



User manual

Digital Satellite Meter

C-Tech SFP 2010

Preface

Please read this manual carefully before using your Digital Satmeter for the first time.

This operating manual will help you in the

- appropriate,
- safe
- favorable

The technical specifications and operating methods included in this manual are subject to changes without notice. In case of any inquires after a period of usage, please contact the manufacturer.



Safety instructions

Please read the safety instructions carefully before operating the device. Please follow all warnings and instructions on the equipment and in the operating manual.



Safety of persons

Ensure that nobody can be hurt by falling tools or parts of the satellite antenna during the adjustment and installation of the antenna. For your own security use a rope on sloping roofs.



Attention for adapter

The device should only be operated with the supplied AC adapter at the mains. Do not open the meter or the included AC adapter. There is danger of life through electric shock! Wrong usage of the ports can lead to the destruction of the measuring device.



Proceed carefully with the measuring device:

- Avoid low temperatures (below 0 °C) or to high humidity.
- The TFT display can be damaged by mechanical impacts.
- Avoid excessive input voltages. Please refer to the technical data



Do not operate with the device:

- If it has visible damage,
- If there are loose parts in the device,
- If the device was located outdoors or in damp rooms a extended period of time.



car adapter cable 12 V

extern charger

device Sat meter



user manual



carrying bag with sunshade

Delivery range

Please check if the delivery is complete.

Included in delivery:

- 1x Digital Satmeter
- 1x carrying bag with sunshade
- 1x car adapter cable 12 V
- 1x external charger
- 1x user manual

If the delivery should be incomplete, contact your dealer.

TABLE OF CONTENTS

Preface	2
Safety instructions	3
Delivery range	4

Chapter: Function

I. Front Panel and Battery.....	6
II. Detailed operation Guide.....	9
1) TP search.....	9
2) Satellite identify.....	10
3) Packet control.....	11
4) DiSEqC search.....	12
5) DiSEqC Motor search.....	12
6) SPECTRUM.....	12
7) Watch TV.....	13
8) SETTING.....	14
9) Software UPDATE.....	14

Chapter: Quick operation

1. FIND	17
2. Scan	17
3. System	18
4. Angle	19

Chapter : Function

This Digital Satmeter 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.

I. Front Panel



Nr.	Item	Function
1	LED Power	Indicates the power status. Yellow: device out ,power adapter connected Orange: device on , power adapter connected Red: device on , power adapter not connected
2	LED Lock	This light will be on when signal is locked.
3-11	LED 13V / 18V / 22kHz	Indicate the 22K/13V/18V
4	Key [F1] [F2] [F3] [F4]	Made of 4 keys, F1 -- F4
5	Key [System]	To set all system parameters.
6	Key [Scan]	Go to auto scan menu and scan channels
7	Key [Angle]	Go to the AZ , EL and Polarity calculation menu
8	Charge port	To connect with the charger cord.
9	IF signal input	Satellite signal input port,
10	Display	Screen shows MENU and Programs clearly
11-3	LED 13V / 18V / 22kHz	Indicate the 22K/13V/18V
12	Key [Power]	To turn the meter on/off, press and hold for 2 seconds to power on the meter.
13	Key Navigations and [OK]	Use the Arrow key to select the right item, OK key to confirm.
14	Key [Menu]	To enter the main menu
15	Key [Exit]	To exit from the present menu and move to the previous menu
16	Key [Find]	Go to the easy satellite find menu, can set and align a satellite dish quickly.
17	USB Port	Connect USB storage device to upgrade

Start of operation

Battery

Before the first operation with the measuring device charge the battery completely.

Load the accumulator during the first loading procedure at least 5hours.

The maximum battery charging time is approximately 12 hours.

Charging the battery

The maximum battery charging time is approximately 12 hours..

A charging circuit in the measuring device provides an optimal charge of the battery. The device is charged if it is switched off.

- Turn the device off, if it is not already off.
- Connect the external AC adapter to the power grid.
- Connect the AC adapter to the low-voltage port at the bottom.
- The battery is charged as soon as you connect the AC adapter to the Digital Sat meter

The battery status are indicated in menu !!

Charging is displayed by the cycling display of the battery symbol:



When fully charged the battery symbol shows permanently four bars.



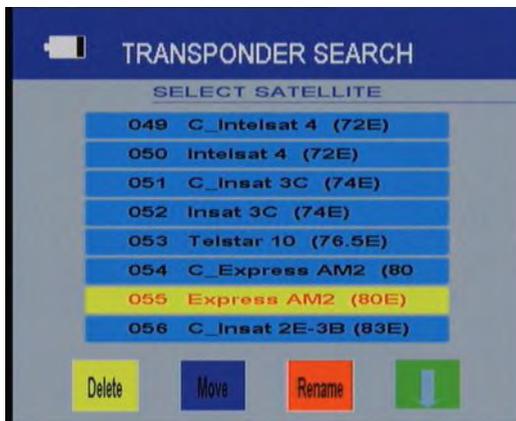
II. Detailed operation Guide

- 1) Turn on the device. Press and hold **POWER** button for 2 seconds to turn on the satellite meter, press the **MENU** key ,enter the main menu.

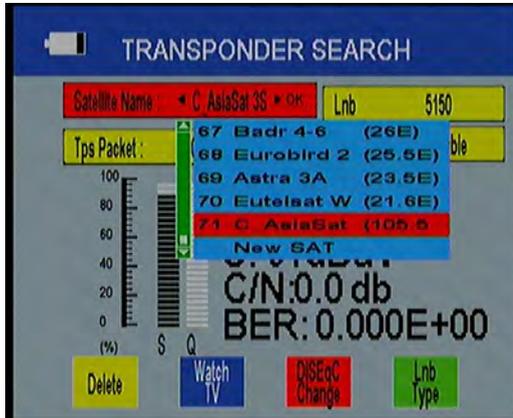


☛ TP search

Press **OK** enter the TP search, first, you should select satellite, in this picture, you also can delete, move, rename the satellite.

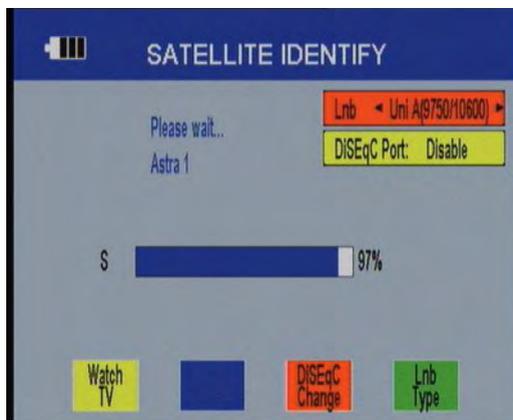


When you fixed on a satellite, then press **OK** the following window will appear. Use [**◀**][**▶**] button to move cursor, it'll show the satellite name, angle and location. Use **left/right** key move to TP list, you can modify Frequency. When all parameters confirm, press **OK** key search the channels. You also can change DiSEqC by **Red** key, or delete the sat or TP. press **Blue** key can play the channel.



☛ Satellite identify

If you don't know the signal information of some usual sat, in this menu, please wait a moment, it will find the satellite identify



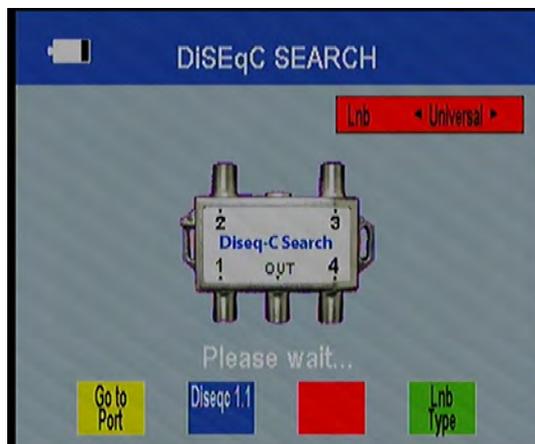
☛ Packet control

Press **OK** enter the packet control menu, in this view, it will display the TP's S or Q under the satellite.



☛ DiSEqC search

Press **OK** enter the DiSEqC search, in this menu, connect the DiSEqC port, the view will be display the sat which can connect, then you can search the channel by DiSEqC. Press **Green** button change LNB type
Press the **Blue** button to go DiSEqC1.1



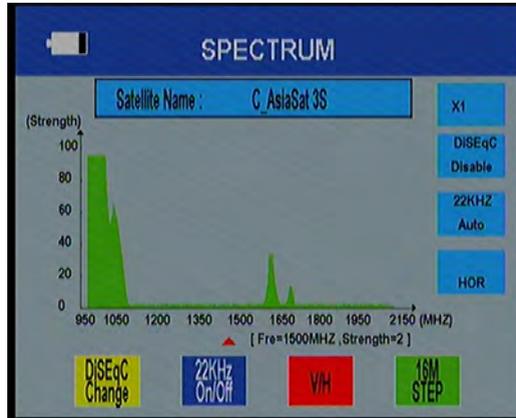
☛ DiSEqC Motor search

Press **OK** enter the Motor search, select satellite and any transponder, if signal and quality **OK** press **Red** button watch TV channel, press **Yellow** key turning Motor to west. Press **Blue** key turning Motor to east. Press the **Green** key you can search by Motor; however, you should set up the **Angle** about the sat use the Angle button first of all.



☛ SPECTRUM

Go to MENU, choose SPECTRUM, and press **OK**, You will see the picture. Press the **Yellow** key change DiSEqC port. Press the **Blue** key 22khz signal on or off, Press **Red** key change Polarization control Hor / Ver. **Green** key you can change the satellite. Every set finished. Press **OK**, you will see the spectrum.



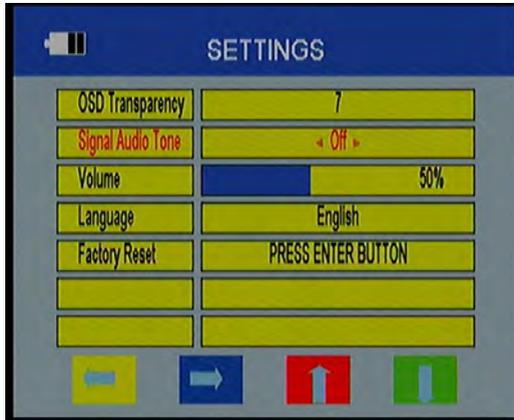
☛ Watch TV

Press **OK** enter the Watch TV menu, in this menu, you can press the **Yellow** key select any satellite or press the **Blue** key enter the Channel/ Radio menu, press the **up/down** key jump to next/previous channel
Press the **Red** button to watch Full Screen



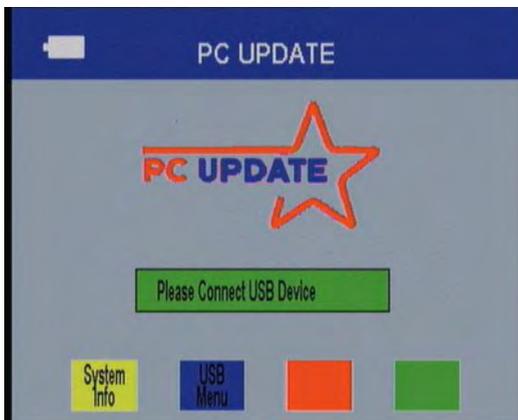
☛ SETTING

Press **OK** enter the setting menu, in this menu, you can set OSD Transparency /signal Audio tone / TV Screen Format/ volume/ language adjust display currently. Factory Reset: Erase all channels and restore the factory default settings.



☛ PC UPDATE

Press **OK** enter PC UPDATE, in this menu, press the **Yellow** button, You can check the current information about your satellite finder such as S/W(software) version,Model ID.



☛ USB

Press the **Blue** key enter the USB menu, you can play stream, movie, music picture, and so on.

USB tool: Press the **Blue** key, you can rename &delete&move&create folder disk info or format the disk.

Help: press the red key you can find some info and operation about USB



A-1 : Play Movie

OK: View play list / Play the selected file in play list

F1: PAUSE

F2: Play the file

F3: Backward

F4: Forward

[UP]:JUMP [DOWN]:HIDE [MENU]:INFO [EXIT]:EXIT

EXIT: Exit play list menu / Exit playing state and return to file list menu



A-2 : Play MP3

OK: View play list / Play the selected file in play list

F1: PAUSE

F2: Stop playing file

F3: backward

F4: forward

EXIT: Exit play list menu / Exit playing state and return to file list menu

Chapter III . Quickly operation guide

When you exit the main menu, you can see this picture, in this view, press buttons mapped to onscreen color, such as **Yellow** button, enter the compass function, sound elimination by **Blue** button, the channel information will display by red button, press the **Green** button, you can connect the USB for record the channel.



🔑 FIND

Press the **FIND** button to display the signal finding menu, jump to **Satellite identify** menu, rest operation same as above

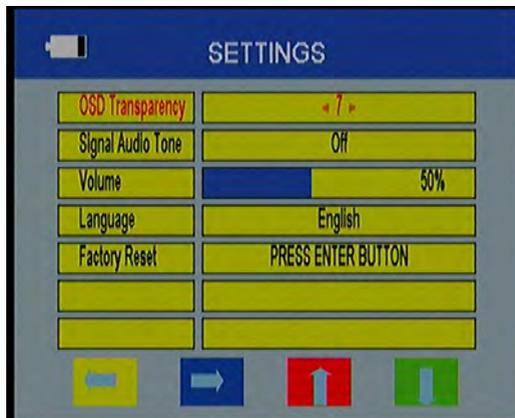
🔑 Scan

Press the **Scan** button enter this view, select the satellite name TP&LNB type, then you can blind search or sat search.



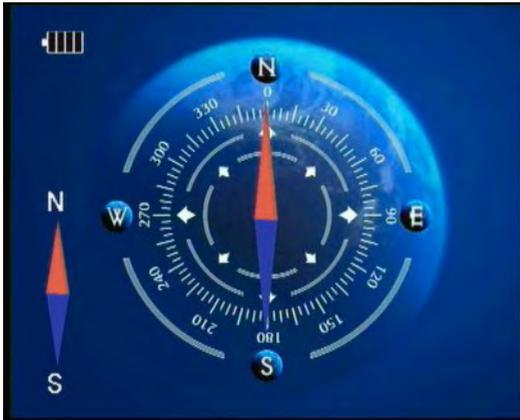
System

Press the system directly jump to **setting** of main menu.



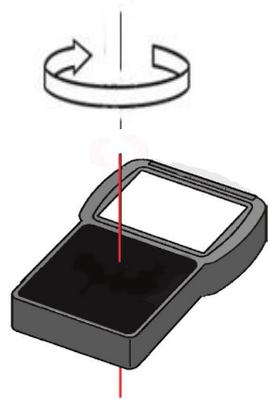
☛ F1

Press the **F1** button you can use the compass.



☛ Compass calibration

- ⇒ Lay the satmeter on a flat horizontal surface.
- ⇒ Turn the satmeter on the surface a few times for calibration

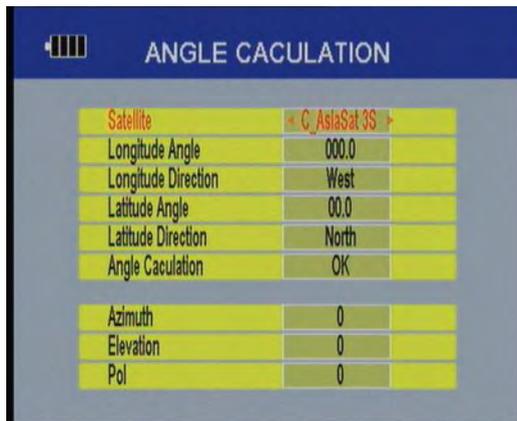


☛ Angle

Press the **ANGLE** button to display the Calculation menu Select auto or manual. In the auto, you only can select satellite, others parameter Calculation auto, select manual, you should do:

1. SATELLITE: choose the satellite you want
2. Your longitude : input your local longitude
3. longitude Direction : input your local location (west/north)
4. Your Latitude: input your local latitude
5. Latitude Direction: input your local location (west/north)

All above set, press the angel calculation button, the fellow's parameter Calculation auto



The screenshot shows a software interface titled "ANGLE CALCULATION". It features a blue header bar with a signal strength indicator on the left. Below the header, there are two main sections of data. The first section is a table with satellite-related parameters, and the second section is a table with antenna-related parameters. Both tables have a yellow background for the text.

Satellite	
Longitude Angle	000.0
Longitude Direction	West
Latitude Angle	00.0
Latitude Direction	North
Angle Calculation	OK

Azimuth	0
Elevation	0
Pol	0

6. Antenna azimuth: shows the azimuth of the chosen satellite.
7. Antenna elevation: shows the elevation of the chosen satellite.
8. Antenna Polarity: shows the polarity angel of the chosen satellite

Trouble shooting

Fault phenomenon	Probability reasons	Solutions
Device does not react.	The battery is empty.	Charge the battery.
Bad picture , block defect	The antenna is not adjusted to the satellite. The LNB is defect	Adjust the antenna. Replace the LNB.
No or only faint signal.		Please check all cable connections. Adjust the antenna.
No picture, no sound.	Display/ Sounds turned off	Turn on the display by Pushing the F1 button. Turn on the sound by Pushing the F2 or ► button.

If you cannot find out what is wrong with your device please contact your local specialized dealer.

Attention



Electronic equipment is not household waste - in accordance with directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL dated 27th electrical and electronic equipment, it must be disposed of properly.

At the end of its service life, take this unit for disposal at a designated public collection point.



Spent batteries are special waste!

Do not throw spent batteries into your domestic waste; take them to a collection point for old batteries!

Technical specifications

System capabilities	Fully DVB compliant	Yes
LCD Screen	3.5 inch TFT	
LNB/Tuner input	Connector	F type, female
	Frequency range	950MHz-2150MHz
	Signal level	-65dBm~-25dBm
	LNB supply	13/18V,max400mA
	LNB switch control	22KHz
	DiSEqC	DiSEqC 1.0 /1.1 / 1.2
Demodulator	Front end	QPSK
	Symbol rate	2Mbps~45Mbps
	SCPC and MCPC Capable	Yes
	Spectral inversion	Auto conversion
System resource	Processor	32bit processor (216MHz)
	SDRAM	256DDR
	FLASH	4Mbyte
Video decoder	MPEG 2	Main Profile @Main Level
	Data Rate	up to 15M bits/s
	Resolution	720x576,720x480
	Video format	PAL/NTSC/SECAM
MPEG Audio	MPEG 1 layer 1&2	
	Type	Mono
	Sampling rates	32,44.1 and 48KHz
USB port	USB 2.0	
Power supply	Li-on Battery	2700 mA
	Supply voltage	12.6Volt
	charger	90-240V
Panel connectors	Digital tuner input	F type, female
Physical Specification	Size	102*157*45MM
	Weight(Net)	0.5Kg