Trumpet
REAL EAR MEASUREMENT SYSTEM - AUDIOMETER

DESCRIPTION

Trumpet is an advanced and easy-to-use Real Ear Measurement system, capable of performing quick and accurate in-situ measures thanks to its small lightweight probes and its built-in amplified speaker. Trumpet also incorporates a diagnostic audiometer for carrying out air, bone and speech audiometric exams.

PRODUCT CONFIGURATION

Trumpet is available in five configurations:

- 10866: Trumpet REM – Real Ear Measurement system with wired REM probe
- 10967: Trumpet AUD – Diagnostic audiometer
- 10969: Trumpet REM & AUD – REM system and audiometer with wired REM probe
- 11724: Trumpet REM Wireless – Real Ear Measurement system with wireless REM probe
- 11725: Trumpet REM & AUD Wireless – REM system and audiometer with wireless REM probe

AVAILABLE SIGNALS

Real ear measurement

Stimuli: white noise, pink noise, ICRA, ISTS, rainbow passage, real speech, mixed environment sounds (e.g. doorbell, phone ring), frequency lowering–s, frequency lowering-sh

Audiometer

Stimulus: pure tone, warble tone
USB audio for speech audiometry
MIC input for live speech audiometry
Masking: NBN, WN, SN

AVAILABLE OUTPUTS AND TRANSDUCERS

Real ear measurement

In-situ headset (wired or wireless)
Built-in loudspeaker
Insert earphones for RECD (ER-3C)

Audiometer

AC: Headphones (DD45 / TDH-39)
    Insert earphones (ER-3C / IP30)
BC: B-71 bone vibrator
Free field

AVAILABLE TESTS

Real ear measurement

- REUR / REUG - (single and bilateral)
- REAR / REAG - (single and bilateral*)
- REIG - (single and bilateral*)
- REOR / REOG - (single and bilateral)
- MPO - (single and bilateral*)
- Advanced - (single and bilateral*)
- Live speech - (single and bilateral)
- RECD – (in combination with Drum)

*: bilateral available only for in-ear measurements

Audiometer

- Pure Tone audiometry (HL and UCL)
- Auto threshold (modified Hughsone-Westlake)
- Speech audiometry (SRT, WRS, MCL, and UCL)
- 2 independent channels Master Hearing Aid
- QuickSIN® test (optional)
- Stenger, with pure tone or speech stimulation
- Oldenburg Matrix Sentence Test® (optional)

REM: FREQUENCY, MEASUREMENT AND INTENSITY RANGE

Frequency range: 125 Hz – 12 kHz
Reference microphone measurement range: 40 – 110 dB SPL
Probe microphone measurement range: 40 – 130 dB SPL
Intensity range: 50 – 90 dB SPL

AUDIOMETRIC SIGNALS SPECIFICATION

Attenuator step: 1, 2 and 5 dB
Presentation: Continuous, Pulsed (0.5, 1, 2 Hz and custom)

PURE TONE: FREQUENCIES AND MAXIMUM LEVELS (dB HL)

Freq. (Hz)	AC (¹) TDH-39 DD45	AC (¹) ER-3C IP30	BC	FF (²) (built-in)	FF (²) (external)
125	80	90	-	60	65
250	100	105	45	75	80
500	110	110	65	85	90
750	115	115	70	85	90
1.000	120	120	75	85	90
1.500	120	120	80	85	90
2.000	120	120	80	85	90
3.000	120	120	75	85	90
4.000	120	110	75	85	90
6.000	105	100	55	85	90
8.000	95	90	50	75	80

(¹)The maximum intensities are obtainable only if the audiometer is powered with the mains adapter.

(²)When the device is powered via USB only the FF outputs are disabled

SPEECH AUDIOMETRY: MAXIMUM LEVELS (dB HL)

AC (¹) TDH-39 DD45	AC (¹) ER-3C IP30	BC	FF (²) (built-in)	FF (²) (external)
100	100	60	70	80

CALIBRATION

Validity: 12 months

Trumpet
REAL EAR MEASUREMENT SYSTEM - AUDIOMETER

COMPUTER INTERFACE
Connection: USB (driverless)
Compatible software: - Inventis Maestro (Noah compatible)

MINIMUM SYSTEM REQUIREMENTS
Refer to Maestro software technical specifications for indications about the minimum system requirements.

POWER SUPPLY
Power supply: 15V, 2A cont., through an external medical grade 100-240 Vac 50/60 Hz power supply

MECHANICS
Size (WxDxH): 15.5 x 10 x 24.5 cm / 6.1 x 3.9 x 9,7 in
Weight: 1.5 kg / 3.5 lbs

APPLICABLE STANDARDS
Real ear measurement: IEC 61669 / ANSI S3.46
Pure tone and speech audiometry: IEC 60645-1 / ANSI S3.6, (Type 2 – Class A)
Calibration: ISO 389-1 (TDH 39, DD45), ISO 389-2 (ER-3C), ISO 389-3 (B71), ISO 389-7 (FF)
Electrical safety: EN 60601-1
EMC: EN 60601-1-2
Radio: FCC CFR 47 Part 15 Subpart B and C and Part 1 Subpart I (§1.1310), ETSI standards for the compliance to the RED Directive (2014/53/EU)

CE CERTIFICATE
MDR 2017/745/EU classification: Class IIa
Classification rule (Annex VIII, 2017/745/EU): 10
Notified body: TÜV SÜD Product Service GmbH (0123)

INCLUDED PARTS
Real ear measurement (Trumpet REM)
- Main unit
- REM probe (wired or wireless)
- Probe kit (tubes, O-rings, probe tube guides)
- Monitor headset with boom microphone
- Inventis Software Suite
- User manual
- Medical grade power supply
- USB connection cable

Audiometer (Trumpet AUD)
- Main unit
- Supra-aural headphones (RadioEar DD45 / Telephonics TDH-39)
- Bone vibrator (RadioEar B71)
- Set of connectors for external speakers
- Patient response switch
- Monitor headset with boom microphone
- Clip-on microphone for patient-operator communication
- Inventis Software Suite
- User manual
- Medical grade power supply
- USB connection cable

ACCESSORIES (with order code)
Only for Trumpet AUD:
- 10968: REM license for Trumpet AUD – Includes the REM probe
- 11821: Wireless REM license for Trumpet AUD – Includes the wireless REM probe

Only for Trumpet REM:
- 10934: AUD license for Trumpet REM – Includes the transducer set

OPTIONAL PARTS (with order code)
- 11061: Trumpet soft carrying case
- 11347: Wall hanger for Trumpet
- 11412: Trumpet stand

Only for Trumpet AUD:
- 10833: Etymotic ER-3C insert earphones
- 11748: RadioEar IP30 insert earphones
- 11858: Pair of SIARE Delta 60 passive loudspeakers
- 11142: LSX additional loudspeaker
- 10179: Amplivox Audiocups noise excluding enclosures for TDH-39 / DD45 headphones
- 10533: QuickSIN™ test license
- 12365: ACT™ test license
- 11348: Wall hanger for Trumpet and AUD transducers
- 11571: Trumpet AUD silent room kit

Only for Trumpet REM:
- 11822: Wireless probe upgrade package

Trumpet is developed by:

INVENTIS S.r.l.
CORSO STATI UNITI, 1/3
35127 PADOVA – ITALY
PHONE: +39.049.8962.844
FAX: +39.049.8966.343
info@inventis.it
www.inventis.it

Follow us on LinkedIn
www.linkedin.com/company/inventis-srl/

The Inventis Quality System complies with ISO 13485 standard.

Inventis® is a registered trademark of INVENTIS S.r.l..