Modular Firmware Upgrades

PATH MEDICAL GmbH
Landsberger Straße 65  82110 Germering  Germany
Tel +49 89 80076502  Fax +49 89 80076503
sales@pathme.de  www.pathme.de

Made in Germany
DPOAE - SCREENING
- DPOAE Screening module provides multi-channel DPOAE with quick results, up to twice as fast as conventional testing.
- Cartoon mode is available for kids for enjoyable testing time.

DPOAE - DIAGNOSTIC
- DPOAE Diagnostic module provides testing up to 10kHz with fast multi-channel DPOAE and FMDPOAE® and up to 30 points per octave resolution.

TEOAE - SCREENING
- TEOAE Screening module provides fast and reliable broadband TEOAE testing between 0.7-4kHz with automated screening stop protocol.

TEOAE - DIAGNOSTIC
- Provides diagnostic TEOAE testing between 1 and 4kHz.
- Can be configured to set user defined stop criteria, (3, 4 or 5 out of 5 frequency bands) and settable signal to noise ratio (SNR) of 6 or 9dB.

DPOAE THRESHOLD ESTIMATION
- DPOAE Threshold Estimation module uses patented PATH technology to provide an estimated audiogram from the DPOAE response. Extremely useful in non-cooperative patients providing objective measurements quickly and accurately.

ABR SCREENING MONAURAL
- The unique Spread Spectrum (SP2®) technology provides additional protection from electric interference, allowing Evoked Potentials testing in virtually any environment, providing fast and accurate test results.

ABR DIAGNOSTIC MONAURAL
- Monaural Diagnostic ABR, including screening, with broadband click and chirp stimuli.
- Choice of transducers available; headphones, insert earphones, OAE probe & bone oscillator.
- Spread Spectrum technology reducing electrical interference for fast test results.

FREQUENCY SPECIFIC ABR
- Includes tone burst, freq. spec. chirps (high, mid and low chirp).

ASSR
- With the varying modulation rate provided on PATH MEDICAL’s ASSR test module, the device will select the most appropriate modulation rate, from 37 to 163 Hz, optimized to your individual setup.

ECOCHG
- Utilising fast weighted averaging the EcochG module displays alternating, condensation and rarefaction traces and has configurable tone burst and click stimulus.

ABR DIAGNOSTIC BILATERAL
- Bilateral ABR module utilizes spread-spectrum technology (SP2®) significantly reducing electrical interference in hostile recording environments providing fast and accurate test results.

ABR SCREENING BILATERAL
- Fast Screening, but both ears.

PLEASE BE AWARE ABOUT THE REQUIRED PREREQUISITES OF THE SELECTED UPGRADES
- SENTIERO/ADVANCED can be upgraded to all.
- SENTI can only be upgraded to subjective tests.

If in doubt please contact your regional manager.
| Item #100561 | ESRT | for evaluation only |
| Item #100653 | -10 dB, 125 Hz - 8 kHz |
| Item #100454 | AUDIOMETRY UP TO 16 KHZ |
| Item #100325 incl. hardware and license | MODEM SET |
| Item #100561 | MODEM LICENSE CODE |
| Item #100560 | TYMP CLASS 2 |
| Item #100114 | MIRA PC SOFTWARE LICENSE |
| Item #100689 | ETF TESTS |
| Item #100112 | ESRT for evaluation only |
| Item #100116 | MIRA PC SOFTWARE LICENSE |

**TYMP CLASS 1**
- Includes Single & Multifrequency Tympanometry, ETF, Ipsi & Contra reflex.
- Multifrequency invented by PATH MEDICAL.
- Introducing the simultaneous stimulation of 226 Hz, 668 Hz, 800 Hz and 1000 Hz whilst testing tympanometry in one single recording, ready for immediate evaluation by the doctor.

**TYMP CLASS 2**
- Class 2 Tympanometry including acoustic reflex.
- Measuring ipsilateral and contralateral acoustic reflex elicited by tones with different levels and frequencies or noise. In both automatic and manual mode (after performing tympanometry).

**ETF TESTS**
- Non Perforated Eardrum
- Perforated Eardrum
- Patulous Eustachian Tube

Please note, ETF test module is an upgrade to Tymp Class 2 module. ETF tests are already included in Tymp Class 1 module.

**1000HZ TEST**
- Available to add 1000 Hz probe tone to existing Tym Class 2 module.
- Provides simultaneous measurement of 226 Hz and 1000 Hz tympanogram.

**MODEM LICENSE CODE**

**MODEM SET**
- Used in combination with pathTrack.
- These options offer secure and cut out of the box data transfer for your regional tracking program.
- Different retail pricing schemes are available. Contact us for details.

**PURE TONE AUDIOMETRY CLASS 4A**
(10-110 dB, 125 Hz - 8 kHz)
- Assessing AC pure-tone thresholds at frequencies from 125 Hz to 8 kHz with stimulus levels from -10 up to 110 dB HL in compliance with IEC 60645-1.

**PURE TONE AUDIOMETRY CLASS 3**
- Assessing AC and BC pure-tone thresholds in compliance with IEC 60645-1 class 3.
- The module provides a contralateral masking option, presentation of different stimulus types (pure-tone, pulsed pure-tone, wideband tone), and automatic threshold detection procedures (Bekesy, Hughson-Westlake).

**HIGH FREQUENCY AUDIOMETRY UP TO 16 KHZ**
- Assessing Pure Tone thresholds at high frequencies from 9 to 16 kHz. PTA-HF is only available with specific headphones, e.g. Radioear DD450.

**MAGIC & MAGIC SCREEN INTERACTIVE**
(children audiometry, children> 4 years)
- Image-based and self-paced test procedures can considerably enhance the child’s attentiveness.
- The test is designed for pre-school and school children but can be used for other cooperative subjects as well.
- MAGIC performs at standard audiometric frequencies from 250 Hz to 8 kHz.

**PLEASE BE AWARE ABOUT THE REQUIRED PREREQUISITES OF THE SELECTED UPGRADES**
- SENTIERO/ADVANCED can be upgraded to all.
- SENTI can only be upgraded to subjective tests.
LATEST UPGRADES
NEW FOR 2022/2023

CHECK OUT OUR LATEST MODULES RELEASED FOR 2022/23.
WE’VE ADDED VEMP, TINNITUS MATCHER, SOAE AND CONTRALATERAL TEOAE SUPPRESSION!

TINNITUS MATCHER
- The Tinnitus matcher module is an extension of the pure tone audiometer, enabling subjects to tune stimuli to match the perceived tinnitus tone in both frequency and level. Tuning is possible down to an ultra-high resolution of 0.1Hz and output to step size of 1dB.
- Please note - Tinnitus Matcher can only be added with existing PTA3 module installed.

SOAE (Spontaneous Otoacoustic emission) - this module will provide SOAE evaluation of the cochlea for SOAE detection up to 9.6kHz in single ear or both ears using 2 probes.
- Please note - SOAE can only be added if existing Diagnostic OAE (TE or DP) module is already installed.

VEMP MODULE
- VEMP module includes cVEMP and oVEMP stimulation via air conduction and bone conduction with multi stimulus types: Click, Chirp and configurable Tone burst stimuli.
- Auto EMG scaling and amplitude calculation in PC-Software, where you will compare left and right ear measurement side-by-side in PC software.
- Availability dependent on regulatory requirements in your territory

Item #101317

CONTRALATERAL TEOAE SUPPRESSION
- Used to detect the presence of OAE suppression in the efferent system. With variable level, test time and configurable peak detection this module quickly assesses both left and right ears (requires 2 OAE probes).
- Please note - TEOAE CAS can only be added if existing Diagnostic TEOAE module is already installed. Future option, please inquire.

Item #101319

PLEASE BE AWARE ABOUT THE REQUIRED PREREQUISITES OF THE SELECTED UPGRADES
- SENTIERO//ADVANCED can be upgraded to all.
- SENTI can only be upgraded to subjective tests.
- If in doubt please contact your regional manager.

SPEECH TESTS
A variety of language based speech tests (English, German, Spanish) and image/CD/Live speech options available. Please refer to the Quick Guide on Audiometric tests (#26 on our website) or ask your regional manager/PATH distributor for further details.

PATH MEDICAL GmbH
Landsberger Straße 65  ▪  82110 Germering  ▪  Germany
Tel  +49 89 80076502  ▪  Fax  +49 89 80076503
info@pathme.de  ▪  www.pathme.de

100837-28_MA_modular_firmware_A, Rev. A, September 2022