

"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.biodes.com/balance

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

BIODEX

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

Int'l 631-924-9000

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 external devices.

NEW Optional Audio Tone

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

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 most popular Balance System ...now even better

The Biodex Balance System SD has been designed to meet the needs of everyone looking to improve balance, increase agility, develop muscle tone and treat a wide variety of pathologies. It is also an excellent tool in the growing field of Fall Prevention. Each Biodex Balance System is shipped with a comprehensive Fall Risk Screening and Conditioning Program to help the clinician begin a Fall Prevention Program.



Featuring five test protocols, six training modes and intuitive “touch-screen” operation, the Balance System SD allows testing and training in both static and dynamic formats. Extremely versatile, it is the only system that provides fast, accurate Fall Risk Screening and Conditioning for older adults plus closed-chain, weight-bearing assessment and training for lower extremity patients.

Using this unique device, clinicians can assess neuromuscular control by quantifying the ability to maintain dynamic bilateral and unilateral postural stability on a static or unstable surface.

Use any of five test protocols including 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). The Balance System SD also serves as a valuable training device to enhance kinesthetic abilities that may provide some degree of compensation for impaired proprioceptive reflex mechanisms following injury.

An easy-to-follow touch-screen format makes the system simple to learn and operate, leading the user step-by-step through testing protocols and training modes.

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



NEW 12.1" High resolution color touch-screen LCD display

Auxiliary Serial and USB Printer Ports

Adjustable height display to accommodate each patient

Adjustable support handles

Color printer with stand - included

Features both static and dynamic balance capabilities

Locking surface ensures safe "on-off" patient movement

Transport wheels allow easy relocation



▲ **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.

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.

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.



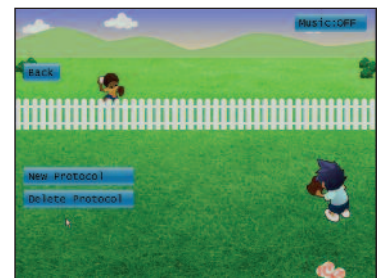
▲ **WEIGHT SHIFT TRAINING** - Patients are challenged to shift and control their center of gravity within two parallel lines, in the medial lateral, anterior posterior and transverse planes of movement. Changing the width of the lines controls the degree of difficulty. Score is kept to track progress.



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

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.



VERSATILE APPLICATIONS

FALL SCREENING AND CONDITIONING PROGRAM:

With the Balance System SD, clinicians can now begin to identify and modify the factors that lead to falls... before the fall. Based on well established science, the Fall Risk Screening & Conditioning Program is a simple combination of balance testing and clinical protocols that include other evaluation and exercise techniques. While challenging and effective, the program is fun and encourages compliance. Older Adults can be tested for balance deficiencies, then trained to improve or restore their mobility. The Balance System SD has proven valuable to Nursing Homes, Senior Living Facilities, Post Surgical Rehabilitation Centers and Private Practice Community Outreach Programs.



SPORTS MEDICINE AND ORTHOPEDIC PATIENTS:

Orthopedic applications include treatment and testing of Joint Replacement, ACL, ankle sprain, fractures and amputee patients – safely and easily. Standardized Testing Environments, like Athletic Single-Leg Injury Screening, can be accomplished easily using the Biodex Balance System SD; other tests can help identify athletes who may be prone to injury before they are hurt.



•Testing

- Preseason baseline
- Joint replacement, ACL, ankle sprain, fractures and amputee status
- Post injury return to activity

•Training

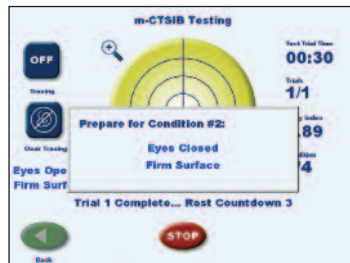
- Proprioception and stabilization exercise
- Range of Motion exercise
- Weight Shift exercise

CONCUSSION MANAGEMENT

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. In addition, the Balance System SD adds vestibular and objective balance assessment, so important in concussion management. Athletes of all levels can test and train in both static and dynamic mode to improve proprioception and avoid injury or re-injury. Using the Balance System SD as part of a concussion management program helps answer the question “can this athlete return to play?”

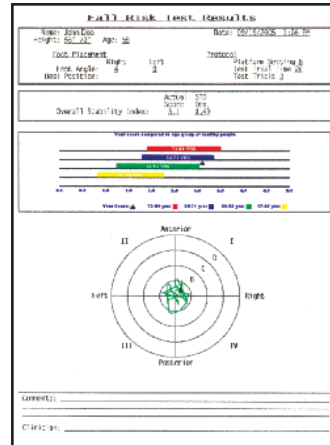


▲ **CTSIB SCREEN:** The CTSIB test helps determine which sensory system (visual, somatosensory, or vestibular) the patient relies on to maintain balance.

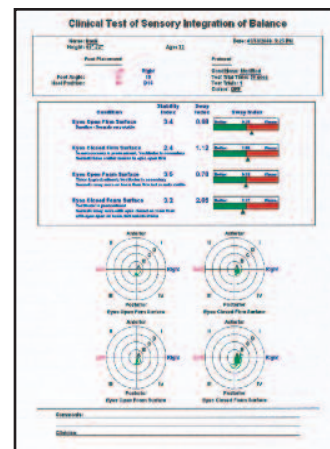


▲ **PROGRESS REPORT:** Graphs overall stability scores for each test date. Recall patients from the database to repeat tests or rehab sessions. Prior foot position is displayed for standardization.

BIODEX BALANCE SYSTEM SD CAN IDENTIFY A POTENTIAL PROBLEM IN JUST TWO MINUTES.



▲ All test results and training sessions are documented on easy-to-read 8.5" x 11" reports which can be placed into the patient's file. Comparisons to normative data can be made for population-specific tests using the Fall Screening and Athlete Single Leg Stability protocols.



▲ Utilizing the CTSIB capabilities clinicians can test patients and compare results to normative data. For a detailed view of the CTSIB report visit us on the web at www.biodex.com/balance

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

950-441 Balance System SD, 12.1" Display, 220 VAC

950-444 Balance System SD, 12.1" Display, 100 VAC

Optional

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

950-306 Step Stool, Balance System SD

Includes printer, printer stand and CTSIB Indexed Pad

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

www.biodex.com/balance

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