# **r37**a

# Clinical Audiometer Audiometry at Resonance's best.





#### Compact. Ergonomic. User friendly.

With compact dimensions, excellent ergonomics and a luminous 7" LCD display, the R37A Resonance® Audiometer has been engineered to respond to the needs of ENT and Audiology Specialists, operating in clinical environments. The design is user-friendly and allows the examiner to improve productivity and patient flow.

#### Reliable. Efficient. Customizable.

High-quality components ensure device reliability as well as long-term operation. Recognized dependability matches with efficiency. Test-report files, generated in PDF, can be initially stored on a USB-stick, then archived into external units or printed, thanks to the built-in thermal printer. Reports can be easily edited and customized with additional text and logos.



#### Powerful. Easy. Complete.

The R37A offers a complete range of clinical tests including air and bone conduction tests, and speech audiometry, up to 8 KHz. High Frequency Test in R37A-HF configuration is available. Speech material in English and Spanish is recorded on the Resonance SD-Card. Configurable tests and preferences designed to improve daily workflow and optimize speed and reliability of testing.

#### Comfortable. Elegant. Reliable.

The design of accessories maximizes patient comfort for the best and easiest handling of the device. Optional accessories increase flexibility and performance. High-quality components ensure device reliability as well as long-term operation. Multiple special testing is available including GAP test, DLF, Quick-SIN, BKB-SIN, SISI, ABLB and Tone Decay.





Innovative thinking has arrived.



Exclusive U.S. Distributor: **EAR TECHNOLOGY** CORPORATION P.O. Box 1516 Johnson City, TN 37605 USA 1-800-327-8547 or email: resonance@eartech.com resonance-eartech.com

#### **R37A Clinical Audiometer**

# **GENERAL SPECIFICATIONS**

#### **TEST TYPES**

• Pure Tone test, Auto-threshold, ABLB, Speech Test, Stenger, DLI, SISI, Bekesy, Tone Decay, MLB, Multifrequency, MHA, GAP, DLF, High Frequency up to 20KHz (R37A-HF only)

#### Quick-SIN, BKB-SIN (available on demand)

#### **DIMENSIONS AND WEIGHT**

- L x W x H: 14.5" x 11.4" x 7"
- Net Weight: 7.7 lbs.
- Body material: Bayblend® self-extinguishing

#### **USER INTERFACE**

#### Multilingual

#### PRINTER

Built-in fast thermal printer with paper width: 4.4" supplied as standard part

#### REPORTS

#### Printed on thermal printer

- PDF report created directly from the device and stored on USB pen drive with possibility to add patient data and tests comments via the USB keyboard (optional)
- Data transfer to PC using MDS\* software

#### **COMMUNICATION PORT**

- Nr.1 USB host type A
- Nr.1 USB slave type B

#### **PC INTERFACE**

- MDS\* software with reporting and printing features
- Compatible with Windows<sup>®</sup> 7, 8, 8.1, 10
- Data transfer via USB cable

### **POWER**

#### **POWER SUPPLY**

• 110-240V AC 50/60Hz 40VA

#### CONSUMPTION

- Max current: 0.15A
- Power consumption: 40VA

# QUALITY SYSTEM

Manufactured, designed, and developed under an ISO 13485, ISO 9001 certified quality system. Medical CE mark.

## COMPLIANCE/REGULATORY STANDARDS

Certifying body: IMQ S.p.A. Istituto Italiano Del Marchio Di Qualita

- MDD 93/42/EEC and update 2007/47/CEE: Class IIa (as referred to in Annex IX, rule 10)
- Safety: IEC 60601-1, 3rd and 2nd edition, Class 1 Type B
- EMC: IEC 60601-1-2
- Audiometer: to IEC 60645-1; IEC 60645-2 and ANSI S3.6 Type 1A

# **OPTIONAL**

- External USB keyboard
- Goose-neck microphone
- Durable, luggage-grade padded carrying case
- TDH39 headset
- Pediatric headset (AC or BC)
- Silent cabin cables
- Free field loudspeakers



# AUDIOMETRY SPECS

#### **FREQUENCY RANGE**

- 125 8000 Hz (with DD45)
- 8000 20000 Hz (with HDA300) (R37A-HF only)
- 250 8000 Hz (with B71-W)

#### ACCURACY

- Frequency: < 0.5%
- Distortion: < 1%
- Attenuator linearity: 1dB per 5dB step, max 3dB whole range
- Range stimuli level: -10 up to 120 dB HL

#### **TYPE OF SIGNALS**

- Pure tone: sine wave
  Warble: ± 5% frequency sine wave modulated, modulation: sine wave 5 Hz
- Narrow band noise: 24dB/oct filtered noise
- Speech noise: 1khz 12dB/oct filtered noise
- White noise
- External signal
- External mic
- Speech material recorded on SD card
- Master Hearing Aid: 1kHz 6, 12, 18, 24dB High pass filters
- On/Off rise fall time: 40 msec.

#### **OUTPUT TRANSDUCERS**

- ACR, ACL: 10 ohm DD45 matched pair earphone
- BC: B71W RadioEar
- INSERT: Button receiver
- Free field output: 600 ohm impedance
- Monitor Phone: headset with boom microphone

#### STIMULUS PRESENTATION MODALITY

- Presentation: Normal, Reverse, Extended (present tone for 1 second from 20dB below the maximum level)
- Modality: Continuous, Pulsed (rate 0.5; 1 and 2 Hz), Alternated (ABLB and MLB 0.5, 1 and 2 Hz)
- DLI increment levels:
- 0.1 in steps of 0.1dB up to 1.0dB; 1.5-2-3.4.5 dB DLI increment recurrence rates: 0.5Hz, 1Hz, 2Hz
- SISI increment recurrence rates: 0.2Hz, 0.5Hz, random
- Time on 300 msec.
- SISI increment level: 0.25, 0.5, 0.75, 1, 1.5, 2, 3, 4, 5 dB
- Bekesy: mode sweep and fixed; Continuous, Pulsed and LOT; exam duration 30sec and 60sec.

# STANDARD ACCESSORIES

- DD45, ADC for audiometry testing
- IP30 insert earphones
- HDA300 headset for high frequency test (R37A-HF only)
- B71W bone conductor
- Insert-Transducer (for bone conduction masking)
- Operator headset with microphone and speaker (talk over and monitor)
- Patient microphone (talk back)
- Patient response push button
- Built-in fast thermal printer
- 1 roll of thermal paper
- Power supply cable (110 V)
- 1 spare fuse
- Device dust cover
- USB pen drive
- SD-card with multilingual speech material

EAR TECHNOLOGY CORPORATION

1-800-327-8547 or email: resonance@eartech.com

MDS\* software

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P.O. Box 1516

\* Resonance Management Data Suite

RES R37A DATA ETC 0220 Rev C