DIGISAT MULTI

USER MANUAL

CONTENTS:

SPECIFICATIONS:

Input frequency:	950-2150 MHz.
Input level:	40-100 dBuV.
Through loss:	5 dB.
Input impedance:	75 Ohm, F-connectors.
Output impedance:	75 Ohm, F-connector.
Short circuit protection:	Automatic fuses on all inputs.
Software upgrades:	Dataport for future use in upgrades.
Measuring method:	Signal presentation on LCD display in form of thermometer scales or three digit number. Pitch-tone indication on loudspeaker. **Max-level:** Thermometer-scales showing max signal. Three digit numbers showing highest value. Highest tone on loudspeaker. Maxhold-function.
Indications:	Voltage, current. 22 kHz (on/off). MiniDiSEqC (toneburst). DiSEqC 1.0 and 1.1 13/18v
Transmitting:	22 kHz (on/off). MiniDiSEqC (toneburst). DiSEqC 1.0 and 1.1 13/18V.
Actuator control:	DiSEqC 1.2 NOKIA (SatScan) TRIAX H/H
Powersupply:	Rechargeble batteries (8xAA) or from receiver via coaxial calble.
Power consumption:	Ca 35 mA without loudspeaker. Ca 50 mA with loudspeaker.
Battery recharge:	Powersupply 14-20V DC, Centerpin +
Weight:	0.75 kg (incl. batteries).
Dimensions:	185 x 115 x 50 mm.
Accessories incl:	Powersupply. Rubber carrying-case. 4-way DiSEqC-switch 4pcs of LED´s with F-con. User manual.

THE **DIGISAT MULTI** IS DEVELOPED FOR SATELLITE-TV INSTALLATIONS.

THE **DIGISAT MULTI** IS DESIGNED TO BE AN AFFORDABLE COMPACT SATELLITE SIGNAL METER THAT IS CAPABLE OF RECEPTION OF THE ENTIRE BANDWIDTH USED FOR SATELLITE-TV INSTALLATIONS. THE METER USES FIELD-REPLACEABLE CONNECTORS AND RECHARGEABLE AA CELLS TO KEEP MAINTENANCE COSTS TO A MINIMUM.
THE METER IS ALSO FULLY UPGRADEABLE..

The DIGISAT MULTI meter is supplied with 8 “AA” NiMH rechargeable cells and an AC transformer charger. It also comes with a neoprene rubber insulation case cover and carrying strap.

The F connectors are field-replaceable should be replaced with F-81 barrel connectors (hi frequency).

Remove and re-insert the meter into the rubber case cover “input side first”
(see illustration to right).

After removal from the protective case covering, you may access the battery - compartment door on the back of the meter. (See illustration below).

CHARGING THE BATTERIES:

Remove the outer case, then access the battery compartment on the back of the meter. Insert the “AA” rechargeable cells into the tray compartments as indicated by the battery diagram in each individual cell holder.

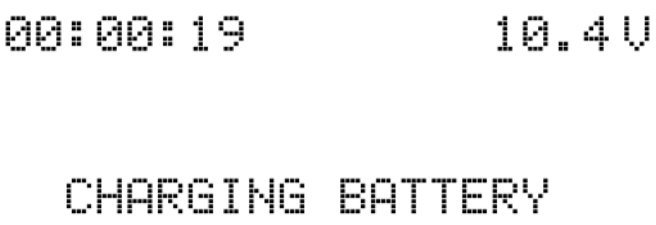
Next, plug the AC wall charger into a common household outlet before connecting the charger plug in the meter’s DC charger port (see diagram lower-right, for location of port).

The meter should display the start up screen momentarily, before displaying the charging screen.

The charging screen will appear as the count down timer begins the count down from 14 hours. The voltage reading of the combined AA battery cells will be displayed in the upper right-hand corner of the screen and the charging status displayed in the center with text reading “Battery Charging”.

The 14 hour timer will stop it’s countdown when the cells are fully charged and the charging status text will read “Battery Charged” (with the voltage of the cells displayed in the upper right-hand corner).

The Digisat Multi will not power On when in the charging mode.

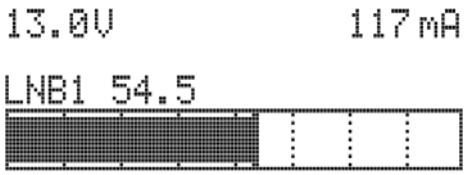


**Note: To maximize the capacity and life of the cells may take up to 3 complete cycles of charging/discharging in order to fully level the cells.

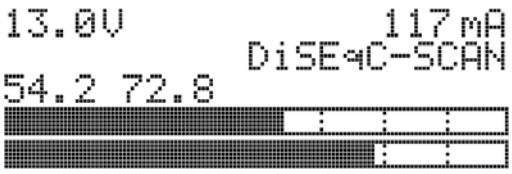
CONTROLS AND FEATURES:

The black-text indicates functions controlled by the buttons within the black-outline (each button controls the corresponding function indicated to the left/right of the box).

The button 13V/18V, 0 kHz and 22 kHz. controls the use of these signals.
Default is 13 Volt.
One push on the button switch the output to 18 Volt (which is displayed on the LCD).
One more push switch to 13 Volt and 22 kHz.
Another push to 18 Volt and no 22 kHz.
Switching again gives 18 Volt and 22 kHz on.
A final push brings the unit back to default (13 Volt only).



The display also shows the current draw of the connected units.
It is presented on the top right corner of the LCD (117 mA in this example).



The DiSEqC Scan button is used when the meter is connected to several LNB´s with a DiSEqC-switch.

NOTICE, this function will not work if there´s no switch connected !

Default mode is no switch (and one signal bar). One push one the button will present two bars instead of one (2-way switch connected). One more push will switch to three bars (three LNB´s on a 4-way switch). Another push will display four bars.
All bars displays signal strength (see above pictures).

“Hi Resolution” MODE/”BEEPER ON/OFF”:

Press the button “Hi resolution” if You want to “zoom in” on a signal (the bar becomes more dynamic, in relation to it’s displayed signal strength movements).

When the “Hi resolution” function is On a “zoom” will appear on the signal bar to indicate that the function is being used.

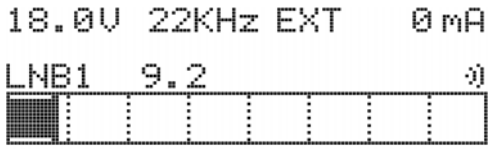
Selecting “Hi resolution” on an individual signal will zoom in on the bar, making movement more prominent to the user (“zoom” will appear).

Press and Hold the button on (*the “Hi Resolution” button*) an individual signal to activate the audio buzzer for that signal (speaker icon will appear on the; signal bar)

BEEPER FUNCTION/AUDIO TONE “ON/OFF”:

To activate the “BEEPER” audio tone, for monitoring signal strength changes by audible tone pitch changes; press and hold the button in the top right column.

An icon of a loud speaker will appear on signal bar and the buzzer will give you an indication, through a rise and fall of pitch change, of how strong the signal is currently being received by the LNB.



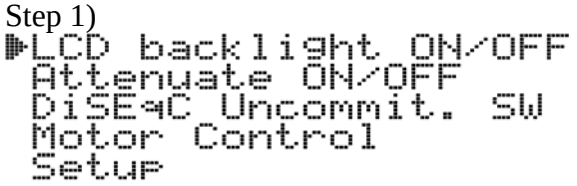
“MENU” OPTIONS:

The MENY button highlighted in white and the white arrows/text on the right side of the faceplate, indicate which function the 3 keys control when in the Menu screen.

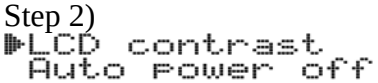
Power the meter On, then press the MENU button.
The screen below will appear.
Use the “down” button to move the curser to “SET UP”,
then press the “right”(OK) button to select.

LCD SCREEN DISPLAY OPTIONS WHILE IN “SET UP” MODE:

Step 1)



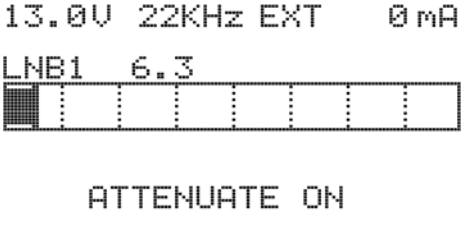
Step 2)



Note concerning the initial powering On: The DIGISAT MULTI is shipped with tlie default setting on the “Auto Power Off” feature to “1 minute”. You will need to access the Auto Power Off options by going to “Menu”, then “Set up”, then “Auto Power Off Timer“ before the meter will remain On for a period of one minute, or longer.

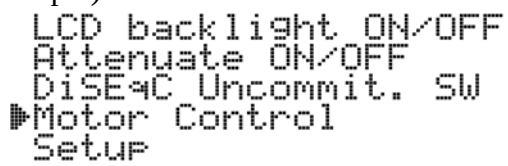
LCD SCREEN DISPLAY OPTIONS WHILE IN “Attenuate ON/OFF” MODE:

This function is very helpful when measuring on very powerful/strong satellites.
Simply switch to ATTENUATE ON (as indicated on the display).

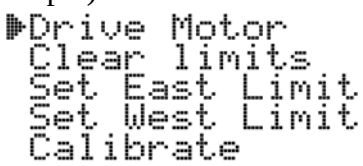


LCD SCREEN DISPLAY OPTIONS WHILE IN “MOTOR CONTROLL” MODE:

Step 1)



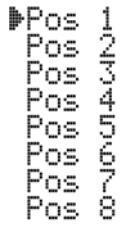
Step 2)



LCD SCREEN DISPLAY OPTIONS WHILE IN “DISEqC UNCOMMIT.” MODE:

Step 1)

Step 2)



POWER ON:

To power the meter On, press the lower-left button labeled “POWER ON/OFF”. The DIGISAT MULTI will display a start-up screen briefly, then go directly to the RF signal strength scales.

To find your serial number and version number, simply continue holding down the “ON/OFF” button, freezing the initial display screen for as long as the button is held.

When the DIGISAT MULTI is connected in-line, between the LNB and the satellite receiver, it will power On automatically (Loop-through mode).

In “Loop-through” mode, the function of the button 13V/18V, 0 kHz and 22 kHz is not available and the meter will only display the parameters set by the satellite receiver.

CONNECTING THE LNB:

Using a jumper coax of RG-6 solid-copper center conductor cable, connect one end to one of the 4 ports of the LNB assembly on the AT9 dish assembly. Route the cabling through the feed arm and to the back of the reflector, then assemble the LNB assembly to the feed arm.

Connect the other end of the coax jumper to the input on the DIGISAT MULTI marked "LNB".

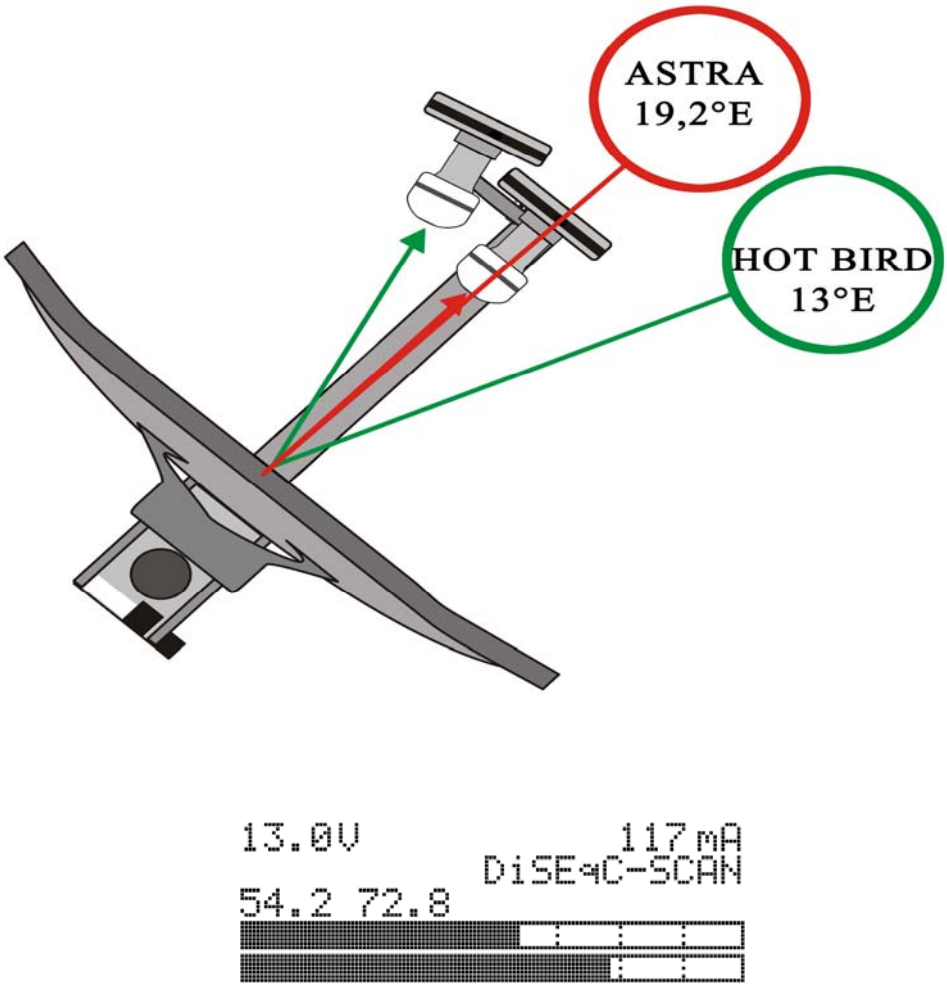
(See illustration below)

The photo above shows the meter powering the LNB assembly with the internal power supply. To use the satellite receiver for power, connect the right port on the meter (labeled "Receiver") to the Receiver´s "Sat Input".

The default setting of "13V/OkHz" will be the parameters first presented when the meter is powered On.

For the optional "Loop-through" mode, connect coax from the satellite receiver's "In from Satellite" port to the meter's right port marked "Receiver".

ALIGNMENT/CONNECTIONS:



The above example shows a typical two LNB dish together with a 2-way DiSEqC-switch.

DATA PORT FUNCTIONS/FUTURE UPGRADES:

To expose the Data Port, remove the outer case covering. The Data Port is located on the opposite end of the DIGISAT MULTI from the DC charging port/F-connection end.

A special cable for connection with PC is needed (optional, not included).