



PRO+

TV & SATELLITE SIGNAL METER WITH LNB POWER



USER GUIDE

GUARANTEED FOR 3 YEARS!

Your Pro+ TV & SAT Signal Meter is guaranteed for a period of 36 months from date of purchase, this is on a "return to base" basis and proof of purchase will be required. Please contact us if you would like to claim repair / replacement under these terms. Your statutory rights are not affected.

PRO+ TV & SAT SIGNAL METER

The **Pro+ TV & SAT Signal Meter** is a highly sensitive and accurate combined UHF TV and satellite signal finder. It incorporates both audio and visual signal indication and UHF signal finding. Also incorporated is a 13V LNB power source, providing an aid to dish alignment without the need for connection to a receiver or other power source.

Instructions for use as a TV signal finder with an aerial:

- ⇒ Fit the **9V PP3 battery*** (supplied) into battery holder within the battery compartment at the rear of the **Pro+ TV & SAT signal finder**.
- ⇒ Connect your directional aerial lead to the socket marked "TV". Note, if your aerial system incorporates an adjustable signal amplifier/booster, the best procedure is to first follow the steps below and find the strongest signal with the booster set to "low" boost setting, and if none can be found, then try again with the setting to "high/normal" boost.
- ⇒ Turn on the power switch, located on the side of the unit and the green "On" power indicator will light. The audio signal will be heard as a continuous tone when two or more LED's are lit.
- ⇒ Rotate the directional aerial, watch the LED's and/or listen to the audio tone. As the signal level improves, the pitch of the tone will increase and more LED's will light. The best position for your aerial will be indicated by the greatest number of LED's being lit and the highest pitch of audio tone. If you have found the signal with your booster set to "low", you may now switch your booster to "high/normal" if required.
- ⇒ The Finder can now be removed from the aerial lead which can be re-connected to your TV or set-top box. You are now ready to tune your TV to receive the best quality TV signal available in your area.
- ⇒ If you have difficulty tuning then you may wish to try re-connecting and continue rotating the aerial until the next highest signal is found. Also note that main TV transmitters require your aerial to be horizontally polarized, and local transmitters, vertical. So you may need to repeat the procedure for each mode. A tip is to look around to see how the local fixed aerial installations are oriented as a starting point.

Instructions for use as Satellite signal finder meter:

- ⇒ Ensure the Pro+ is switched off. Connect the signal meter using the supplied patch lead by screwing one end directly onto the LNB connection of the meter. An additional push fit connection converter is provided for your convenience to aid speedy connection of the other end to your LNB. We suggest starting with your dish pointing towards the east (if you are in the UK and are looking for Sky/Freesat service).

- ⇒ Once connected, Turn on the power switch, located on the side of the unit and the green "On" power indicator will light, the audio signal will be heard as a continuous tone and the first 3 to 5 LED's (depending on the model of LNB) will light up. On a non-aligned dish, this is the received signal starting point and is the result of a combination of LNB and background noise.

- ⇒ By adjusting the direction and elevation angle of the dish, the finder will indicate any signal received from a satellite. You must first find out the elevation angle and direction for the required satellite for your location. Then, turn the face of the dish towards the north. Now adjust the dish's angle, and then slowly and smoothly turn the dish through east towards the south. Watch the LED's and listen for the audible tone. When the dish becomes aligned, the pitch of the tone will increase and more LED's will light. Remember to use fine fingertip adjustments, rather than aimlessly waving the dish around... the source of the signal you are trying to find is a pinpoint in the sky 18-25deg above the horizon and 22,300 miles above the equator!. A compass is a really useful aid and with practice, aligning a satellite dish will become second nature.

- ⇒ The best position for your dish will be indicated when the greatest number of LED's are lit and the audio tone is at its highest pitch. Once that position is found, the elevation angle may be fine tuned. Successful alignment with the correct satellite will be confirmed by subsequent connection to your satellite receiver (see the receiver's instructions.)

Because of the wide band nature of this signal meter, erroneous readings may occur if used in close proximity of transmitting sources (cell phone, wi-fi, tetra, wireless equipment etc)

The indicated signal level is a guideline only and absolute accuracy is not guaranteed.

Technical Specifications:

Power Requirement 9V PP3 Alkaline Battery*. ENERGIZER INDUSTRIAL as supplied is available as an accessory direct from us (Part no. 330-064) or a premium brand, high performance battery is recommended.

9V PP3 Battery. The Pro+ has a built in voltage converter that provides an accurate and constant 13.0V output to the LNB, whatever the battery voltage (as long as there is sufficient charge). This is quite a demanding function and so we have tested many types of battery that are commonly on the market. Lesser quality batteries simply don't have the performance required in order to operate this function and so their useable life is extremely short.

Battery Life

The batteries that performed best in all our tests are listed as follows;
Alkalines; In order of preference;

Energizer Industrial (as supplied), **Energizer Ultra+** and **Energizer Hightech** all achieve more than 50 SAT uses** or >10hrs continuous TV aerial use.

NiMH Rechargeables; In order of preference (commercial charger is required);

Ansmann 300 AKKU; Ansmann 200 AKKU; nx-ready 9V NiMH all achieve more than 30 SAT uses** or >6hrs continuous TV aerial use.

LNB connection 13V +/-0.1V, 250mA max (most modern LNB's are 75-150mA)

Freq Response TV - 470-860Mhz; LNB - 950-2100Mhz

Sensitivity: TV input, 5 channels/MUX's, +/-2dBuV, 75Ω

- 1 LED44dBμV.... Low signal, could be background noise / limited TV services.
- 2 LED's ...47dBμV.... Low signal, not all TV services may be available
- 3 LED's ...51dBμV.... Minimum signal, not all TV services may be available
- 4 LED's ...54dBμV.... Minimum signal, not all TV services may be available
- 5 LED's ...59dBμV.... Optimum signal
- 6 LED's ...61dBμV.... Optimum signal
- 7 LED's ...64dBμV.... Optimum signal
- 8 LED's ...68dBμV.... Optimum signal
- 9 LED's ...71dBμV.... Optimum signal
- 10 LED's ...74dBμV.... Optimum signal
- 11 LED's ...78dBμV.... Optimum signal
- 12 LED's ...81dBμV.... Strong signal, attenuation may be required

**1 use being 30 seconds connected to a single "Sky Minidish" LNB.

LNB input – Visual / Audio indication only

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