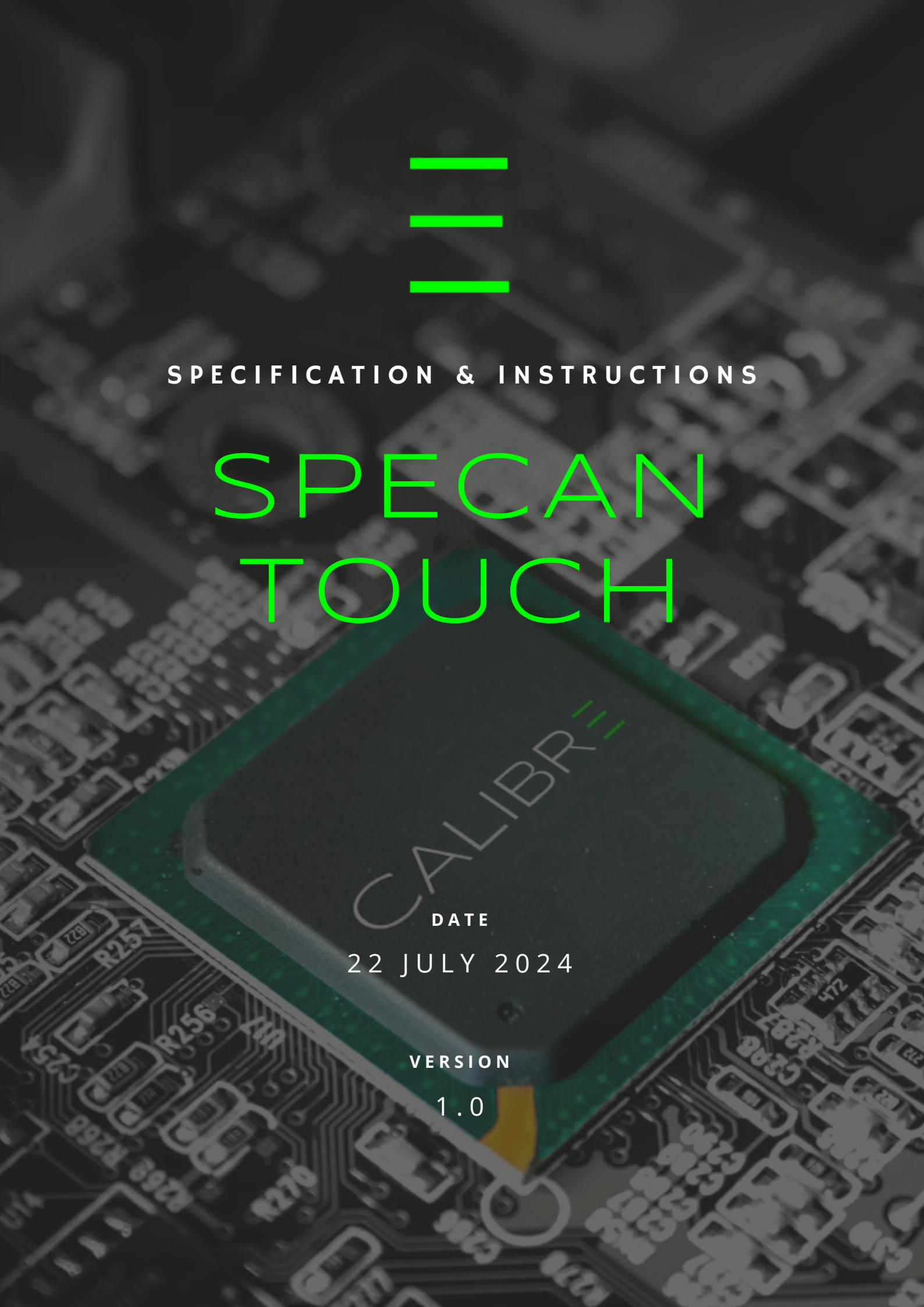
SPECIFICATION & INSTRUCTIONS

SPECAN TOUCH



DATE

22 JULY 2024

VERSION

1.0

BASIC OVERVIEW

DIMENSIONS

DIMENSIONS - 262x182x78

WEIGHT - 6KG

MATERIAL - Steel

PORTS:

Hi-Speed USB C Charging

1 x Wideband Antenna

1 x 700-2600Mhz Antenna

1 x 868-915MHz Antenna

FIRMWARE

Range - 1MHz to 6GHz

Graph Mode

Waterfall Mode

Various Range RX Control

"Show Peaks" Function

Up to 20 million samples per second

SUMMARY

Our spectrum analyser has a number of functions designed to help TSCM operators in the analysis of radio frequencies by breaking down the data in a simplified yet comprehensive format.

INTRODUCTION

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The Specan Touch is an innovative spectrum analyser, meticulously designed by British engineers and experts in technical surveillance countermeasures. This groundbreaking device is renowned as the world's first touchscreen-only spectrum analyser and is encased in a robust steel casing, ensuring durability and reliability in various operational environments.

The Specan Touch, with its British engineering excellence, robust construction, and innovative features, is an indispensable tool for professionals requiring precision and versatility in signal analysis and surveillance countermeasures. Its combination of a high-quality touchscreen, steel casing, and specialised antennas makes it a standout choice in the field of technical surveillance countermeasures.

INTRODUCTION

OVERVIEW OF THE SPECAN TOUCH

- **10-inch Touchscreen Display:** A pioneering feature in spectrum analysers, the Specan Touch’s large, 10-inch touchscreen offers intuitive navigation and control, enhancing user interaction and efficiency in signal analysis.

- **Broad Frequency Range:** With its extensive 0-6 GHz bandwidth, this device captures a wide spectrum of signals, from low-frequency communications to high-frequency wireless transmissions, ensuring comprehensive signal analysis.

- **Multifunctional Interface:** Operators can analyse a diverse array of signals including Bluetooth, Wi-Fi, cellular, and other signals within its range, thanks to its adaptable and user-friendly interface.

- **Advanced Analysis Features:** The Specan Touch's waterfall and 'Show Peaks' features make identifying potentially malicious signals easier, especially within its variable range settings.

- **Durable Steel Casing:** Built to withstand challenging field conditions, the device is encased in a sturdy steel body, providing extra protection, zero RF interference and longevity.

- **Three Specialised Antennas:** The device includes three custom-designed antennas, each tailored to enhance reception capabilities for specific signal types. One antenna is dedicated to wideband signals, another for cellular frequencies, and the third for Bluetooth/Wi-Fi signals, ensuring optimal performance and accuracy in various surveillance scenarios.

- **Portable and User-Friendly:** Despite its advanced technology and durable build, the Specan Touch remains portable and user-friendly, making it an invaluable tool for law enforcement, security professionals, and technical surveillance countermeasures experts.

INSTRUCTIONS

SAFETY INFORMATION

Warning: Proper Handling Required

- Handle the device with care. Dropping or mishandling the device can cause damage.
- Do not insert any objects into the ventilation holes or ports.
- Avoid using the device in environments with excessive dust, moisture, or vibrations.

Warning: Overheating Hazard

- Avoid operating the device in extreme temperatures. Refer to the specifications for the recommended operating temperature range.

Warning: Use Correct Power Source

- Use only the charging plug and lead provided with the device or a replacement specified by the manufacturer.
- Ensure the power source matches the following outputs:
  - Voltage - 5V
  - Current - 1A
  - Power - 5W

Warning: Qualified Service Personnel

- Do not attempt to repair or modify the device yourself. Only Calibre service personnel should perform repairs.

INSTRUCTIONS

GETTING STARTED

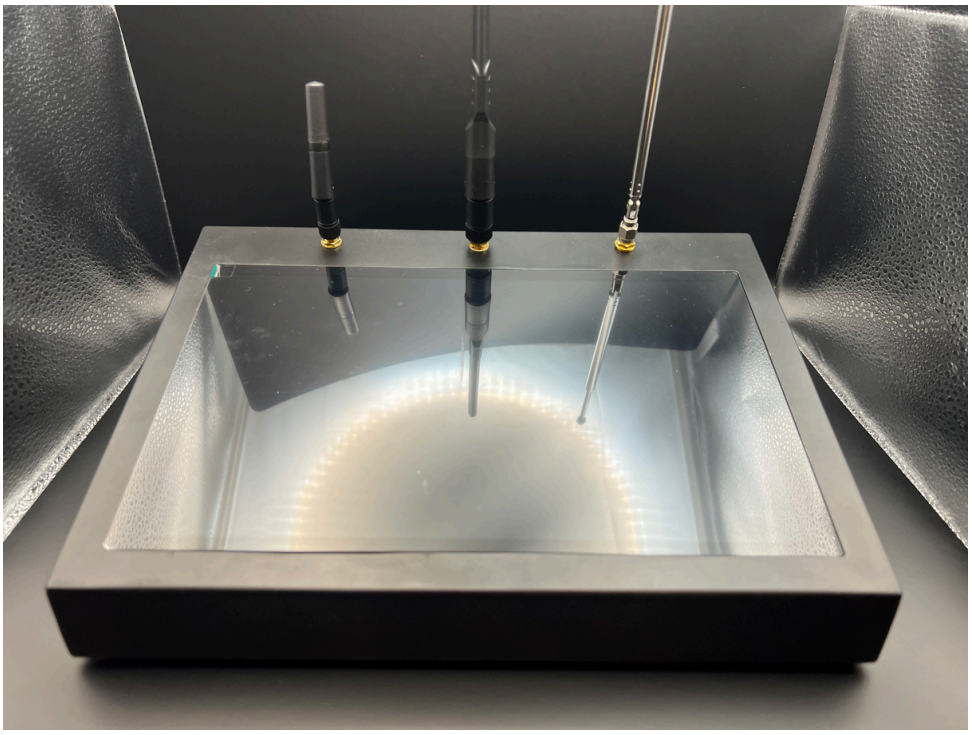
- The device will require sufficient battery charge to operate. The device may not work whilst on charge.

- **POWER ON -** Press the power button once to turn the device on. It will take a while to self-calibrate and start operating.

- **POWER OFF -** To turn the device off safely, touch the “SHUT DOWN” on-screen button followed by “OK”. Wait 5 seconds then speed press the power button twice.

- **WARNING: Not following this procedure correctly can result in the firmware crashing permanently.**

- **ANTENNAS -** Please refer to the images provided. The easiest way to remember the correct order from left to right is small, medium, large.



INSTRUCTIONS

CONTROLS

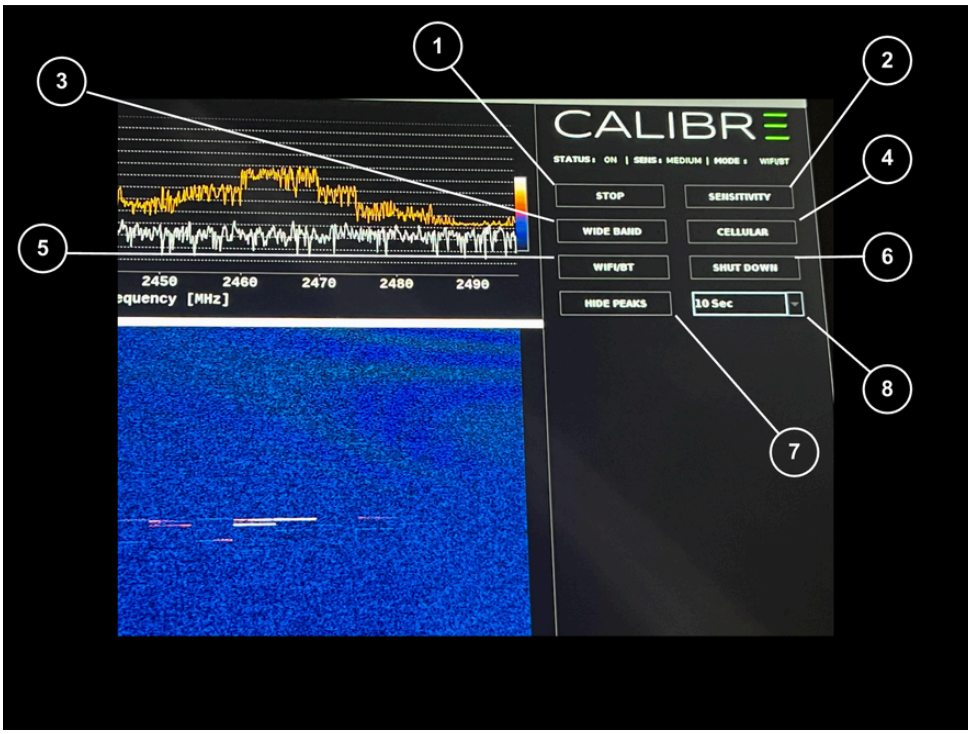
1. START/ STOP - Commences and ceases the analysis.

2. SENSITIVITY.

MIN - Analyses an isotropic radius of approximately 3-5 metres.
MED - Analyses an isotropic radius of approximately 5-10 metres.
HIGH - Analyses an isotropic radius of approximately 10-25 metres.

3. WIDEBAND - The “WIDEBAND” function will analyse all frequencies within the Specan’s range (0-6GHz).

4. CELLULAR - The “CELULAR” function will analyse all frequencies within the low band cellular and mid-band cellular ranged simultaneously. This is applicable for all regions.



INSTRUCTIONS

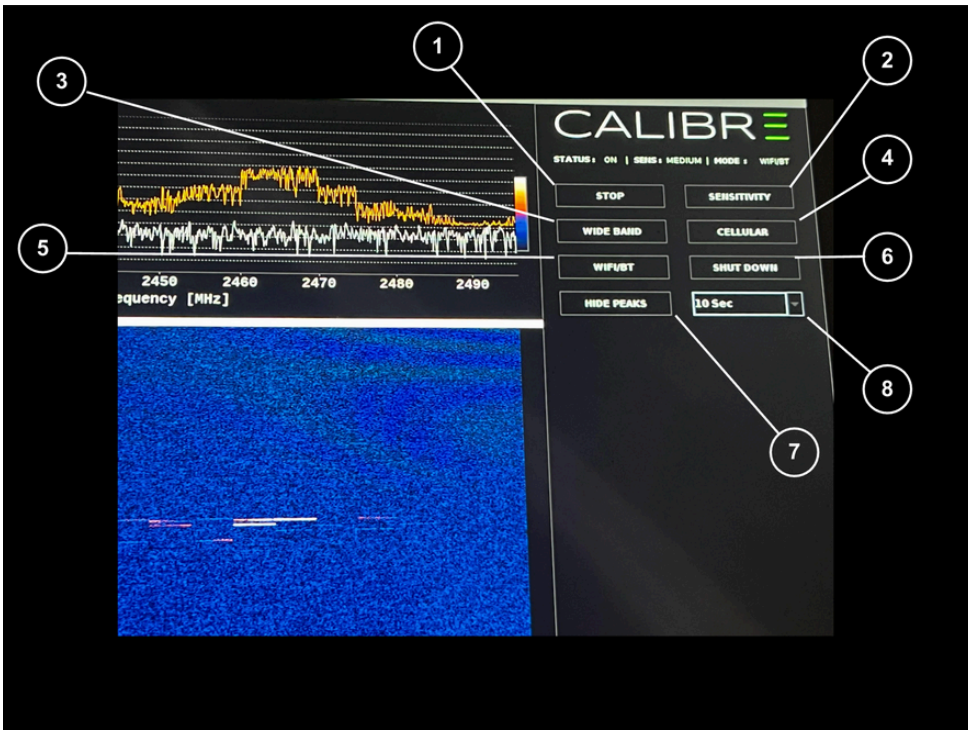
CONTROLS

5. WIFI/ BT - The “WIFI/ BT” function will analyse all frequencies within the Wi-Fi and Bluetooth ranges. This is applicable for all regions.

6. SHUT DOWN - Terminates operation safely.

7. SHOW PEAKS - This function allows the user to see any increase in received signals over the period stated in the SHOW PEAKS TIME OPTION. This enabled the operator to leave the device whilst it continues to scan without having to watch the screen during that period for any significant readings.

8. SHOW PEAKS TIME OPTIONS - Set a time frame for the ‘peak’ to remain on the screen so that the operator can see the strength of the received signal as well as the frequency. The peaks will disappear after the selected time has elapsed.



INSTRUCTIONS

OPERATION

When the device is powered on, it will begin to operate on the Wi-Fi / Bluetooth bandwidth. To change this, select which bandwidth you would like to monitor by touching either “CELLULAR” or “WIDEBAND”.

In “CELLULAR” mode, you will notice a gap in the graph. This is where because cellular ranges operate on both sides of the Bluetooth and Wi-Fi bandwidth. The gap is designed to block out readings that fall within the Bluetooth and Wi-Fi range and allow the user to observe the whole cellular spectrum.

The “SENSITIVITY” button will adjust the receiving strength (Rx) of the device. It has three settings; minimum, medium and high which are displayed in the status panel at the top right hand side of the screen as “MIN”, “MED” and “HIGH” respectively.

MIN - Analyses an isotropic radius of approximately 3-5 metres.

MED - Analyses an isotropic radius of approximately 5-10 metres.

HIGH - Analyses an isotropic radius of approximately 10-25 metres.

INSTRUCTIONS

OPERATION

The operator is unlikely to have their eyes fixated on the screen during a monitoring period. It is for that reason that the “SHOW PEAKS'' function exists. This will highlight any spikes in RF activity to the user.

The timing options enable the user to decide how long peaks should remain present on the screen for. If unsure, a longer time should be selected to ensure that any potentially important readings are not overlooked or deleted as a result of selecting a shorter time frame.

The waterfall feature provides an alternative display to the graph. Set to blue by default, it will show any recent spikes along with their pattern (if any). If, for example, a strong signal is pulsing, the waterfall will show orange or yellow dots in line with one another in a vertical fashion. The stronger the signal, the lighter the colour.

If a reading is shown and the user would like to know the exact frequency and/ or strength, they can touch the screen where the spike is and the reading details will be shown on the screen.

The “WIDEBAND” function will analyse all frequencies within the Specan’s range (0-6GHz).

INSTRUCTIONS

OPERATION

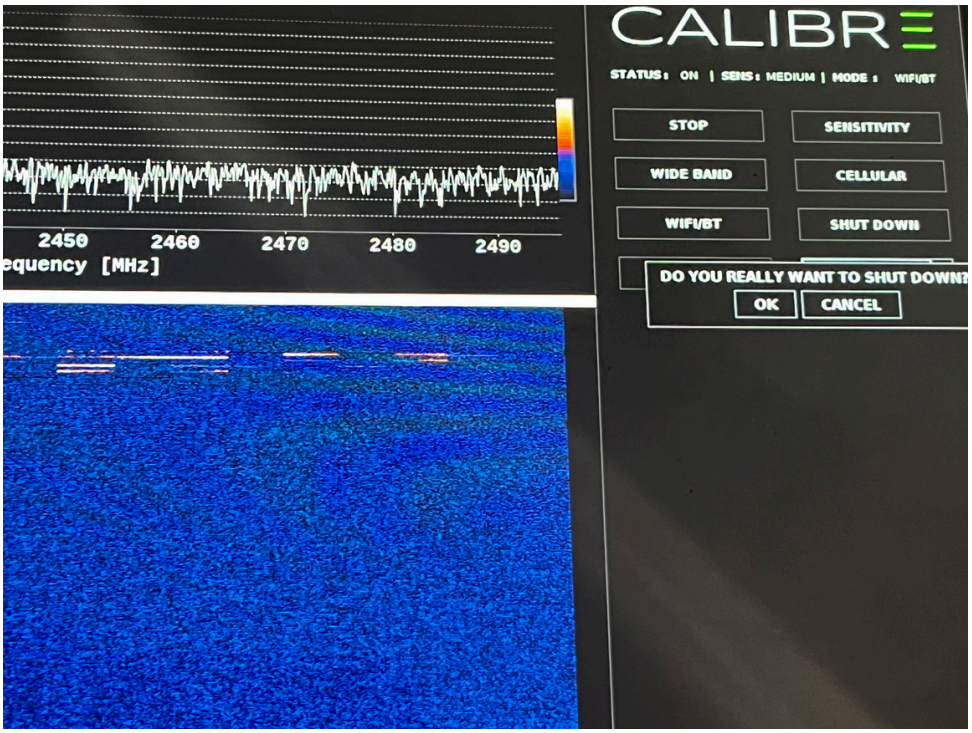
The correct shutdown procedure must be used which is as follows:

Press “SHUT DOWN”

Press “OK”

Wait 5 seconds

Press the power button twice in quick succession. There will be a difference in sound as the cooling fan within will shut down. Some models may require a long press on the power button as opposed to a double press.



MAINTANENCE

SUPPORT

If it appears that the device is not functioning properly, shut the device down following the correct procedure and turn it on again.

If the problem persists, please email us info@CalibreSecTech.com and someone will respond to you within 24-48 hours.

WARRANTY

COVER

All Calibre products are covered by a 12-month warranty from the date of purchase. The warranty covers manufacturing defects and faults in materials. It does not cover damage resulting from misuse, accidental damage, or normal wear and tear. To claim warranty service, please provide proof of purchase and a detailed description of the issue. If the product is found to be defective under normal use, it will be repaired or replaced at no additional cost. This warranty does not affect your statutory rights.

For more information, please contact our customer service team.