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1. Quick Installation

1.1 Setting Language

User can select a preferred language among various languages at Installation page.

(1) Press <menu> button to enter Main Menu.

(2) Press <Left/Right> button to select SETUP option.

(3) Press <Up/Down> button to select Installation option.

(4) Press <OK> button to enter Installation page.

(5) Press <Up/Down> button to select OSD Language option.

(6) Press <Left/Right> button to select a language.

See Figure 1, 2. If there is no database (scan result) in the STB, it will start at step (5) when booting.

1.2 How to receive the programs?

Scan the possible frequency and bandwidth to receive the programs.

(1) Press <menu> button to enter Main Menu.

(2) Press <Left/Right> button to select SETUP option.

(3) Press <Up/Down> button to select Installation option.

(4) Press <OK> button to enter Installation page.

(5) Press <Up/Down> button to select Country Setting option.

(6) Press <Left/Right> button to set Country Setting.

(7) Press <RED/GREEN> button to Auto Scan or Manual Scan.

See Figure 1, 2. If there is no database in the STB, it will start at step (5) when booting.

1.2.1 Auto Scan

Auto Scan will erase the database first, and scans default frequency and bandwidth by Country Setting. Follow the steps (1) ~ (6) at section 1.2.

7) Press <RED> button to be confirmed to clear the database.

8) Press <OK> button to confirm the database will be cleared and start Auto Scan.

It costs time to do Auto Scan, user can press <exit> to exit at anytime. See Figure 3, 4.
1.2.2 Manual Scan

Manual Scan adds the scanning results into database, it doesn't erase the database. But User has to know the Frequency and Bandwidth for scanning. If user scans the same Frequency and Bandwidth more then once, the programs will be duplicated. Follow the steps (1) ~ (6) at section 1.2..

(7) Press <GREEN> button to enter Manual Scan Page.
(8) Press <Up/Down> button to select Frequency option.
(9) Press <0~9> button to input the Frequency value.
(10) Press <Up/Down> button to select Bandwidth option.
(11) Press <Left/Right> button to set Bandwidth value.
(12) Press <OK/exit> button to start scan or exit.

See Figure 5, 6.

2. STB Operation

Describe how to operate the STB.

2.1 Main Menu

Main Menu for operating a lot of functions.

(1) Press <menu> button to enter Main Menu.
(2) Press <info> button to display the version information of STB.

See Figure 7, 8.

2.2 SETUP

Set the system settings of STB. See Figure 9.

2.2.1 Installation

Set about receiving and playing program settings of STB. See Figure 10.

2.2.1.1 Antenna Setting

Set the antenna power on or off at Installation page.

(1) Press <Up/Down> button to select Antenna Setting option.
(2) Press <Left/Right> button to set "ON" or "OFF" for turning on or off the antenna power.

2.2.1.2 Country Setting
Set the country for **Auto Scan**, **Manual Scan** and **Time Zone**. Change the **Country Setting** will automatically change the default **Time Zone** value. **Country Setting** also has default **Frequency** and **Bandwidth** for **Auto Scan**.

(1) Press <Up/Down> button to select **Country Setting** option.

(2) Press <Left/Right> button to set the Country.

### 2.2.1.3 OSD Language
Set the On Screen Display Language, please reference section 1.1.

(1) Press <Up/Down> button to select **OSD Language** option.

(2) Press <Left/Right> button to set the language.

### 2.2.1.4 Audio Language
Set the audio language for watching program.

(1) Press <Up/Down> button to select **Audio Language** option.

(2) Press <Left/Right> button to set the language.

### 2.2.1.5 Subtitle Language
Set the language for displaying subtitle.

(1) Press <Up/Down> button to select **Subtitle Language** option.

(2) Press <Left/Right> button to set the language.

### 2.2.1.6 Time Zone
Set the **Time Zone** for adjusting the system time. Some Countries are covered with more than one **Time Zone**.

(1) Press <Up/Down> button to select **Time Zone** option.

(2) Press <Left/Right> button to set the **Time Zone** value.

### 2.2.1.7 Auto Scan
**Auto Scan** erases the database first, and scans default frequency and bandwidth by **Country Setting**. Please check the section 1.2. and 1.2.1 for more detail.

(1) Press <RED> button to start **Auto Scan**.

### 2.2.1.8 Manual Scan
**Manual Scan** adds the scanning results into database, it doesn't erase any database. But user has to know the **Frequency** and **Bandwidth** for scanning. If user scans the same **Frequency** and **Bandwidth** more then once, the programs will be duplicated. Please check the section 1.2. and 1.2.2 for more detail.

(1) Press <GREEN> button to start **Manual Scan**.

### 2.2.2 TV Setup
Setup the display mode for TV. See Figure 11.

#### 2.2.2.1 TV Format
Set display format for watching program, such as 4:3LB, 4:3PS, 16:9LB, 16:9FIT.

(1) Press <Up/Down> button to select **TV Format** option.

(2) Press <Left/Right> button to set format.
2.2.2.2 TV Mode
Set PAL, NTSC or AUTO for display. AUTO will switch PAL or NTSC by program content. This setting should be matched with user's TV.

(1) Press <Up/Down> button to select TV Mode option.
(2) Press <Left/Right> button to set mode.

2.2.2.3 OSD Transparency
Set the On Screen Display transparency. 1 is the most diaphanous.

(1) Press <Up/Down> button to select OSD Transparency option.
(2) Press <Left/Right> button to set transparent value.

2.2.2.4 Banner Display Time
Set Banner displays time. Banner doesn't disappear when setting "Always". It displays at watching program. See Figure 12.

2.2.3 Password
To setup password for channel lock or censorship lock. User can change password here. The default PIN Code is 0000. See Figure 14.

2.2.3.1 Channel Lock
Lock the channel (program) which has been set lock status by password when turning on the Channel Lock. About setting program lock status, please check the section 2.3.1.3 for more detail. And lock many functions by password.

(1) Press <Up/Down> button to select Channel Lock option.
(2) Press <Left/Right> button to turn on or off the lock setting.

2.2.3.2 Censorship Lock
Lock the program by password and censorship threshold. The censorship info is in program content. Under the censorship rating, user has to enter the password for watching program.

(1) Press <Up/Down> button to select Censorship Lock option.
(2) Press <Left/Right> button to set the rating.

2.2.3.3 Change Password
Change the PIN Code. If user forget the PIN Code, please contact the provider.

(1) Press <Up/Down> button to select Change Password option.
(2) Press <Left/Right> button to trigger changing password.
(3) Press <0~9> button to enter old password.
(4) Press <0~9> button to enter new password.
(5) Press <0~9> button to confirm new password.

If success, it will display PIN Code changed message. Or it will display PIN Code Error message. See Figure 15 ~ 19.
2.2.4 Advance Timer
User can set event(s) for watching the program(s) by date, time and frequency. When setting date and start time is up, STB will automatically switch to program user sets. Setting here, the start time and end time depend on current system time. Please check the section 2.3.2.1 for more detail. See Figure 20.

2.2.5 Data Transfer
Transfer code (application), database or both to PC or STB. Transfer data by RS232 to PC, or from master STB to slave STB. See Figure 21.

(1) Press <RED> button to set Target value.
(2) Press <GREEN> button to set Mode value.
(3) Press <OK> button to start transfer.

2.2.5.1 System Software Update
Update application and tsbootl by build-in card reader or USB port. See Figure 21 ~ 24.

(1) Press <BLUE> button to enter file browser.
(2) Press <Left/Right/OK> button to change folder and focus *.crd file.
(3) Press <OK> button to start update.
2.2.6 Set Default
Reset STB to factory default. All settings by user has been operated will be reset default, and database will be erased at same time. See Figure 25, 26.

2.3 TV/RADIO
There are two types of program. One is TV and the other is Radio. The operation of the List and Guide at TV and Radio are the same. Here using TV to be example. See Figure 27, 28.

2.3.1 List
User can operate some functions in List. The result of operating will be displayed. See Figure 29, 30.
(1) Press <Left/Right> button to select Tool (operation).
(2) Press <Up/Down> button to select the program.
(3) Press <RED/GREEN/YELLOW/1~8> button to operate. Buttons depend on operation.
2.3.1.1 Delete

Delete will delete the program perpetually from database. User must rescan to recover it.

1) Press <Left/Right> button to select Delete option.
2) Press <Up/Down> button to select the program.
3) Press <RED/GREEN> button to set delete status.
4) Press <YELLOW> button to confirm the operation and save the result.

Program status is changed after operating. And press <Left/Right> button will confirm and save. See Figure 31 - 34.

2.3.1.2 Skip

Skip will skip the program by channel up/down when watching program.

1) Press <Left/Right> button to select Skip option.
2) Press <Up/Down> button to select the program.
3) Press <RED> button to set skip status.
4) Press <YELLOW> button to confirm the operation and save the result.

Program status is changed after operating. And press <Left/Right> button will confirm and save. See Figure 35, 36.

2.3.1.3 Lock

Lock will confirm password before watching this program when Channel Lock is turned on. Please check the section 2.2.3.1. for more detail.

1) Press <Left/Right> button to select Lock option.
2) Press <Up/Down> button to select the program.
3) Press <RED> button to set lock status.
4) Press <YELLOW> button to confirm the operation and save the result. Program status is changed after operating. And press <Left/Right> button will confirm and save. See Figure 37, 38.
2.3.1.4 Edit

User can use Edit to edit the program name, maximum length is 16 characters.
(1) Press <Left/Right> button to select Edit option.
(2) Press <Up/Down> button to select the program.
(3) Press <RED> button to display program info page.
(4) Press <OK> button to edit program name.
(5) Press <Up/Down/Left/Right/OK> button to select the character.
(6) Press <RED>/<OK> button on "Save" button to return program info page.
(7) Press <RED> button to save the editing and return to List. If press <exit> button at step (7), it returns to List without saving. See Figure 39 ~ 44.

2.3.1.5 Favorites

User can quickly channel up/down the favorite programs by favorite filter. There are 8 kinds of favorite for user setting. They are News, Sprot, Movie, Music, Shopping, Travel, Boy, and Girl.
(1) Press <Left/Right> button to select Favorites option.
(2) Press <Up/Down> button to select the program.
(3) Press <1~8> button to set the kind of favorite.
(4) Press <YELLOW> button to confirm the operation and save the result.

Program status is changed after operating. And press <Left/Right> button will confirm and save. See Figure 45, 46.
2.3.1.6 Search

User can search the program name by partial keyword or character(s).

1. Press <Left/Right> button to select **Search** option.
2. Press <RED> button to entry search page.
3. Press <Up/Down/Left/Right/OK> button to input keyword or character(s).
4. Press <RED>/<OK> button on "Search" button to return **List**. It will focus on the match result.
5. Press <GREEN/YELLOW> button to next or previous match result.

See Figure 47 ~ 50.

2.3.2 Guide

**Guide** is also naming EPG (Electronic Program Guide). Display program info and events. TV and Radio Guide are the same. See Figure 51 ~ 53.

1. Press <Up/Down> button to select program.
2. Press <Left/Right> button to change date.
3. Press <GREEN/YELLOW> button to select event.
4. Press <BLUE> button to show event more detail.

See Figure 51 ~ 53.
2.3.2.1 Book

Book will remain user to watch event user sets by date and time. It is the same with Main Menu \& SETUP \& Advance Timer, please check the section 2.2.4. for more detail. When editing in Book, the Start Time and End Time are depended on selected event. In Advance Timer, they are depended on current system time.

(1) Press <Up/Down> button to select program.
(2) Press <GREEN/YELLOW> button to select event of program.
(3) Press <RED> button to enter Book page.
(4) Press <Up/Down> button to select Event row user wants to set or modify.
(5) Press <RED/GREEN> button to start edit or delete one event.
(6) Press <Up/Down> button to focus item user wants to modify.
(7) Press <Left/Right/0~9> button to change the data.
(8) Press <YELLOW> button to save. If conflict with itself or other event, it displays conflict message.

If the date and time in the event are up, STB will automatically switch to setting program in event. Press any key except <Vol-/Vol+/mute> button, STB asks user to abort it or not at watching program. User can delete the event while it isn't at running. See Figure 54 ~ 59.
2.4 MULTIMEDIA

Multimedia must be used with build-in card reader or USB port. Enter My Album and My Music, it displays "Initializing" when just inserting device or "Device is not ready!" without device. See Figure 60 ~ 61.

2.4.1 My Album

My Album can display JPG photo and operate it. Remove device when playing photo, it displays "Device is not ready!" message and return to Main Menu. See Figure 62.

2.4.1.1 Thumbnail

If there is no photo in device root folder, it will start at Thumbnail mode. Or it will start at Folder mode. It displays JPG EXIF info (Width, Height and Date) of selected photo. See Figure 63.

2.4.1.2 Folder

If there is no photo in device root folder, it will start at Folder mode. Or it will start at Thumbnail mode. User can browser folders and files. It also displays JPG EXIF info of selected photo. See Figure 64.
User can zoom the photo with 25%, 50%, 100%, 150%, 200%. If zooming greater then 100%, press <Up/Down/Left/Right> button can move the photo. See Figure 67 ~ 69.

Press <UP/Down/Left/Right/OK> button to browse folders or files.
Press <OK> button to view (zoom) the selected photo.
Press <exit> button to return Thumbnail mode with photos in current folder, or return Main Menu.

2.4.1.3 Zoom

View and zoom the photo at 100% from Thumbnail or Folder mode. See Figure 65, 66.

Press <GREEN> button to browse folders and files.
Press <YELLOW> button to zoom in the photo.
Press <BULE> button to zoom out the photo.
Press <Up/Down> button to display next or previous photo.
Press <exit> button to return Thumbnail mode.
2.4.1.4 Rotate

View and rotate/flip the photo from Thumbnail mode. See Figure 70, 71.

![Figure 70. Edit - Decoding](image)

Z Press <RED> button, the photo will be rotated left.
Z Press <GREEN> button, the photo will be rotated right.
Z Press <YELLOW> button, the photo will be flipped horizontal.
Z Press <BLUE> button, the photo will be flipped vertical.
Z Press <exit> button to return Thumbnail mode.

After rotating or flipping the photo and return Thumbnail mode, the result will display on Thumbnail mode. See Figure 72 ~ 76.

![Figure 71. Edit - Display](image)

![Figure 72. Edit - Rotate left](image)

![Figure 73. Edit - Rotate right](image)

2.4.1.5 Slide Show

Slide all photos in current folder from Thumbnail mode.

Z Press <RED> button to play the slide show when pausing.
Z Press <GREEN> button to pause the slide show when playing.
Z Press <YELLOW> button to set repeating or once.
Z Press <BLUE> button to set the time interval between current and next photo.
Z Press <Up/Down> button to next or previous photo right away.

See Figure 77 ~ 83.
2.4.2 My Music

Figure 85. Browse
Figure 86. Play
Figure 87. Pause
Figure 88. Repeating
Figure 89. Random
Figure 90. Play and Volume
Figure 91. Mute with volume
Figure 92. Mute

2.5 GAME

There are two items in **Game**. One is **Gomoku**, the other is **Calendar**. See Figure 93.
2.5.1 Gomoku

User can play with computer or someone else. See Figure 94, 95.

- Press <Up/Down/Left/Right> button to set play mode and difficult.
- Press <OK> button to start play Gomoku.
- Press <Up/Down/Left/Right> button to select the position.
- Press <OK> button to place the piece.

2.5.2 Calendar

Calendar displays the year, month, and date. See Figure 96 ~ 98.

- Press <Left/Right> to change year.
- Press <Up/Down> to change month.

2.5.3 Calculator

Calculator can used for mathematical calculations.

- Press <Up/Down/Left/Right> button to move the focus to the symbol you want.
- Press <1~9> button to select 1~9 number.
- Press <INFO> button to select.
- Press <OK> button to calculate the answer.
- Press <RED> button to do plus function.
Z Press <GREEN> button to do sub function.
Z Press <YELLOW> button to do multiply function.
Z Press <BLUE> button to do divide function.
Z Press <EXIT> button to out calculator.
While use calculator to calculate number. See Figure 99 ~ 100.

Figure 99. Calculating number
Figure 100. The answer

2.6 Normal Play

Normal Play means STB under watching TV or playing Radio. See Figure 101, 102.

2.6.1 Information
Display program's info or more detail info. Banner displays the program No., favorite setting, current time, program name, current and next event, lock, scramble, subtitle and teletext info. More detail info displays about tuner info. See Figure 103, 104.

Z Press <info> button to display banner to show program info.
Z Press <info> button when banner exist to display program more detail info.

Figure 101. Normal Play – TV
Figure 102. Normal Play - Radio
Figure 103. Banner
Figure 104. Program Info
2.6.2 Switch Program
User can channel up/down to switch program or input program number.

Z Press <Ch Up/Ch Down> button to next or previous program.

Z Press <0~9/OK> button to switch program by inputting program number.

f the input program number doesn't exist, STB will ignore the input. See Figure 105.

2.6.4 Volume
User can adjust the volume or mute. If adjust the volume with mute, mute will be canceled.

See Figure 107, 108.

Z Press <Vol-/Vol+> button to adjust the volume.

Z Press <mute> button to mute.

2.6.3 Program List
Display Program List with No., name, and state. And user can switch program at here. See Figure 106.

Z Press <OK> button to display Program List.

Z Press <Up/Down/Left/Right/Page Up/Page Down> to preview the program.

Z Press <OK/exit> to switch program or return last watching program before pressing OK button.
2.6.5 Pause

Pause video and audio. But it will be canceled by any input. See Figure 109.

Z Press <pause> button to pause video and audio.

2.6.6 Audio

Switch Main or SAP sound channel. And switch output channel with LR or L or R. If setting audio language at Main Menu Installation Audio Language, the audio channel default language will be chosen by setting. See Figure 110.

Z Press <audio> button to display the audio setting page.
Z Press <Up/Down> button to select Channel or Sound Mode option.
Z Press <Left/Right> button to set the value.
Z Press <exit> button to exit the audio setting page.

2.6.7 Favorites

User can switch the same favorite program by favorite filter. About favorites setting, please check the section 2.3.1.5. for more detail. See Figure 111, 112.

Z Press <fav Up/fav Down> button to switch the favorite filter.
Z Press <Ch Up/Ch Down> button to switch the same favorite program.

2.6.8 Teletext

Display teletext on screen, the style of teletext may be different by content provider. See Figure 113, 114.
Z Press <text> button to display the teletext setting page.
Z Press <Up/Down> button to select the teletext language, if the program has teletext.
Z Press <OK/exit> button to exit the teletext setting page.
Z Press <0~9/Up/Down/Left/Right> button to change teletext page, if teletext exists.

2.6.9 Subtitle
Display the subtitle on screen, the style of subtitle may be different by content provider. See Figure 115, 116.
Z Press <subtitle> button to display subtitle setting page.
Z Press <Up/Down> button to select subtitle language, if the program has subtitle.
Z Press <OK/exit> button to exit subtitle setting page.

2.6.10 Teletext Subtitle
Display subtitle by teletext, the style of the teletext subtitle may be different by content provider. See Figure 117, 118.
Z Press <text/subtitle> button to display teletext or subtitle setting page.
Z Press <Left/Right> button to select "TTX Subtitle".
Z Press <Up/Down> button to select teletext subtitle language.
Z Press <OK/exit> button to exit the setting page.
2.6.11 Guide
About Guide detail, please check the section 2.3.2. for more detail.
Z Press <RED> button at normal play.

2.6.12 List
About List detail, please check the section 2.3.1. for more detail.
Z Press <GREEN> button at normal play.

2.6.13 Browse
Browse digest of programs on screen. It can display 9 programs at once. The selected program is playing, others will display its snapshot. See Figure 119.
Z Press <YELLOW> button to display digest.
Z Press <Up/Down/Left/Right> button to browse program.
Z Press <OK> button to switch program and watch.
Z Press <exit> button to return the last watching program before press yellow button.

2.6.14 Return
User can quick return the last watching program, also naming recall.
Z Press <BLUE> button to switch last watching program from current watching program.

2.6.15 Message
There are some messages to inform user the current condition.

2.6.15.1 No Signal
STB can't get signal, for example, cable is disconnected. See Figure 120.

2.6.15.2 No Service
Program doesn't have any content to play. See Figure 121.
2.6.15.3 Service Scrambled
Program is scrambled for payment, contact the content provider to know how to descramble it. See Figure 122.

Figure 122. Service Scrambled

2.6.15.4 Antenna Overload
The power of antenna is overload. See Figure 123.

Figure 123. Antenna Overload

2.6.15.5 HDTV not support
This STB doesn't support HDTV. If the program content is HDTV, STB will display this message. See Figure 124.

Figure 124. HDTV Not Support

2.6.15.6 Locked
Program is locked by setting lock (please check the section 2.3.1.3.) and turning on password setting (please check the section 2.2.3.1.). User must input correct password to watch program. See Figure 125, 126.

Figure 125. Lock by password
Figure 126. This channel is locked.