

"The Clinical Advantage"™

**NEW** BioSway™

A fixed platform, **portable** balance assessment and training device



## Lightweight, Portable Balance Assessment and Training

Athletes to Older Adults

Instrumented platform with easy-to-read  
15.6" touchscreen display sets up in minutes  
to perform interactive training and standardized testing.

[www.biodes.com/biosway](http://www.biodes.com/biosway)



**PORTABLE** BioSway featuring large monitor, intuitive software and **NEW** games for balance. Shown with optional adjustable height stand, printer and printer stand.

**BIODEX**

[www.biodes.com](http://www.biodes.com)  
**1-800-224-6339**

Int'l 631-924-9000

## FEATURES:



15.6" touchscreen display

- **Fall Risk Screening Test** – Standardized protocol that compares balance test results to age-dependent normative data.
- **Concussion Management Protocol** – For preseason baseline testing and post-injury return-to-play management. Compare to age-dependent normative data using modified Clinical Test for Sensory Integration of Balance (mCTSIB).
- **Objective Documentation** – Printed color reports prove need, track progress and document outcomes – ideal for insurance reimbursement. (Printer sold separately.)
- **Custom Reporting** – Allows entry of unique comments to test results and assignment of CPT codes.
- **Marketing Support** – Biodex provides marketing materials to help you build a concussion program around balance assessment. Attract athletes, parents, community sports teams, school coaches and athletic directors, as well as referring pediatricians.
- **Vibrotactile Feedback** – Enhanced biofeedback for Biodex balance technology. *Learn more about the VibroTactile System, [www.biodex.com/vibrotactile](http://www.biodex.com/vibrotactile).*
- **NEW Games for Balance** – Single- and dual-task, and high-repetition balance training games enhance patient engagement and drive better outcomes.
- **Advanced Software and Large Display** – Intuitive navigation, 15.6" touchscreen display for enhanced user experience. Accommodates external keyboard and mouse.
- **Audio/Visual Biofeedback** – Motivates patient by prompting proper balance control in real-time. Allows clinician to easily monitor patient during interactive testing/training.
- **Normative Data** – Healthy populations stored for test comparison of older adults for fall screening and student athletes for concussion management.



- **Microsoft SQL Database** – Allows clinician to easily store and retrieve patient data, multiple tests per patient. Export to Excel® for reporting and analytics.
- **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** – Conveniently portable within a facility for in-resident care. For satellite locations, the 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.
- **Multipurpose Connectivity** – Allows connection to larger monitors and projectors to enhance interaction for visually impaired patients.
- **Display Stands** – The tabletop stand can also be used to wall mount the display. The display can even attach to compatible display mounts. A telescoping adjustable stand, available separately, is compact and portable with its own travel bag.



Adjustable stand, printer and printer stand sold separately

## Who can benefit from the BioSway?

### Athletes



Support athletic performance by demonstrating functional deficits using the BioSway. Objective measures of the athlete can be trained, and then easily reevaluated and assessed to quantify improvement.

### Concussion Management

Consistent with NCAA and NATA Guidelines, 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.

### Older Adult



Testing older adults for balance deficiencies on the BioSway will help you establish training programs to maintain mobility, develop muscle tone and improve balance in both clinical and wellness environments. The portability of the BioSway allows testing and training on location – perfect for health fairs or off-site presentations.

### Fall Risk

Using the Fall Risk Screening capabilities, identify a person at risk to fall in just two minutes by comparing their balance test results to age-dependent normative data.

### Neurorehabilitation

Use 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 can be applied to treat and retrain balance and gait. Patients are motivated with real-time biofeedback while their progress can be documented and printed for review.

### Vestibular Disorders

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 VibroTactile System, patients receive 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.

## NEW Included with BioSway

### Games for Balance

Games are increasingly used in rehab therapy to motivate patients of all ages, and drive better outcomes. Gaming options for the BioSway help encourage postural improvements. Choose from single- and dual-task gaming options.

#### SINGLE TASK = BALANCE CONTROL



Catch Game

#### DUAL TASK = COGNITIVE + MOTOR



Ball Maze



Word Search

### Recovery Rapids

Deliver high-repetition balance training with Recovery Rapids – a river rapids adventure game from Games That Move You. Power a boat downstream, steer around bends, collect items and avoid obstacles, all through weight-shifting on the BioSway platform.



Co-developed by patient partners and neurorehabilitation researchers.



## Balance Technology That Travels



The BioSway is a portable balance system ideal for clinicians on the go. The lightweight instrumented platform with large touchscreen display is easy to transport and sets up in minutes to provide static balance testing and training from clinic to courtside.

Similar to our Balance System SD, this fixed-platform assessment and training device is a powerful rehabilitation tool that can be used across a broad scope of populations for general orthopedic and neuromuscular rehabilitation, senior wellness, and athletic conditioning.

Choose from interactive training modes or standardized testing environments, including the Clinical Test of Sensory Integration of Balance (CTSIB).

*Easy transport and setup makes the BioSway a vital tool for clinicians and trainers on the go.*

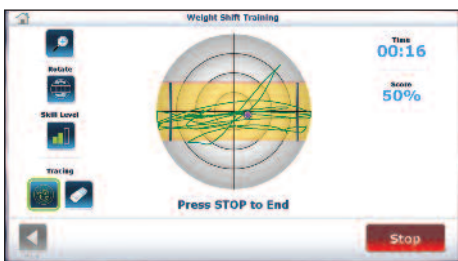
## PEER PERSPECTIVE



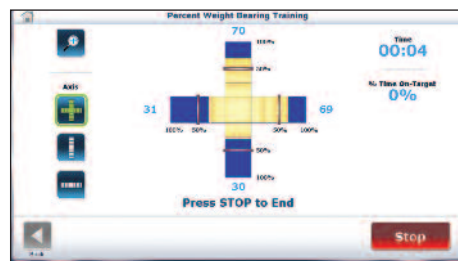
“The Biodex BioSway has become an important tool in our clinical research for concussions in young athletes. There are many important questions that we hope to answer. The portability and objective data make it a great tool.”

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

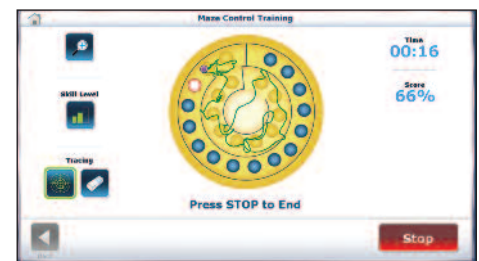
## Training Modes:



**WEIGHT SHIFT** – 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.

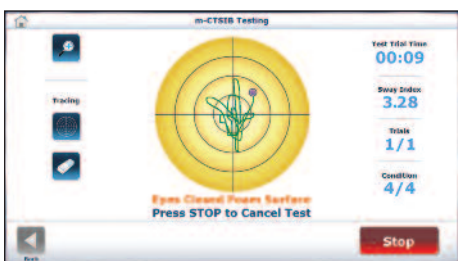


**PERCENT WEIGHT BEARING** – Provides real-time feedback on a patient's foot, ankle, knee, hip, body side, and such. In this mode, targets can be set that encourage patients to focus on goals in anterior, posterior, medial, and lateral movements.

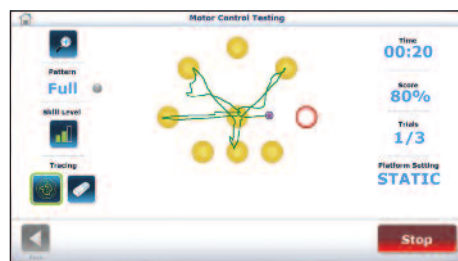


**MAZE CONTROL** – This defined movement pattern encourages proprioception and motor control. Various skill levels challenge a wide variety of patients.

## Testing Modes:



**SENSORY INTEGRATION** – Includes the mCTSIB test, the BESS test and the ability to create custom sensory integration and balance tests.



**MOTOR CONTROL** — Shift weight to move the cursor from center – to a blinking target – and back to center quickly with as little deviation as possible.



**LIMITS OF STABILITY** – Determines how far a patient can sway with no preset distance required. The angle of sway is a predetermined standard.

*All-In-One Flat Panel PC 15.6" Color Touchscreen, Windows Operating System, USB and Speakers.*



*Auxiliary Serial and USB Printer Ports*

*Supports USB keyboard in all screens for entering text and numerics.*

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

*Adjustable stand, printer and printer stand sold separately*

*Features static balance platform*



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

*Wireless printer connection also available.*

## STANDARDIZED TESTING ENVIRONMENTS



Postural Stability, Limits of Stability, Bilateral Comparison, Motor Control, Fall Risk and Clinical Test of Sensory Integration of Balance (CTSIB) are all included.

### SPECIFICATIONS:

- Dimensions:  
Platform Dimension: 21.25" w x 19" l x 2.56" h (54 x 48 x 7 cm)
- All-In-One Flat Panel Display: 15.6" Color Touchscreen, Windows Operating System and Speakers. Video/Audio Out: Bolsters connectivity options to other devices, enabling remote operation for data transfer and software upgrades.
- Hard Case Dimension: 23.75" w x 22.75" l x 10.75" h (60 x 58 x 27 cm)
- User Capacity: 500 lb (227 kg)
- Power: 115V/ 230VAC, 50/60 HZ, 15 amp line
- Weight: 19 lb (8.6 kg)
- Total Weight (including case): 44 lb (20 kg)
- 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 15.6" Display with Tabletop Stand and Case, 115/230 VAC 50/60 Hz  
*Includes: Instrumented platform, CTSIB Indexed Pad, tabletop stand/wall mount bracket, AC adapter for 100/240 VAC input, and two blindfolds.*

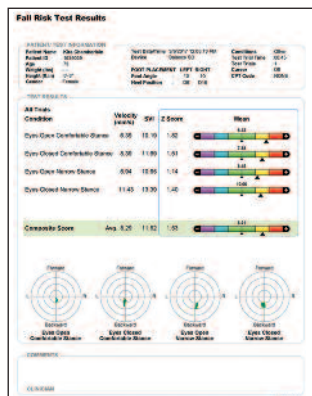
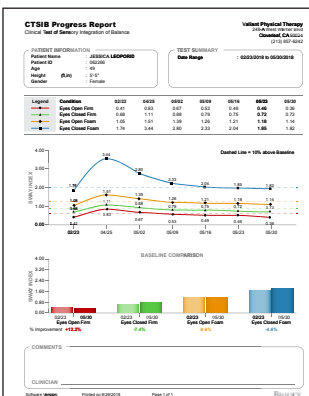
### Resources Included

- **Marketing Support** for Balance Assessment for Concussion Management.

### Optional

- 950-430** VibroTactile™ System  
*Includes: Transmitter, two tactile belts (S/M and L/XL), each with wireless receiver and connection cables.*
- 950-465** Adjustable Height Stand for 15.6" Display
- 950-464** HP Office Jet Printer (compact portable printer)
- 950-467** HP InkJet Printer (full size color printer)
- 950-466** Printer Stand

## Objective Documentation



**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.

Sample reports available. [www.biodex.com/biosway](http://www.biodex.com/biosway)

**BIODEX**



[www.biodex.com/biosway](http://www.biodex.com/biosway)

**BIODEX**  
Biodex Medical Systems, Inc.

20 Ramsey Road, Shirley, New York, 11967-4704, Tel: 800-224-6339 (Int'l 631-924-9000), Fax: 631-924-9241, Email: [info@biodex.com](mailto:info@biodex.com), [www.biodex.com](http://www.biodex.com)

