



HD RANGER Eco

HD TV ANALYZER FOR PROFESSIONAL INSTALLERS

INCLUDES 4K SIGNAL IDENTIFIER

The **HD RANGER Eco** is a universal TV analyzer that covers a comprehensive mix of broadcast standards around the globe: DVB-T/T2, DVB-C/C2, DVB-S/S2 with MPEG-2 as well as MPEG-4 video. All the standards are managed effortlessly by the analyzer.

One of the most noticeable and stunning features on the new **HD RANGER Eco** is the spectrum analyzer. The sweep is super-fast, with an unbeatable refresh rate.

Its processing power allows to display multiple screens either overlapped together or in a split screen format to quickly review all the measurements.



THE BEST VALUE FOR MONEY IN TV & SPECTRUM ANALYZERS

- ✓ **Full HD:** TV decoder up to 1080p/1080i
- ✓ **UHD ready:** Includes 4K signal identifier
- ✓ **Triple split display:** 3 functions in a single screen
- ✓ **Perfect for Satellite:** Includes DiSEqC, LNB supply...
- ✓ **Ultra fast spectrum:** Lightning-fast scan, just 70 ms
- ✓ **USB connection:** Download measurements and screen shots
- ✓ **Multistandard:** DVB-T/C/S and DVB-T2/C2/S2
- ✓ **Datalogger:** Automatic measurements storage
- ✓ **Echoes analyzer:** The best tool to aim antennas with reflections
- ✓ **Reports:** Generate printable PDF measurement reports
- ✓ **Constellation diagram:** Identify problems at a glance
- ✓ **Lightweight:** More comfortable to use
- ✓ **5G and 4G interference analysis:** Helps solve mobile phone problems in TV distribution wiring

SPECIFICATIONS	<i>HD RANGER Eco</i>
GENERAL	
Inputs and outputs	
RF input	F-type male, 75 Ω
USB Interface	Mini-USB. Mass storage host, Serial port emulation, USB CDC "Communications Device Class"
Video/Audio input	Jack multipole connector
Monitor Display	7" TFT, 16:9
External units power supply	Through the RF input connector
Terrestrial Supply	External, 5 V, 12 V and 24 V
Satellite Supply	External, 5 V, 13 V, 15 V and 18 V
22 kHz signal	Selectable in Satellite band
DiSEqC Generator	DiSEqC 2.2 (DiSEqC 1.2 commands implemented) ⁽¹⁾
Other	SATCR/SCD (EN50494) and dCSS/SCD2 (EN50607)
Dimensiones y Peso	290 (An.) x 185 (Al.) x 65 (Pr.) mm. 1,5 kg.
Battery Operation Time	> 2 hours in continuous mode
MEASUREMENT MODE	
Tuning range	Displayed data: Numeric and Level bar From 5 to 1000 MHz (Terrestrial), 950 to 2150 MHz (Satellite)
DVB-T COFDM	From 35 dBμV to 115 dBμV
Measurements	Power, CBER, VBER, MER, C/N and Link margin
DVB-T2 Base and Lite COFDM	From 35 dBμV to 115 dBμV
Measurements	Power, CBER, C/N, LBER, MER, Link Margin, BCH ESR, LDP Iterations and Wrong packets
DVB-C QAM, J83 Annex C QAM	From 45 dBμV to 115 dBμV
Measurements	Power, BER, MER, C/N and Link margin
DVB-C2 QAM	From 45 dBμV to 115 dBμV
Measurements	Power, CBER, MER, C/N, LBER, BCH ESR, LDP Iterations and Wrong packets
TPAL, SECAM and NTSC analogue TV	
Supported standards	M, N, B, G, I, D, K and L
Radio FM	From 45 to 1000 MHz
Measurements	Level
DVB-S QPSK	From 35 dBμV to 115 dBμV
Measurements	Power, CBER, MER, C/N and Link Margin
DVB-S2 QPSK, 8PSK, 16APSK, 32APSK	From 35 dBμV to 115 dBμV
Measurements	Power, CBER, LBER, MER, C/N, BCH ESR, Wrong packets and Link Margin
DSS QPSK	From 35 dBμV to 115 dBμV
Measurements	Power, CBER, VBER, MER, C/N, and Noise margin
SPECTRUM ANALYZER MODE	
Tuning range	From 45 to 1000 MHz (Terrestrial), from 950 to 2150 MHz (Satellite)
Reference level	From 60 dBμV to 135 dBμV (adjustable in 5 dB steps)
Span	Full span / 500 MHz / 200 MHz / 100 MHz / 50 MHz / 20 MHz / 10 MHz
Measurement range	From 10 to 130 dBμV
Measurement bandwidth	100 kHz
VIDEO	
Codecs	MPEG-1, MPEG-2, MPEG-4 AVC H.264. Includes UHD detection.
Maximum image size	1920x1080x60i; 1280x720x60p/50p
AUDIO CODECS	MPEG-1, MPEG-2, HE-AAC, Dolby Digital Plus
TOOLS	Constellation diagram, Dynamic echoes, Attenuation test ⁽²⁾ , Datalogger ⁽³⁾ , PLS code indicator, ISI filtering Screen capture key, Field strength, Task planner, H.265 detection
INCLUDED ACCESSORIES	Jack 4V/RCA cable, USB on-the-go cable A (female) - mini USB B (male), USB cable USB A (male) - mini USB B (male), Car lighter charger, External DC charger, "F"/f-"DIN"/f adapter, "F"/f-"F"/f adapter, Mains cord, Transport belt, Carrying bag, Quick Reference Guide, Monopod
OPTIONAL ACCESSORIES	AM-030 master aerial, CV-150 Security cameras video adapter

(1) DiSEqC™ is a trademark of EUTELSAT.

(2) Attenuation Test function designed to be used with **RP-110** multiple pilot generator.

(3) Using NetUpdate software application under Windows PC platform.