DIGISAT PRO ACCU

Manual English





DIGISAT PRO ACCU by Emitor AB



The DIGISAT PRO ACCU from Emitor is designed to be an aid in aligning satellite antennas so they can provide maximum performance.

Charge the Battery

The DIGISAT PRO ACCU can be powered by the internal battery or from a satellite receiver. We suggest that you charge the internal battery before using the meter as, in most field situation; you will probably be relying on the internal power.

To charge the battery, plug in the wall charger or vehicle charger in the 15vDC socket on the meter. The LCD display will indicate charging is in process with approximately 14 hours to go on the cycle.

To use a satellite receiver for power or to power the meter when the battery is discharging, plug the DIGISAT PRO ACCU into coax between the receiver and the LNB connector, the DIGISAT PRO ACCU will power up immediately. However, the receiver will not charge the internal battery. Charging can only be done with the wall or car charger.

Start-up

When the battery has been charged, press "ON/MENU" button and the DIGISAT PRO ACCU will power up.

The signal strength (when connected to a dish) will be indicated by the bar graphs and the digits just above each bar graph. As you move the dish, you will see increase and decrease in signal strength. The objective is to maximize the signal strength indicated on the bar



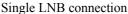
graph(s) by minor azimuth, elevation and rotation adjustment of the dish. When you have maximized the readings, lock the dish mount bolts and re-attach the LNB connector to the coax or switches provided with the antenna. Then check your effort with the satellite receiver.

Connections

Single or Dual LNB connections:

You can connect the DIGISAT PRO ACCU to a single or a dual LNB and read the satellite strength on either the top or the bottom bar depending on which connection is attached.







Dual LNB connection

Audible Tone

An audible tone is available if you would prefer listening to the DIGISAT PRO ACCU rather than trying to watch the digital reading or the bar graph. The audible tone is selectable and applies to only one LNB connection at the time.

• To use the tone capability, start from the default signal sensing mode (right)



 Press the "ON/OFF" button once. The tone will begin and the letter "T" will appear above the top bar graph. This indicates that the tone applies to the top LNB 1 reading.



• To apply the tone to the bottom LNB 2, press the "ON/OFF" button once more. The "T" will appear above the bottom bar graph and the tone will apply to that LNB. To cancel the tone, press the "ON/OFF" button one more time.



The Menu

The DIGISAT PRO ACCU can provide much more information about your satellite system. To access the expanded menu area, press the "ON/MENU" button. The screen illustrated (right) will appear and provide a very detailed range of tests and adjustments. The menu map as well as details about what each function con do for you are listed in this manual. Press the "UP" or "DOWN" button to scroll the arrowhead pointer up and down through the menu.



Signal view

This is the screen you will see when you first turn on the DIGISAT PRO ACCU. These bars indicate the general signal strength, voltage and current draw in mA of all connected devices. If desired, you can look at only one LNB by pressing "UP" button. Press the "UP" button again to look at only the second LNB, one more press of the "UP" button takes you back to both LNBs.

Receiver view

Displays the voltage provided by the satellite receiver or battery. Indicates the total current draw in mA of all connected components. Also indicates if a 22 kHz tone is being sent from the receiver. These readings verify the receivers operations. Also, using the receiver for power, you can measure voltage at the receiver and at the end of the coax, this will help calculate the voltage loss through the coax cable.

22 kHz Mode

The DIGISAT PRO ACCU has a built-in 22 kHz tone generator which can be activated by this function. This allows you check switches and LNBs. The option is ON/OFF and toggle (between ON/OFF) mode.

13/18 V

You can select the 18 v as the output voltage sent from the battery to the LNB. Be very careful when selecting this higher voltage as the circuitry demands a lot more battery power. If the demand on the battery is high, the voltage will automatically drop back to 13 v.

Motor control

This menu allows you to drive the motor east and west to the position you want. Here you can also set the east/west limits, as well as clear the east/west limits. There is also a function that allows you to calibrate the motor.

DiSEqC Control

The DiSEqC modes are:

- Toneburst A or B (ON or OFF)
- Position + Option Position 1,2,3,4 (OFF/OFF, OFF/ON, ON/OFF, ON/ON)
- Switch 1-4 -Switch 1-4 ON or OFF

Setup

Setup takes you to a list of options as follows:

Atten ON/OFF; this attenuates (reduces) both signal meter readings to lower numbers. Handy if the bar graphs is maxed out. Note that "ATT" text is now shown on the display. To turn off this feature, go back to ATTEN in the setup menu and press the red button.

Switch mode; the DIGISAT PRO ACCU can also perform as a 2-way switch, the options are as follow:

- TB Toneburst- (miniDiSEqC) switch
- POS DiSEqC "position" switch
- OPT DiSEqC "option" switch
- SW1 DiSEqC "switch 1" switch
- SW2 DiSEqC "switch 2" switch
- 14/18V 14/18 volt switch
- 22 kHz 22 kHz switch

Receiver Video

If you want to check the video with the DIGISAT PRO ACCU connected, press "UP" button to select the LNB you would like to view. This illustration indicates that we have selected LNB1. The video data will now pass smoothly from LNB1 through the DIGISAT PRO ACCU and can be interpreted by the satellite receiver.



Note that you must select only one LNB to receive video signals for a viewable picture. The DIGISAT PRO ACCU is effectively dividing its attention to both ports LNB1 and LNB2 when both graphs are presented. This is perfect for dish alignment but interrupts the data stream to the receiver and it will present no video in this mode.



How to use DIGISAT PRO ACCU with DiSEqC setup

This is an illustration of how to set up the DIGISAT PRO ACCU with a DiSEqC switch.



- Connect the Coax-cable from the LNBs with the DiSEqC switch A & B.
- Then connect the coax with the out connector from the switch to the LNB1 connector on the DIGISAT PRO ACU.
- Connect the coax from the DIGISAT PRO ACCU to your satellite receiver. The setup is done and if the dish has been installed correctly, you should now be able to see picture from your satellite receiver. If there is no picture, do the setup again and check that you have connected all the coax-cable correctly.

F.A.Q

Be aware of the fact that the DIGISAT PRO ACCU is an aid to aligning the antenna, it does not identify which satellite you are looking at. It still takes basic knowledge of satellite elevation and azimuth to track and identify the correct satellites. You can easily pick the wrong satellite, align the antenna and then discover that the receiver indicates NO SIGNAL.

The DIGISAT PRO ACCU can be used with digital or analog LNBs. It also operates with both circular and linear polarized LNBs. The only qualification is that the LNB must be down-converting to an I.F. Frequency of 900~2200 MHz (which is typical of most LNBs).

The DIGISAT PRO ACCU looks at the entire spectrum of signals received from the LNB and gives an overall summation of the signal. It is not transponder / frequency selectable. If you need specific frequency selections, EMITOR AB offers the SATLOOK DIGITAL NIT meter which can provide individual transponder information.

There is not an exact number meter reading which you should attempt to achieve. Your objective is to maximize the meter reading so that the antenna and LNBs are providing the best signal possible.

The signal level reading indicated on the DIGISAT PRO ACCU will not be the same reading as you get on the satellite receiver. These two readings can compliment each other (when one increases, the other one increases) but the numbers will not be the same. The satellite receiver indicates interpreted data reception (forward error correction information) while the DIGISAT PRO ACCU indicates overall gain of the LNBs.

The DIGISAT PRO ACCU can be confused by weak (satellite frequency) signals reflection from the LNB if these weak signals strike a tree or a building and are reflected back into the dish. When trees are in the path of the satellite signal, you may have to fallback on the satellite receiver for correct dish alignment.

Battery performance time is greatly affected by cold air temperatures. This is just a fact of life for batteries. In freezing conditions battery packs can loose more than 60% of their capacity.

The internal battery charger in this meter takes 14 hour to fully charge a dead battery. The circuit has a built-in voltage detector which will prevent overcharging a partially charged battery. The internal charger circuit does not "trickle charge" so it serves no purpose to leave the DIGISAT PRO ACCU continually plugged into either power source.

The 18V option setting is selectable only when running on the internal battery. Keep in mind that this synthesized higher voltage requires quit a bit more power from the internal 8.4 volt NiMH battery. Use the higher voltage only if it is necessary as your battery run time will be reduced.

The DIGISAT PRO ACCU is designed to align satellite antennas. It will not aid in the alignment of off-air antennas.

The DIGISAT PRO ACCU is warranted for two full years against manufacturing defects. We will ask for proof of purchase so keep your receipt.

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