

"The Clinical Advantage"™

Balance System SD

A simple, efficient and versatile balance testing and training tool.



Balance Assessment & Conditioning

Athletes to Older Adults

The Balance System SD will improve balance, increase agility, and develop muscle tone, with the broadest range of treatment options.

www.biodex.com/balance

The **Balance System SD** includes enhanced features that make the already most popular balance system even better.

BIODEX

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

Int'l 631-924-9000

BALANCE SYSTEM SD™

FEATURES INCLUDE



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.

Expanded Connectivity

New display allows connection to an external computer monitor, including larger monitors and LCD projectors - to enhance interaction for visibility impaired patients. Ethernet connection accommodates wired or wireless printing support.

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.

MORE Normative Data

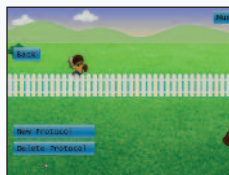
In addition to the normative data for older adults, system now includes a population of student athletes for concussion management.

Upgraded Software

More intuitive experience including assignment of CPT codes and unique comments to test results, improved report formats and support in all screens for entering data using USB keyboard.

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.



Video and Audio out

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

Optional Audio Tone

An added audio tone offers audio biofeedback for cueing successful target hits.

Optional Patient Data Collection Software

Allows easy download of patient data via USB flash drive. All data is stored in folders for each patient for archiving, reporting or exporting as a CSV file.

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STANDARD FEATURES

- **Visual Biofeedback** - real-time biofeedback prompts patients into proper postural and balance control
- **Six Training Modes and Five Testing Protocols**
– for extreme versatility and standardized testing
- **Standardized Fall Screening and Athlete Knee Injury Screening Tests** – simple, quick and accurate. Test results are compared to age-dependent normative data to help identify fall candidates and athletes predisposed to knee injury.
- **Twelve Levels of Platform Control as well as Static Force settings** – allows testing, training and rehabilitation programs for diverse populations
- **Balance Training** – includes proprioception and stabilization exercise, range of motion and weight shift exercises
- **Objective Documentation** – printed color reports track progress and document outcomes – ideal for insurance reimbursement
- **Unlimited Patient Data Storage** – added convenience of USB connectivity now allows for unlimited data storage using USB memory devices
- **Locking Surface** – ensures safe “on and off” patient movement
- **Adjustable Support Handle** – locks in place for safety or swings away for an unobstructed open environment allowing a variety of training activities
- **Mobility** – transport wheels allow easy relocation between the clinic and community-based fall screening programs and health fairs
- **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.





The Biodex Balanced Approach

- FALL RISK SCREENING AND CONDITIONING
- SPORTS MEDICINE
- CONCUSSION MANAGEMENT
- NEUROREHABILITATION
- SENIOR REHAB

FIVE STANDARDIZED TESTING ENVIRONMENTS

Fall Risk Screening, Athletic Single-Leg Injury Screening, Dynamic or Static Limits of Stability, Postural Stability and Clinical Test of Sensory Integration of Balance (CTSIB) environments are included.

STANDARDIZED FALL RISK SCREENING TEST PROTOCOL

Biodex Balance System can identify a potential problem in just two minutes. Compares balance test results to age-dependent normative data. Fall Risk Assessment Protocol is consistent with American Geriatrics Guidelines. ICD-9 Code V15.88 Personal History of Fall includes patients identified as "at risk of falling."

ATHLETE KNEE INJURY SCREENING TEST PROTOCOL

Consistent with leading sports medicine programs including Cincinnati Sports Medicine, Cincinnati Children's Hospital and University of Pittsburgh.

CONCUSSION MANAGEMENT PROTOCOL

Preseason baseline testing and post injury return to play management using The Clinical Test for Sensory Integration of Balance (CTSIB).

BROADEN YOUR APPLICATIONS INCREASE YOUR CLINICAL REVENUE

Fall Risk Screening and Conditioning

With the Balance System SD, Biodex includes a comprehensive Fall Risk Screening and Conditioning Program and Protocol to help the clinician begin a Fall Program. This is an excellent tool in the growing field of Fall Prevention. The Biodex Fall Risk Screening & Conditioning Program includes the marketing support to assist with community outreach at senior centers and other events to build awareness and expand patient base.



Sports Medicine



A great resource for any clinic when addressing sports-related injuries and surgical rehabilitation. Help athletes perform better by demonstrating functional deficits. The Biodex Balance System documents weakness and challenges patients to improve. The various test modes evaluate the athlete in a static or dynamic environment, then generates objective documentation of the results. Reports include standard deviations of target performance, the percentage of time an athlete stays in a particular quadrant and then compares performance to normative data, built into the system. This

allows the objective measures of the athlete to be trained, and then easily reevaluated and assessed to quantify improvement.

Senior Rehab

The Balance System SD is part of the Balance & Mobility product series for addressing age-related diseases. Tackling the needs of the older adult requires understanding of the complex physiology of this population segment. The Balance System SD increases mobility, addresses fall risk, improves balance, develops muscle tone and increases agility. Many centers routinely balance-screen all elderly admitted for any rehabilitation because the elderly suffer degradation of balance just by convalescing in a hospital bed for a few days. Biodex works with leading rehabilitation centers around the country to increase awareness as well as provide the tools necessary to address these particular challenges.

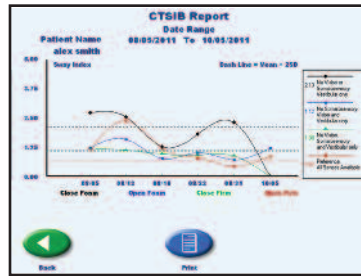


ATIONS ICAL VALUE

MEETING MULTIPLE CLINICAL NEEDS WITH A SINGLE TOOL

Concussion Management

The Biodex Concussion Management Program is used by high school, college and professional sports teams to unravel the mystery of concussion and to bring together cognitive and functional objective assessments. The program uses accepted tools and methods for a single-source concussion management program.



In the U.S. over 300,000 sports-related concussions occur annually and the likelihood of suffering a concussion, while playing a contact sport, is growing. The Balance System SD is a component of the Biodex Concussion Management Program to add vestibular assessment for an integrated approach. Athletic Directors and sports teams at all levels look to this technology to provide them objective data to make safe decisions.

Neurorehabilitation



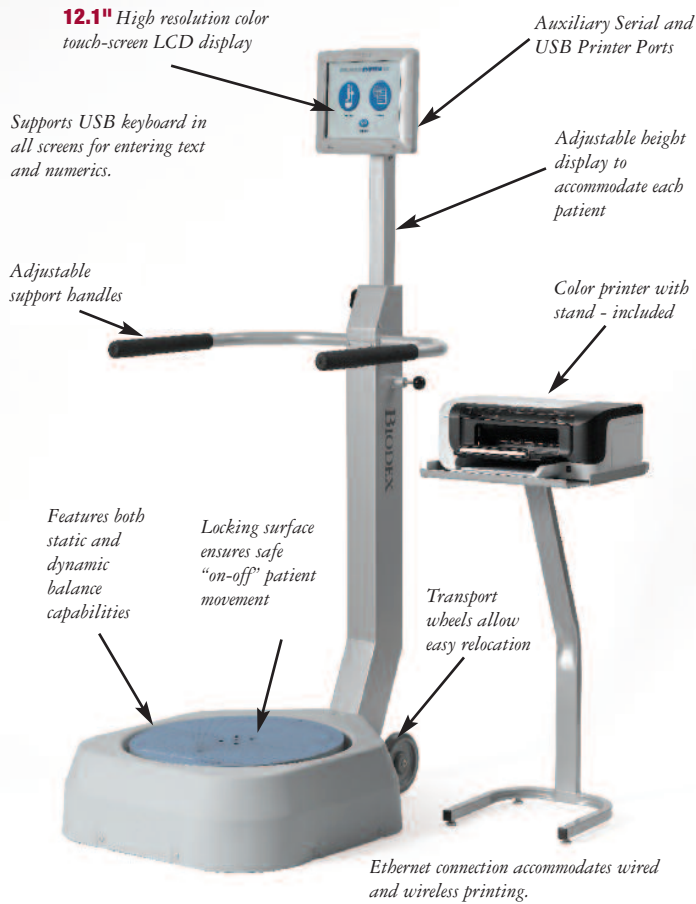
Referral of Parkinson's disease patients to both inpatient and outpatient rehabilitation facilities typically follows a traumatic fall. The training exercises of the Balance System SD are geared to improve strength, range of motion, gait and balance. In practice, the Balance System can capture, quantify and document a patient's relative tendency to overcompensate to one side or the other. This information can often determine a true course of treatment.



Balance Testing, Training, Documentation
UTILIZING TOMORROW'S TECHNOLOGY TO IMPROVE TODAY'S OUTCOMES

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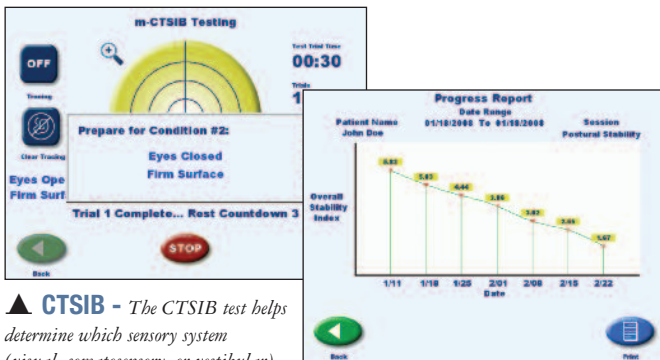
A simple, efficient and versatile balance testing and training tool.



▲ **NEW Safety Step Stool (optional)** – the non-slip surface assures stability and patient safety.



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



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

▲ **PROGRESS REPORT SCREEN**
Graphs overall stability scores for each test date. Recall patients from the database to repeat tests or rehab sessions. Prior foot position is displayed for standardization.

SIX INTERACTIVE TRAINING MODES: STATIC AND DYNAMIC



▲ **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. Progressively increase sway envelope over time.



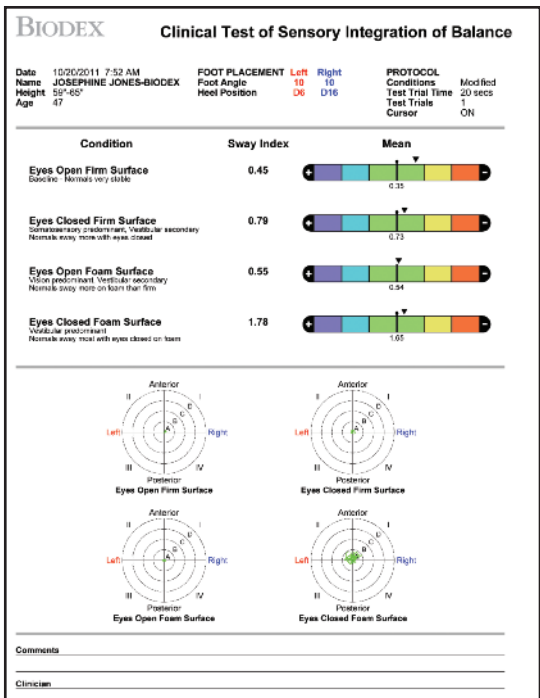
▲ **RANDOM CONTROL TRAINING** – An undefined movement pattern where the patient is challenged to keep pace with a moving target. Target size and movement speed can be varied to match skill level. Ideal for motor control and vestibular training.



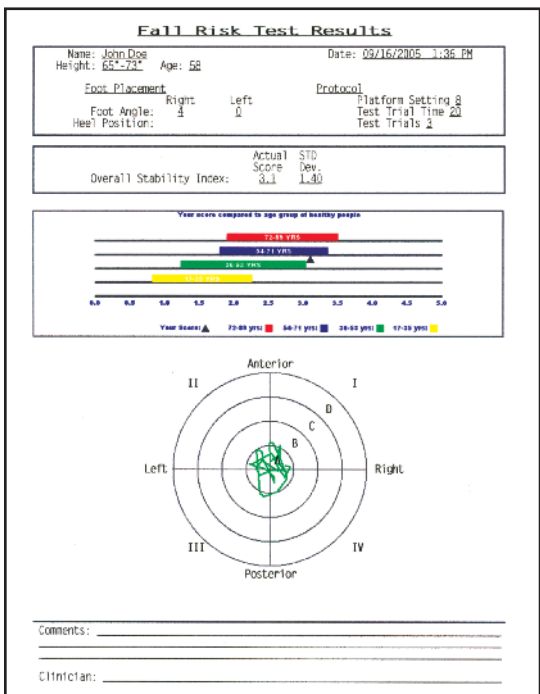
▲ **WEIGHT SHIFT TRAINING** - Patients are challenged to shift and control their center of gravity within two parallel lines, in the medial lateral, anterior posterior and transverse planes of movement. Changing the width of the lines controls the degree of difficulty. Score is kept to track progress.



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



▲ Utilizing the CTSIB capabilities clinicians can test patients and compare results to normative data.



▲ All test results and training sessions are documented on easy-to-read 8.5" x 11" reports

What they are saying in the field...

"...from geriatric to professional athlete"

"I have used the Biodex Balance System for two years with a wide variety of patients ranging from geriatrics to professional

"It is a great resource to have in the clinic..."

athletes. It is a great resource to have in the clinic when dealing with hip, knee, and ankle dysfunction patients, and is especially beneficial with the athletic population.

Lance Kelly MPT, ATC
 Hughston Rehabilitation
 Hughston Clinic, P.C.
 Columbus, GA

Parkinson's Disease Patients

"I've had good success with my Biodex Balance System. I've been using it with patients that have Parkinson's Disease and balance has improved in 60% of the cases.

I put patients on the Balance System prior to using any other intervention (including therapeutic exercises, transfer training and gait training.) The patients perform both LOS and dynamic training during each session. Sessions are scheduled for the same time each visit to account for medication schedules.

"I put patients on the Balance System prior to any other intervention..."

The objective results provided by the Balance System encourages patients by providing feedback they can easily understand. Even more important, these patients are noticing significant improvement in functional balance at home. I would certainly recommend this system to other clinics whose clientele suffer from Parkinson's Disease."

Trevor Meyerowitz, PT
 Trevor Meyerowitz Physical Therapy
 Boca Raton, FL

SPECIFICATIONS:

- Dimensions:
 Base: 30" w x 44" depth x 8" h (76 x 112 x 20 cm)
 Platform: 21.5" diameter (55 cm)
- Color Touch-Screen Display:
 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°
- Display Height: Adjustable from 53" to 68" h above platform (135 x 173 cm); 76" h (193 cm) maximum from floor.
- Stability Levels: 12 dynamic levels, plus locked for static measurements
- Platform Tilt: 20° from horizontal in all directions
- Support Rails: Adjustable from 25" to 36.5" above platform (64 to 93 cm). Rails can swing away from platform when not in use.
- Printer: HP DeskJet
- Printer Stand: 24" x 24" (61 x 61 cm)
- Patient Capacity: 400 lb (136 kg)
- Weight: 196 lb (89 kg)
- Power: 115 VAC, 50/60 Hz, 15 amp line or 230 VAC, 50/60 Hz, 15 amp line
- Power Rating: 350 watts
- 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: Two-years parts; one-year labor



950-440 Balance System SD,
 12.1" Display,
 115 VAC
 Includes printer, printer stand and
 CTSIB Indexed Pad
 Export models available.

- Optional**
- 950-410 Software, Patient Data Collection, v1.4
 For Win CE 12" Display with USB and Serial Interface
 - 950-446 Concussion Management Software
 - 950-306 Step Stool, Balance System SD

ATTENTION Existing Balance System SD Customers:
 Display and Software Upgrades are available.
 Contact Biodex Customer Service for details.



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Biodex Medical Systems, Inc.

20 Ramsey Road, Shirley, New York, 11967-4704, Tel: 800-224-6339 (Int'l 631-924-9000), Fax: 631-924-9338, Email: info@biodex.com, www.biodex.com