



1 LTE: What does it mean?

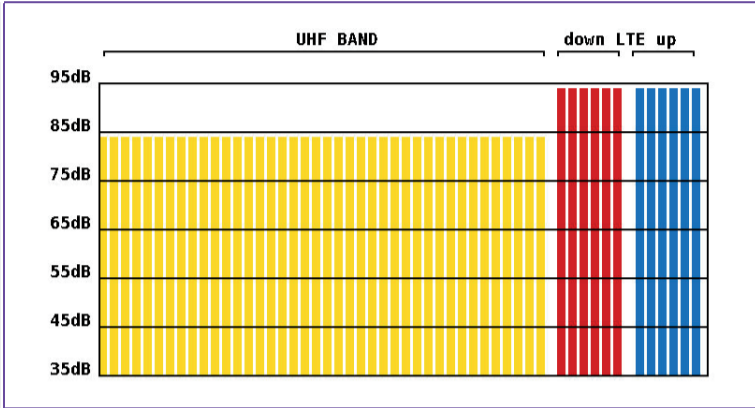
Long Term Evolution is the latest frontier of UMTS telephone signals dedicated to the internet (4G). LTE signals occupy the upper part of the UHF band, for example from channels 61 to 69; channels that, until the end of 2012, were used for Digital TV transmissions.



2 LTE: New UHF canalizations

This diagram shows an example of the new UHF canalization:

- In yellow: UHF channels dedicated to Digital TV: from channel 21 to channel 60;
- In red: new LTE channels, transmitted from repeaters: 6 channels Down;
- In blue: LTE channels transmitted from mobile terminals: 6 channels Up (smartphones, tablets, etc.).

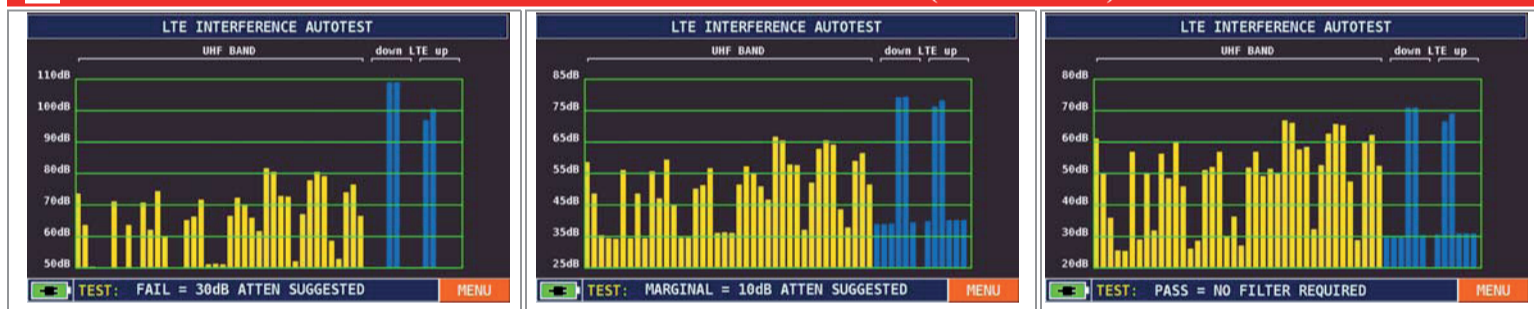


3 LTE: Possible interferences

A number of field tests showed that LTE signals may cause interference to TV systems. The level difference between TV and LTE signals could cause intermodulation problems inside the TV band amplified by the head-end, or they could create interference in the transition zone between TV and LTE channels: for example ch 60. These disturbances can be attenuated and/or eliminated by inserting technical corrections in the system, for example: LTE filters.

ROVER's exclusive **LTE INTERFERENCE AUTOTEST (ANALYSIS)** new feature is included in all its new **HD Series**. This "smart function" automatically activates the Spectrum analysis and measurements, suggesting to the installer which could be the correct filter attenuation value in dB for the interfering LTE signals. Please find below three measurement examples.

4 LTE: ROVER's solutions - LTE Interference AUTOTEST (ANALYSIS)



An example of **high LTE interference**

The following information appears in the lower part of the display:

FAIL = 30dB ATTEN SUGGESTED

The instrument suggests attenuating LTE signals (shown in blue) by 30 dB in order to mitigate or eliminate interferences.

An example of **slight LTE interference**

The following information appears in the lower part of the display:

MARGINAL = 10dB ATTEN SUGGESTED

The instrument suggests attenuating LTE signals by 10 dB in order to mitigate or eliminate interferences.

An example of **no LTE interference**

The following information appears in the lower part of the display:

PASS = NO FILTER REQUIRED

The instrument does not detect any threat of LTE interference.

5 LTE: HD Series SW Upgrades

This function is available for instruments in the **HD Series** (HD LIGHT STC, HD FLASH STCO, HD TOUCH STCO, HD PRO STCOI and HD PROTAB STCOI). It will soon be available through a **FREE SW UPGRADE**.

[Click here](#) to download the Newsletter in pdf format.

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