Otowave •102-1 •102-4

Handheld portable tympanometers

The **Amplivox Otowave** is shaped for success in accurate middle ear measurements.

Ergonomics

Elegantly shaped to follow the contours of a hand and with a perfect weight distribution, tests can be completed with confidence and accuracy.

Ease of use

The **Otowave** is very intuitive to use with on-screen information displayed before, during and after the test. The compliance peak, compliance peak pressure, gradient, ear canal volume and an ipsi lateral reflex test will be measured within seconds. The programmable reflex test can be configured for one frequency (1kHz) for the **Otowave 102-1** and four (500, 1kHz, 2kHz and 4kHz) for the **Otowave 102-4.**

Recording results

Results are displayed for review on a large high-resolution graphics display. Results can be:

- saved within internal memory with a patient identifier
- printed via an infra-red connection to the optional portable printer
- transferred to a PC with an IrDA port, NOAH database with the optional Amplivox impedance module

Portability

Lightweight and weighing just 380g, the **Otowave** is designed to be a totally portable 'go anywhere' instrument which is reliable, accurate and easy to use. The **Otowave** requires no external power or data cables.

- Fast accurate middle ear measurements
- Ergonomic shape
- Totally portable
- Intuitive use
- Large graphics display
- Programmable reflex test
- Optional portable printer and PC interface
- No external power or data cables

amplivox *specialists in healthcare products*

Otowave •102-1 •102-4

Handheld portable tympanometers

Technical specifications

Tympanometry measurements

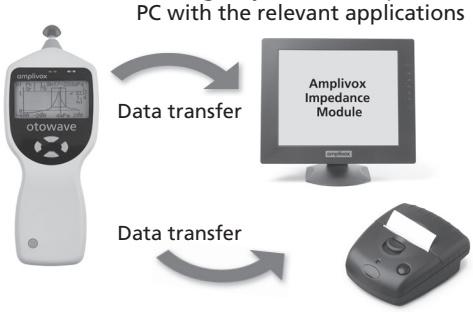
Probe tone:	226Hz +/-2% 85dB SPL +/-2 dB over range 0.2ml to 5ml
Pressure range:	+200daPa to -400daPa +/- 10daPa or +/-10% (whichever is greater)
Direction of sweep:	Positive to negative
Volumetric range:	0.2ml to 5ml +/-0.1ml or +/-5% (whichever is greater)
Analysis performed:	Compliance peak level, compliance peak pressure level, gradient and equivalent ear canal volume

Reflex measurements

Otowave 102-1:	1kHz +/-2%
Otowave 102-4:	500Hz, 1kHz, 2kHz, 4hKz +/-2%
Reflex dB range:	85 to 100 dBHL (programmable in 5 or 10 dB steps)
Reflex measurement range:	0.01ml to 0.5ml +/-0.01ml
Analysis performed:	Reflex maximum amplitude and pass/fail at each test level

Data management

Internal database:	30 patient records Patient record identification Data transfer to designated printer or PC application
Electronic data storage (database PC requirements):	NOAH aud module Amplivox impedance module Infra-red PC port
Printing:	*Designated printer:* high speed portable thermal printer *Data transfer:* Infra-red IrDA 9600 Baud Printing may also be completed via a PC with the relevant applications



Physical data

Power (battery):	4x Alkaline AA or 4x NiMH (>=2.3Ah) rechargeable
Dimensions (mm):	210 long x 80 wide x 40 high envelope
Weight:	380 grams (including batteries)

Standards

The Otowave conforms to the relevant clauses of the following standards.

Safety:	EN60601-1
EMC:	EN 60601-1-2
Impedance:	EN60645-5 Type 2 tympanometer
CE Mark:	Complies to EU Medical Device Directive

Equipment

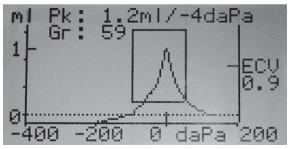
Standard equipment

- Test cavities
- Set of disposable ear-tips
- Operating manual
- Carrying case
- 4 x 1.5V alkaline 'AA' batteries (UK only)
- Amplivox NOAH impedance module
- Tympview PC application

Optional equipment

- Additional sets of disposable ear-tips
- High speed portable thermal printer

Measurements



Tympanometry: when testing children, very fast, accurate middle ear measurements are essential. The advanced technology within the Otowave makes this possible.
Acoustic reflex: the Amplivox Otowave provides a comprehensive user-defined reflex measurement facility. This programmable function includes reflex selection, levels and sensitivity. The large display area facilitates a graphical display of the reflex response and a pass/fail result.

Amplivox USA
Tel: 888-941-4208 • Fax: 952-903-4200
10393 West 70th Street
Eden Prairie, MN. 55344
E-mail: info@amplivox.us