

Connect

- 1** Attach an antenna and a filter (if needed) to the RX1 port on the SABR (PinPoint radio) hardware.
- 2** Connect SABR via a USB 3.0 cable to the host device and wait at least 8 seconds for it to fully power on.
- 3** Tap the "Connect" button to search for the device. If an error occurs try unplugging, reconnecting the device, and trying to connect again.

Setup

- 1** Set the measured frequencies, reception mode, and other radio parameters.
- 2** Specify how many measurements to take and other sampling settings.
- 3** Click the "Next Page" button to begin setting up the floorplan and gridding. Here you specify number of floors, load images, etc.
- 4** Once done with setting up the floors tap the "Apply" button to save the configuration and continue.

Measure

- 1** Tap an unmeasured square to take a measurement and capture signal recordings if configured (i.e., IQ data).
- 2** Long hold on a square to view additional options such as taking additional measurements or setting the area as inaccessible or critical.
- 3** Tap a measured square to replay any IQ captures. Press the "Spectrum" button to view the spectrum live
- 4** Use the frequency and measurement type pulldown menus to view more results, if multiple frequencies or metrics are being measured.

Report

- 1** Setup report options such as branding, pass and fail criteria, threshold settings, as well as location and test information.
- 2** Tap "Generate Report" to begin generating a report for each of the frequencies being tested.
- 3** Once generation is complete a pop-up prompt will appear allowing the user the option to open the folder containing the reports.

TapHere!® Radio Menu Load Save Edit Report Spectrum Help

Currently Loaded Site Template: Demo Site

Project Setup

Create a new survey project, specify site information, configure measurement settings, and prepare the floorplan.

+ New Project

Use a SABR

Connect a SABR to take multiple RSSI measurements with a single tap, test multiple frequencies at a time, capture RF data for later playback, view the live spectrum, and more!

Connect

Manually Record

Use other radio hardware to take RSSI measurements and record them manually. Please note that this mode does not support viewing the spectrum, capturing RF data, or playback features!

Manual Mode

Tap to setup a new project

Tap to connect to hardware

Tap to enter manual mode

Setup - General Measurement Options

The screenshot displays the 'Setup - General Measurement Options' screen in the TapHere! PinPoint application. The interface is divided into two main sections: 'Radio Settings' on the left and 'RSSI & Capture Settings' on the right. At the bottom, there are 'Back' and 'Next' buttons.

Radio Settings:

- RX Frequencies (MHz): 856.93750
- Select Reception Mode: P25
- RX Sample Rate (sps): 960000
- Measurement Templates: Load, Save

RSSI & Capture Settings:

- RSSI Threshold (dBm): -95.00
- RSSI Measurement Count: 20
- Time between samples (ms): 250
- Estimated Measurement Duration: 5.00 seconds per frequency
- Capture IQ Recordings:
- Max IQ Capture Length (ms): 2500

Callouts and Annotations:

- 'Set measurement frequencies' points to the RX Frequencies field.
- 'Set RSSI pass/fail threshold' points to the RSSI Threshold field.
- 'Set reception mode (P25 recommended)' points to the Select Reception Mode field.
- 'Control how samples and recordings are taken' points to the RSSI Measurement Count, Time between samples, and Capture IQ Recordings fields.
- 'Continue onto next setup page' points to the Next button.

Set reception mode (P25 recommended)

Set measurement frequencies

Set RSSI pass/fail threshold

Control how samples and recordings are taken

Continue onto next setup page

Setup - P25 Measurement Options

*This page only is accessible when selecting P25 reception mode

TapHere!® PinPoint Menu Load Save Edit Report Spectrum Help

P25 - SINR, FBER, & DAQ Settings

Enable SINR Measurements:

SINR Threshold (dB):

Enable FBER Measurements:

FBER Threshold (%):

Enable DAQ Measurements:

DAQ Threshold:

Note: Both SINR and FBER measurements are required to enable DAQ

[Back](#) [Next](#)

Automated DAQ Measurements require both SINR and FBER measurements to be enabled

Control which measurements are taken and their pass/fail criteria

Continue onto floorplan/gridding setup page

Setup - Floorplan & Gridding

Adjust floorplan/image

Quickly clear all selected grid squares or select all grid squares for measurement

Change naming of the current floor

Adjust and modify grids

Copy settings from one floor and paste it on another (requires changing floors after copying and pasting on desired floor)

Finalize setup (a blank save file will be made in the Autosaves folder)

Change floors

File PinPoint Menu Load Save Edit Report Spectrum Help

Total Number of Floors: 2

Select Floorplan Image: Browse

Adjust Image X Offset: 0

Adjust Image Y Offset: 39

Adjust Image Scaling: 1

Image Rotation (deg): 0

Number of Grid Rows: 6

Number of Grid Columns: 12

Scale on Floorplan (ft): 1

Desired Area Length (ft): 1

Measure Floorplan Scale: Measure

Critical Area Indicators: Add Clear

Configuration Preview Window

Clear Floor Fill Floor

Floor 1

Copy Paste

Next Floor

Back Apply & Save Exit Setup

Square Scale ? ft

Change the currently displayed frequency

Change the currently displayed measurement type

TapHere!® PinPoint Menu Load Save Edit Report Spectrum Help

Frequency (MHz): 853.77500 Threshold: -95.00 dBm Measurement Type: RSSI Displayed Method: Average

Lookout Mountain NAC: D18 Exterior RSSI: Not Measured

Point ID	RSSI Value
f1g1	-97.98
f1g2	-88.74
f1g3	-90.28
f1g4	-91.10
f1g5	-92.05
f1g6	-90.83
f1g7	-90.55
f1g8	-91.50
f1g9	-97.98
f1g10	-97.98
f1g11	-97.98
f1g12	-91.96
f1g13	-95.08
f1g14	-95.84
f1g15	-95.53
f1g16	-93.04
f1g17	-90.34
f1g18	-91.55
f1g22	2.18
f1g23	-91.96
f1g24	-95.84
f1g25	-95.53
f1g26	-93.04
f1g27	-90.34
f1g28	-91.56
f1g29	-97.98
f1g30	-97.98
f1g31	-97.98
f1g32	-97.98
f1g33	-97.98
f1g34	-97.98
f1g35	-97.98
f1g36	-97.98

Max/Min: (-78.53, -98.40)
Current RSSI: -98.40 dBm

Zoom: [Slider]

Layer (Grid Measurements): [Off]

Floor 1

Tap/Click to take an exterior measurement

Change the method used to calculate the measurement

Tap/Click a measured square to view the capture (if taken)

Tap/Click an unmeasured square to start taking measurements

Change floors

View the current measured RSSI

Slide to adjust zoom level

Long press/right click on a square to view additional options (clearing measurements, taking additional measurements, setting areas as inaccessible, etc.)

Measure - Additional Options

TapHere!® PinPoint Menu Load Save Edit Report Spectrum Help

Frequency (MHz): 853.77500 Threshold: -95.00 dBm Measurement Type: RSSI Displayed Method: Average

Lookout Mountain NAC: D18 Exterior RSSI: Not Measured

Tap/Click to modify the next tap/click to behave like a long press/right click

Select from multiple different options when long pressing/right clicking on a square

- Measurement Info
- Clear Grid Measurements
- Take Additional Measurements
- Add Critical Location Measurement
- Add Location Measurement

Max/Min: (-78.53, -101.23) Current RSSI: -101.23 dBm Zoom: SABR: Connected Layer (Grid Measurements): Automatic Retry: Off Floor 1

Detailed description: The image shows a software interface for signal measurement. At the top, there's a menu bar with options like 'Menu', 'Load', 'Save', 'Edit', 'Report', 'Spectrum', and 'Help'. Below that, several settings are displayed: 'Frequency (MHz): 853.77500', 'Threshold: -95.00 dBm', 'Measurement Type: RSSI', and 'Displayed Method: Average'. The main area shows a floor plan of 'Lookout Mountain' with a grid of measurement points labeled 'fig1' through 'fig36'. Each point has an RSSI value, such as -97.98 for fig1 and -91.56 for fig28. A context menu is open over the grid, listing options like 'Measurement Info', 'Clear Grid Measurements', 'Take Additional Measurements', 'Add Critical Location Measurement', and 'Add Location Measurement'. A red arrow points from a text box to a briefcase icon in the top left, and another red arrow points from a text box to the context menu. At the bottom, there's a status bar with 'Max/Min: (-78.53, -101.23)', 'Current RSSI: -101.23 dBm', a zoom slider, 'SABR: Connected', 'Layer (Grid Measurements):', 'Automatic Retry: Off', and 'Floor 1'.

Measure - Threshold Updating

Tap/Click the threshold text to bring up a menu to update pass/fail threshold settings for selected measurement types

The screenshot displays the TapHere! PinPoint software interface. At the top, the menu bar includes 'TapHere! PinPoint', 'Menu', 'Load', 'Save', 'Edit', 'Report', 'Spectrum', and 'Help'. Below the menu, the current settings are: Frequency (MHz): 853.77500, Threshold: -95.00 dBm, Measurement Type: RSSI, and Displayed Method: Average. The location is identified as 'Lookout Mountain' with 'NAC: D18' and 'Exterior RSSI: Not Measured'. The main area shows a floor plan with various rooms and measurement points labeled f1g1 through f1g36. A dialog box titled 'Update Pass/Fail Threshold Values' is open, allowing users to adjust settings for RSSI, SINR, FBER, and DAQ. A red arrow points from the 'Update thresholds for available measurement types and press apply' text box to the 'Apply' button in the dialog. The bottom status bar shows 'Max/Min: (-78.53, -100.78)', 'Current RSSI: -100.62 dBm', 'Zoom' controls, 'SABR: Connected', 'Layer (Grid Measurements): Off', 'Automatic Retry: Off', and 'Floor 1'.

Frequency (MHz): 853.77500 Threshold: -95.00 dBm Measurement Type: RSSI Displayed Method: Average

Lookout Mountain NAC: D18 Exterior RSSI: Not Measured

Update Pass/Fail Threshold Values

RSSI: -95.00 dBm

SINR: 18.00 dB

FBER: 2.50 %

DAQ: 3.4

Apply Cancel

Update thresholds for available measurement types and press apply

Max/Min: (-78.53, -100.78) Current RSSI: -100.62 dBm Zoom: SABR: Connected Layer (Grid Measurements): Automatic Retry: Off Floor 1

Spectrum - P25 Reception Mode

Adjust the frequency



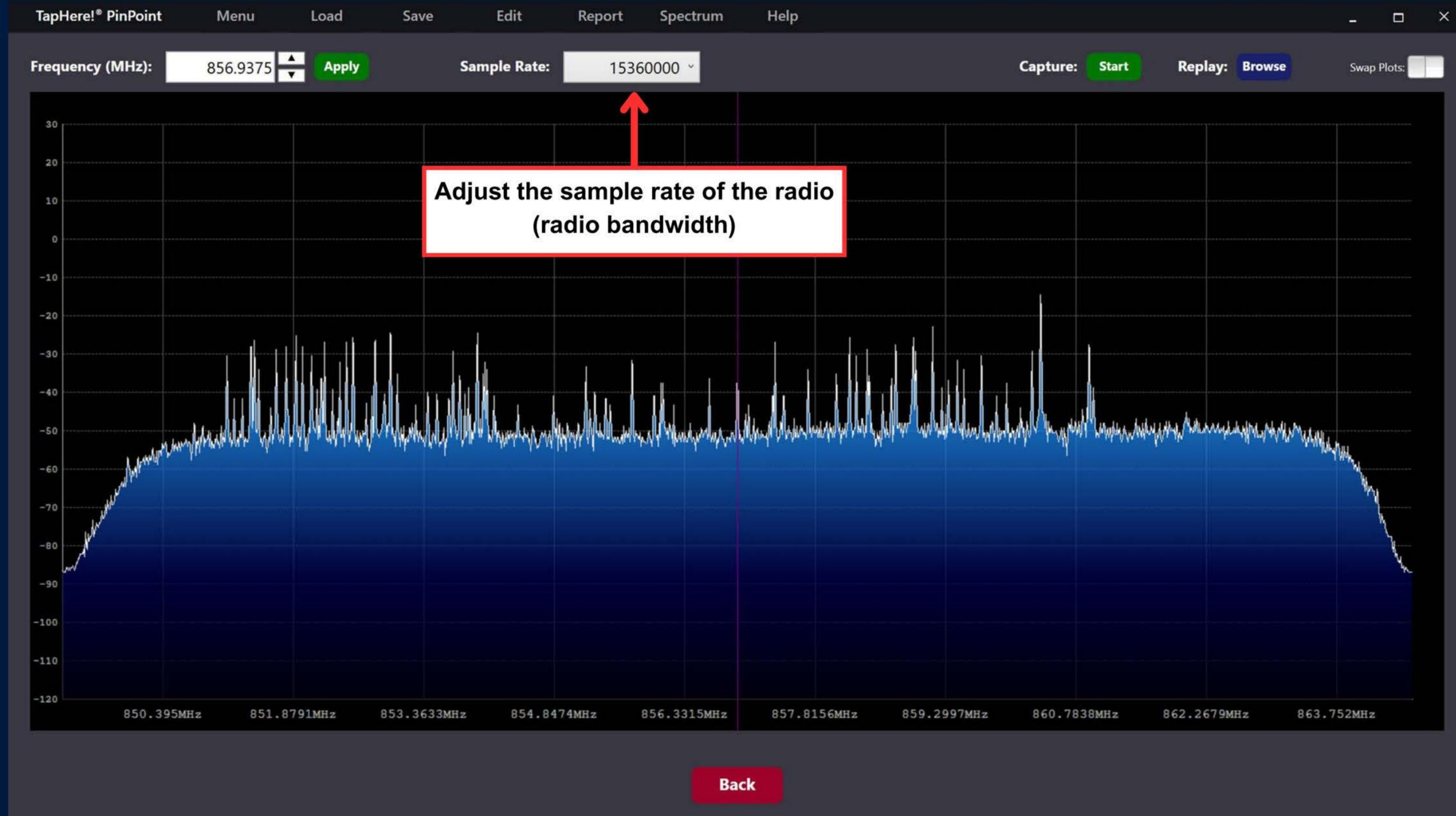
Take and replay IQ captures

Change the plot type (FFT Spectrum vs. Waterfall)

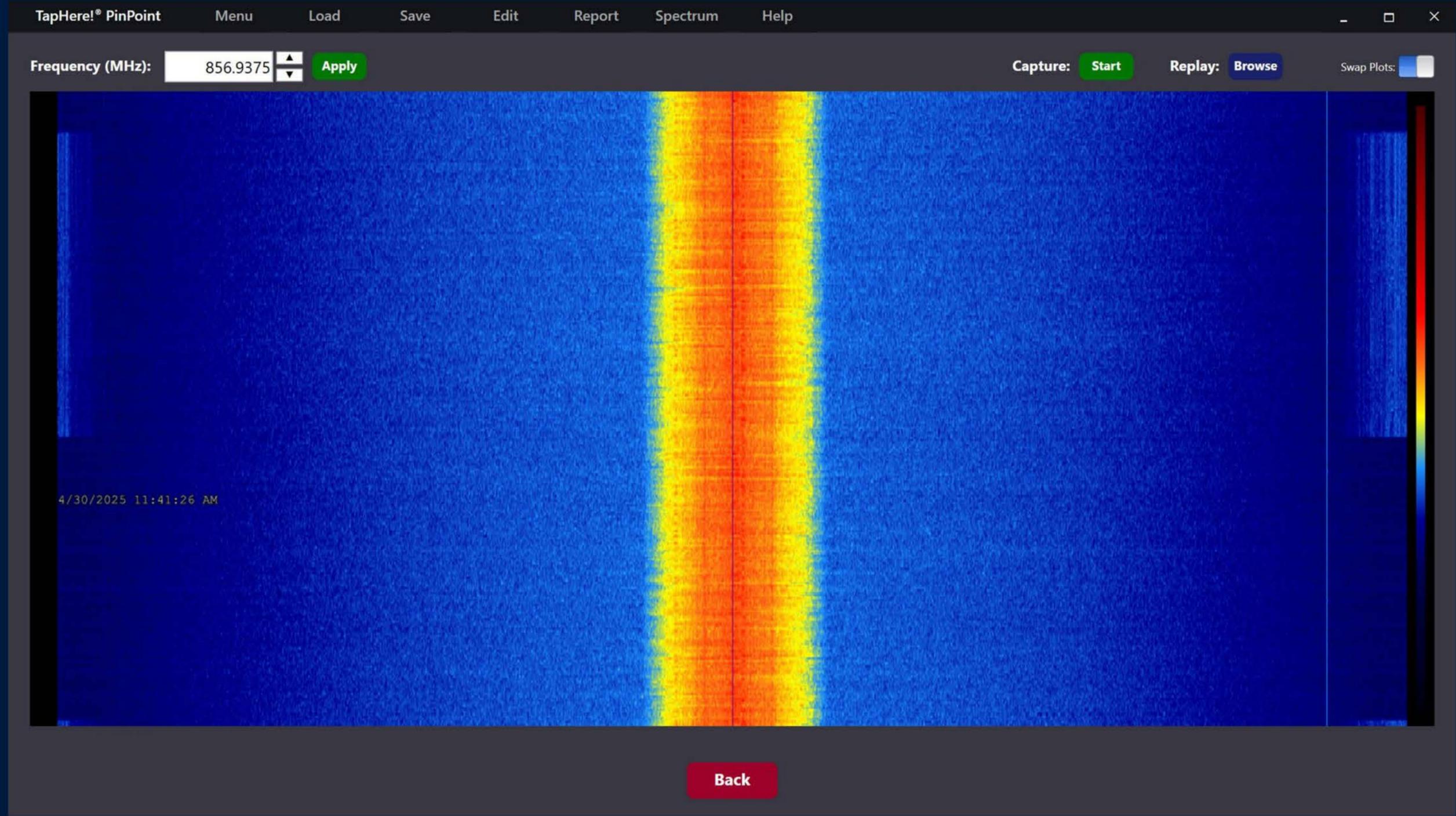
Exit spectrum display

Back

Spectrum - Custom Reception Mode



Spectrum - Waterfall Display



Add custom branding to the report. Set footers, upload a company logo, size the logo, etc.

Set overall pass/fail criteria

Provide location and test specific information

The interface is divided into three main sections:

- Report Styling:** Includes fields for Footer Text (Triple C Communications · Englewood, Co), Top Margin Height (2.5 cm), Title Page Logo Height (6 cm), Header Logo Height (1.5 cm), a Logo Image browser button, and an Enable Landscape Pages checkbox (checked).
- Pass/Fail Calculation Information:** Includes an Adjust Measurement Thresholds button (Adjust), Total Pass Percentage (95.00), Critical Area Pass Percentage (99.00), and an Apply Adjacent Area Rule checkbox (unchecked).
- General Test Information:** Includes Site Name (Example Site), Site Address (123 Test St. Golden, CO 80401), Technician Name (TapHere), FCC # (N/A), Antenna Information (Motorola 700/800), Antenna Gain (0.0 dB), and checkboxes for measurement types (RSSI, SINR, FBER, DAQ) under both 'Included Measurement Types' and 'Included Floorplan Screenshots'.

At the bottom, there are buttons for Load Template, Save Template, Generate CSV, Generate Report, and Exit. A Survey Type dropdown is set to 'Annual Inspection', and Exterior/Interior Completion percentages are both at 100%. A Survey Notes text area contains the text: 'These are notes that will be added to the cover page of the survey'.

Change the survey type or supply additional notes that will appear on the report cover page

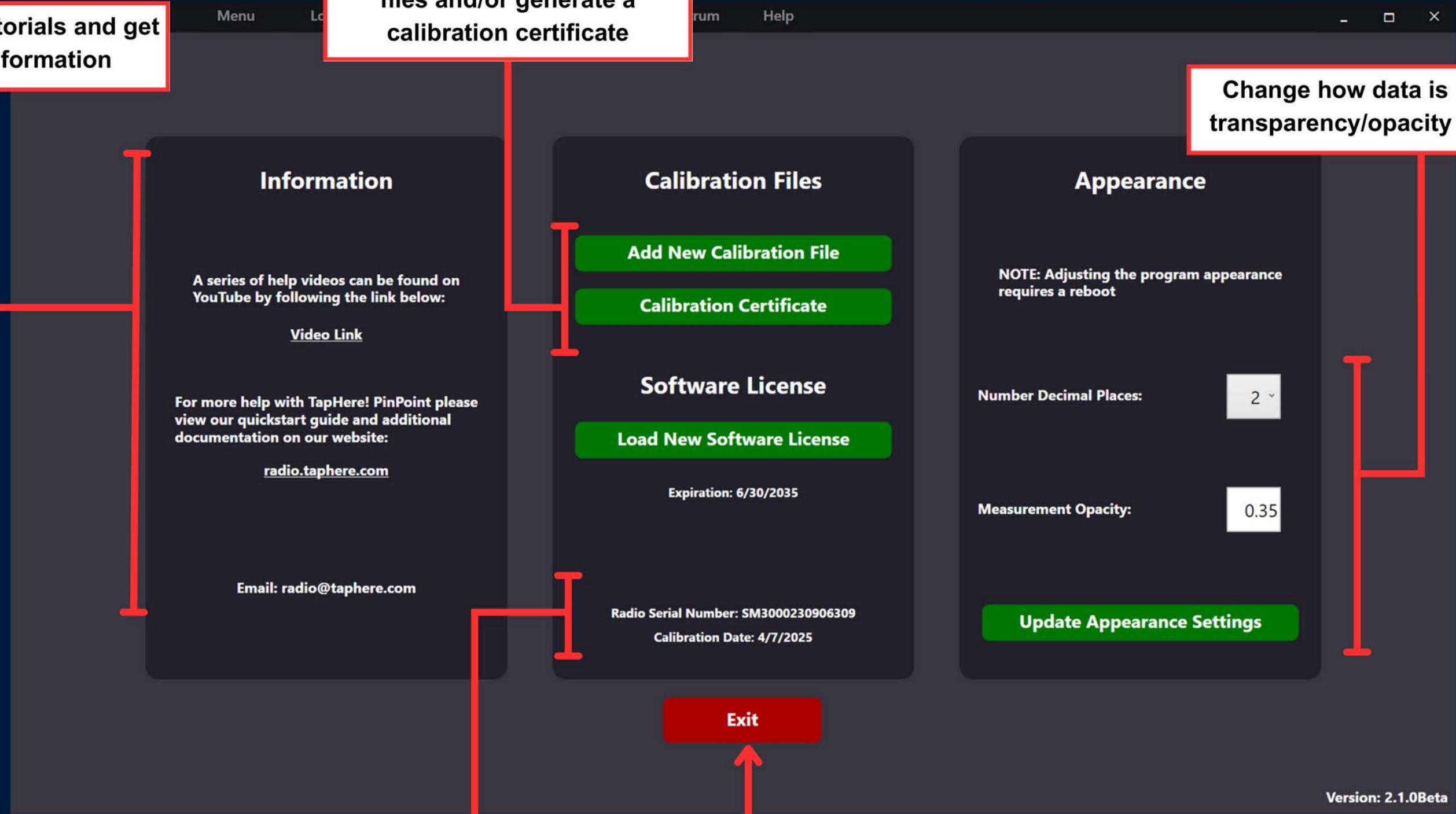
Tap/Click to generate a PDF report

Select measurement types and screenshots to include in the report

Access video tutorials and get additional information

Load or replace calibration files and/or generate a calibration certificate

Change how data is presented and transparency/opacity of grid squares



View information about the currently connected radio

Exit the help menu