100% Made in Italy

SAT, TV, CATV ANALYZER

HD TAB 7 STC:
7" display, 4 cm thick

This meter belongs to the TAB platform developed by Rover: it is thin, has a 7", touchscreen display, encoder knob and 8 mechanical, function keys

This Rover platform is called TAB and it represents the latest generation of advanced measuring instruments from ROVER. Last year Rover launched their first model, the HD PROTAB STCOI, which has a 10.2" display and was designed for professionals in the broadcasting sector.

HD TAB 7 STC is the new product in 2013, a professional analyzer, with a 7" touchscreen display. It is extraordinary for a number of reasons, including the fact that it is only 4 cm's thick.

Equipped with dual controls - it has both touchscreen and encoder/mechanical keys - this instrument has very fast navigation and visualizes, in real time, the spectrum (with Max Hold function), echoes, micro-echoes, pre-echoes and post-echoes.

Measurements

The HD TAB 7 STC measures DVB-S/S2, DVB-C and DVB-T/T2 signals for satellite programs with QPSK/8PSK modulation, terrestrial programs with COFDM modulation and Cable TV with QAM modulation. It has a built-in MPEG-2/4 H264 decoder. The HD TAB 7 can therefore view signals from both SD & HD and analog broadcasters.

It has many strengths, including:

- Pre-stored SAT transponder navigation in all the most important satellites and all TV canalizations worldwide;
- Assisted SAT pointing, dual input function (DUAL LNB) and sat finder function;
- All DiSEqC commands, SCR with auto search, motor protocol;
- Constellation visualization, MER, PER, LDPC, BCH, aBER, bBER, EVM, ECHOES, noise margin, level/power measurements and spectrum analysis;
- CATV measurements: DOCSIS downstream, INGRESS mode, LEAKAGE mode, BARS SCAN and TILT.

The tuner has a range of up to 1GHz in the terrestrial band (therefore it is possible to visualize interference in the cellular band) and up to 2250 MHz in the satellite band.

The meter is only 4 cm thick, so an installer can hold it using only one hand

Usage

The HD TAB 7 has a 4-hour autonomy thanks to 4.8 Ah Ion Polymer batteries. The charging circuit is controlled by a microprocessor with battery test function to regenerate, automatically measure the batteries and calibrate the indicator. All the features, that have made Rover analyzers popular over time, are present in this meter, for example Autodiscovery, which automatically recognizes and selects analog TV and DTT COFDM /QAM signals, in either Measurement or Spectrum mode. The HD TAB 7 STC displays, on one screen, the program picture, as well as all the measurements: the program list, AV Pids, Net ID, LCN and settings.

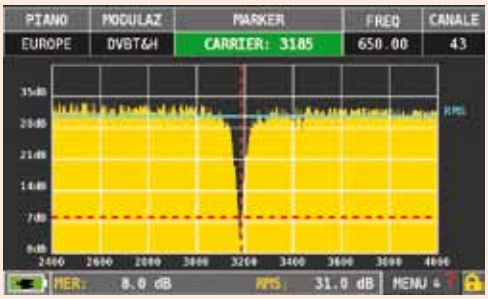
There is a composite video input that shows pictures from a CCTV camera on the display.

Constellation analysis

Like all meters in the HD Series, the TAB 7 STC has constellation analysis of DVB-C/T/T2/S and S2 signals. The screen below shows an example of how the instrument displays the constellation of a DVB-T signal, in a case where the TV system is suffering from an alternating disturbance, caused by the power supply of a PABX or the amplifier.
The symbols positioned at the extreme sides of the constellation assume a classical ellipse shape and are projected both towards the inside and the outside due to an amplitude error. The new SW designed by ROVER laboratories also allows you to select, not only the REFRESH TIME (how many seconds the constellation must be updated), but also has the possibility of selecting a START STOP of the carriers in order to perform a more thorough analysis.

APP: MER analysis for carriers

MER Versus Carrier analysis (optional), allows you to analyze, for example, a reception problem in TV systems sometimes caused by the presence, inside the apartment, of access points, electronic transceivers, remote control repeaters. On the screen it is possible to analyze how the MER value precipitates considerably to 8 dB in correspondence with carrier number 3185. The terrestrial digital signal is composed of 6,817 carriers, in this example, the horizontal axis represents only a portion of the carriers in a ZOOM from 2400 to 4000. The vertical axis shows the value of the MER, from 0 to 40 dB. Simply move the marker so you can measure the value of the MER for the different carriers. The screen also shows the MER RMS value (BLUE line, 31.0 dB), this value is displayed in the main screen of the meter where you will find all the measurements and the picture of the selected MUX. Besides the possibility of selecting a Start-Stop of the carriers, you can choose Normal / Reverse and the graphics representation, total picture or contours only.

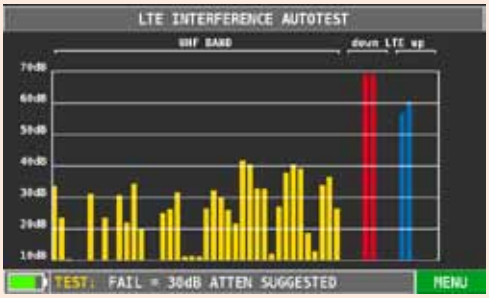


Echo analysis (impulse response)

The TAB 7 STC also completes the analysis of echoes, micro echoes, pre-echoes and post-echoes by including the bBER measurement value (before BER or BER before Viterbi) on the same screen. To even further improve the visualization of the presence of microechoes, that are not always visible on the main screen, the TAB 7 STC has four ZOOM levels. The main screen displays echoes from - 294.00 to +294.00 microS (i.e. from -88.20 to + 88.20 Km) in the case of a DVB-T signal. If you select the words "micro ECHOES" it is possible to Zoom, in this case the display scale of the micro ECHO ranges from -49.0 to + 49,00 microS (ie from -14.70 to 14.70 + Km). The graphics representation of the guard interval, is shown on the instrument by a green band of colour, this also helps the installer to understand if an ECHO is located inside or outside the Guard Interval.

LTE interference analysis

It is now widely known that LTE signals could be a source of disturbance in TV systems. These disturbances can be attenuated and/or eliminated by inserting appropriate technical corrections in the system, such as LTE filters. For this reason, Rover's unique LTE Interference Autotest (Analysis) suggests to the installer the correct attenuation values in dB of the interfering LTE signals. This screen shows an example of high LTE interference, the lower part of the display shows the following information: "Fail = 30 dB Atten Suggested." The meter suggests attenuating LTE interfering signals by 30 dB (shown in red and blue) in order to attenuate or eliminate the disturbance.



APP: Sat Expert

*The new Sat Expert App (optional) is of particular interest. The screen example shows the pointing of Hot Bird positioned at 13°E. The display in the upper left, in correspondence with the word "Plan," shows the abbreviated name of the Satellite that you wish to capture, selected using the meter's memory plans, "**HBIR13**." The bottom of the display shows "**ASTRA19**" followed by "**> go west**." This indication informs the installer that at the time the dish was oriented towards the ASTRA satellite positioned at 19° East, and that if he wants to point the antenna towards the Hot Bird satellite, positioned at 13 degrees East, he must move the dish to the west. Once the antenna has been pointed, the bottom of the display will show "**HBIR13 FOUND!**". According to the diameter of the satellite dish, the installer can move the dish in a range of + / - 10 ° and the instrument indicates, from time to time, in SAT EXPERT Full Spectrum mode, which satellite is being pointed.*