DIGITAL SATELLITE FINDER

USER'S MANUAL

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 change 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 devise 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.

Contents

■ Function

This Digital Sat 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.

Front Panel

No.		Description
1	LNB-IN	Digital satellite signal input
2	LC-Display	Display of the TV picture, the menu and the measured values
3	POWER	Switch devise on/off
4	POWER-LED	**red** the meter is on **off** the meter is turned off
	LOCK-LED	LED lights when a signal is received
	22K/13V/18V -LED	Lights if 22K/13V/18V signals are received
5	FUNCTION keys	Different functions depending on the menu The functions are at the bottom of Screen display
6	SYSTEM	Configuration of all system parameter. Display current software version.
7	ANGLE	Open the menu for the calculation of azimuth, Elevation and Polarization
8	FIND	Open the menu of satellite detection
9	MENU	Display the main menu
10	EXIT	Leave the current menu, cancel operation
11	SCAN	Open the Autoscan Menu
12	Navigation-Cross	Navigation through menus, switching programs ▲, ▼ volume control ◄, ►
	OK	OK button: confirmation of a selection
13	Numeric keys	Direct enter of numbers
14	AC adapter port	Low volt port – for power supply connection
15	USB-Port	USB port for USB-storage device

Start of operation

☛ **Battery**

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

CAUTION !	Load the accumulator during the first loading procedure at least 5 hours. The maximum battery charging time is approximately 12 hours.

☛ **Switch-on the Device**

Press 2 seconds the red power button on the Sat meter.

☛ **Lithium-ions-battery**

⚠	**Explosion danger!**
	Never the two poles (+ and -) connect with each other!

⚠	**Attention!**
	Storing or operating accumulator no more than 40° C.
	Not burning or damaging accumulator.
	Not taking accumulator to contact with water.

Charging the battery

CAUTION ! 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 Euro-main cable with the external AC adapter.
■ 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 Sat meter S4.

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

When fully charged the battery symbol shows permanently four bars.

☛ **Storing of the batteries**

CAUTION ! Storing the batteries between 0° Celsius and 40° Celsius.
Loading the accumulator at a longer storage every two weeks to avoid a depth discharge.

Detailed operation Guide

1） Turn on the equipment，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, In the menu TP Search a list of the stored satellites is shown. Eight satellites are displayed on each page. first, you should select satellite, in this picture, you also can delete, move, rename the satellite.
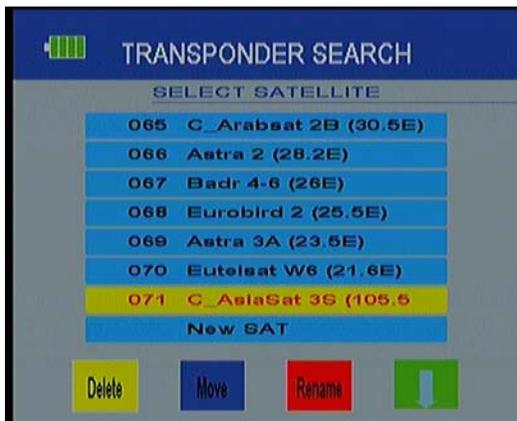
When you fixed on a satellite, Then press ok the following window will appear. Use [◄][►] button to move cursor, it'll show the satellite name ,angle and location. Use left/right key move to TP list, you can modify Frequency. When all parameters confirm, press "start search" key start the transponder search and after apron. 5 sec can watch the TV signal of the marked transponder.

By pressing **yellow** key you can delete a marked transponder
By pressing **red** or **green** you can choose the DiSEqC-Port or the LNB-Type.
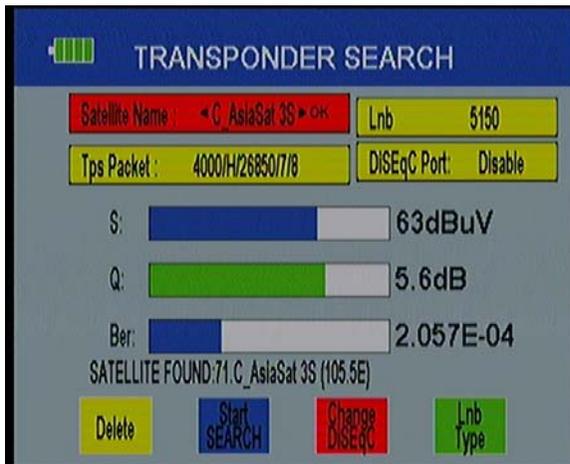
☛ **Satellite Identify**

The name of the satellite from which you receive signal is displayed. Also the signal strength of this satellite is displayed.

■ Press **F1** to start search the chosen transponder.
■ Change the transponder with the button **F2**.
■ Chose the DiSEqC-Port with the button **F3**.
■ Chose the LNB-Type with the button **F4.**
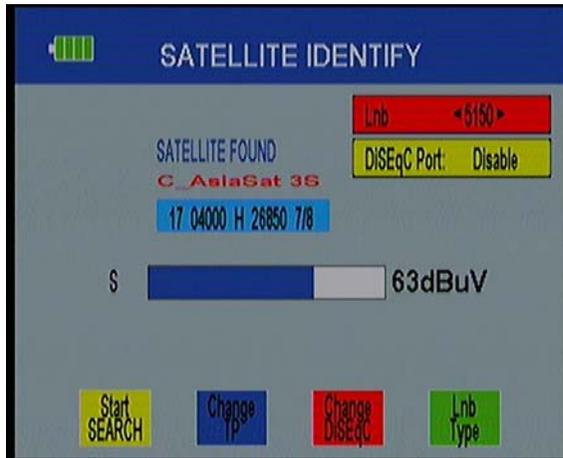
☛　　　**Packet control**

Press ok enter the packet control menu, now you can see the signal strength (S) and signal quality (Q) of five transponders.

By pressing the buttons [◄][►] you can jump from page to page.

■　Press **F1** to Change the satellite
■　Start search the satellite with the button **F2**.
■　Chose the DiSEqC-Port with the button **F3**.
■　Chose the LNB-Type with the button **F4**.
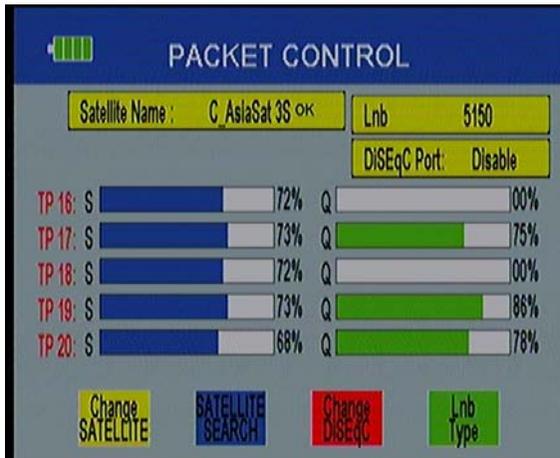
☛ **DiSEqC search**

Press ok enter the DiSEqC search，in this menu, The DiSEqC-Search starts
automatically. At every port the name of the received satellite is displayed.

You can selcet single ports by pressing **F1** and can the switch to the menu
Transponder Search by pressing **OK**.

■ Chose the DiSEqC-Port wit the button **F1**.

■ With **F2** the allocation of the 16 DiSEqC-Ports is displayed.

■ Chose the LNB-Type wit the button **F4**.
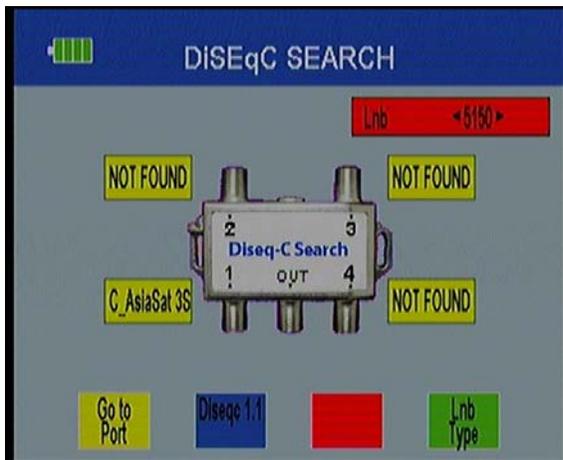
☛   **DiSEqC Motor search**

Press ok enter the DiSEqC Motor search，use the up/down buttons to mark one of the setting fields and then use the buttons **right/left** to choose different settings.

Signal display
Signal strength (S), Signal quality (Q) and Bit Error Rate (BER) are shown.

Turn Satellite Dish
By pressing **F1** or **F2** you can turn the satellite dish to the west or to the east. Watch the green signal quality bar. This graph shows you, if you receive a signal from the satellite.
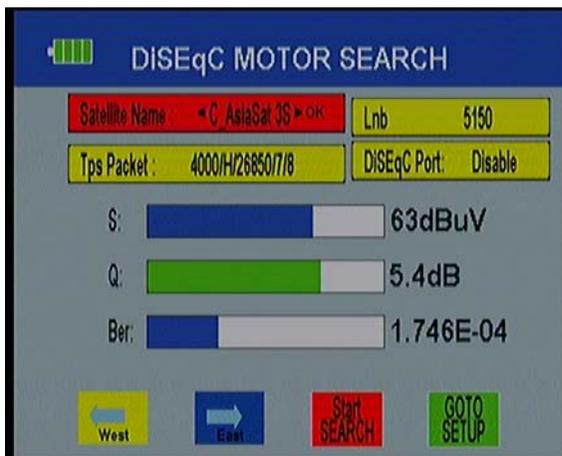
☛   **SPECTRUM**

Go to MENU, choose SPECTRUM, and press OK, you will see the picture，
In this menu you can control the signal quality of different transponders over
the whole spectrum.

■   Chose the LNB-Type with the button **F1.**

■   Switch 22KHz On or Off with **F2.**

■   Chose the polarisation with the button **F3**.

■   Chose the sampling steps with the button **F4.**

■   **4M STEP**: precise scan, duration approx. 10sec.

■   **16 M STEP**: duration approx. 3sek., medium precise
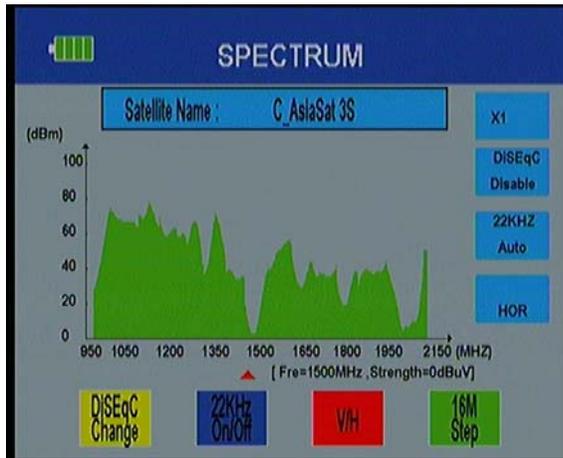
☛　　**Watch TV**

Press ok enter the Watch TV menu, in this menu, you can check the TV reception
Chose the satellite by pressing **F1**.
Chose the desired channel by pressing F2 and confirm with OK.
Press **F3** for full screen mode.

☛　　**SETTING**

⇨ **OSD Transparency**

Use the buttons [◄][►] to chose the transparency of the On Screen
Display. You can chose from 10 (no transparency) to 1 (nearly transparent).

⇨ **Signal Audio Tone**

Use the buttons[◄][►] to chose whether you like to have a signal tone while adjusting an antenna or not.

⇨ **TV Screen Forma**t: Use the buttons [◄][►] to set the TV display format

⇨ **Volume** Use the buttons [◄][►] to set the volume.

⇨ **Language** Use the buttons [◄][►] to chose a display language.

⇨ **Factory Reset**

Mark this item to reset the device to factory settings.→Confirm with OK. →Mark the item YES with the buttons [◄][►]confirm by pressing OK.
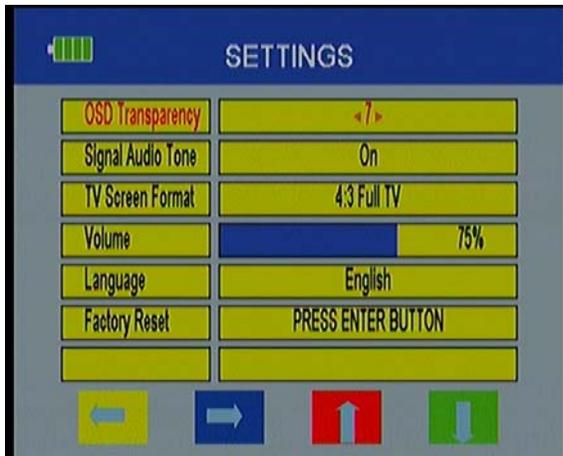
☞ PC UPDATE

Press ok enter PC UPDATE, in this menu, press the yellow button, you can check the current information about your satellite finder such as meter S/W (software) version, Model ID.Press the **red** key enter the USB menu, you can play music picture and so on.
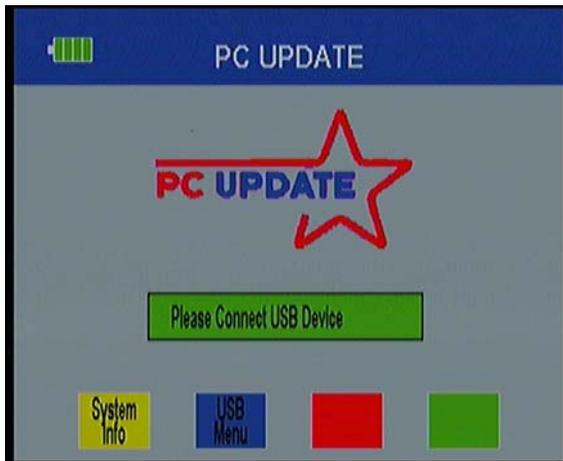
☛ **USB Menu**

To open the USB menu enter the menu PC Update and press the button
F2.
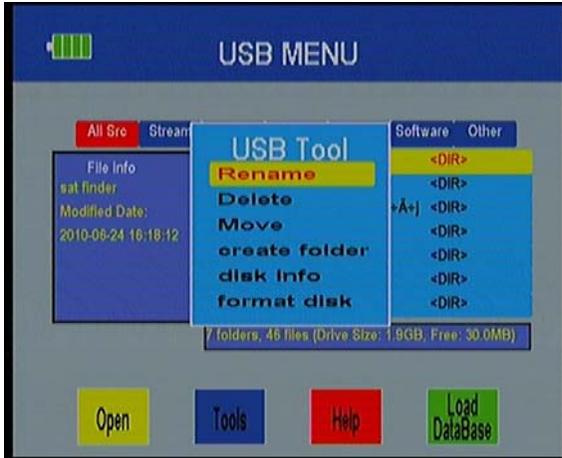
In the USB menu all files are shown that are stored on the connects USB-device.
Use the buttons [◄][►]to limit the number of shown files.
Example: If you want to see all the music files on the connected USB device:
press the button ► until the item music is marked on the top of the screen.
Only music files are shown now.

Use the buttons **up/down** to chose a file an press **OK** to open it.

☛ **Load Database**

Press **F4** to save the channel list or your USB-device.You can load the modified
channel list via the USB-menu by marking it and then pressing **OK**.

☛ **Tools**

Press F2 to open the Tools. you can rename /delete/ move the files and also create the folder. also you can get the disk info and format disk

▤ **Quick 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** on enter this view, select the satellite name TP&LNB type, then you can blind search or sat search.
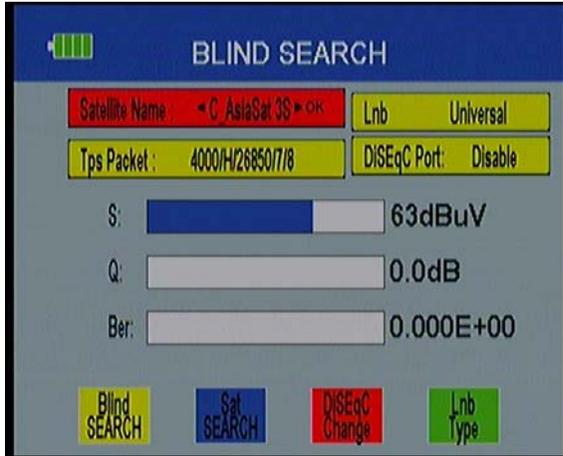
☛   **SYSTEM**

Press the **SYSTEM** directly jump to Setting of main menu.
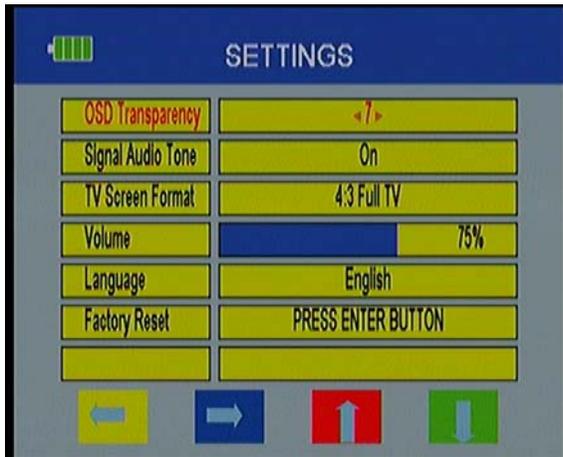
☛   **F1**

Press the **F1** button you can use the compass。
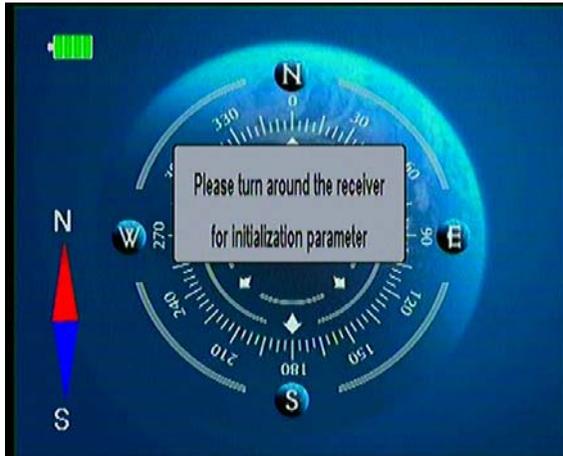
☛   **ANGLE**

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 angle calculation button, the follow's parameter Calculation auto

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.	Adjust the antenna.
	The LNB is defect	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 27electrical 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