

## C-NIC (“Continuous” NIC)

The measurement of NIC (Noise Isolation Class) is a staple of transmission loss or noise isolation measurements. The traditional setup requires an “inside” measurement (on the side of the barrier with noise source) and an “outside” measurement (on the side opposite from the noise source) to be stored in separate memories. The NIC contour algorithms are then applied to show the subtracted curve with the NIC contours (and, in the case of Ivie’s IE-33, a calculation of the NIC number is also displayed)..

Ivie has developed a new process called C-NIC which allows continuous NIC measurement in real time. C-NIC allows for real time on-site evaluation of transmission conditions through a barrier between two spaces. With C-NIC you can “sniff out”weak spots in isolation material in real-time, on site.

### Start with the normal Static NIC Measurement

Take an Inside Measurement and store in a Scratch memory.



Take an Outside Measurement and store in a Scratch memory.



### IE-33 Subtraction/NIC Setup Screen

Using the “Subtract/STC” setup screen, set up the Inside Measurement in “S1” and the Outside Measurement in “S2”.

Now tap the “(F)STC/NIC” button.



The IE-33 runs NIC contour calculations and shows NIC display PLUS calculating the appropriate correct NIC number.

## Now try the new Ivie “C-NIC” Continuous NIC Measurement

Step one is the same as seen above in the normal NIC measurement.

Take an Inside Measurement and store in a Scratch memory.



### Now, go to the IE-33 Subtraction/NIC Setup Screen

Using the “Subtract/STC” setup screen, select the Inside Measurement Scratch memory in “S1” and select the Real Time display in “S2”. Now tap the “(F)STC/NIC” button.(Pic)

The IE-33 runs continuous contour/NIC display and continuously calculates the NIC number. The combination of the continuously moving NIC display and the continually calculated NIC number allows you to easily see where the barrier might be ineffective and at what frequencies.

Using this method the user can move the microphone across the surface of the barrier and read changes in the transmission loss characteristics in real time. In this way “hotspots” can be identified quickly and accurately in the field.

