

A fixed platform, **portable** Balance Assessment and Training device

NEW
Vibrotactile
Biofeedback



Lightweight, Portable Balance Assessment and Training

Athletes to Older Adults

Lightweight, portable instrumented platform and easy-to-use, easy-to-read, high resolution color touch-screen display, sets-up in minutes to provide patients with a choice of interactive training modes or standardized testing environments.

www.biodes.com/biosway

PORTABLE BioSway

Large Monitor and Versatile Software
Shown with optional adjustable height stand,
printer and printer stand.

BIODEX

www.biodes.com
1-800-224-6339

Int'l 631-924-9000

FEATURES:

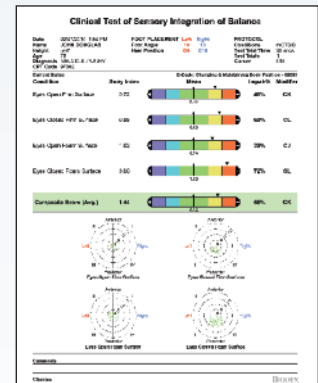
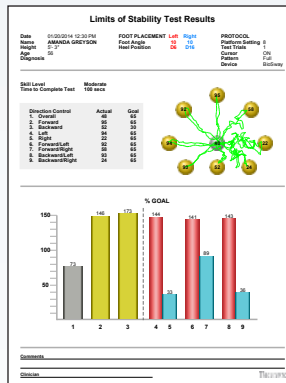
- **Lightweight instrumented platform** – sets-up in minutes to provide static force testing for interactive training modes or standardized testing environments, including the Clinical Test for Sensory Integration of Balance (CTSIB).
- **Fully portable** – BioSway is conveniently portable within a facility for in-resident care. For satellite locations, the optional hard-shell travel case provides added protection when transporting to community-based health fairs or school settings for athletics. The case fits easily into small car trunks.
- **NEW Automated G-code Calculations and Impairment Level Reports** – Increases efficiency and productivity, improves documentation of rehab effectiveness fostering continuity of care, helps with audits, efficiencies and reduces claims denial.
- **Objective Documentation** – Printed color reports track progress and document outcomes – ideal for insurance reimbursement. (Printer sold separately.)
- **NEW Enhanced Sensory Integration Balance Testing Capabilities** – Ability to perform a modified version of a Balance Error Scoring System (BESS) test of postural stability, popular for concussion management. Modify existing or create custom protocols for both the CTSIB and BESS tests.
- **Custom Reporting** – Allows entry of unique comments to test results and assignment of CPT codes.
- **Six Training Modes and Three Testing Protocols** – Standardized testing for true progress assessment. Test results are compared to age-based normative data.
- **Expanded Normative Data** – New healthy populations stored for test comparison of older adults for fall screening and student athletes for concussion management.
- **Audio Biofeedback** – Used for cueing successful target hits.
- **Visual Biofeedback** – Prompts patients into proper balance control. Allows the clinician to easily monitor the patient and acts to motivate the patient during interactive testing/training.
- **Large Display** – Features 12.1" touch-screen display, powered by a Windows CE operating system. Simple to learn and operate, leading the user step-by-step through testing protocols and training modes.



- **Display Stands** – The BioSway includes a tabletop stand (a) that can also be used to wall mount (b) the display. A telescoping Adjustable Stand (c), available separately, is compact and portable with its own travel bag. The display can even attach to compatible display mounts (d).
- **Multipurpose Connectivity** – Allows connection to larger monitors and LCD projectors to enhance interaction for visually impaired patients.
- **Video and Audio Out** – Bolsters connectivity options to other devices.
- **USB Compatibility** – Accommodates external keyboard, a mouse, printing devices for remote operation and USB memory devices for data transfer and software upgrades.
- **NEW Patient Data Collection Software Utility** (complimentary download) – Facilitates download and transfer of patient data allowing for unlimited storage capacity, reporting or exporting as a .csv file and import into Excel to run statistical analysis for normative data generation.
- **NEW VibroTactile™ System** – In addition to audio and visual biofeedback, vibrotactile cueing provides a third sense to postural sway feedback. Using wireless technology, the belt responds with a vibrating sensation when the patient sways outside the therapist-set parameters.

OBJECTIVE DOCUMENTATION - Now with G-Code reporting

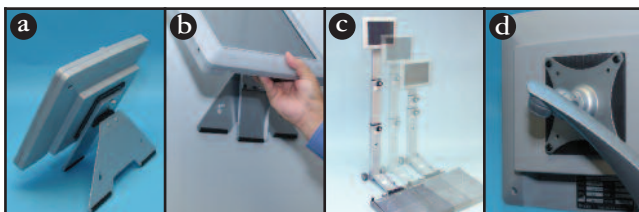
- *Impairment percent with associated modifier code*
- *Functional Limitation G-code categories*
- *Patient Status: (Current and Discharge Status)*



▲ **COLOR REPORTS** - Easy-to-read 8.5" x 11" reports. Comparisons to normative data can be made for the CTSIB and Limits of Stability Tests.



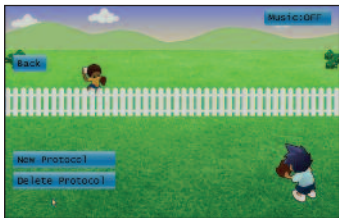
FULLY PORTABLE - BioSway is conveniently portable within a facility for in-resident care. For satellite locations, the optional hard-shell Travel Case provides added protection when transporting to community-based health fairs or school settings for athletics. The case fits easily into small car trunks.



Prove Need. Progress. Outcome – All test results and training sessions can be stored and printed. Comparison to normative data helps communicate need, progress and outcome.



▲ Adjustable stand, printer and printer stand sold separately



▲ **INTERACTIVE CATCH GAME FOR BALANCE TRAINING** – The CATCH game offers various progressive skill levels to promote interaction and help keep patients engaged. CATCH also offers the ability to create a custom protocol geared toward specific training activities.

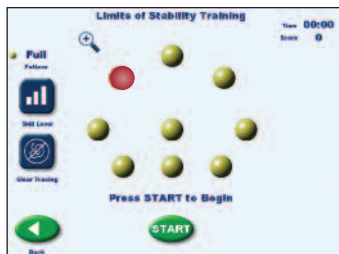
SIX TRAINING MODES



▲ **POSTURAL STABILITY TRAINING** – Emphasize specific movement patterns or strategies by placing markers anywhere on the screen. Score reflects how many times a target is hit.



▲ **MAZE CONTROL TRAINING** – This defined movement pattern encourages proprioception and motor control. Add or subtract sections to vary the challenge.



▲ **LIMITS OF STABILITY TRAINING** – Challenges the patient's balance within their sway envelope.



▲ **RANDOM CONTROL TRAINING** – An undefined movement pattern where the patient is challenged to keep pace with a moving target. Target size and movement speed can be varied to match skill level. Ideal for motor control and vestibular training.



▲ **WEIGHT SHIFT TRAINING** – Patients are challenged to shift and control their center of gravity within two parallel lines, in the medial lateral, anterior posterior and transverse planes of movement. Changing the width of the lines controls the degree of difficulty. Score is kept to track progress.

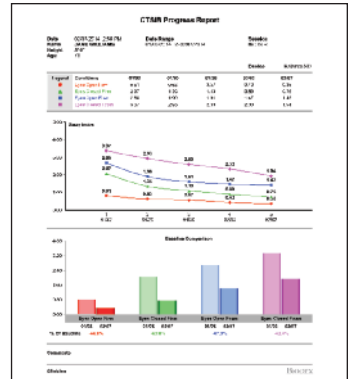


▲ **PERCENT WEIGHT-BEARING TRAINING** – Target zones change color when within % weight bearing targets.

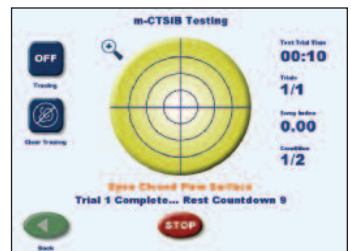
STANDARDIZED TESTING ENVIRONMENTS



Postural Stability, Limits of Stability and Clinical Test of Sensory Integration of Balance (CTSIB) are all included.



▲ **PROGRESS REPORTS** - document change over time and outcomes. All test results and training sessions are output on easy-to-read 8.5" x 11" reports which can be placed into the patient's file.



▲ The CTSIB test helps determine which sensory system (visual, somatosensory, or vestibular) the person relies on to maintain balance.

"The Biodex BioSway has become an important tool in our clinical research for concussions in young athletes. There are many important questions that we hope to answer. The portability and objective data make it a great tool."

Mark V. Paterno PT, MS, MBA, SCS, ATC
Coordinator of Orthopaedic and Sports Physical Therapy
Cincinnati Children's Hospital Medical Center

VERSATILE APPLICATIONS

Who can benefit from the Biodex BioSway?

The applications for the BioSway are extensive; here are just some of the patients who can benefit from this device.

OLDER ADULT



Older adults can be tested for balance deficiencies, and training programs can be established to help them remain mobile or regain their mobility. The portability of the BioSway allows the testing and training to be done either “in-facility” or on location.

Note: **ICD-9 Code V15.88 Personal History of Fall** includes patients identified as “at risk of falling.” For additional codes that apply see www.biodex.com.



FALL RISK

Utilizing the CTSIB capabilities of the BioSway, clinicians can test patients and compare balance test results to normative data.

NEUROREHABILITATION

The clinician utilizes the BioSway to assess balance and stability of those patients suffering from neurological disorders associated with Parkinson’s, Stroke or Peripheral Neuropathy, and to determine a course of treatment. The progressive testing and training modes are applied to treat and re-train balance and gait. Patients are motivated with real-time biofeedback while their progress can be documented and printed for review.

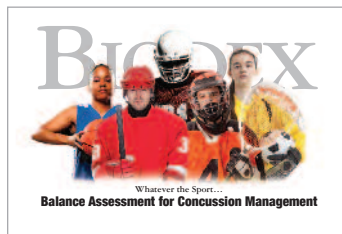
VESTIBULAR PATIENTS

The portable BioSway is an evaluation tool, as well as a rehabilitative device, ideal for patients experiencing vestibular issues. Vestibular therapy includes balance retraining exercises designed to steady a patient while walking or standing through improvements in coordination of muscle responses and organization of sensory information. Coupled with the NEW VibroTactile System patients receive vibrotactile biofeedback resulting in improved postural control – eliminating the need for subjective verbal and hands-on therapist cueing.

POST SURGICAL/AMPUTEE AND POST TRAUMA REHABILITATION

The BioSway is a valuable tool when addressing balance deficiencies in post-surgical Hip, Knee and Ankle patients, as well as Amputee patients. Balance evaluation, retraining, lower extremity strengthening and weight-shift training can speed recovery. The post surgical patients benefit from evolving difficulty of the training modes and the real-time biofeedback. The clinician benefits from ease-of-use, trackable documentation and fast results.

ATHLETES



Biodex Balance Assessment for Concussion Management delivers objective preseason baseline and post-injury balance assessment for athletes. Detailed summary and progress reports track recovery and provide quantitative data to aid clinicians with return-to-play decisions.

Visit www.biodex.com/concussion for details.



CTSIB Indexed Pad (included)– standardizes foot positioning for improved consistency and result comparisons.

SPECIFICATIONS:

- Dimensions:
 - Platform Dimension: 21.25" w x 19" l x 2.56" h (54 x 48 x 7 cm)
 - Weight: 19 lb (8.6 kg)
 - Color Touch-Screen Display Dimension: Viewing Area: 12.1" (30.7 cm) diagonal screen; 9.75" w x 7.25" h (24.8 x 18.4 cm)
 - Angle: Adjustable from vertical back to approximately 45°
- Hard Case Dimension: 23.75" w x 22.75" l x 10.75" h (60 x 58 x 27 cm)
- Total Weight (including case): 44 lb (20 kg)
- User Capacity: 500 lb (227 kg)
- Power: 115V/ 230VAC, 50/60 HZ, 15 amp line
- Certification: ETL listed to UL 60601-1 and CAN/CSA C22.2 No.:601.1-M90. CE conformity to EN 60601-1, EMC compliance to EN 60601-1-2.
- Warranty: one year parts and labor



950-460 BioSway 12.1" LCD with Tabletop Stand and Case
115V/230V 50/60Hz

950-461 BioSway 12.1" LCD with Tabletop Stand
115V/230V 50/60Hz

Includes: Instrumented platform, CTSIB Indexed Pad, 12.1" color touch-screen LCD display with tabletop stand/wall mount bracket, AC adapter for 100-240 V input and two blindfolds.

Resources Included

- **NEW eLearning Tutorials** for increased product utilization.
- **Marketing Support** for Balance Assessment for Concussion Management.
- **Marketing Support** for Peripheral Neuropathy.

Optional

950-462 BioSway Travel Case (Fits 12.1" Display)

950-465 Adjustable Height Stand for 12.1" Display

950-430 VibroTactile™ System

Includes: Transmitter, two tactile belts (S/M and L/XL), each with wireless receiver and connection cables.

950-464 HP Office Jet Printer (compact portable printer)

950-467 HP InkJet Printer (full size color printer)

950-466 Printer Stand

FREE CERTIFICATION

Purchase a Biodex Balance System SD or portable BioSway and receive a single enrollment to become a Certified Concussion Health Provider at no cost (\$350 value).



www.biodex.com/biosway

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