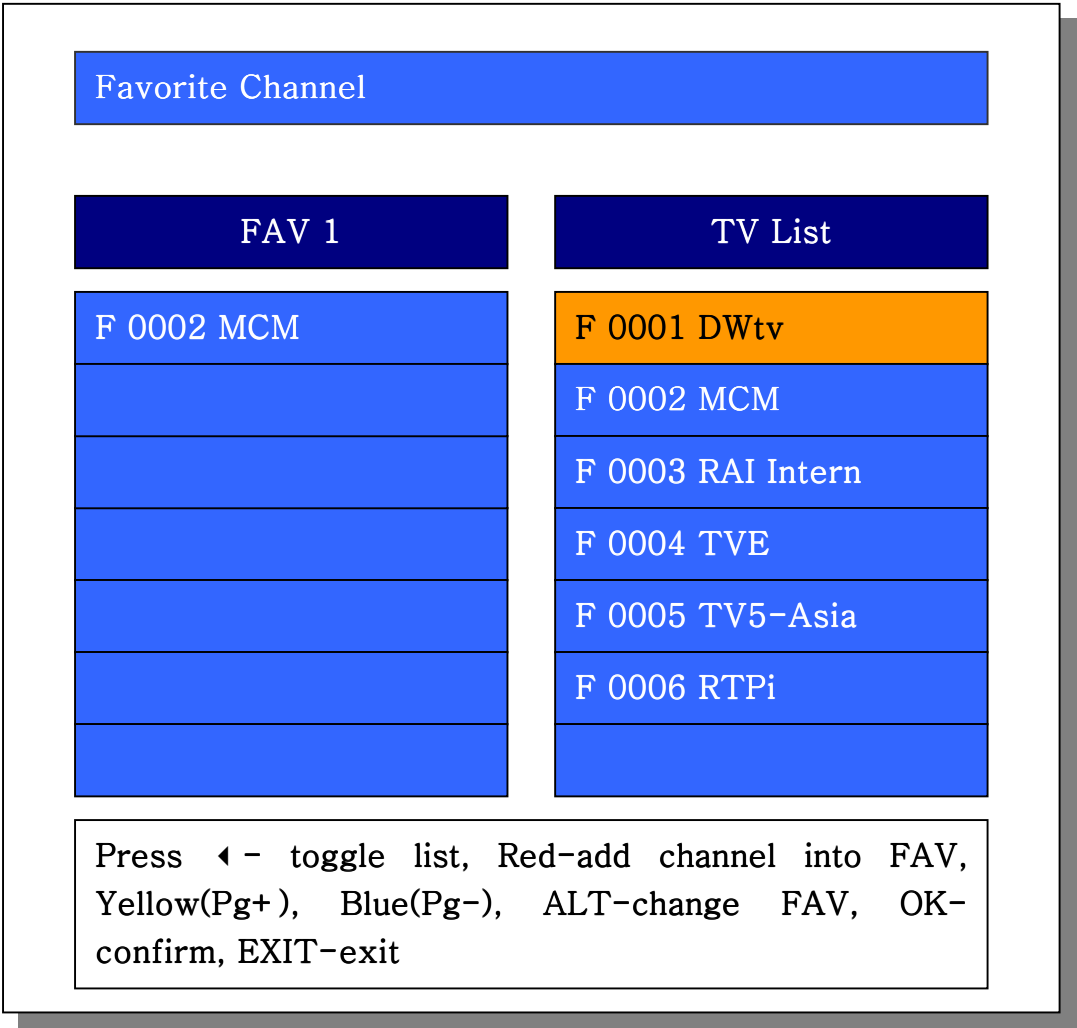
<Figure 33>



<Figure 34>

In the Figure 32, 33, 34 if the user select the second item of <2> the data will be different in the each Figures but the layout of Figures are the same.

The last sub-menu of the Security is ***Favorite Channel***. When any channel is locked the TV list and Radio list will be shown on the screen as the Figure 35.



<Figure 35>

Press the FAV Key to change the FAV from FAV1 to FAV3. To change the TV List to Radio List or Radio List to TV List press the TV Key and RADIO(phonetic sign) on the remote controller. Press the RED Key to add any channels into the FAV from the list and also to delete the channels which you have added in the FAV.

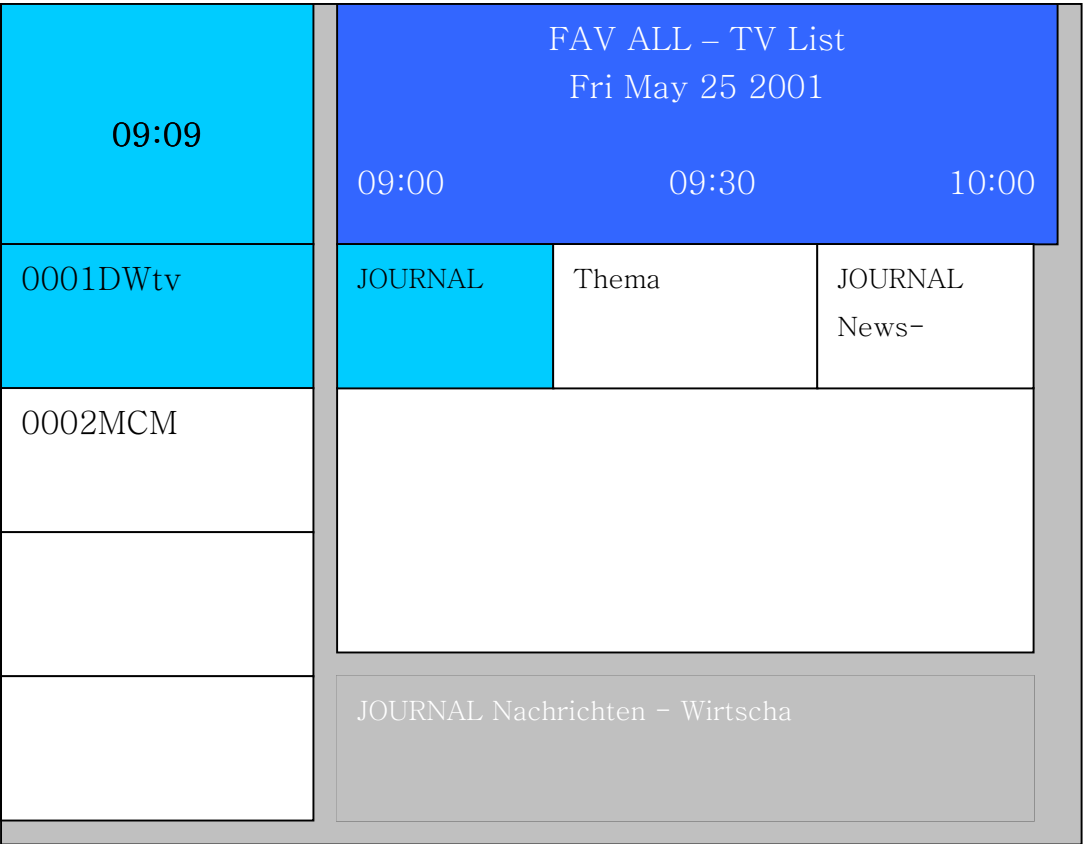
The YELLOW Key is for Page-Down and the BLUE Key is for Page-Up function. When the cursor is on the FAV list the help message will be changed as the Figure 36.

Press ▶-toggle list, Red-delete channel from FAV, Yellow(Pg+), Blue(Pg-), ALT-change FAV, OK-confirm, EXIT-exit

<Figure 36>

6. EPG

When the user presses the *EPG* Key the Figure 37 will appear on the screen. When the user moves the cursor on the any channel and press the OK Key, the channel will be shown directly. If the user press the I Key which is for the program information, the details of the program will be displayed. To change the FAV from ALL to FAV3 press the ALT Key and press the TV Key or RADIO Key to choose between the TV List and RADIO List .



<Figure 37>

7. FUNCTION KEYS

- **POWER** : to change the status to Stand-by mode from Power-on mode or from Stand-by mode to Power-on mode. Before it is changed to the Stand-by mode, the current channel data which is displayed on the screen will be saved, so when it come back to the Power-on mode the previous channel will be displayed.
When it is Stand-by mode the Power Led is orange and when it is Power-on mode the Led is light green.
- **I (information)** : Once it is pressed the information about the current channel will be shown. Unless the banner display is on the screen the banner will be shown first and when this Key is pressed again the information will be displayed.
- **MUTE** : When it is pressed the sound becomes on or off status. When it is mute mode and the Volume key ◀ or ▶ is pressed the volume bar will be displayed and also automatically the mute mode will be off.
- **ALT** : to change the Favorite list from ALL to FAV1, 2, 3. When this Key is pressed the FAV number which is on the banner display will be changed if any channels are set using the Favorite Channel menu.
- **EPG** : to see the EPG information.
- **RCL** : to return to the previous channel. If the FAV number is different between the current channel and previous channel, when it returns to the previous channel the FAV number will be also changed for the previous channel.
- **TV** : to set the TV mode

- ***RADIO(phonetic sign)*** : to set the RADIO mode
- ***GREEN, YELLOW, BLUE, RED*** : The YELLOW Key is to set the video track and the BLUE Key is for the sound track. These Keys are also used several times within the menu functions and they are mainly to avoid the user's misuse of the OK Key and make sure the user want to set the function in the menus.
- ***MENU*** : to go to the Menu option. This Key works even during the Default , Manual and Full Scanning.
- ***EXIT*** : to exit from Main Menu, any sub-Menus, Video track, Sound track, information display, Banner, Volume bar display and EPG display.