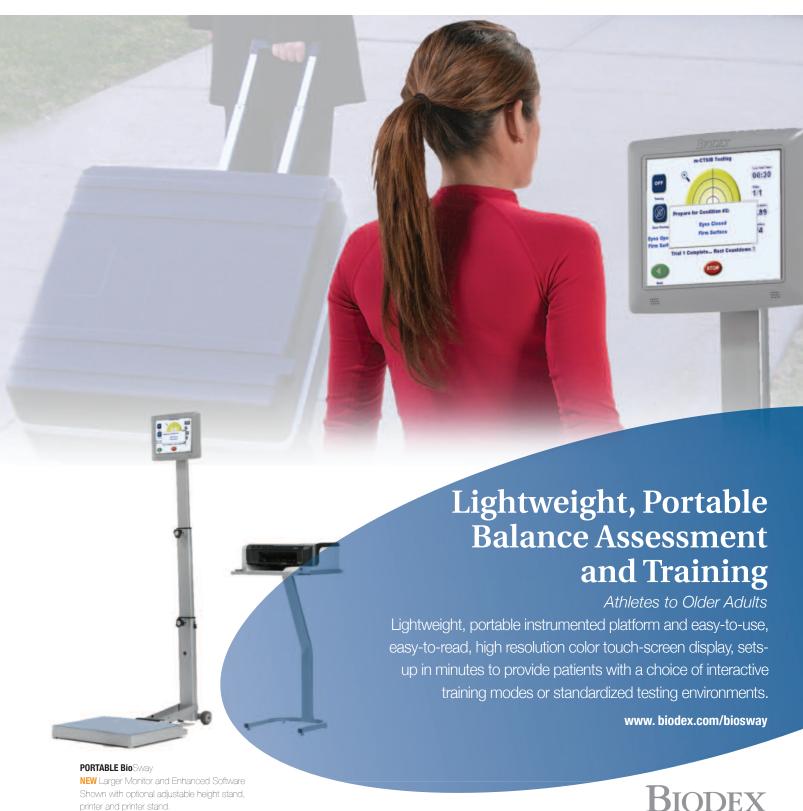
# **NEW Bio**Sway

A fixed platform, Portable Balance Assessment and Training device.



BIODEX
www.biodex.com
1-800-224-6339

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#### **NEW FEATURES INCLUDE**

#### **NEW Larger Display**

The new 12.1" display is approximately 50% larger than the previous display and is powered by a Windows CE operating system. Windows CE offers greater processing power for enhanced software, graphic, audio and internet capabilities.



#### **NEW Expanded Connectivity**

The new display provides the ability to connect to an external computer monitor, including larger monitors and LCD projectors. This enhances interaction for visually impaired patients.

#### **NEW USB Compatibility**

Added USB ports now offer the ability to accommodate a USB keyboard, a mouse and printing devices for remote operation. The added USB ports also allow for data transfer and software upgrades via USB memory devices.

#### **NEW Ethernet Capability**

New Ethernet capability allows for a direct network connection.

#### **NEW Upgraded Software**

The software upgrade features a more intuitive user interface with a new look and feel.

#### **NEW 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.

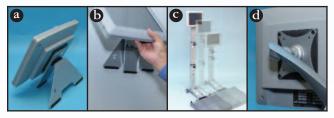
#### **NEW Video and Audio out**

Added video and audio out bolsters connectivity options to other devices.

#### **NEW Optional Audio Tone**

An added audio tone option offers audio biofeedback for queuing successful target hits.

#### **NEW 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 new display can even attach to compatible display mounts (d).

# Portable Balance Assessment and Training

#### **FEATURES**

• The 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 including the Clinical Test for Sensory Integration of Balance (CTSIB).



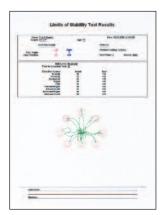


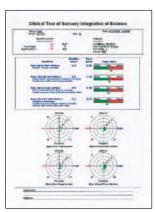
- Fully Portable BioSway is conveniently portable within a facility for in-resident care. For satellite locations, the optional hard-shell Travel Case provides added protection when transporting to community-based health fairs or school settings for athletics. The case fits easily into small car trunks.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

Is simple to learn and operate, leading the user step-by-step through testing and interactive training protocols.



- **Immediate Biofeedback** This allows the clinician to easily monitor the patient and acts to motivate the patient during interactive testing/training.
- **Need. Progress. Outcome.** All test results and training sessions can be stored and printed. Comparison to normative data helps to communicate need, progress and outcome.





▲ 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.

For a detailed view of the CTSIB report, click in online at www.biodex.com/biosway

Adjustable stand, printer and printer stand sold separately



▲ PROGRESS REPORT - graphs overall stability scores for each test date.



▲ NEW CATCH GAME — is an opportunity to work on balance skills in a game-like setting and provides standardized training protocols, similar to traditional applications (included).

#### **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.



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



#### **▲ 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.

"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."



#### **▲ MAZE CONTROL TRAINING**

 This defined movement pattern encourages proprioception and motor control. Add or subtract sections to vary the challenge.



# ▲ 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.



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

#### STANDARDIZED TESTING ENVIRONMENTS



Postural Stability, Limits of Stability and Clinical Test for Sensory Integration of Balance are all included.

# CTSIB - Clinical Test for Sensory Integration of Balance.

The Clinical Test for Sensory Integration of Balance (CTSIB) is a more complex sensory strategy balance test. It is administered by:

- 1. manipulating the support surface (ie, firm vs compliant),
- 2. visual conditions (ie, eyes open,eyes closed),
- postural system sway
  reference by using the
  computerized sway platform,
  while an individual is asked
  to maintain their standing
  balance.



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



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

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# 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.

#### **SENIORS**



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.

## NEUROLOGICAL / PARKINSON'S AND STROKE PATIENTS

The clinician can safely assess balance and stability to treat and *re-train* balance and gait skills through progressive testing and training modes. Patients are motivated with real-time biofeedback while their progress can be documented and printed for review.

#### **VESTIBULAR PATIENTS**

The Clinical Test for Sensory Integration of Balance (CTSIB) test helps to differentiate which sensory system (visual, somatosensory, or vestibular) the patient relies on to maintain balance. The BioSway allows the clinician to make such evaluations and begin to accurately address deficiencies.

## 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**



Play It S.A.F.E., our concussion management program, starts with preseason baseline testing using objective neuro-physical balance testing to compliment

the neuro-cognitive testing tool of your choice. Athletes of all levels can test and train to improve proprioception and avoid injury or re-injury. Using the BioSway as part of a concussion management program helps answer the question "can this athlete return to play?" Play It S.A.F.E. with Biodex.

Visit www.biodex.com/concussion for details.



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

#### SPECIFICATIONS:

- Patient Weight Capacity: 500 lb (227 kg)
- Power: 115V/ 230VAC, 50/60 HZ, 15 amp line
- Dimensions:

Platform Dimension: 21.25" w x 19.00" 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)
- 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.

#### **Optional**

950-462 BioSway Travel Case (Fits 12.1" Display)950-465 Adjustable Height Stand for 12.1" Display

950-446 Play It S.A.F.E.® Concussion Management Program

950-333 HP Office Jet Printer
(Compact portable printer)

**086-339** HP InkJet Printer

(full size color printer)

950-466 Printer Stand

## www.biodex.com/biosway

