3.5" Handheld TFT LCD
Multi-Function Monitor/
Satellite Finder
Use of a manual



Important Notice

Dear customer

If you need to add satellite information onto our satellite finder, please follow bellowing steps:

1st: Press button (MERU), select "Add satellite" and press [OK], setup satellite name,

Local frequency, DisEqC and 22K according to your LNB, DisEqC and 22K.

Please refer to step 'Add satellite' on manual.

2nd: then enter "Add channel", find the satellite name you setup before by pressing right/left key.

then input TP Frequency, symbol rate and type of polarization.

Please refer to step "Add channel" on manual.

3rd: Connect LNB well, adjust the direction of antenna until finder alarms, press *OK* key to search programs.

Introduction:

Thanks for your purchasing Satellite finder. The Satellite finder with world advanced technology: QPSK demodulator and MPEG-II decoder in full compliance with the DVB-S standards, with newest integrated circuit and TFT,TFD liquid crystal display technology production. machines targeting a high-performance, high-capacity lithium-polymer battery, the Satellite finder is a collection of satellite television signal and AV signal reception, high resolution LCD display and with DC power supply directly one of the high-tech electronic products. Built-in Satellite finder management;13V18V/22K/Signal lock instruction; LNB Short-circuit protection & alarm. It is can be carried and used outdoors. It is the absolutely necessarily for engineers during their installation of the satellite television reception systems and monitoring equipment system.

To ensure the best use of unit, and long-term normal use, please read this handbook carefully beforehand.

ATTENTION:

- There are no user-adjustable components, Do not remove the rear panel of this product, only qualified technical personnel are permitted to perform maintenance.
- Do not let child within put anything into the unit, to avoid damage to machinery.
- Don't expose this product to directly sunlight, heat or humid conditions.
- Keep away from strong light while using this product so as to obtain the clearest and the most colorful picture and normal long-term use.
- Avoid heavy impact or drop onto the ground although our machine with Protection measures.
- Do not use chemical solutions to clean this unit, Please simply wipe with a clean soft cloth to keep the brightness of the surface.
- Only use the power adapter attached when you charge.
- Turn off this unit before you plug LNB cable.

CATALOG

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1. Appearance

1.1 , the front panel (Figure 1)

1.LCD display: show images and other signals.

2.LOCK:the light is green when signal is strong

2.22K:the light is green when signal is Conversion by opening 22K.

4.18V:the light is green when LNB output 18V.

5.13V:the light is green when LNB output 13V.

6. Sat: directly into the satellite Management functions



7. Exit:

8. Alarm: Signal locked alarm On/Off

Figure 1

9.F4:pending

10.0-9:Number key

11.TV/AV:TV/AV function switch

12.INFO:enter find satellite status by clicking this key,it shows signal strong, Signal quality and other information of satellite signal on the screen.

13.MENU: press this key to enter or exit the menu.

- 14. <: to turn down the volume or move the cursor left. "VOL-"
- 15. ▼:to turn down the channel or move the cursor down. "CH-"
- 16.►:to turn up the volume or move the cursor right."VOL+"

17.OK: confirm key.

18. ▲: to turn up the channel or move the cursor up. "CH+"

19.power light: the light is red when power is connected.

1.2, Top panel (Figure 2.)

 LNB IN: the satellite signal input socket.

 USB SIMPLE UPDATE SOCKET: software update socket (note: Only suitable for the same style)

VIDEO: Video of output/input.

 AUDIO:input/outputleft/right -channel audio

1.3, side panel (Figure 3.)

 power switch: "0" turn off the unit; "I" turn on the unit

 DC: direct power supply (DC12.5V) input/output jack.
 battery cover:Open the battery cover, you can replace the built-in battery

4.Alarm hole:when LNB is short-circuit during a sharp alarm sound

2:system connection

3 Basic Operation

3.1. power supply

3.1.1.Built-in battery pack power supply: Internal 11.1V 2200mAh high-performance lithium-polymer battery. Turn on power switch, the battery auto supply, the battery can work about 3-4 hours outdoor.



Figure 2

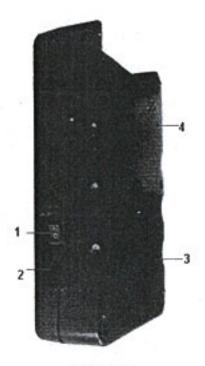


Figure 3

3.1.2.An external power adapter: please use power adapter we supply, connect the power DC12.5V at the side panel to charge.

3.1.3. Charge for Built-in rechargeable battery pack: The

battery with intelligent protection circuit to avoid the damage by over-recharge/over -discharge or short-circuit. Please recharge the battery with the attached power adapter, when the power light is red

3.2receive satellite television signals

Satellite TV signal parameters can be adjusted through the buttons on the front panel.

Start: turn the power in the state "I", the LCD display will show the information and the TV signals.

When the first time to use the Satellite Finder, it will play the first channel as the factory default setting.

If it isn't the first time to use the Satellite Finder, it will play the channel which played the last time before you turn Satellite Finder off.

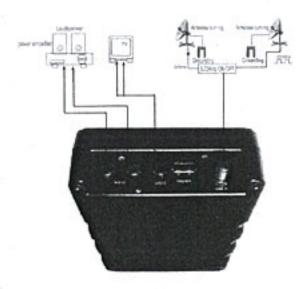


Figure 4

Frequently problems: I have turned my Satellite Finder on and not in stand-by mode, there is no program played but displayed a small ball or NO SIGNAL on the screen.

It is means you received that channel no signal, which may cause by follow reasons:

- You choose the channel not on the satellite which your antenna has been chosen, the simple solution is to change channel.
- 2. If the signal quality is too bad. You can change to other channel which has good signal quality. If you cannot solve this problem at last, please contact with the nearby agency or other professional man.
- You used the twin-local frequency LNB, you need modified local frequency setting of the Satellite Finder.

OK KEY: No menu displayed on the screen. Press "OK" key, the channel list and small picture will displayed on the TV screen. This small picture used for fast search the channels you have stored in the satellite Finder. It convenient for browse and choose. Press ▶,9 channels will page down. ◄,9 channels will page up.(Figure 5)



Figure 5

VOLUME: When picture displayed in full screen, press displaye

NUMBER: When picture displayed in full screen, press 0-9 number key to choose the channel you want, and then press OK key, change to that channel faster.

INFO: Press INFO key when picture displayed in full screen, the information window will appear on the screen to show some information about current channel.

TV/AV: Under TV mode, press TV/AV key can switch to AV input mode.

F1: directly into the satellite Management functions F2:exit.

3.3 Adjust image parameters

press TV/AV the botton select AV status With the three buttons on the front panel to adjust image. Press "OK" enter the menu in Figure 6:

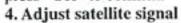
Brightness: adjust the black-level of images to what you want.

Contrast: adjust the degree of discrepancy of the image.

Color: adjust level and the color tone (the picture reddish or green).

HUE: adjust imbalances in the color images.

Language: choose the following language from menu you want: Chinese English. the items need to adjust by "OK", the selected option in red background, adjust by "◄" / " ▶ " to meet your request, press "OK" to confirm.



4.1 antenna's azimuth and elevation



Figure 6

If you do not know the azimuth and elevation satellite to receive, please check the guidance software of this unit, to calculate antenna azimuth and elevation, Please refer to specific operational guidance 6.4B.

4.2 To catch satellite signals

Press the green shortcut key "INFO" on the front panel, to directly enter mode to find satellite, the screen will show as Figure 7, the screen displays the relevant parameters to receive the satellite and signal strength, signal quality and other information etc.

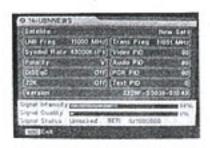


Figure 7

4.3 Exact debugging

The Satellite Finder not receive digital programs only if you adjust the antenna up to the value of signal quality not less than 30% and it is steady; following that exact adjust the installation altitude of tuner to get the best focal distance. Continue to adjust the azimuth up to the MAX value of signal strong degree and signal quality.

5. Receive Audio and Video signal.

Press the button on the front panel "TV/AV", the LCD will show blue screen, AV Jack of rear panel can receive audio and video signal, can be used for monitoring equipment installation and AV signal of broadcast.



Figure 8

6 MENU OPERATION MAIN MENU

Press the MENU on the front panel to see Fig.8 on the screen.

Press
A/▶ key on the front panel to choose the item (Channel, Satellite, System, Tools), then press OK enter into the relative item and the one selected will be highlighted, press Exit to exit the current menu.

1. Channel

When you are in the Channel item, you can use ▲/▼ to choose TV channel, Radio channel and Add channel.

A: TV channel(Fig.9)

Press OK key to confirm when the cursor on the Channel item, the satellite channel list will be displayed. Press ◄/► to choose the satellite have been installed. You can Delete, Delete All, Move or Change the TV channels under this menu.

a. Delete: In the channel list,

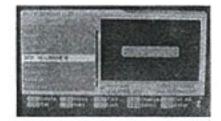


Figure 9

use ▲/▼ to change the channels, press key"1" to choose the channel you want to delete, the channel which you have chosen

will be marked with "x" (as Fig.10), press key "1" one more time can cancel the deleting, Press OK to confirm the deletion or cancel.

Press key"5"can marked all channels with"x", then OK to delete all channels in one time.

b. Move: In the channel list, use ▲/▼ to change the channels, Press key"2"to choose the channel you want to move, the channel which you choose will be marked with "◆"(as Fig 11), then press ▲/▼ move that channel to the position you want, press"2"again to confirm.

c.Favorite: use ▲/▼ to set your favorite channels in the channel list. Press key"3"and ▲/▼ to choose the favorite types (Commerce, Sports, Movies, News, Kid and Music), as fig.12.OK to confirm and MENU to exit. The channels which have set will be marked with the red heart symbol.

d. Change: Use ▲/▼to select the channels you want to change in the channel list, press key"4"enter into the interface of change as fig.13 displayed. Change the relative parameters of the channel following the indications. Move the cursor on SAVE to confirm and exit.

B. Radio Channel:



Figure 10

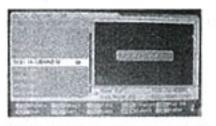


Figure 11

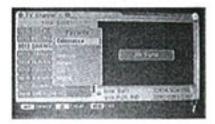


Figure 12

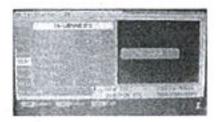


Figure 13

The operations are same as TV Channel.

Note: Press "TV/RADIO" on the remote control to switch TV or Radio Channels when there is no menu displayed on the screen.

C: Add Channel (fig.14)

Enter into the menu of Channel. Move cursor on the "Add Channel" by press ▲/▼ ,and then press OK to confirm. You can add channels under this menu.

Move cursors to change item after enter into this menu. When the cursor on the



Figure 14



Figure 15

"Satellite", press
✓/▶, change the satellite. You can input the TP Frequency, Symbol rate and Polarity to search satellite channels following the indications under the menu, then move cursor on Search, press OK the search new channels.

2. Satellite

Press ◄/► to select Satellite menu under the main menu, You

can choose Add Satellite, Edit Satellite, Delete Satellite, Auto Scan by press ▲/▼as Fig.15.

A. Add Satellite (Fig.16)

Move cursor on Add Satellite and OK. Operated following the indications under his menu, for example, when he cursor on the satellite, press



Figure 16

"OK" or key "1" to enter into the create satellite's name statue, press ▲/▼, ◄/▶ move cursor to choose the number and letters for the satellite name, then OK to confirm. Press "menu" to save and exit. It is the same for set the other parameters to save and exit after finish setting.

B. Edit Satellite

Press ▲/▼ to move cursor after enter into this menu. When the cursor on the Edit satellite, press ◄/▶ to choose the satellite you want to edit. Move the cursor on the "Positioner", press ◄/▶ to choose DiSEqC 1.2 and OK enter into DiSEqC 1.2 setting, according to the indications to edit DiSEqC 1.2 as Fig.17 displayed. The other operations are same Add Satellite.

C. Delete Satellite (Fig.18)

Enter into this menu, choose the satellites you want to delete and press OK, the satellites which you choose will be marked with "x", press OK again can cancel the chosen. Press Menu to exit.

D. Auto scan(Fig.19)



Figure 17



Figure 18



Figure 19

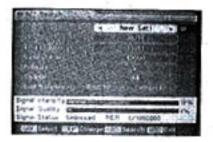


Figure 20

Move cursor on Auto scan and OK to confirm, Use ◀/▶ to select the satellite you want to search, then select mode of the channels you want (All, Free TV, All TV). You can edit the parameters of the satellite which you selected also. When you finished the editing, press OK to start satellite auto scanning.

E: NIT Search(Fig.20)

Choose NIT Search and OK to confirm, you can choose

add or delete one TP of any satellite and modified the parameters, then press OK to search channels on this TP.

F: Satellite Search

Under this menu, you can search the satellite which pre-installed in the Satellite Finder. There are also have three search modes(All TV, Free and All)as Fig 21. displayed.

G: PID Search

Choose PID Search and press OK. Fig22. will displayed on the screen. You can change or modify the PID code under this menu, then press OK to search channels according to the PID which you



Figure 21



Figure 22

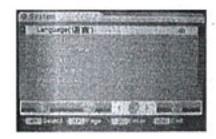


Figure 23

changed.

3. System

Use **◄/▶** select System under the main menu, press **▲/▼** to choose Language, TV System, Auto Shut Down, OSD Setting, Default value Parent Lock as Fig.23 displayed.

A. Language (Fig.24):

Here the language means that you can choose the language for menu display on the screen. Under the System menu, press ▲/▼ to move on Language and OK enter into menu language. Using ◄/▶ chooses the language you need, OK to confirm. Press Menu will back to System menu, the menu interface will display the language which you currently chosen.

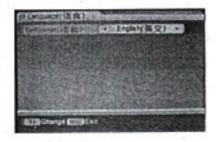


Figure 24



Figure 25

B. TV System (Fig.25)

Move the cursor on TV System and OK to confirm it.

Press ◀/▶ select the TV system you want, which included Auto,

PAL and NTSC, OK to confirm the

selection and exit, press Menu will exit without change.



This unit have auto shut down function, move the cursor on the Auto Shut Down and OK, the cursor will stay on the example, if you want shut down the unit after



Figure 26

one hour, that you need input number "060" and OK only. Press menu back to System item after finished.

D. OSD Setting

Move cursor on the OSD Setting in system menu, press OK enter into OSD Setting menu. You can change the Menu Color and the Transparence of menu according to the indications as Fig.27.

E. Default: Value Fig.28.

You can recover this unit to factory default setting by Default Value to cancel your careless change for the unit.

- (1) Select Default Value and Ok, one dialog box "Sure to load default?" will appear on the screen. OK to confirm restores factory default or Cancel to cancel this operation.
- (2)After load default success, the unit will back to the first TV channel.

Note: Load default value will erase all changes by the user, please confirm before your operation, and avoided power off during loading in progress.

F. Parent Lock (Fig.29)

There are so me functions of

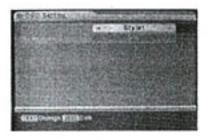


Figure 27

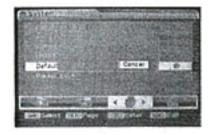


Figure 28

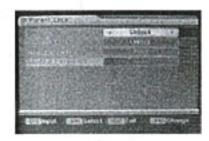


Figure 29

this satellite finder and some channels don't suitable for children to use or watch. Now you can use the Parent Lock to lock those MENU and CHANNELS. (The default password for Parent Lock is "0000")

4. Tools

Press ◀/▶ to select Tools in the main menu, use CH+, CH- you can choose some useful tools. There are Information, Satellite Guide, Software Upgrade.(as fig 30)

A. Information

Press this item will show some information about the current channel which including LNB Freq., Symbol Rate, Polarity, Software Version etc. (as Fig.31).

B. Satellite guide (Fig.32):

Choose the sub-menu Satellite guide and OK to confirm. Under this menu, you need to input Local longitude, Local latitude and Satellite longitude only, the unit can calculate the antenna's degree of Orientation and Elevation automatically.



Figure 30

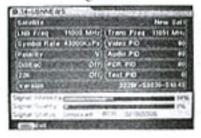


Figure 31



Figure 32



Figure 33

C: Software Upgrade

Move cursor on Software Upgrade and OK. There are All, Code, logo and channel list four modes for you to choose in upgrade mode. Move the cursor on Start and OK to start upgrade (as Fig 33 displayed).

Note: 1.Software Upgrade function is only operated by career man only;

2. This function is only suitable for the same style unit.

7. The main parameters

Display screen	TFT LED 3.5* 230400 pixels	Video decode	ISO/IEC 13818-ZMP @ML NTSC/PAL
A/V output/input	Audio RCA channel	Input impedance	75 Ω (F type)
Input frequency	950~2150MHZ	Input signal level	-65~-25dBm
LNB power	13/18V,max400mA	LNB switch	22KHz
DiSEqC	1.2 edition	EB/O Threshold	4.1dB
Demodulation chip	QPSK(SCPC and MCPC compatible)	Symbol rate	2-45MbaudsMCP C, SCPC Compatible
System processor	32bit processor(200MHz)	SDRAM	16Mbyte
FLASH	4Mbyte	Video	MPEG-2 Main Level
Rate	up to 15M bits/s	Image analysis	720*576,720*480
Sampling rate	32,44.1 and 48KHz	Audio decode	ISO/IEC 13818-3Layerl & 2
Battery	DC11. 1V 2200mAh×3	Input voltage	DC12.5V 1.5A
Size	170*110*38mm	Weight	420g(with battery)

8. PACKING LIST

Satellite Finder	1 piece
■ DC12.5V, 1500mA power adapter	1 piece
RF direct head.	1 piece
Use of a manual	1 piece
■ Bag	1 piece
■ Car power	1 piece(optional)

9. THE SOLUTION OF THE SMALL TROUBLE

Problems	Reasons	Solution	
No picture and sound after the power is on	Check power adapter 12.5V Output or connection Abattery is lack of power	Check power input Take charge of battery.	
"No satellite signal" displayed, When you changed channel	Antenna installation error	Readjusting antenna	
	Not connected with LNB input	Connect LNB well	
	Launch station is closed	Confirm signal exist and try	
	Over strong of interference	Try again after a while	
	Polarized error	Reselect LNB polarized in the polarized control	
No picture in the TV Screen	The cable connection with TV is error	Reconnection refer to System connection	
	TV was not be set in video	Set the TV to video station	
Compounding with noise and radio	Be used to using single audio on something satellife and the other audio is used to using in radio	Salast left sudio output	