

# TEST TOOL



## Features

- Spectrum Analyser Mode
- Cell Tower Analyser Mode
- Beacon Mode
- Cable Test Mode
- Automatic sync of survey data to StellaControl account
- Large user friendly Touch Screen
- Big internal battery for extended hours
- Remote monitoring via StellaControl cloud.

## Details

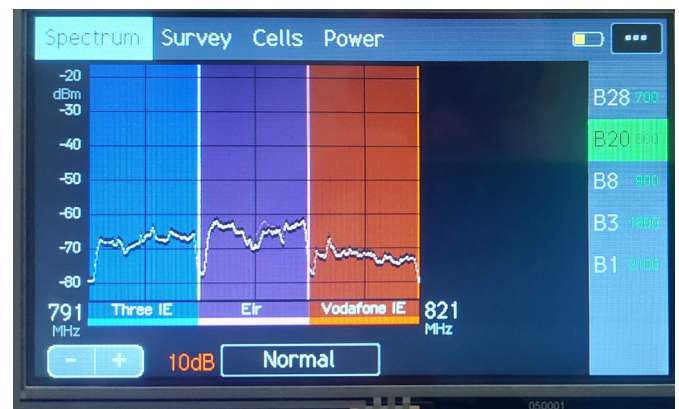
Items in kit: TestTool, Beacon, 12 volt Power supply, Omni antennas X2, Yagi antenna, User manual.

Licence: The TestTool must only be used with Stella Doradus equipment. It comes with a 1 year licence which must be reactivated every 6 months through a remote firmware update. If the TestTool is used with non Stella equipment the licence is revoked and the TestTool will become inoperable.

### 1. Spectrum Analyser Mode

This mode allows the installer to quickly understand the status of each operator on each cellular band.

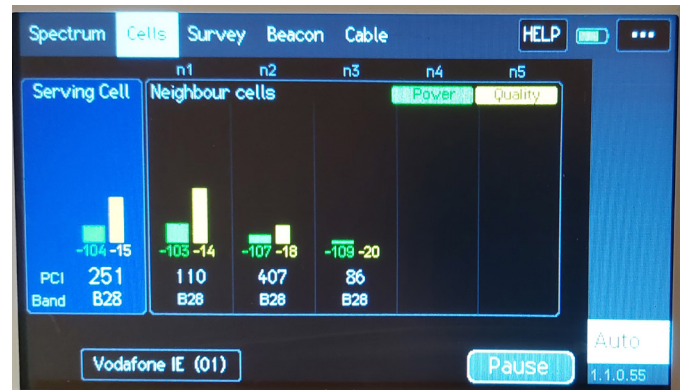
In this mode, the TestTool can be used as a simple and intuitive spectrum analyser. This analyser is tailored specifically for cellular frequencies. The installer can select a specific cellular band and quickly view the spectrum for this band. The start and stop frequency is automatically selected. The cellular operators are labelled underneath.



## 2. Cells Mode

This mode allows the installer to easily locate the dominant cell tower.

The installer can focus on one specific operator at a time and find the dominant cell tower and its neighbours. Typically this mode will be used during the indoor testing to find the natural dominant tower. Then it can be used on the roof to track down this dominant tower. This helps in orientating the outdoor antenna correctly.



### 3. Beacon Mode

This mode allows the installer to understand more clearly how RF propagates throughout the building. This can help the installer to better understand how far we can expect the indoor signal to travel. It can also be used to understand the material makeup of the walls and doors.

Typical use case:

Place the Beacon in a location where typically an internal antenna might be installed. The Beacon will transmit 2 tones at 1GHz and 2GHz. Use the TestTool to see the strength of these tones in nearby locations, such as adjacent rooms or further down the corridor. This will clarify how signal is traveling through the building and help with designing the antenna floor plan.



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## 4. Cable Mode

This mode allows the installer to test all cables.

The Cable Mode enables quick analysis of all coaxial cables in the repeater installation. Putting N-connectors onto coaxial cable requires skill and it is easy to do it wrong. If the centre pin of the connector is too far inside the housing, it will not form a contact with the centre core of the cable and it will attenuate the signal badly. Even worse, it will appear as an “open” circuit, with no signal passing at all. Another type of failure occurs when a small braid of metal gets caught between the centre pin and the outside housing of the connector. This will result in a short, which will also block the signal.

This mode will test for SHORTS and OPENS on the cable.



## 5. Internal Antenna Tester

The TestTool can be used to test every antenna after the installation. It's as simple as touching the Yagi antenna off every antenna and viewing the power spectrum. If there is an issue with a particular antenna, it can easily be detected.

## 6. Outdoor signal tester for StellaPlanner

This mode can be used on the roof of the building to quickly record or capture the power spectrum per cellular band. This is the average power across all the spectrum per band. This is what the repeater sees. By doing this test the outdoor signal is captured from the perspective of the repeater. This information allows for accurate design of the repeater system. Specifically, it enables the installer to accurately understand the allowable loss in dB between the outdoor antennas and the first repeater. Knowing this information allows the installer to add longer cables or splitters after the outdoor antenna, with confidence.

