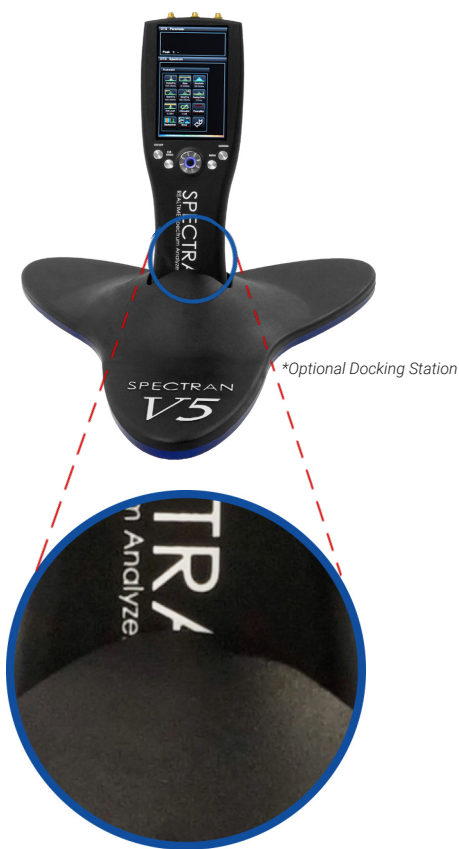


# SPECTRAN V5

## QUICKGUIDE



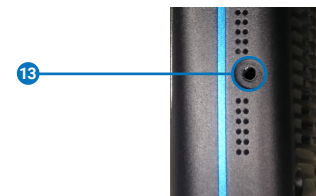
In order to use the docking station correctly, note that the device must be properly placed in the docking station. The „A“ of SPECTRAN should only be half-visible, the „e“ of Analyzer should be completely visible.



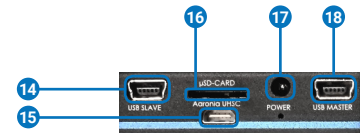
**IMPORTANT:** Always keep the fan clear of obstructions or you might cause the device to over-heat, which can result in damage to the device.



Back



Side



Bottom

### 1 Powermeter

Sync In/Output or Powermeter (not implemented yet)

### 2 RF Input

50 Ohm RF input

### 3 Tracking Generator

Tracking generator output (not implemented yet)

### 4 Power-LED

The LED flashes green/red while the device is booting and blinks orange while the device is powered up.

### 5 On/Off Button

Turns the device on. The screen remains black for about 15 seconds, while the device is booting. It is ready for use after the „beep“ sound.

### 6 Clr/Undo Button

Clear data and change settings.

### 7 Scroll Button

Scroll button, controls the cursor and activates functions.

### 8 Charge-LED

Red - battery is charging  
Green - battery is fully charged

### 9 Custom Button

Configurable button (not implemented yet)

### 10 Menu Button

Open the main menu.

### 11 Fan cooler

Make sure that the fan is never obstructed, else the device might not be cooled sufficiently

### 12 Speaker R/L

Speakers for demodulation

### 13 2,5mm Audio Plug

For headphones, ear-buds or speakers.

### 14 USB Slave

Mini-USB port for printer, storage, GSM, WLAN connections.

### 15 Aaronia UHSC port

Ultra fast (4x3GSPS) Aaronia I/O connector.

### 16 µSD Slot

Supports Aaronia micro SDHC cards with more than 10MB/s (not implemented yet)

### 17 Power Connector

Only use the original Aaronia Power Adapter (5.5V, 6A/33W).

### 18 USB Master

Mini-USB port for the direct connection to a PC



# SPECTRAN V5

## QUICKGUIDE

## MAIN MENU

To open the main menu you have to tap once anywhere on the screen OR press the *Menu Button*.

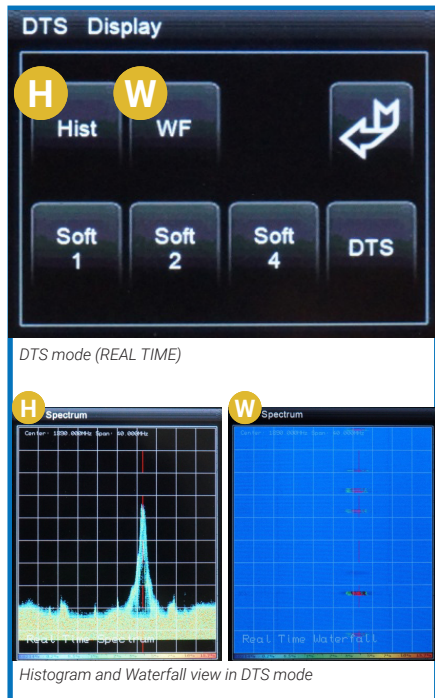


Main Menu

- 1 Select the *Center* (middle frequency)
- 2 Select the *Span* (frequency range for REAL-TIME measurements)
- 3 Select the *Bandwidth* (level of detail and sensitivity in SOFT mode)
- 4 Select the *Start* frequency (SOFT mode)
- 5 Select the *Stop* frequency (SOFT mode)
- 6 Select the *Sweep Time* (the measurement period in SOFT mode)
- 7 Select the *Reference Level* (position adjustment on the dBm axis)
- 8 Adjust the internal *Attenuator* (helps avoiding RF input overloads)
- 9 Turn the internal *Preamplifier* on/off (amplifies by ~15dB)
- 10 Select the *Display Mode* (DTS or SOFT, see the next page)
- 11 Enter the *Setup* menu (details on a following page)
- 12 Return button



### 10 DISPLAY MODE



DTS Display

H Hist W WF

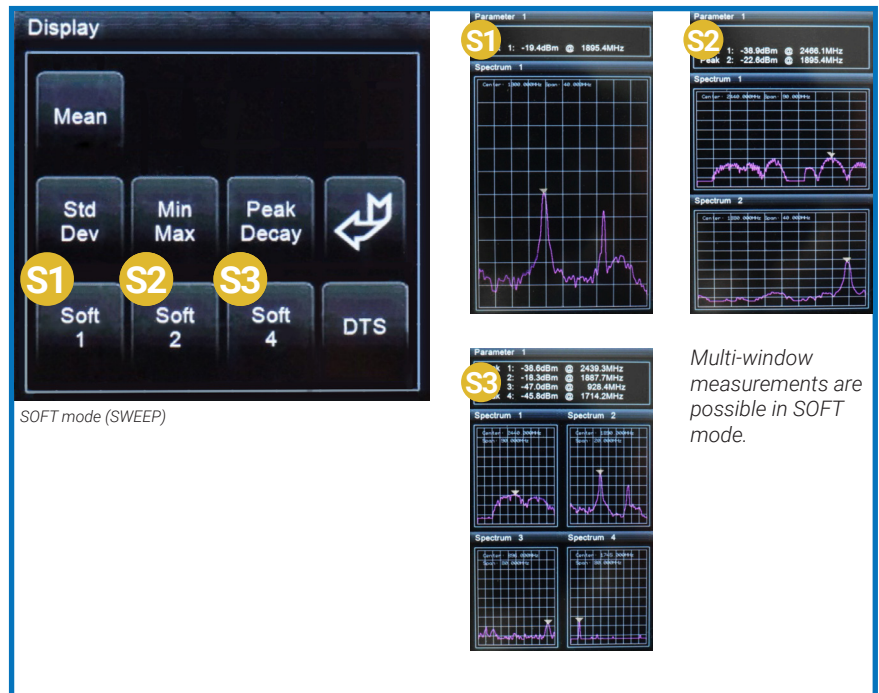
Soft 1 Soft 2 Soft 4 DTS

DTS mode (REAL TIME)

H Spectrum W Spectrum

Histogram and Waterfall view in DTS mode

### REAL TIME MODE



Display

Mean

Std Dev Min Max Peak Decay

S1 Soft 1 S2 Soft 2 S3 Soft 4 DTS

Parameter 1: 1: -19.4dBm @ 1895.4MHz

Spectrum 1

Parameter 1: 1: -35.9dBm @ 2485.1MHz  
Peak 2: -22.8dBm @ 1895.4MHz

Spectrum 1

Parameter 1: 1: -38.6dBm @ 2430.3MHz  
2: -19.3dBm @ 1897.7MHz  
3: -47.9dBm @ 928.4MHz  
4: -45.8dBm @ 1714.2MHz

S3

Spectrum 1 Spectrum 2

Spectrum 3 Spectrum 4

Multi-window measurements are possible in SOFT mode.

SOFT mode (SWEEP)

### SWEEP MODE

**S1 S2 S3** *Soft 1* shows one, *Soft 2* shows two and *Soft 4* shows four spectrum windows.

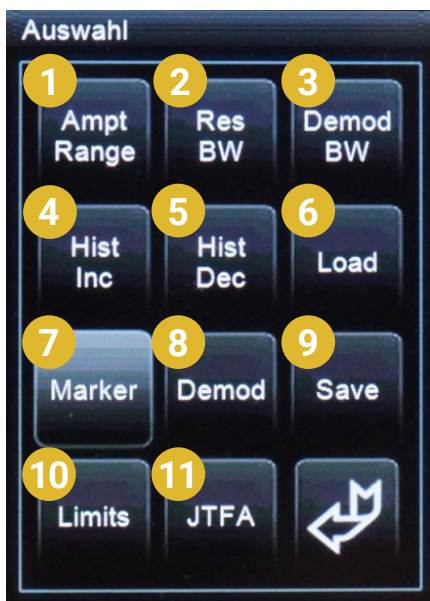
You can change the settings of a specific window by tapping it.

You can save the settings of your SOFT window or windows. Go to the **Main Menu**, press **Setup** and press **Save**. You can save up to 10 individual SOFT windows.



## 11 SETUP MENU

To open the setup menu you have to select the *Setup* button in the *Main Menu*.



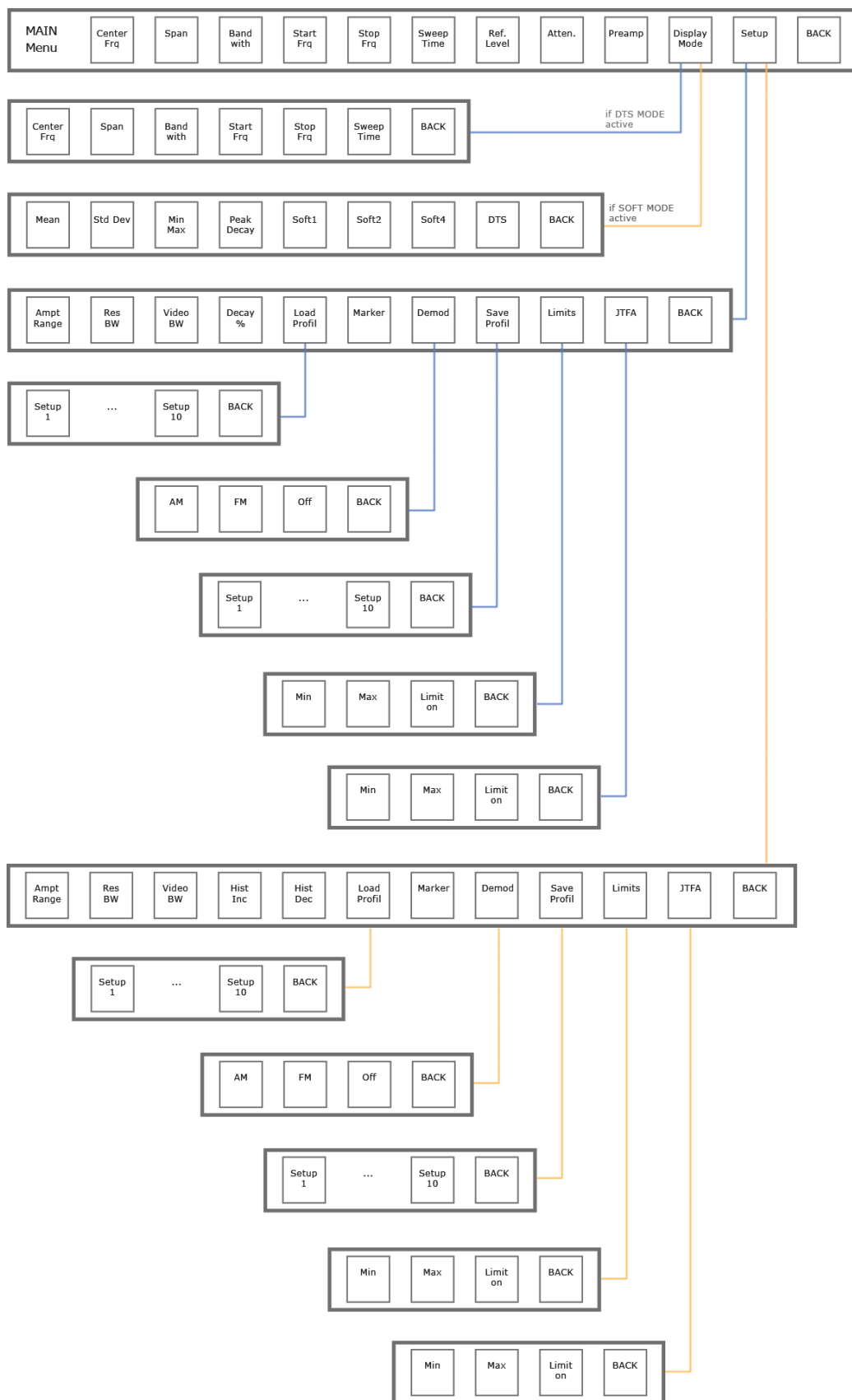
Setup menu

- 1 Define the *Amplitude Range* (dynamics)
- 2 Select the *Resolution Bandwidth*
- 3 Select the *Demodulator Bandwidth* (for clearer demodulation)
- 4 *Histogram Increase* controls the histogram view color distribution
- 5 *Histogram Decrease* controls the histogram view color distribution
- 6 *Load* a saved set of specific settings (SOFT mode)
- 7 Set a *Marker* or cursor to measure specific signals (DTS mode)
- 8 *Demodulate* AM/FM/PM signals (DTS mode)
- 9 *Save* a set of specific settings (SOFT mode)
- 10 Define a *Limit* (red value if exceeded, SOFT mode)
- 11 *JTFA* options to optimize symbol processing

# SPECTRAN V5

## QUICKGUIDE

### MENU STRUCTURE



## KNOWN PROBLEMS AND BUGS

The *SPECTRAN V5* feels hot



The *SPECTRAN V5* operates at 37 - 38°C, the device might feel hotter due to the metal surface, but there is no risk of injury if you are operating it correctly.

Make sure that the fan on the back is not obstructed.

You can also use either the optional *Docking Station* or the optional *Rubber Cover* for the *SPECTRAN V5*.

Changing from *SOFT mode* (1-2-4) to *DTS mode* (Hist/WF) either crashes the device or takes a long time



A known software bug, which we are still investigating.

Our workaround is to reset (turn off and then on) the *SPECTRAN V5* when changing between *SOFT mode* and *DTS mode*, this is faster than waiting for the long loading time and risking a crash.

The device doesn't react to any inputs



Press and hold the *ON/OFF Button* for 20 seconds to reset the device and then start the device as usual.

