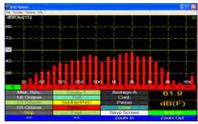
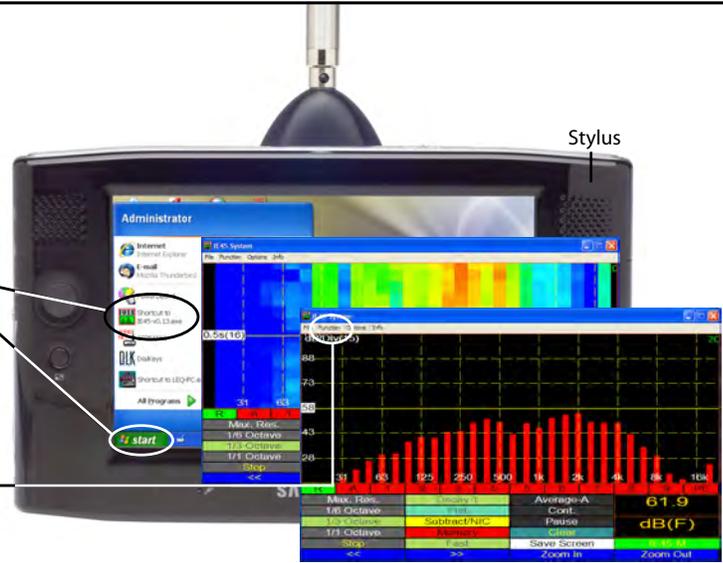


Quick Start

Starting the IE-45

1. Using the stylus tap on "Start"
2. Using the stylus tap on "IE-45"
3. Wait while the program starts and memories are loaded
4. The screen of the last used function will appear
5. Tap the "Function" menu and choose the desired function



RTA



SPL Monitor



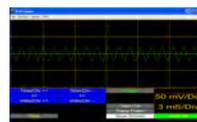
Seat to Seat



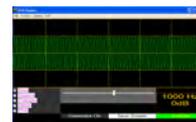
Strip Chart



Polarity



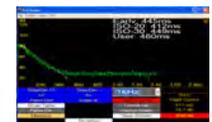
Oscilloscope



Signal Generator



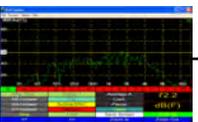
Voltmeter



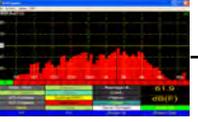
RT60 (Optional)

RTA Controls

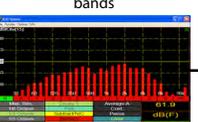
- dB/division display
- dB/Center display
- Store/Recall Memories
- Average display On/Off
- RTA display On/Off



Max Resolution 240 points



60 - 1/6 Octave bands



30 - 1/3 Octave bands



10 - 1 Octave bands

Max. Res. 1/6 Octave	Decay 1 Flat
1/8 Octave	Subtract/NIC
1/1 Octave	Memory
Stop	Fast

SPL Response - Fast, Slow, Peak, Impulse

Start/Stop RTA

Once the RTA display is stopped use the Joystick to select and read dB levels of individual frequency bands.

Averaging Controls

Pushing the center of the Joystick performs the same function as Start/Stop RTA

Frequency Select (Used in memory recall)

dB Center UP/Down (In increments set by dB/Div)

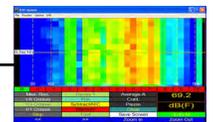
- Preferred Curve Set/Display
- Use the mechanical buttons to set dB/division
- dB SPL display

Tap the "Set dB Scale" to bring up the dB/Center, dB division window

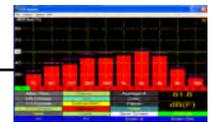
Weighting - A, C, Flat



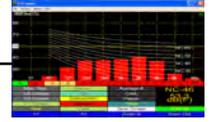
Freq Detect



Spectrograph



Peak Hold



NC/NR

RTA Memories

The IE-45 offers powerful Memory Management functions (see manual for details). Basically, there are nine Scratch Memories, an Average memory and a Preferred Curve memory available via on-screen controls, but spectra captured in these temporary Scratch Memory slots can be renamed and stored in virtually unlimited number.

Store a curve to memory

Step 1 - Tap an empty Scratch memory location 1 - 9 (colored in Red). The curve will appear on the screen and the Scratch memory background color will turn Blue indicating it is now filled and being displayed.

Tap the Blue Scratch memory to remove the stored curve from the display. The background color will turn to Buff indicating that the memory is filled but not presently displayed.

Memory #3 being displayed

Buff colored 1, 2, 4 & 5 = Curves are stored in these memories but they are not currently being displayed.

Red colored 6, 7, 8 & 9 = These Scratch memories are empty and available for curve storage.

Red = "PE" curve not stored

Blue = Scratch memory #3 displayed.

Red "A" = No Average curve is stored.

Green "R" = RTA curve is displayed.

Step 2 - To store a Scratch memory to the main memory, tap on the "Memory" control to bring up the memory management screen.

Re-name a memory from "Scratch" to a more descriptive name and tap on "SAVE."

From this screen you can "Store" a Scratch memory to main memory or "Load" a memory from main back into a Scratch memory. Preferred, Peak and Subtraction memories can also be "Stored" and "Loaded."

Tap on a memory file to move it into a Scratch memory so it can be displayed.

Memory Cursor

Step 1 - Tap on "Options" then "Memory Cursor."
 Step 2 - Tap on "S top."
 Step 3 - Turn RTA display On/Off as desired.
 Step 4 - Use Left/Right Cursor to select the frequency.

Subtract / Display Two

Step 1 - Tap on the yellow "S subtract" control.

Step 2 - Select two sources or spectrums for comparison: Scratch Memory, Preferred Curve, RTA Display or Average and then Tap "S1 - S2."

Step 3 - The result will be displayed in blue on the screen. To exit this mode, tap on "S subtract" and then "CANCEL."

RTA Averaging Functions

The various averaging functions of the IE-45 constitute one of the most powerful feature sets in the instrument. Spatial averaging is made easier (you don't have to average one memory with another). Averaging samples can be automatically or manually collected. The user can select Arithmetic or Power averages. See the manual for a complete outline of the IE-45's powerful averaging features.

Continuous/Trigger Mode

Step 1 - Select either the Continuous (Cont.) or Trigger mode for Averaging.

The Continuous mode will automatically take sample after sample until the "Pause/Resume" control is pressed.

The Trigger mode will take only one sample each time the "Add" control is pressed.

Step 2 - Tap on the "Average-P" control to enter into Average mode.

Step 3 - The "Average" display will be replaced with a "Count=X" display, with X= the number of samples taken. In the Trigger mode the Count will be incremented with each tap of the "Add" control. In the Continuous mode the Count will be controlled by the "Pause/Resume" control.

Step 4 - Store the Average curve by selecting any un-used scratch memory. If you wish to store the real-time curve instead of the Average curve, turn off the Average curve display before pressing the Scratch Memory Store control.

To Select Averaging Method 1 - Tap "File."

2 - Tap "Preferences."
 3 - Tap either "Power Average." or "Arithmetic Average."

Tap "Clear" to Clear the Average curve and reset the Count to zero.

Real time "R" and Average "A" displays turned on.

Both RTA and Average curve displayed (Green = display on, Buff = display off)

Average Curve

Real time "R" display Off Average "A" display turned on.

With Average curve displayed, press an empty (red color) Scratch Memory to store.