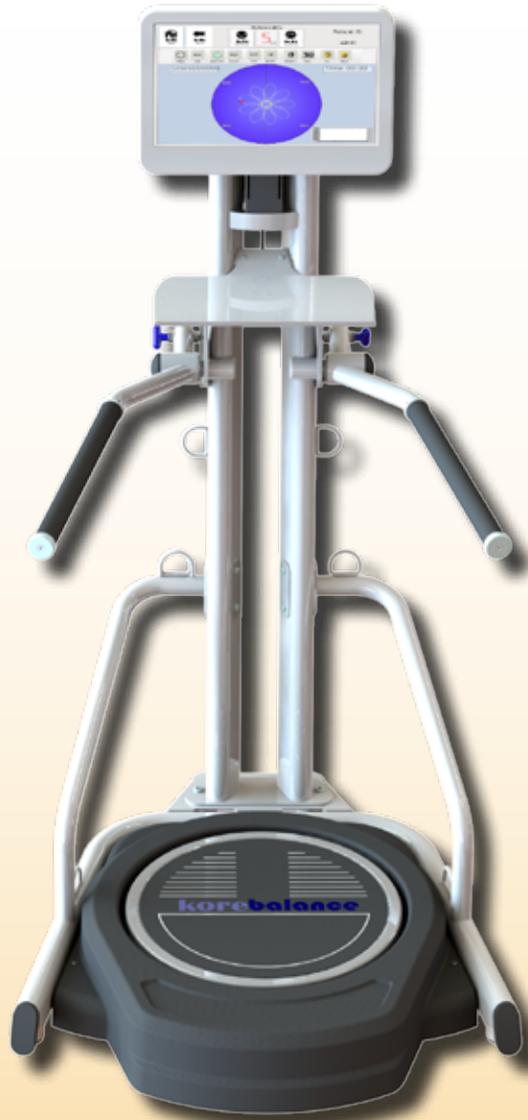




# Balance Assessment and Rehabilitation



**korebalance™**







# Table of Contents

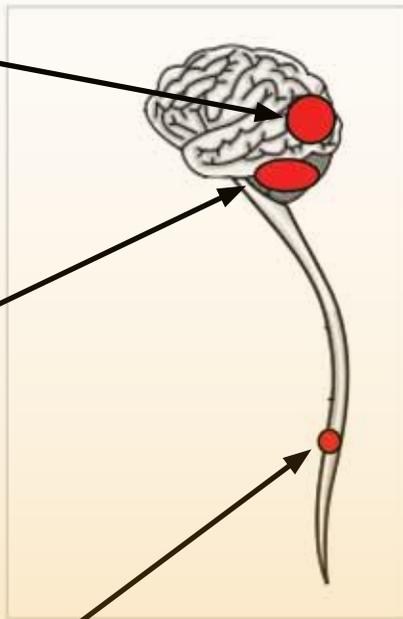
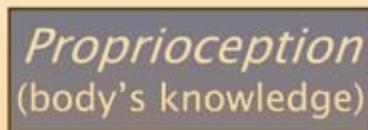
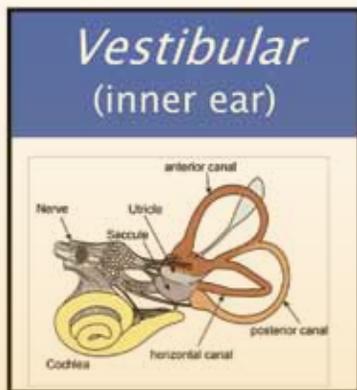
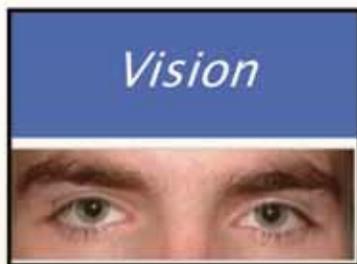
Introduction To Balance .....	1
Korebalance™ Premiere and Korebalance™ - Overview/Features/Testimonials.....	2
Korebalance™ Premiere - Available In Two Models.....	6
Korebalance™ Premiere with 22" Medical Grade Touchscreen/Computer - Specs.....	7
Korebalance™ Premiere with 19" Touchscreen/Computer - Specs.....	8
Korebalance™ - Specs.....	9
Korebalance™ Mobile.....	10
<i>Nautilus</i> ® Concussion Management Program.....	12
Korebalance™ Basic.....	14

# Introduction To Balance

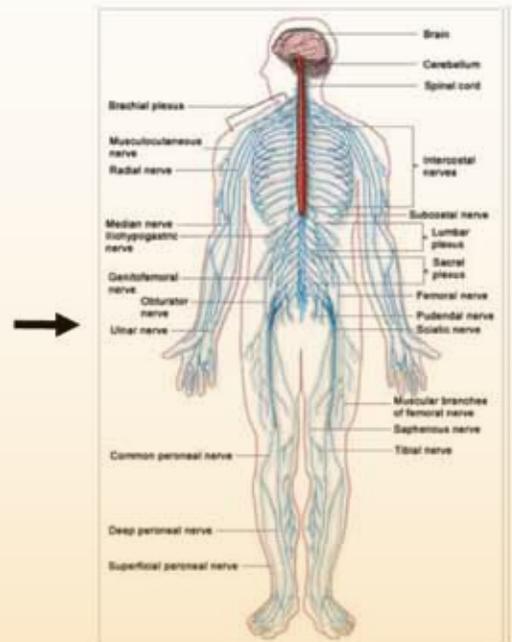
These three systems (vision, vestibular, proprioception) are required to ensure proper balance. Each sends a signal through the central nervous system, which the brain interrupts. The brain must then send the proper signal to the muscles causing contraction.

## What controls your balance?

Peripheral System



Central Nervous System



Muscle Function; balance, stability and coordination



# korebalance™ premiere and korebalance™

A trusted name in orthopedic and neurosensory rehabilitation.

The Korebalance™ Premiere and Korebalance™ are designed for use by medical centers and clinics, medical and PT offices, assisted living facilities, recreation centers, health and fitness clubs, universities and professional sport teams. The Korebalance™ System uses the latest in virtual and interactive technology, offering innovative high-tech balance assessment and training. Backed by over two decades of medical experience, the Korebalance™ systems will provide you and your patients with the best possible documented neurosensory assessment and training.

The software for the Korebalance™ and Korebalance™ Premiere provides balance and vestibular assessment. The units features patent pending variable stability technology. Training programs are incorporated, stimulating the brain and nervous system to improve balance, stability, coordination and posture. Interactive 3D games make training programs fun and captivating, increasing positive feedback and compliance.

## korebalance™ premiere



## korebalance™



### How It Works:

Korebalance™ is the world's first balance training system incorporating VSR training together with cognitive interaction. Korebalance™ exercises visual, vestibular (inner ear) and proprioception (knowing where the body is in space) to find or create new pathways in the brain, improving balance. Korebalance™ is an essential component of any rehabilitation program. It delivers a higher quality of therapy by allowing healthcare professionals to customize the program and adjust difficulty levels and tasks over time.

“Pushing forward the idea of rehabilitation and fall prevention, if you have an awareness of your balance (or proprioception) and you train to keep it at its highest peak, like we do with flexibility, strength and endurance, we’re going to see a reduction in injuries. I think the Korebalance is a wonderful product. Balance equipment utilizing the unstable platform, such as the Korebalance™ machine, really is one of the greatest inventions of the 21st century... We found that by using the unstable platform, we are able to diagnose where [people] are weak and retrain those fibers, and to re-teach the body reflexes necessary for proper balance. The equipment is an invaluable tool for aiding proprioception - the body's ability to know where our extremities are and to keep us balanced. And it allows us to effectively get a person back up to speed faster, ready to go back to full duty.”

Captain Joseph Moore, US Navy, M.D., Medical Director, Miramar Sports Medicine And Reconditioning Team (SMART) Center, Former Commanding Officer of the Medical Treatment Facility aboard the Military Sealift Command (MSC) hospital ship USNS Mercy (T-AH 19).

### **Korebalance™ Premiere and Korebalance™ were designed to aid in the following:**

Post Orthopedic Surgery  
Post Acoustic Neuroma Resection  
Meniere’s disease  
Vertiginous Migraines  
Vestibular Neuronitis  
Presbystasis  
Closed Head Injuries  
Multiple Sclerosis  
Ataxia  
Parkinson’s Disease  
Neuronitis  
Stroke  
Peripheral Neuropathy



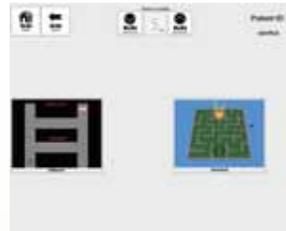
### **Korebalance™ Premiere and Korebalance™ will assist you in achieving the following benefits:**

- Using the body’s balance mechanism to send stimuli through the central nervous system (CNS) to the skeletal muscles
- Real time biofeedback for the peripheral systems
- Re-mapping and retraining neuropathways
- Return of vestibular functionality for mild traumatic brain injuries (TBI)
- Improving the body’s ability to respond to an unstable environment
- Increasing confidence for seniors to react and recover from impending falls
- Improving agility, reaction time & motor control
- Neurosensory training that is challenging, interactive and fun
- Ability to customize software to meet the individual needs of each patient

- **FUN, INTERACTIVE 3-D TRAINING PROGRAMS**
- **UNLIMITED DATA STORAGE AND REPORTS**
- **LEADING EDGE TOUCHSCREEN INTERFACE WITH A CHOICE OF SIZES**
- **COORDINATED FUNCTIONAL USE OF ALL THREE PERIPHERAL SYSTEMS**  
(Vestibular, Vision, and Proprioception)
- **INFINITE STABILITY SETTINGS** The pneumatic pressure system allows an infinite range of settings. Settings can be adjusted from very stable for the senior population to extremely challenging for professional athletes, and everyone in between.

"Post concussion injuries in the athlete/client often cause vestibular disorders - some say up to 90%. Vestibular disorders in the assessment and treatment of post concussed patients/ athletes is often missed with the general screens for balance. More sensitive testing is needed. At Werner Institute, Med-Fit Systems' KOREBALANCE equipment is used daily to initially assess the vestibular and balance systems and to allow us to progressively challenge the patient/athlete. We are believers in this technology and endorse its use."

**Brian Werner, PT, MPT**  
President  
Werner Institute for Balance and Dizziness



*Interactive Games:*

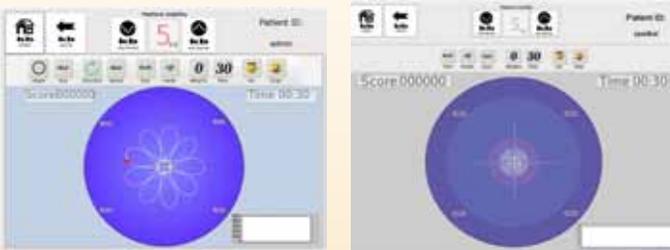
**Hockey (2D)**  
**Neverball (3D, virtual reality)**

Increase user interaction and compliance; make training process fun and captivating.



*Detailed Results Screen:*

Touch the result that the user would like - see the detailed information and graphic display. It can be easily navigated and printed out in color.



**Dynamic Test** offers a moving cursor that the user "follows". Four patterns are offered: Circle, Square, Infinity and Random. Each pattern is available in three dimensions: Small, Medium and Large; five speeds; Clockwise and Counterclockwise directions.

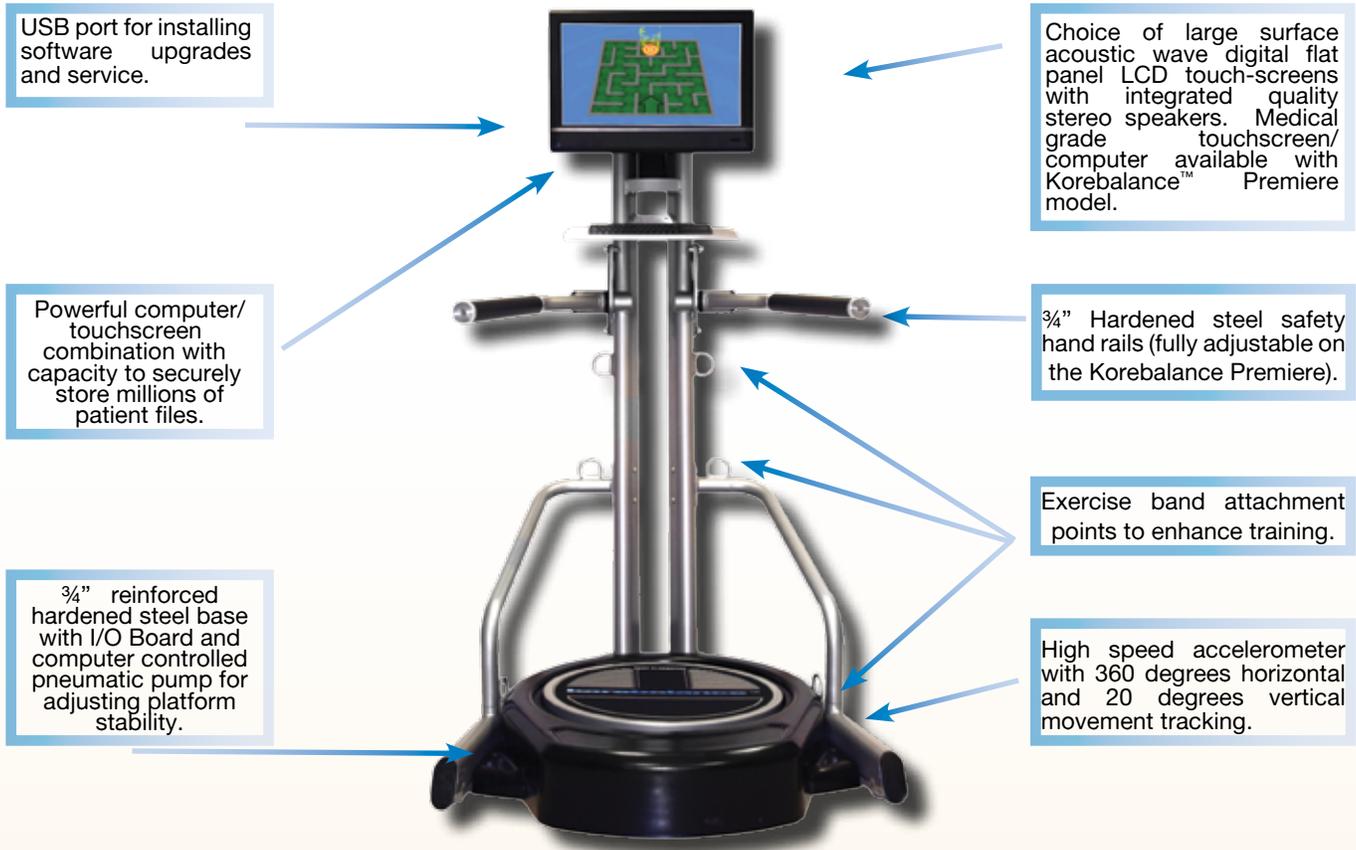
**Static Test** requires standing steady & balancing on the platform, keeping the crosshairs of cursor in the center of the test pattern. The Score indicates the deviation of user's center of gravity from the center of the pattern.

### **Korebalance™ = Exceptional Hardware**

- Large dynamic platform
- Enhanced patented pneumatic system
- Ergonomically designed safety handrails, independently adjustable in the Korebalance™ Premiere model.
- Effortless mobility with integrated wheels
- Anti-slip surface
- Color printer included

## Clinicians get the following benefits from Korebalance™ Premiere and Korebalance™

- ≈ Evaluate the balance and stability using objective neuro-sensory balance assessment in addition to neuro-cognitive testing tools.
- ≈ Objective documentation: patient's balance assessment and training progress are well documented and can be printed for review.
- ≈ Accurate quantitative balance assessment for the patients receiving neuro-sensory rehabilitation.
- ≈ Personalize rehabilitation protocol according to patient's needs.
- ≈ Patient data storage: maintain records to track progress and issue up to 1 million reports.
- ≈ Get patient's satisfaction due to improving life functions and faster rehabilitation progress.

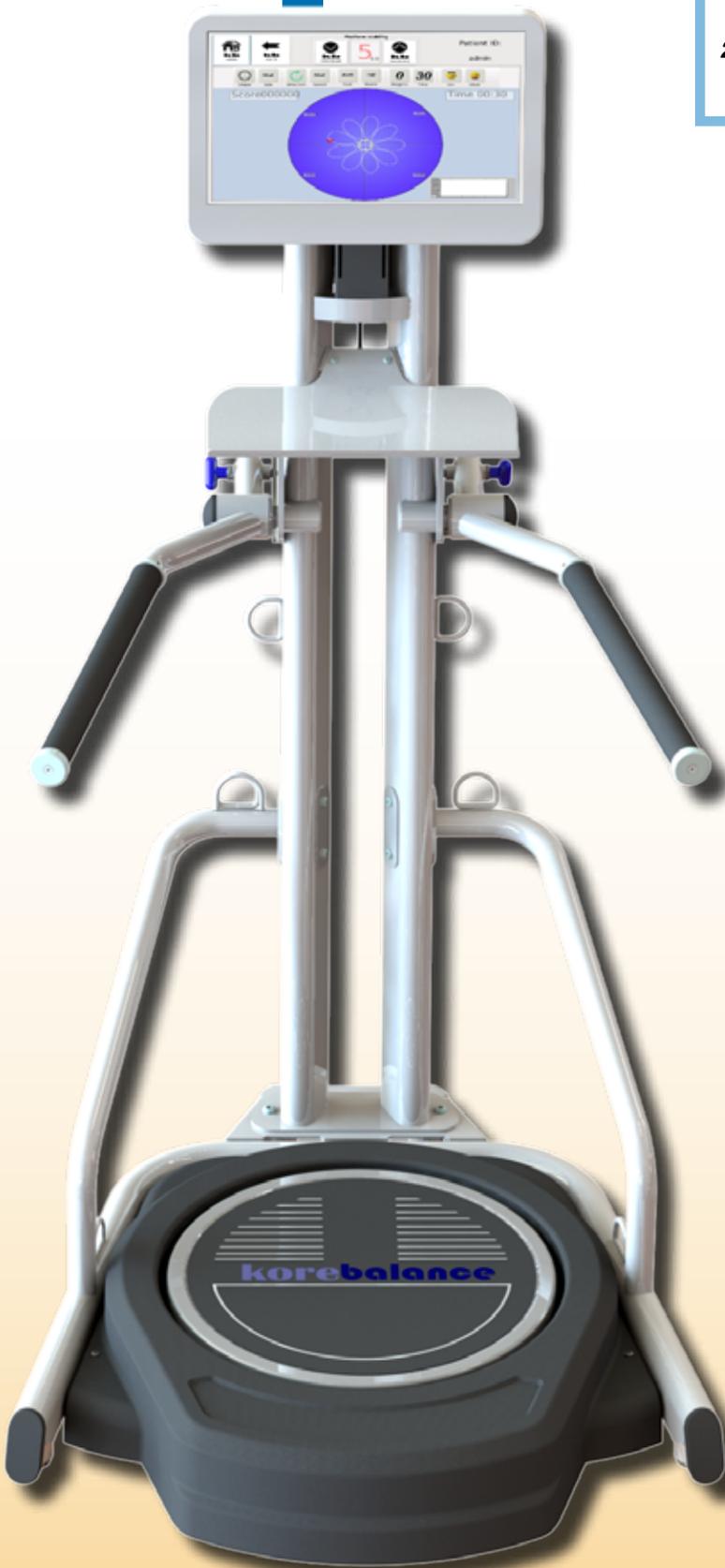


“For many years, I have used Korebalance™ machines in my offices for successful treatment of my patients. I have found it particularly helpful to incorporate these proprioceptive training protocols in treating patients with various balance anomalies. This has improved patients' static and dynamic balance. This training utilizes and improves both ankle and hip strategies effectively. By using guidelines of adjustable pressure under the unstable platform in relation to the patient's height, we have found an improvement in balance with pre vs. post rehabilitation tests for patients with both peripheral and central vestibular deficits, originating from various medical diagnoses. The machines have become an integral part of the balance treatment protocols we've instituted for our patients, and our outcomes certainly are improved by their use. I believe the machines are successful in diminishing fall risk in my patients.”

**Jim Buskirk PT, SCS**  
President/Owner  
Balance Centers of America / Peak Therapeutics

# korebalance™ premiere

Available with  
22" medical grade touchscreen/computer combination  
OR  
19" touchscreen/computer combination



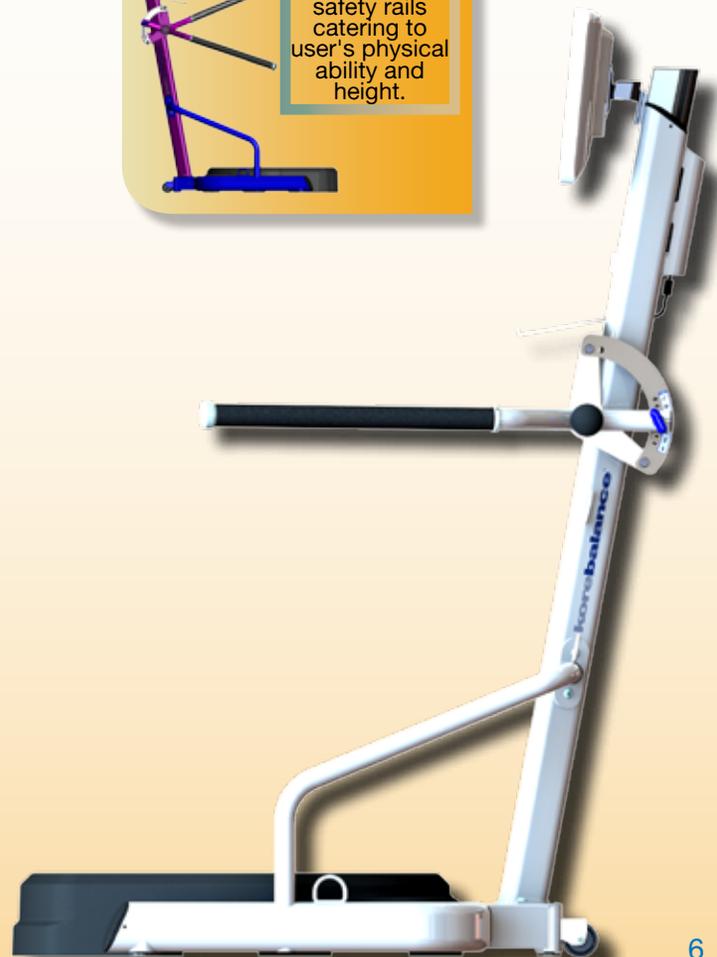
22" medical grade touchscreen/computer combination



19" touchscreen/computer combination



Individually adjustable safety rails catering to user's physical ability and height.



**Korebalance™ Premiere With 22" Medical Grade Touchscreen/Computer Combination**

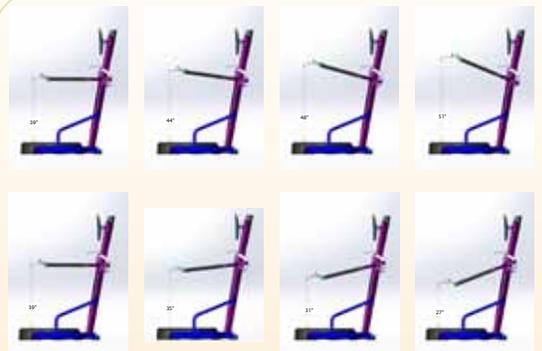
**22" Touchscreen Computer Specs**

- 22" Medical Grade, 16:9 wide screen , 5 wire resistive touch display.
- Resolution: 1920x1028
- Processor: Intel B840 1.9GHz
- Memory: 4GB
- WiFi: Wireless 802.11
- Hard Drive: 250GB HD of file storage
- Video: The Intel® Graphics Media Accelerator 3000HD includes built-in support for full 1080p high-definition video playback
- Audio: Realtek High Definition Audio enables premium Dolby Digital 5.1 surround sound. Two built-in 3.0 watt stereo speakers with two audio jacks for Audio Line Out, and Microphone.
- I/O : 1 x RS232, 4 x USB 2.0 Ports, 1 x RS232/422/485 DVI-I monitor out port Microphone-in & line-out - Enough ports to connect any external devices you may need such as a printer or a scanner.
- Safety & Certifications: EN60601-1 & UL60601-1 Medical Electrical Equipment Certification, FCC Class B, CE, RoHs-WEEE, Energy Star 5.0
- Front bezel is completely sealed with a rating of IP65, and IPX1. Safe to disinfect by spraying directly on the screen.



**Machine Specs**

- Footprint: 44" x 58" (112 cm x 148 cm)
- Height: 80" (203 cm) - fully extended
- Platform has 360° horizontal and 20° vertical range of movement.
- Individually adjustable safety rails, catering to user's physical ability and height.
- Exercise band attachment points.
- Large, stable stepping platform with low step-up height for ease of access and safe mount and dismount.
- Power: 100-240 VAC; 50/60 Hz; 500 Watt
- Machine weight: 315 lbs (143 kg)
- Patient weight capacity: 500 lbs (227 kg)
- Antimicrobial electrostatically, permanently bonded.
- Available in choice of 4 standard colors or custom color upgrade.
- Warranty: frame, 15 years; electronics, 2 years; wear items, 1 year
- Made in the USA



Because Med-Fit Systems manufactures our equipment in the USA, virtually limitless color customization can be offered at a reasonable price, with swift turnaround. Customize your equipment with your own branding or choose from 4 standard frame colors!

**Korebalance™ Premiere With 19" Touchscreen/Computer Combination**

**19" Touchscreen Computer Specs**

- 19" inch 4:3, 5 wire resistive touch display.
- Resolution: 1600 x 1200
- Processor: Intel E5500 2.8Ghz Processor
- Memory: 2GB
- WiFi: Wireless 802.11
- Hard Drive: 500GB HD of file storage
- Video: The Intel® integrated H61 Chipset, with Intel® HD Graphics, maximum display resolution of 2560 x 1600
- Audio: Realtek High Definition Audio enables premium Dolby Digital 5.1 surround sound. Two built-in 2.5 watt stereo speakers with three audio jacks for Audio Out, Line-in, and Microphone video cards or decoders.
- I/O: 2 x USB 3.0 Ports, 4 x USB 2.0 Ports, 1 x RS-232 Serial Port, 1 x DVI-I. Enough ports to connect any external devices you may need, such as a printer or a scanner.
- Safety & Certifications: FCC Class B, CE, UL60950, Energy Star 5.0, RoHS, WEEE



**Machine Specs**

- Footprint: 44" x 58" (112 cm x 148 cm)
- Height: 80" (203 cm) - fully extended
- Platform has 360° horizontal and 20° vertical range of movement.
- Individually adjustable safety rails, catering to user's physical ability and height.
- Exercise band attachment points.
- Large, stable stepping platform with low step-up height for ease of access and safe mount and dismount.
- Power: 100-240 VAC; 50/60 Hz; 500 Watt
- Machine weight: 315 lbs (143 kg)
- Patient weight capacity: 500 lbs (227 kg)
- Antimicrobial electrostatically, permanently bonded.
- Available in choice of 4 standard colors or custom color upgrade.
- Warranty: frame, 15 years; electronics, 2 years; wear items, 1 year
- Made in the USA

# kore balance™

## 17" Touchscreen Computer Specs

- 17" inch touch display.
- Resolution: 1280 x 1024
- Processor: 1 x Atom Dual-core D510 / Intel 1.66 GHz
- Memory: 1GB
- Hard Drive: 160GB HD of file storage
- Video: Intel® GMA 3150
- Audio: Integrated stereo sound card. Two built-in stereo speakers with three audio jacks for Audio Out, Line-in, and Microphone.
- I/O: 6 x USB 2.0 Ports, 1 x RS-232 Serial Port, Enough ports to connect any external devices you may need, such as a printer or a scanner.
- Compliant Standards: BSMI, C-Tick, CCC, cUL, EK, GOST-R, KCC, NOM, UL, VCCI

## Machine Specs

- Footprint: 44" x 58" (112 cm x 148 cm)
- Height: 80" (203 cm) - fully extended
- Platform has 360° horizontal and 20° vertical range of movement.
- Fixed safety rails
- Exercise band attachment points.
- Large, stable stepping platform with low step-up height for ease of access and safe mount and dismount.
- Power: 100-240 VAC; 50/60 Hz; 500 Watt
- Machine weight: 315 lbs (143 kg)
- Patient weight capacity: 500 lbs (227 kg)
- Antimicrobial electrostatically, permanently bonded.
- Available in choice of 4 standard colors or custom color upgrade.
- Warranty: frame, 15 years; electronics, 2 years; wear items, 1 year
- Made in the USA





The Korebalance™ Mobile is designed for use by medical centers and clinics, medical and PT offices, assisted living facilities, recreation centers, health and fitness clubs, universities and professional sport teams. It can also be used in conjunction with the Nautilus® Concussion Management Program.

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The Korebalance™ Mobile comes with software pre-installed in a laptop computer. The unit features patent pending variable stability technology. A centrally pivoted balance platform operates with an air pressure bladder system. Bladder pressure is controlled by a handheld pump, providing variable stability. Proprietary balance software provides balance and vestibular assessment, creates training programs, stimulating the brain and nervous system to improve balance, stability, coordination and posture.



The Korebalance™ Mobile is shown here with included laptop stand and carrying bag accessories.

## Features

- Korebalance<sup>™</sup> Mobile includes: platform, hand pump, variable air pressure bladder system, analog pressure gauge, tilt sensor and laptop computer.
- Provided with proprietary balance software to be used with laptop computer.
- Variable air pressure bladder system and a tilt sensor (solid-state accelerometer) underneath the platform to track movements 360° horizontal and 20° vertical.
- Non-stick pads on platform for added safety.
- Real time, visual biofeedback.
- Static and dynamic balance assessment.
- Five training mazes for extreme balance assessment.
- Objective documentation - printed color reports to track progress and document outcomes.
- Patient data storage - store over one million reports.



## Machine Specs

- Footprint: 23" diameter (58 cm)
- Platform has 360° horizontal and 20° vertical movement capacity
- Machine weight: 22 lbs (10 kg)
- Patient weight capacity: 500 lbs (227 kg)
- Supplied with accelerometer, USB cable and Korebalance<sup>™</sup> software CD, laptop computer
- Antimicrobial electrostatic bond
- Warranty: one year
- Made in the USA

# Nautilus® Concussion Management Program

The Nautilus® Concussion Management Program was created to work in conjunction with the Korebalance™ Mobile model.

This catalog contains an introduction to the Nautilus® Concussion Management Program. For more information, please request a full Nautilus® Concussion Management Program brochure or download one at [www.nautiluscommercial.com](http://www.nautiluscommercial.com).

## *Nautilus® Concussion Management Program*

The comprehensive program that combines baseline assessment, proven strengthening regimen, and post injury assessment, including both cerebrum (cognitive) and cerebellum (automatic) function.



**Document** - Individual's pre-season balance and cognition

**Protect** - Strengthen neck musculature with Nautilus® Neck Protocol

**Assess** - Post concussive event

**Rehabilitate** - Using strength and balance training

**Return** - Use objective test information to determine return to action

## Korebalance™ Mobile



### NAUTILUS® CONCUSSION MANAGEMENT PROGRAM IN ATHLETICS

- Document
- Protect
- Assess
- Rehabilitate
- Return

Nautilus ONE®  
Four Way Neck Machine



**NAUTILUS® NECK  
STRENGTHENING  
PROTOCOL**

- Expert-endorsed neck strengthening protocol for reduction of concussion risk, included in Nautilus® Concussion Management Program.
- Used in conjunction with Korebalance™ Mobile balance assessment and rehabilitation computerized equipment.



Renowned author, strength consultant and Professor of Exercise Science, Dr. Wayne Westcott gives an enthusiastic seal of endorsement to the Nautilus® neck strengthening protocol – an important component of the Nautilus® Concussion Management Program.

**“I could not be more pleased with the Nautilus® Concussion Management Program. Every aspect of this innovative neck strengthening and conditioning program is excellent. We have used the recommended training protocol and most of the suggested exercises for many years with highly reinforcing results. The relatively brief time commitment required to perform these advantageous exercises is an investment well-worth making for both the muscle strengthening benefits and the reduced risk of serious neck injuries. My heartfelt congratulations to Nautilus® [commercial] for designing and developing this practical, performance oriented program to help athletes at risk for neck injuries and concussions.”**



## **korebalance™ basic**

The Korebalance™ Basic is designed for use by individuals, clinics, medical and physical therapy offices, recreation centers, health and fitness clubs, universities and professional sport teams.

**Korebalance™ is a trusted name in orthopedic and neurosensory rehabilitation. The Korebalance™ Basic unit features patent pending variable stability technology. A centrally pivoted balance platform operates with an air pressure bladder system. Bladder pressure is controlled by a hand held pump, providing variable stability. The Korebalance™ Basic provides training programs, improving balance, stability, coordination and posture.**



# korebalance™ basic



## Features

- Korebalance™ Basic includes: base stand, platform, hand pump, variable air pressure bladder system and analog pressure gauge.
- Hand pump control which allows for manual inflation and deflation of the air bladder to adjust the level of difficulty.
- Non-stick pads on platform for added safety.
- No power supply required
- Proven effective for orthopedic deficiencies.
- Compact and easily transported

## Machine Specs

- Model footprint: 23" diameter (58,4 cm)
- Platform has 360° horizontal and 20° range of movement
- Machine weight: 22 lbs (10 kg)
- Patient weight capacity: 500 lbs (227 kg)
- Antimicrobial electrostatic bond
- Warranty: one year
- Made in the USA





For more information about *Med-Fit Systems, Inc.*, manufacturer of *Nautilus®* Commercial Fitness and *Korebalance* Balance Assessment products, please visit:

[medfitsystems.com](http://medfitsystems.com)   [nautiluscommercial.com](http://nautiluscommercial.com)

phone (USA): 1.800.831.7665

phone (International): +1.760.451.3038

e-mail: [info@medfitsys.com](mailto:info@medfitsys.com)

Please call us if you would like to book an interactive webinar that brings our showroom to you.

In the interest of product development and improvement, specifications subject to change without notice.



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