

THE PROFESSIONAL EQUIPMENT

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**USER'S MANUAL**

## DIGITAL SATELLITE METER

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Please read this manual carefully before using your meter for the first time. The technical specifications and operating methods included in this manual are subject to changes without notice. In case of any inquiries after a period of usage, please contact the manufacturer.

Please charge the battery before using your meter for the first time. (Recommend 5 hours)

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## Chapter I Introduction

This meter is simple and convenient for setting and aligning a satellite dish.

Using the parameters of satellite, you can set and align a satellite dish quickly, easily and accurately.

## Chapter II Function

### A. Front Panel



- (1) **LNB INPUT:** Satellite signal input port, connects directly to satellite antenna using coaxial cable.
- (2) **LCD Screen:** Shows MENU and Programs clearly
- (3) **Lock Light:** This light will be on when signal is locked.
- (4) **22K/13V/18V light:** Indicate the 22K/13V/18V
- (5) **Power Light:** Indicate the power status.  
Normally,  
Green: the meter is power on  
Dim: the meter is power off  
Charge,  
Red: the battery is being charged,  
Green: the battery is full.
- (6) **Function Key:** Made of four keys, F1 — F4.  
(Tip) F1: turn on or off the LCD screen  
F2: Mute  
F3: To show information about the current program  
F4: To choose TV or Radio
- (7) **Arrow Key and OK key:** Use the Arrow key to select the right item, OK key to confirm.
- (8) **MENU Key:** To enter or exit the main menu quickly.
- (9) **EXIT Key:** To exit from the present menu and move to the previous menu
- (10) **Numerical Key:** To enter numerical settings directly.
- (11) **FIND Key:** Go to the easy satellite find menu, can set and align a satellite dish quickly
- (12) **Scan Key:** Go to auto scan menu and scan channels
- (13) **ANGLE Key:** Go to the AZ, EL and Polarity calculation menu
- (14) **⏻:** Press to switch between Operation and power off modes
- (15) **SYSTEM Key:** To set all system parameters.
- (16) **Power:** To switch on/off the battery power
- (17) **USB Port:** Connect to PC to upgrade.
- (18) **Charge port:** To connect with the charger cord.

## B. Detailed operation Guide

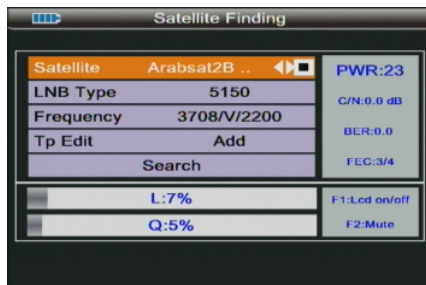
### Turn on the equipment

Press and hold POWER button for 2 seconds to turn on the satellite meter, after 6-7 seconds later, the main menu will appear.



#### 1. Satellite Finding

Use [◀] [▶] button to select "Satellite Finding", and press OK, then following window will appear

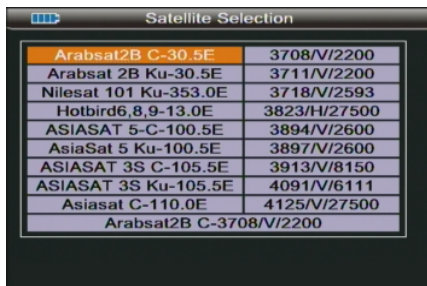


Use [▲][▼]button to move cursor

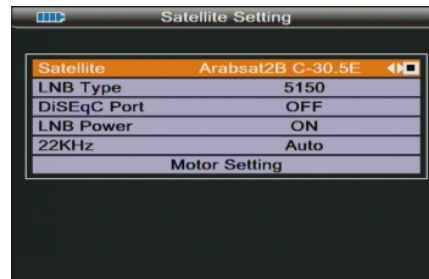
(1) Satellite

Use [◀][▶] button to select the satellite, and select the item that you want to edit, and set its parameters as desired.

Or you can press OK button to get the full satellite list and select the desired satellite use [◀][▶] button, then press OK button and MENU button to confirm it.

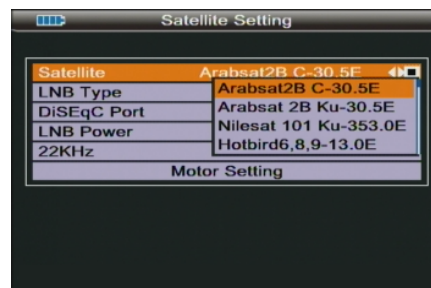


(2) LNB Type: Press OK button, the Satellite Setting menu will appear.



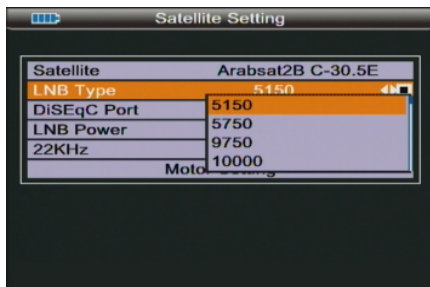
a. Use [▲][▼] to move cursor

b. Use [◀][▶] button to select desired satellite you want.

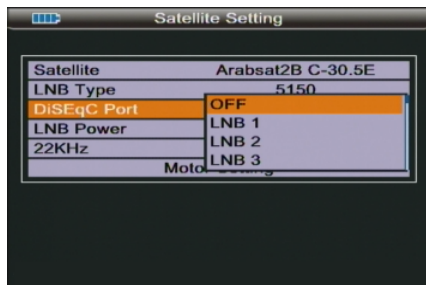




LNB Type: Use [◀][▶] button to choose LNB Type between 5150 / 9750 / 10000 / 10600 / 10750 / 11300 / 9750 / 10600



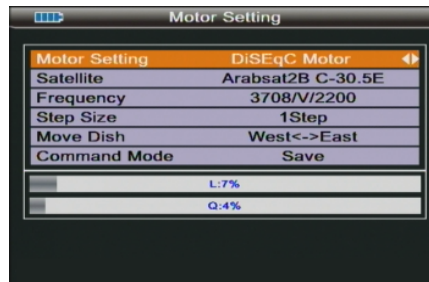
DiSEqC Port: Choose among OFF/LNB 1/LNB2/LNB3



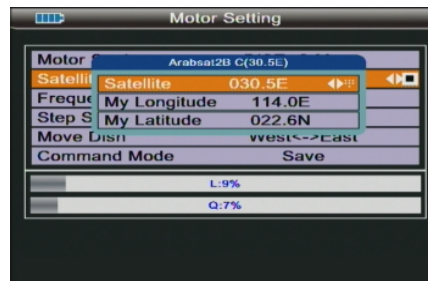
LNB POWER: choose between ON/OFF

22KHz : choose among AUTO/OFF/ON

Motor Setting: press OK button, "Motor setting" menu will appear.



Motor Setting: Choose among DiSEQC Motor/USALS/None  
 Satellite: select the item that you want to edit, and set its parameters as desired



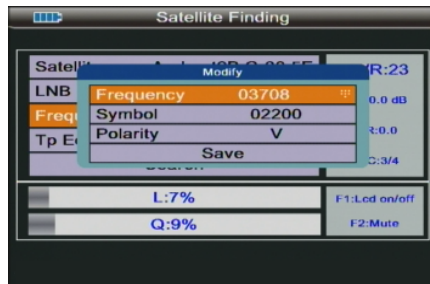
Frequency: Use [◀][▶] button to select the TP frequency you want.

Step Size: Choose among 1 Step/2 Step/3 Step/4 Step/Continuous

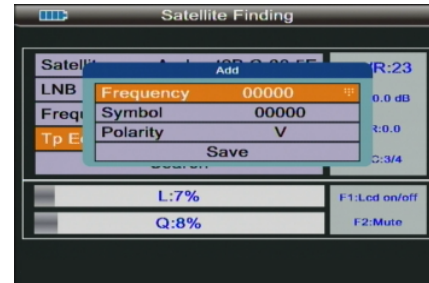
Move Dish: Choose to west or to East  
 Command Mode: Choose among Save/Reset/GoTo Sat  
 Position/Goto 0/Setting East Limit/Setting west Limit/Disable Limits/Enable Limits

(3) Frequency: Use[◀][▶]button to select the TP frequency you want.

Or you can press OK button to get the modify frequency menu:  
 FREQUENCY Set its parameters, can input numerically .  
 SYMBOL RATE Set its parameters, can input numerically  
 POL: POLARITY Select between Vertical and horizontal.



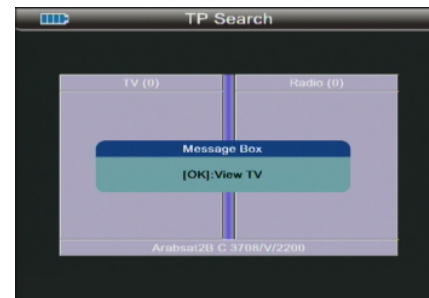
(4) Tp Edit: Choose among Add/Edit/Delete and get the modify frequency menu



(5) When signal finding: you can see the bar meter of the LEVEL and QUALITY, and the numerical of C/N ,FEC, a.BER (after BER) at the same time the LOCK light will come on and the speaker will notify.

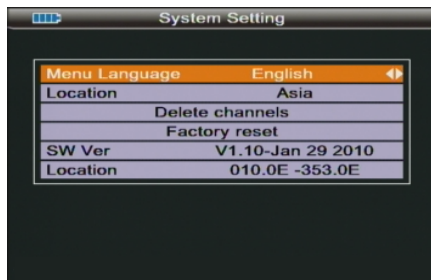
(6) Adjust the dish slightly to get the strongest signal

(7). Go to "SERACH" and press "OK" to scan for channels.



## 2. System Setting

Go to main menu, Use [◀][▶] button to select "System Setting", and press OK, then following window will appear.



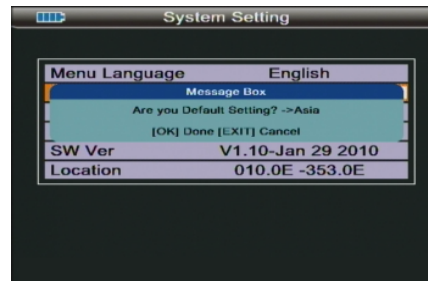
Use [▲][▼] to move cursor

Use [◀][▶] button to select the item you want

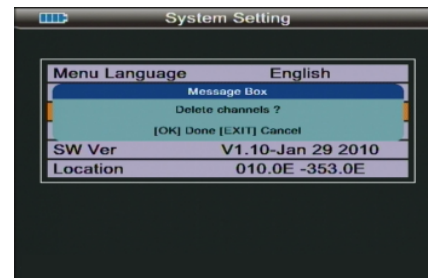
**Language select:** at present, only English Menu is available

**Location:** Select your area

**Delete Channels:** press OK button then you will delete all channels..



**Factory Reset:** this sub menu allows you to restore the factory default value. Erase all channels and restore the factory default settings.

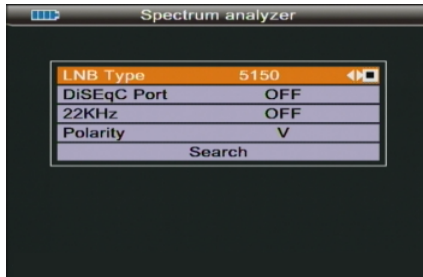


**SW Ver:** You can check the current information about your satellite meter such as meter Soft ware version.

**Note:** This information is useful to see if there is a newer software available.

### 3. Spectrum Analyzer

Go to MAIN MENU, Use [◀][▶] button to select "SPECTRUM ANALYZER", and press OK, then following window will appear



Use [▲][▼] to move cursor

Use [◀][▶] button to select the item you want

LNB Type Use [◀][▶] button to choose LNB Type among UNIVERSAL/5150/9750/10750/11300/10700/Customised.

LOW L.O.F: Use digital button to input the LOW L.O.F once the LNB Type is Customized

HIGH L.O.F: Use digital button to input the High L.O.F once the LNB.Type is customized.

22K : choose among AUTO/OFF/ON

POL: POLARITY Select between Vertical and horizontal.

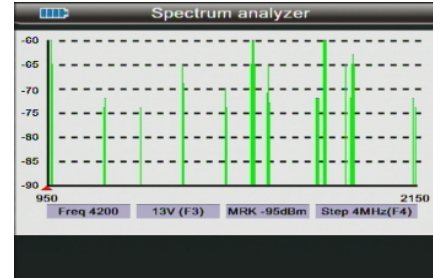
Search : press OK, you will see the spectrum

You can choose the Spectrum step between 4 MHz and 16MHz ( Tip: 16MHz will be faster)

F3: press F3 to choose 13V and 18V

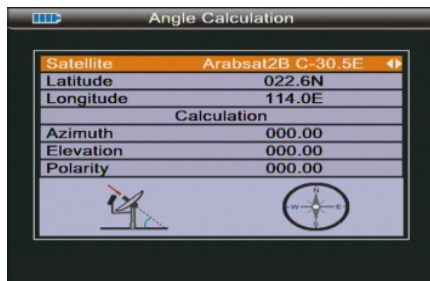
Use [◀][▶] button to choose the Frequency you want

Use [◀][▶] signal strength showing ( -70dBm----10dBm)



#### 4. Angle Calculation

Go to main menu, Use [◀][▶] button to select "Angle calculation", and press OK, then following window will appear <Figure 4-1>.



SATELLITE : choose the satellite you want

Longitude : input your local longitude

Location : input your local location

Latitude: input your local latitude

Hemisphere: input your local Hemisphere

Azimuth: shows the azimuth of the chosen satellite.

Elevation: shows the elevation of the chosen satellite.

Polarity: shows the polarity angel of the chosen satellite

### Chapter III Specifications

System capabilities	Fully DVB compliant	Yes
LNB/Tuner input	Connector	F type,male
	Frequency range	950MHz-2150MHz
	Signal lever	-65dBm~-25dBm
	LNB supply	13/18V,max400mA
	LNB switch control	22KHz
	DiSEqC	Ver 1.0
Demodulator	Front end	QPSK
	Symbol rate	2Mbps~45Mbps
	SCPC and MCPC Capable	Yes
	Spectral inversion	Auto conversion
System resource	Processor	32bit processor (200MHz)
	SDRAM	16Mbyte
	FLASH	2Mbyte
	EEPROM	8Kbyte
Video decoder	MPEG 2	Main Profile@Main Level
	Data Rate	up to 15M bits/s
	Resolution	720×576, 720×480
	Video format	PAL/NTSC/SECAM
MPEG Audio	MPEG 1 layer 1&2	
	Type	Mono
	Sampling rates	32,44.1 and 48KHz
Serial data interface	Connector	USB type
Power supply	Li-oN Battery	3000 mA H
	Supply voltage	8.4Volt
	charger	90-240V 12V
Panel connectors	Digital tuner input	F type, male

**Handling Precautions and Prohibitions of Battery in Sat Meter****Warning:**

You are using Lithium ion batteries or Nickel metal hydride batteries in the machine now, so please don't work under high temperature or high pressure conditions. If the following items happened, abnormal chemical reaction may occur which will lead to the battery overheat, emit smoke, ignite and/or burst.

- (1) incinerate and dispose the battery in fire or heat it;
- (2) pierce the battery with a nail or other sharp objects, strike it with a hammer, or step on it;
- (3) immerse the battery with water or connect the positive(+) and negative(-) terminals with a metal objects such as necklaces, hair pins, etc.

**Notice:**

The battery is only applicable to the charger which supplied or appointed by the manufacturer of this machine.

The charging time should be minimum 5 hours for the first time, and it should not be charged over 12 hours after the first time.

Please keep your machine off when the battery is charging.

The battery should be stored within a temperature range of 0°C to 40°C.

When stored for a long period, charge the battery at least once per half month so as to prevent over discharge.

The battery is expendable.

**Handling:**

Improper setting of new battery may lead to the battery burst.

Please use the battery only supplied by the manufacturer if you want to change a new battery.

Please do not put the battery in fire or dispose it together with garbage.

Please contact the waste administrative institute in your place to get the nearest battery collection station.