



**What good is an announcement over a mass communications system if you can't understand the message? Voice alarm systems play an important role in alerting occupants and the clarity of that message can contribute to safe evacuation procedures. Many issues can affect the clarity of speech transmission through a voice actuated fire alarm or mass communications system including background noise, reverberation and distortion. The NFPA 72 Annex E (National Fire Alarm Code) has introduced standards that require voice alarm systems to meet specific levels of speech intelligibility.**

**The Verifier is a special type of sound level meter which offers simplified methodology for measurement of Speech Transmission Index-Public Address (STI-PA), to ensure voice actuated fire alarms, mass communications and PA systems are clearly heard and understood in an emergency.**



## VERIFIER KEY FEATURES

- Easy user set-up and operation with results in Speech Transmission Index-PA (STI-PA) and Common Intelligibility Scale (CIS) formats
- Digital readout displays numerical value and results of Bad, Poor, Fair, Good or Excellent
- Quick 15 second measurement intervals with post-processing from meter
- Sample and store ambient noise during peak business hours to perform non-disruptive after-hours studies
- Display table of modulation indices
- Measures Speech Intelligibility in accordance with IEC 60268-16, NFPA 72 Annex E and DOD United Facilities Criteria UFC-4-021-01

### Applications

- Homeland Security
- Airport / Mass Transit Facilities
- Office Buildings
- Hotels
- Government Facilities
- Arenas / Convention Centers
- Fire Inspections
- Schools / Gymnasiums



## SPECIFICATIONS FOR VERIFIER

GENERAL	
DISPLAY LANGUAGE	English, French, German, Italian, Portuguese and Spanish
USER INTERFACE	10 Pushbuttons and 4 Softkeys
DISPLAY TYPE	Transreflective 128 X 64 Dot Matrix LCD with fiber optic backlighting
STANDARDS	
IEC 60268-16 (2003); Objective rating of Speech Intelligibility by Speech Transmission Index	
MEASUREMENTS	
PARAMETERS	STI-PA, CIS, SPL, Average Value
RANGES	Eight selectable ranges of 50 dB to 140 dB
FREQUENCY WEIGHTING	A and F (flat)
RESPONSE TIME	Fast and Slow
OCTAVE FILTERS	
NUMBER OF BANDS	Seven bands with center frequencies ( $f_c$ ) ranging from 125 Hz to 8 kHz
STUDIES AND SESSIONS	
RUN-TIME CLOCK	Duration of every study shown in screens and added to the session file
MANUAL OPERATION	Run, Pause, and Stop keys
PORTS AND CONNECTION	
POWER JACK	External power supply 8-16V DC
AC/DC OUTPUT	2.5 mm plug
10 PIN AUXILIARY CONNECTOR	RS-232 communication
USB	Conforms to USB 2.0 Mini Connector
ELECTRICAL CHARACTERISTICS	
BATTERIES	4 disposable AA Alkaline Cells, typically ~8 hours continuous use; rechargeable NiMH batteries available (option)
EXTERNAL DC POWER INPUT	100-240V AC, 47-63 Hz transformed to 9V DC
STANDARD MICROPHONES	Class/Type 1 Precision - BK4936; Class/Type 2 General Purpose - QE7052
METER INPUT	Greater than 1G $\Omega$ ; less than 2 pF
PREAMPLIFIER	Removable preamp directly accepts 13.2 mm (0.52") microphone
INPUT IMPEDANCE	20 k $\Omega$ in series with 11 $\mu$ F capacitance, 100 pF capacitance to ground
PHYSICAL CHARACTERISTICS	
SIZE	7.9 cm X 28.2 cm X 4.1 cm (3.1" X 11.1" x 1.6") with preamp
WEIGHT	0.54 kg (1.2 lb) including batteries
HOUSING	Stainless fiber-filled ABS Polycarbonate with additional internal EMC shielding
TRIPOD MOUNT	Standard photographic mount on rear accepts 1/4" - 20 screw threads
ENVIRONMENTAL	
TEMPERATURE	Operating -10°C to 50°C (14°F to 122°F) (<+/- 0.5 dB effect); Storage -25°C to 70°C (-13°F to 158°F)
HUMIDITY	10% to 90% RH, non-condensing

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