

Starting the IE-33

1. Insert the iPAQ into the IE-33J jacket and plug the IE-33M microphone into the IE-33J



2. Press power button to turn on IE-33

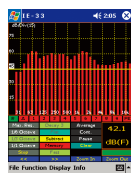
3. Using the stylus tap on "Start"

4. Using the stylus tap on "IE-33"

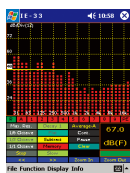
5. Wait while the program starts and memories are loaded

6. The screen of the last used function will appear

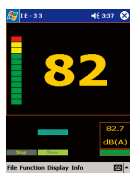
7. Tap the "Function" menu and choose the desired function



RTA



RTA/LED



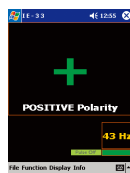
SPL Monitor



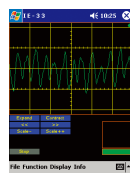
Seat to Seat



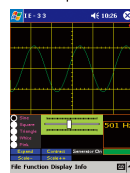
Strip Chart



Polarity

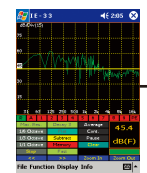


Oscilloscope

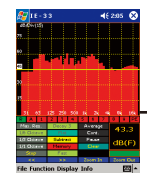


Signal Generator

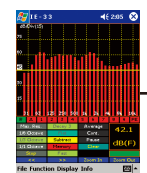
RTA Controls



Max Resolution 240 points



60 - 1/6 Octave bands



30 - 1/3 Octave bands



10 - 1 Octave bands

dB/division display

Memory Snapshot /Average Sample button (See "Averaging" & Memory sections of the manual)

dB/Center display
Store/Recall Memories
Average display On/Off
RTA display On/Off
Weighting - A, C, Flat

Start/Stop RTA

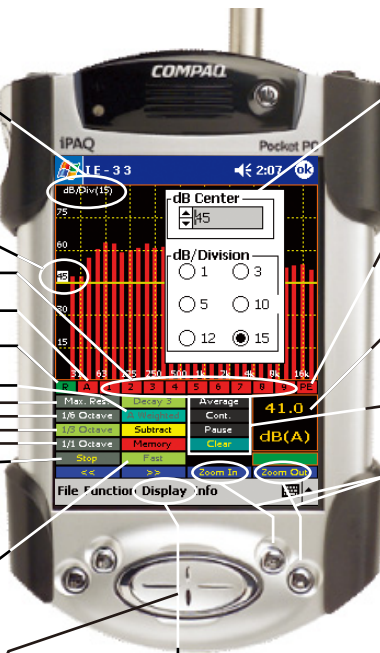
Once the RTA display is stopped use the Joystick to select and read dB levels of individual frequency bands.

SPL Response - Fast, Slow, Peak, Impulse

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

Frequency Select (Used in memory recall)

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



Tap the "Display" menu and then "Set dB Scale" to bring up the dB/Center, dB division window

Preferred Curve Set/Display Tap to Enter or Display the Preferred Curve. Use Joystick to enter values: dB & Frequency

dB SPL display

Averaging Controls

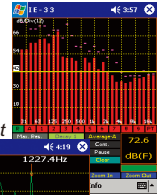
Tap on screen or use the mechanical buttons to set dB/division

Freq Detect

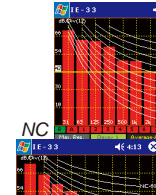
Turns On/Off Weighting applied to the RTA screen.

Note: Freq Detect is only accessible from the Max Res screen.

Peak Hold



NR

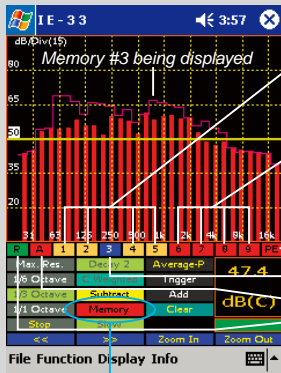


RTA Memories

The IE-33 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.



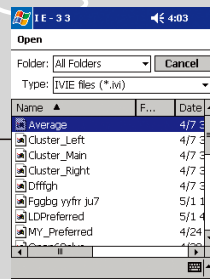
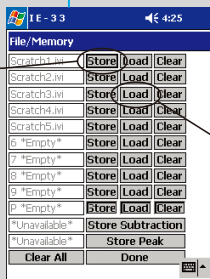
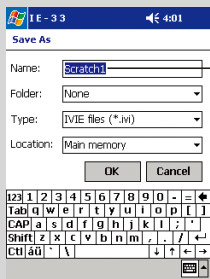
Buff colored 1, 2, 4 & 5 = Curves are stored in these memories but they are not currently being displayed.

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

Red "PE" Preferred curve not stored.
Blue = Scratch memory #3 displayed.
Red "A" = No Average curve is stored.
Green "R" = RTA curve is 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.

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



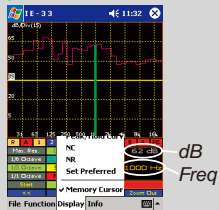
Re-name a memory from "Scratch" to a more descriptive name and tap on "OK."

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.

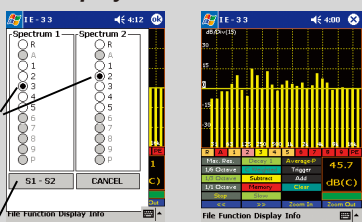
Memory Cursor

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



Subtract / Display Two Memories

Step 1 - Tap on the yellow "Subtract" control.



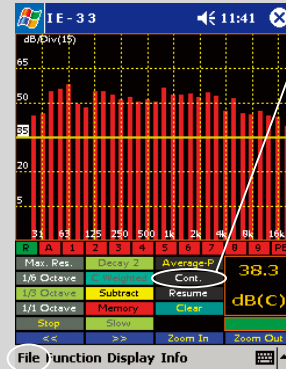
Step 2 - Select two sources or spectrums for comparison: Scratch Memory, Preferred Curve, RTA Display or Average and then Tap "S1 - S2."

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

RTA Averaging Functions

The various averaging functions of the IE-33 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-33's powerful averaging features.

Continuous Mode

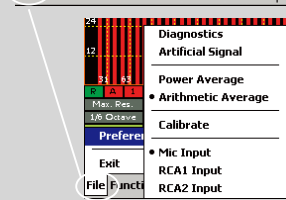


Step 1 - Select either the Continuous (Cont.) or Trigger mode for Averaging.

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

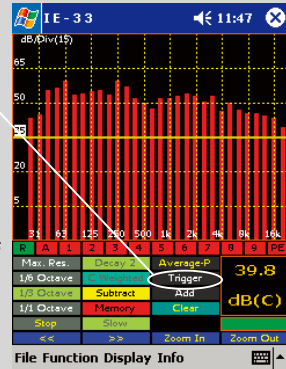
The Trigger mode will take only one sample each time the "Add" control is pressed or the Thumb button on the side of the IE-33 is pressed.

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



- To Select Averaging Method**
- 1 - Tap "File."
 - 2 - Tap "Preferences."
 - 3 - Tap either "Power Average." or "Arithmetic Average."

Trigger Mode

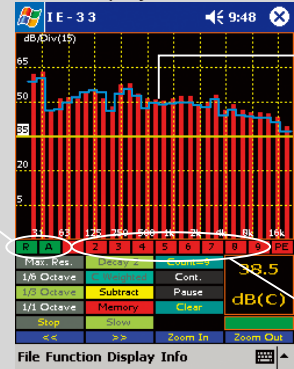


Step 3 - The "Average" display will be replaced with a "Count=X" display, with X= the number of samples taken. In the Trigger mode the Count will be incremented with each tap of the "Add" control. In the Continuous mode the Count will be controlled by the "Pause/Resume" control.

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.

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

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



Green = Display On

Average Curve

Buff = Disp Off

Green = Disp On

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

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

