gsi
Grason-Stadler

CLINICAL PC AUDIOMETER

AUDIOSOL

THE RELIABILITY OF GSI WITH PC-BASED AUDIOMETRY

VERSATILE AND COMPREHENSIVE

The GSI AudioSol™ is a clinical two-channel audiometer, combining GSI's gold standard of accuracy and efficiency with the convenience of PC-based operation. This versatile audiometer allows clinicians to maintain high clinical standards in a format that fits their testing preferences.

POWERED THROUGH GSI ACUITY

The AudioSol is powered by the new GSI Acuity™ software. Built on GSI's legacy of familiar design and intuitive navigation, GSI Acuity makes testing straightforward while supporting a comprehensive test battery and flexible testing configurations. Results transfer seamlessly to GSI Suite.

3 KEY BENEFITS

SETUP FLEXIBILITY

The AudioSol has flexible setup options including mounting the device inside or outside the booth. The wall mount significantly reduces the audiometer footprint. Use a keyboard and mouse for control or use the GSI AudioSol Console as an optional accessory.

PERSONALIZED CONFIGURATIONS

Clinic protocols can be created for different patient exams and one selection will load a group of test settings, including wordlists. Users can maximize testing through a variety of display options. Improve efficiency and reduce testing time using customized configurations.

INTUITIVE SOFTWARE

GSI Acuity software provides a familiar testing interface and fast, seamless transitions. Use GSI Acuity as a standalone solution or integrate with GSI Suite for comprehensive data management.

PC AUDIOMETRY

CLINICAL TESTING

Two independent channels provide complete control in testing including air and bone conduction, speech testing, and integrated special tests. Navigate quickly using a mouse and intuitive keyboard shortcuts to move confidently while evaluating patients across all populations.

ON-SCREEN CONTROLS

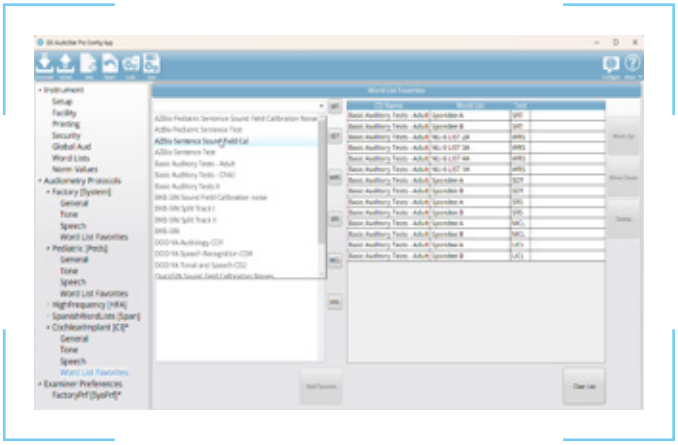
Customizable navigation bar allows you to tailor shortcuts to move easily between test types. Expand side menus to make selections for Channel 1 and 2 including signal, routing, and transducers, and adjust monitor and microphone levels with ease. Show or hide controls based on your preferences so everything you need is right at your fingertips.

SYNCHRONOUS TELEAUDIOLOGY

Expand access to hearing healthcare by enabling real-time, remote testing when a clinician can't be on site. By using the optional Telehealth Audio Interface, you can take full control of the audiometer from anywhere to perform manual testing with the same precision and confidence as if you were in the room.

CUSTOMIZABLE PROTOCOLS

The clinical audiometry config app allows you to create examiner preferences to ensure the software display is meaningful for each clinician and set security protocols for each examiner. Audiometry protocols can be defined by patient population, appointment type, or individual preference to ensure the appropriate testing tools are available when you need them.



KEY FEATURES

PC-BASED AUDIOMETER

The AudioSol provides efficient testing, integration, and connectivity, which improves daily workflows.

COMPREHENSIVE TESTING BATTERY

Test patients of all ages for all exam types including pediatric, auditory processing, difficult to test, tinnitus, and cochlear implant evaluations. Independent store buttons are present for each channel. Special tests with the AudioSol include QuickSIN, BKB-SIN, the TEN test, and the ACT test.

KEYBOARD SHORTCUTS

Quickly and efficiently activate test stimuli, masking, store test results, present words, move between test types throughout test session via the PC keyboard. There are additional shortcuts for actions such as activating VRA and talk forward.

PEDIATRIC FRIENDLY

Pediatric noise calibrated in dBHL, direct VRA activation for up to 5 reinforcers, pediatric word lists and remote keyboard shortcuts are necessary tools for pediatric audiologists. Quickly navigate between signal types. Includes a pediatric protocol for fast setup.

SOFTWARE INTEGRATION

GSI Acuity, the software that drives the AudioSol, can be operated as a stand alone software or from within GSI Suite. This flexibility ensures integration with Noah and other business management software programs.

GSI AUDIOSOL CONSOLE*

GSI AudioSol Console features full control of the AudioSol in a familiar GSI audiometer layout. The one-button testing you normally get with a standalone audiometer can now be utilized with a PC audiometer.

*Optional accessory

WHAT YOU SHOULD EXPECT FROM OUR DEVICES

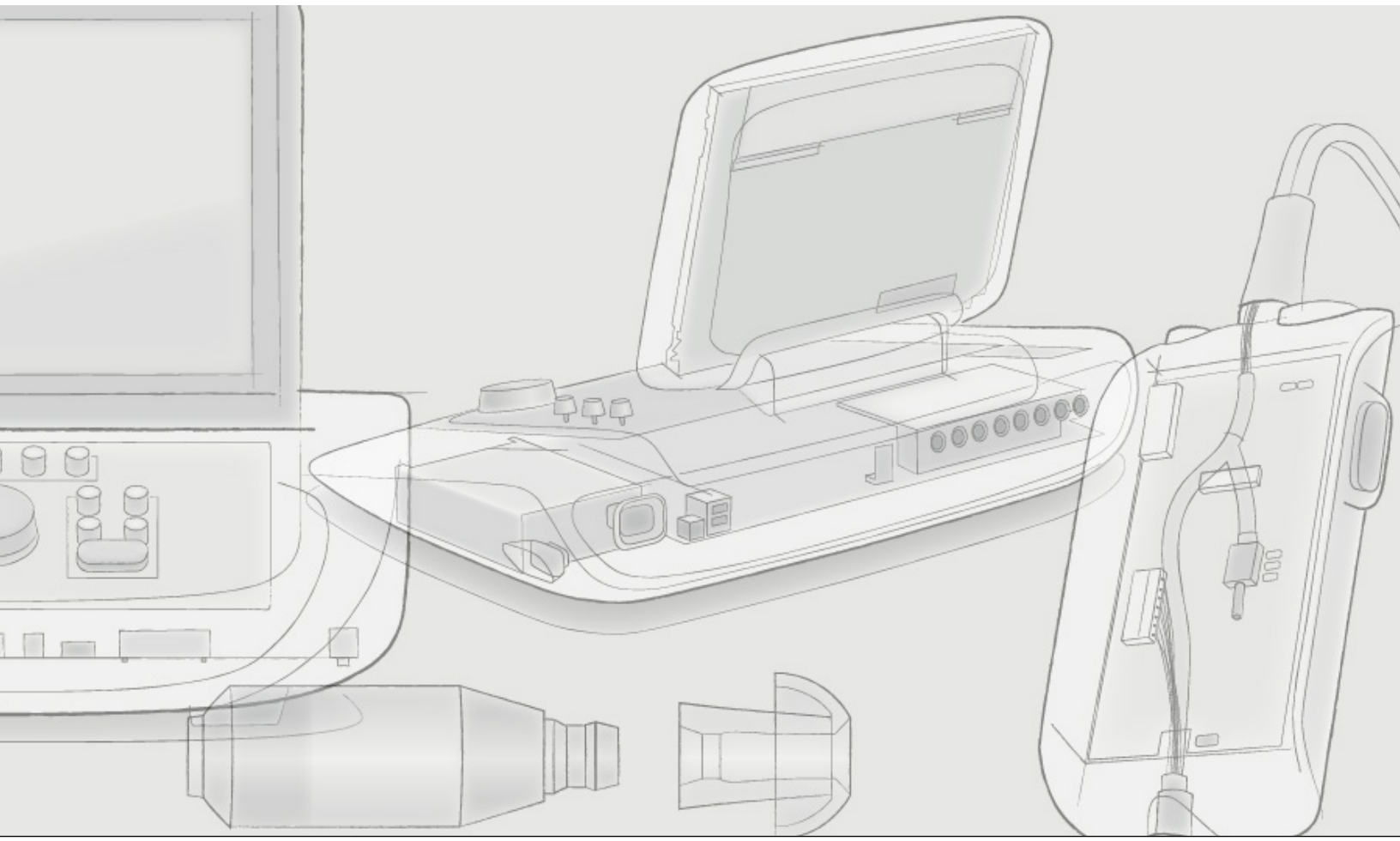
WORLD LEADER IN AUDIOMETRIC SOLUTIONS

GSI is a world leader in audiometric assessment instrumentation and carries a full line of audiometers, tympanometers, otoacoustic emissions (OAE), and auditory evoked potential instruments. From research facilities to school screenings, GSI instruments have been the equipment of choice for audiological assessments throughout the world for over 75 years.

DESIGNED SMART, BUILT STRONG

Our motto is Designed Smart, Built Strong. GSI devices are Designed Smart with the audiologist in mind, providing superior ergonomic design and navigation with one button, one function accessibility. Built Strong, our devices can take on the most routine to complex testing scenarios in any environment.

Quality, Reliable, and User-Friendly are the three core attributes that are the backbone of the GSI brand. These attributes are what you should expect from any GSI product.



AUDIOSOL

TECHNICAL SPECIFICATIONS

DIMENSIONS AND WEIGHT

W x D x H: 20.1 in x 14.6 in x 4 in (51 cm x 37 cm x 10.2 cm)

Weight: 11.9 lb (5.4 kg)

Shipping Weight: 21.9 lb (9.9 kg)

CHANNELS

Two Independent Channels

PURE TONE – CHANNELS 1 AND 2

FREQUENCY RANGE

Air Conduction: 125 Hz - 20,000 Hz*

Bone Conduction: 250 Hz - 8,000 Hz

Sound Field: 125 Hz - 8,000 Hz

Paired Inserts: 125 Hz - 8,000 Hz

Frequency Accuracy: ±1%

Total Harmonic Distortion:

- < 2% (earphones and paired insert phones)
- < 5.5% (B81)

HEARING LEVEL RANGE

Air Conduction: -20 dB HL - 120 dB HL

Bone Conduction:

- **Mastoid:** -10 dB HL - 90 dB HL
- **Forehead:** -10 dB HL - 80 dB HL

Sound Field:

- -10 dB HL - 90 dB HL (basic speakers)
- -10 dB HL - 96 dB HL (high performance speakers)
- -10 dB HL - 102 dB HL (high performance speakers and external booster amplifier)

Paired Inserts: -10 dB HL - 120 dB HL

Masking Intensity Range (Calibrated in effective masking):

- **Narrow Band Noise:** Maximum dB HL is 15 dB below tone
- **White Noise:** Maximum dB HL is 30 dB below tone

SIGNAL FORMAT

Steady: Tone continuously present

Pulsed: Tone pulsed 200 msec ON, 200 msec OFF

FM: Modulation Rate: 5 Hz

Modulation Depth: +/- 5%

Pulsed/FM: Pulsed and modulated

Pediatric Noise

Pediatric Noise Pulsed

**Testing above 8,000 Hz requires HF transducer option*

SPEECH – CHANNELS 1 AND 2

Microphone: For live voice testing and communications

INT/EXT A & INT/EXT B: Utilized for internal wave files or recorded speech material from an external digital device

INTENSITY RANGE

Air Conduction: -10 dB HL - 100 dB HL

Bone Conduction:

- **Mastoid:** -10 dB HL - 60 dB HL
- **Forehead:** -10 dB HL - 50 dB HL

Sound Field: -10 dB HL - 90 dB HL

Paired Inserts: -10 dB HL - 95 dB HL

MASKING INTENSITY RANGE

Speech Noise:

- **Air Conduction:** -10 dB HL - 95 dB HL
- **Bone Conduction:**

  -10 dB HL - 50 dB HL (mastoid)

  -10 dB HL - 40 dB HL (forehead)
- **Sound Field:** -10 dB HL - 85 dB HL

White Noise:

- **Air Conduction:** -10 dB HL - 95 dB HL
- **Bone Conduction:**

  -10 dB HL - 60 dB HL (mastoid)

  -10 dB HL - 50 dB HL (forehead)
- **Sound Field:** -10 dB HL - 80 dB HL

SPECIAL TESTS

ACT Test

Weber Test

ABLB

SISI

High Frequency Audiometry

TEN Test

QuickSIN

BKB-SIN

Tone Decay

GSI AMTAS (Optional)

SPECIAL TESTS (USER DEFINED)

MLB

Lombard test

Pure Tone Stenger

Speech Stenger

SAL

COMMUNICATIONS AND MONITORING

Talk Forward: Permits the tester to speak through the examiner microphone into the selected transducer

Talk Back: Allows the examiner to listen to comments from the patient in the testing booth

Monitor: The monitor headset or monitor speaker built into the instrument housing may be used by the examiner to listen to Channel 1, Channel 2, Aux intercom, and/or Talk Back signals

Aux Intercom: The built-in Auxiliary Intercom and assistant headset allows the examiner to speak directly to an assistant and allows the assistant to hear what is being presented to the patient

POWER

Power Consumption: 90 Watts

Voltage & Amperage: 100-240, 2.5-1.25 A

Frequency: 50 Hz and 60 Hz

ENVIRONMENTAL

Temperature: +59° F (15° C) to +95° F (35° C)

Storage Temperature: -4° F (-20° C) to +122° F (50° C)

Relative Humidity: 30% to 90% (non-condensing)

Ambient Pressure Range: 98 kPa to 104 kPa

Location: Indoor Use

QUALITY SYSTEM

Manufactured, designed, developed, and marketed under ISO 13485 certified quality systems

COMPLIANCE

Designed, tested, and manufactured to meet the following domestic (USA), Canadian, European and International Standards:

- ANSI S3.6 (2018) Type 1 HFAE, IEC 60645-1 (2017) Type 1 EHF A-E
- UL 60601-1 American Standards for Medical Electrical Equipment
- IEC/EN 60601-1 International Standards for Medical Electrical Equipment
- CSA C22.2 # 601-1-M90
- Medical Device Directive (MDD) to comply with 93/42/EEC

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