Spectrum Compact

PRODUCT APPLICATIONS

SAF's team of engineers has directly assisted to countless customers with installation, maintenance and troubleshooting of microwave networks for more than a decade. It has given SAF a unique impact when designing Spectrum Compact. Special attention was paid so that the user gets the best possible expierence. From its wide range of features integral in the day-to-day work of microwave field engineers, to its intuitive and efficient interface, the Spectrum Compact is a peerless tool for:

- Link planning stage
- Microwave link installation
- Site acceptance
- Link maintenance.

This tool is offering a whole spectrum of time & money saving capabilities for link troubleshooting from GROUND LEVEL and up on the tower. Here's a review of some of the most popular applications.

Site investigation before installation

The Spectrum Compact allows you to check availability of the chosen radio channel in the installation area. Skipping this step, the installer risks additional expenses if spectrum availability issues are detected after installation.

Antenna alignment

Spectrum Compact will help you to align the antenna by viewing the spectrum at the remote end of the radio link and it will give you a remarkable precision.

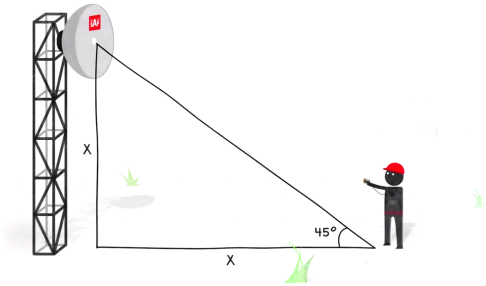
No more problems recognizing side lobes – just follow the real-time visual data on your Spectrum Compact color screen.

The high sensitivity threshold of the Spectrum Compact, which exceeds maximum radio sensitivity by about 20 dBm, allows for easy installation of large antennas, as the device registers the slightest signal variations.

Reminder: Spectrum Compact unit can be connected to all standardized antennas via waveguide flange.

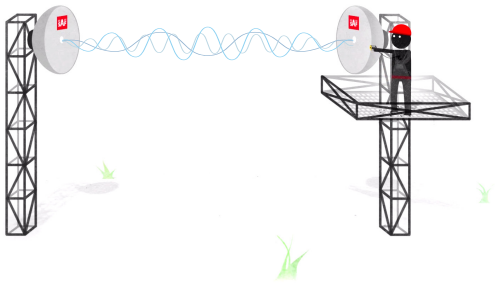
Radio verification

The Spectrum Compact is perfect for checking a radio's performance parameters, such as Tx power, frequency, band and signal quality. This will help you verify that the radio is functioning as per the manufacturer's specification and, if no deviations are found, exclude it as the source of any link performance issues.



The Spectrum Compact provides a range of options for link **troubleshooting from GROUND LEVEL**, enabling you to check:

- Signal polarization
- Transmitted frequency
- Transmitted bandwidth
- Antenna-radio interconnection quality
- Transmitter operation
- Antenna gain



In addition to the above, you can climb the tower and, **without interrupting link functionality**, check the:

- Antenna alignment, which, if done incorrectly, is the number one cause for insufficient system gain.
- Antenna gain
- Absence of interference. Interference can degrade or completely disrupt a radio link, and it can appear after the installation, making the Spectrum Compact a useful tool for link maintenance as well as installation.
- Transmitter quality
- Receiver quality. That's right - you can detect the link element that's causing the performance issue even if it's at the remote end of the link.