

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.



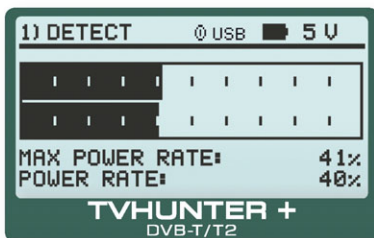
External antenna power

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.

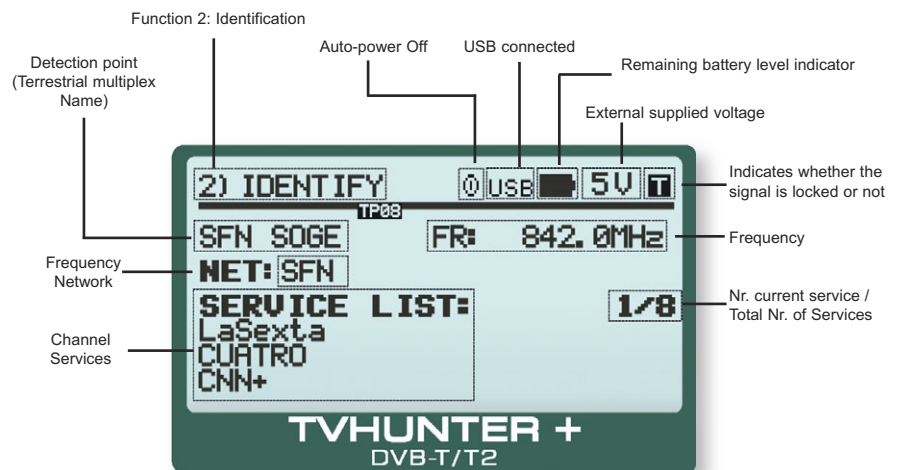


2.- Identification

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

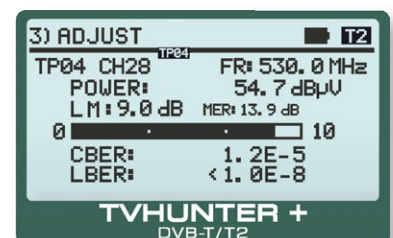


SCAN.- The **TVHUNTER+** allows a broadcast search in DVB-T and DVB-T2.



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

OPERATING ENVIRONMENTAL CONDITIONS

Altitude	Up to 2000 m.
Temperature range	From 5 °C to 40 °C
Max. relative humidity	80 % (Up to 31 °C), decreasing lineally up to 50 % at 40 °C

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