

## touchTymp MI 36

### Tympanometry & Audiometry in one device

Simply intuitive middle ear diagnostics with AC & BC audiometry

#### Improve your workflow every day

Our touchTymp MI 36 combines diagnostic middle ear analyzer and audiometry tests in one exceptional device. The full 10.4" touchscreen with its user-friendly interface guarantees a unique intuitive operation and allows to quickly change parameters. You can easily switch between the tests without reorganizing from one to another device and benefit from its small footprint when facing limited desk space. touchTymp MI 36 really improves your workflow every day.

#### Comprehensive test protocols

Our touchTymp MI 36 provides comprehensive standard protocols for immediate operation of screening and diagnostic test processes: tympanometry with 226 Hz, tympanometry with automatic or fixed acoustic reflexes, reflex decay, Eustachian tube function testing (ETF) plus air conduction and bone conduction audiometry. The optional high-frequency probe tone of 1 kHz is ideal for providing reliable results when testing newborns.

#### Stay focused on your patients

The unique touchTymp light bar on our shoulder box probe provides a real-time progression of the immittance test. The shoulder box can easily be clipped to your patient's top for controlled handling of the diagnostic probe. The light indicator shows you which ear is tested and the test result.

#### Printing made easy

Print test results instantly by using the touchTymp built-in printer. Place the shoulder box into its holder to automatically start printing. You can transfer the results to a PC to allow long term storage, full page printout and PDF creation for EMR integration.

#### Features at a glance

- Combo device with small footprint
- Customizable to suit individual needs
- High resolution and quick screen transitions
- Full touch-based interface for intuitive handling
- Probe tone 226 Hz, 678 Hz, 800 Hz
- Optional high-frequency probe tone 1 kHz
- Acoustic reflex stimuli 500 Hz, 1 kHz, 2 kHz, 4 kHz, BB, HP, LP (ipsilateral and contralateral)
- Reflex Decay test (ipsilateral and contralateral)
- ETF test for intact and perforated eardrums
- Air conduction audiometry
- Bone conduction audiometry
- Built-in printer or data transfer to PC



## Technical Data touchTymp MI 36

### TYMPANOMETRY

<b>Probe Frequency</b>	226 Hz $\pm$ 1 %, 85 dB SPL $\pm$ 1.5 dB 678 Hz $\pm$ 1 %, 72 dB SPL $\pm$ 1.5 dB 800 Hz $\pm$ 1 %, 70.5 dB SPL $\pm$ 1.5 dB
<b>Optional High Frequency</b>	1 kHz $\pm$ 1 %, 69 dB SPL $\pm$ 1.5 dB
<b>Pressure Range</b>	- 600 to + 400 daPa
<b>Accuracy of Pressure</b>	$\pm$ 5 % or $\pm$ 10 daPa
<b>Volume Range</b>	0.0 to 6.0 ml (compensated)
<b>Compliance Range</b>	0.1 to 8.0 ml at 226 Hz 0.1 to 15.0 mmho at 678, 800 and 1000 Hz
<b>Accuracy of Volume</b>	$\pm$ 5 % or 0.1 ml
<b>Test Time Measurement</b>	3 - 5 seconds

### ACOUSTIC REFLEXES

<b>Test Frequencies</b>	0.5, 1, 2, 4 kHz $\pm$ 1 %
<b>Test Noise</b>	BB, LP, HP
<b>Test Methods</b>	Ipsilateral, contralateral
<b>Level Ipsilateral</b>	70 to 105 dBHL
<b>Level Contralateral</b>	70 to 120 dBHL
<b>Level Setting</b>	Automatic, fixed
<b>Ipsilateral Reflex Test</b>	With AGC

### REFLEX DECAY

<b>Standard</b>	Probe frequency 226 Hz
<b>Test Frequencies</b>	0.5, 1, 2, 4 kHz $\pm$ 1 %
<b>Test Noise</b>	BB, LP, HP
<b>Level Ipsilateral</b>	70 to 105 dBHL
<b>Level Contralateral</b>	70 to 120 dBHL

### EUSTACHIAN TUBE FUNCTION

<b>Test Methods</b>	Intact and perforated
<b>Pressure Range</b>	- 600 to + 400 daPa

### SANIBEL

We highly recommend to use Sanibel disposables in order to guarantee optimal test results.



### AUDIOMETRY

<b>Test Signals</b>	Sinus and warble tone (pulsed and continuous)
<b>Test Frequencies</b>	125, 250, 500, 750, 1000, 1500, 2000, 3000, 4000, 6000, 8000 Hz (125 Hz excluded from bone conduction test frequencies)
<b>Level Steps</b>	5 or 1 dB
<b>Hearing Level Range AC</b>	-10 to 120 dBHL
<b>Hearing Level Range BC</b>	-10 to 80 dBHL
<b>Masking Noise</b>	Narrow band and white noise

### DEVICE GENERAL

<b>Display</b>	10.4" Graphic LED-Display with resistive touchscreen
<b>PC Interface</b>	USB
<b>Probe</b>	Lightweight diagnostic Shoulder-Box with built-in control light and switch
<b>Printer</b>	Fast 4 inch thermal printer
<b>Power Supply</b>	Mains 100 to 240 V $\sim$ $\pm$ 10 %, 50 - 60 Hz $\pm$ 10 %
<b>Dimensions / Weight</b>	W 30 x D 34.5 x H 14.8 cm / 3.2 kg
<b>Languages</b>	English, German, Spanish, French, Polish, Turkish, Russian, Chinese

### STANDARD

- ANSI/ AAMI ES/ IEC/ EN 60601-1, class I, Type B; IEC 60645-5, Type 2/  
ANSI S3.39, Type 2; IEC 60645-1, Type 3/ ANSI S3.6, Type 3
- Class IIa according to EU medical device directive 93/42/EEC



### STANDARD COMPONENTS

Shoulder-Box probe, Shoulder-Box adapter kit, Shoulder-Box attachment kit, contra phone (DD45 C), DD45 audiometry headset, B71 Bone Conductor, patient response switch, built-in calibration cavity, built-in printer and roll of thermal paper, mains cable, Sanibel ear tip kit, probe floss kit, MAICO USB flash drive kit, MAICO software, USB-cable, cleaning cloth, touchpen, operational manual, quick guides

### OPTIONAL ACCESSORIES

Talk back microphone, mic-monitor headset

Specifications are subject to change without notice.

#### Standard Components



touchTymp  
with printer



Shoulder-Box



DD45 and B71  
(Audiometry)



DD45 C  
(Tympanometry)

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