

DIGITAL TERRESTRIAL TELEVISION HUNTER

TVHUNTER+: Aligning antennas fast and easily

DVB-T/T2

The **TVHUNTER+** is a small handheld easy to use meter, that has been designed for the installation of Digital Terrestrial Television for both DVB-T and **DVB-T2** systems. The **TVHUNTER** has become a widely popular tool for DVB-T antenna alignment. The key factors have been its small pocket size and ease of use, still offering proper measurements. As a natural evolution, **TVHUNTER+** is now available allowing full compatibility with **DVB-T2** standard for the High Definition digital terrestrial TV broadcasting.



Easy to use



1.- Detection

It detects signals from any analogue or digital terrestrial broadcast with the built-in wide band detector. In this mode the meter shows information about the received signal power in the form of two graphic bars with two different time constants and an audible indicator to help align the aerial to the optimum detection.



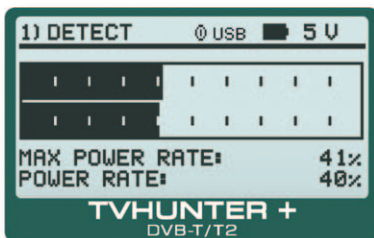
External antenna power

The meter includes a power supply for external active antennas or preamplifiers. It is possible to select 5 V, 12 V, 18 V or 24 V depending on the requirements of the external device.

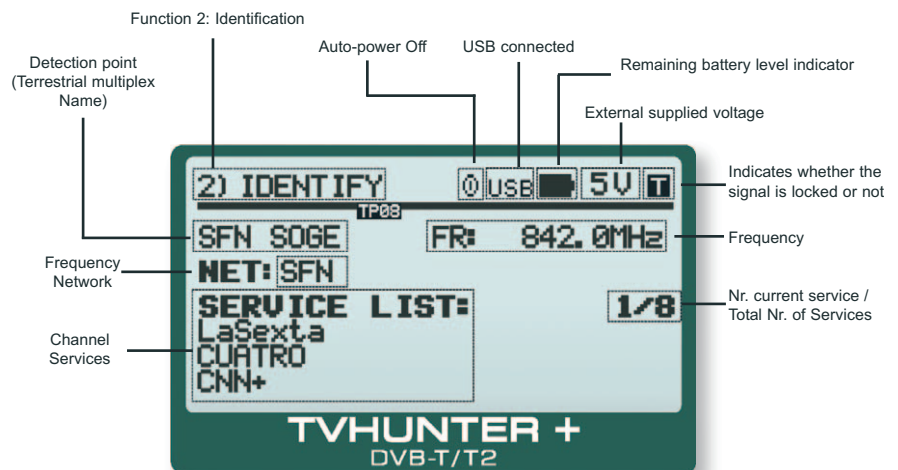


2.- Identification

In this mode the **TVHUNTER+** shows information about the received digital channel and programmes included in the service list as well.

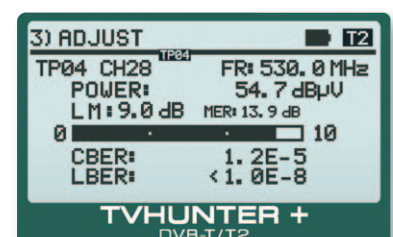


SCAN.- The **TVHUNTER+** allows a broadcast search in DVB-T and DVB-T2.



3.- Adjustment

It allows fine pointing the reception antenna, to optimise the digital measurements such as channel power, MER, VBER and CBER on preselected channels. All information is displayed on the screen in a very convenient way so that optimising the aerial alignment becomes really easy. MER in particular is shown numerically and through a graphic bar as well. VBER and CBER can be shown together or graphically.



SPECIFICATIONS TVHUNTER+

TUNING

| | |
|--------------------|--------------------------|
| Frequency range | 170 MHz to 858 MHz (UHF) |
| Measurement points | 50 maximum |

RF INPUT

| | |
|----------------------|---|
| Impedance | 75 Ω |
| Connector | Universal, including BNC, DIN and F interchangeable adapter |
| Level range | 40 dB μ V to 100 dB μ V |
| Maximum signal level | DC to 100 Hz 30 Vrms 170 MHz to 858 MHz 120 dB μ V |

DIGITAL SIGNALS MEASUREMENTS

DVB-T (COFDM) MEASUREMENTS

| | |
|-------------|--|
| Power | 40 to 100 dB μ V |
| MER | 0 to 35 dB |
| CBER | 1E-6 to 1E-1 |
| VBER | 1E-8 to 1E-1 |
| Link Margin | In dB (Range depends on signal parameters) |

DVB-T SIGNAL PARAMETERS

| | |
|------------------------------|---|
| Carriers | 2k / 8k |
| Guard Interval | 1/4, 1/8, 1/16, 1/32 |
| Code Rate | 1/2, 2/3, 3/4, 5/6, 7/8 |
| Modulation | QPSK, 16-QAM, 64-QAM |
| Bandwidth | 6,7 and 8 MHz |
| Spectral inversion | ON, OFF, (AUTO) |
| Displayed information | Multiplex name and its first 48 services, if it is detected Visual indication of DVB-T locked signal |
| Configuration of test points | By means of USB 2.0 connection to PC. (Cable and software included) |

DVB-T2 (COFDM) MEASUREMENTS

| | |
|-------------|--|
| Power | 40 to 100 dB μ V |
| MER | 0 to 35 dB |
| CBER | 1E-6 to 1E-1 |
| LBER | 1E-8 to 1E-1 |
| Link Margin | In dB (Range depends on signal parameters) |

DVB-T2 SIGNAL PARAMETERS

| | |
|----------------------------|---|
| Carriers | 1k, 2k, 4k, 8k, 8k+ EXT, 16k, 16k+ EXT, 32k, 32k+ EXT |
| Guard Interval | 1/4, 19/256, 1/8, 19/128, 1/16, 1/32, 1/128 |
| Bandwidth | 5, 6, 7 and 8 MHz |
| Spectral Inversion | ON, OFF (AUTO) |
| Pilot Pattern | PP1-PP8 |
| Code Rate PLP | 1/2, 3/5, 2/3, 3/4, 4/5, 5/6 |
| PLP Constellation | QPSK, 16QAM, 64QAM, 256QAM |
| PLP Constellation Rotation | ON / OFF (AUTO) |
| PLP ID | 0-255 |

EXTERNAL UNITS POWER SUPPLY

| | |
|-------------------------------|---------------------------------|
| Output voltage | 5 V, 12 V, 15 V, 24 V \pm 1 V |
| Maximum external output power | 5 W (2.5 W for +5 V) |

BACK-LIGHT DISPLAY

Automatic

POWER SUPPLY

| | |
|-------------------------------|--|
| Battery | 7.4 V 2.2 Ah Li-Ion battery |
| Low battery indication | Acoustic indication and message on the display |
| Charger | Built-in. It disconnects power supply when charging process ends |
| Autonomy | 6 hours typically, without powering any amplifier through the external power supply |
| Charging time | 90 min. approx. starting from a complete discharge (instrument off), within the margin of tolerated temperatures |
| Mains adapter | 90 - 250 V / 50-60 Hz (included), 12 V DC, 20 W |

MECHANICAL FEATURES

| | |
|-------------------|------------------------------------|
| Dimensions | 180 mm (W) x 95 mm (H) x 50 mm (D) |
| Weight | 480 g |

ACCESSORIES

Mains power adapter, F to BNC/DIN/F adapters, Mains cord, Car lighter adapter, **TVHUNTER+** carrying suitcase, **TVHUNTER +** carrying belt, USB 2.0 connector cable, **TVHUNTER+** Quick Reference Guide