

Balance Trainer

Software for Balance Applications

Balance Trainer is a tool designed for balance research, assessment, rehabilitation, and training. Balance Trainer incorporates a versatile balance feedback system with traditional software for static balance measurements. The software package includes powerful tools for the analysis and documentation of clinical and research balance studies. The Balance Trainer software was written for use with the AccuSway^{Plus} portable balance platform, the entire package can be run off of a simple notebook computer.

Features

Trial Types - Static and Feedback.

Subject Database - record subject and trial information within Balance Clinic.

Test Protocol - run same sequence of trials for each subject.

Batch Analysis - select multiple trials to analyze for Static and Feedback trials.

Export Data - export in ASCII text format the force and moment data, raw X and Y COP, statistical results.

Base of Support - automatically recorded with a pointer wand provided with the AccuSway^{Plus} platform.

Limits of Stability Sway Marking - automatically records extremes of motion and saves them as representatives of the BOS.

Romberg Ratios - can be printed when the protocol is complete.

Compatibility - can also be used with AMTI's AccuGait platform.

Static Trials

- Real time measurement of COP.
- Wide variety of traditional analytical tools.
- BOS marking tool.

Feedback Trials

- Real time visual balance feedback.
- Programmable visual targets and obstacles.
- Fully customized training regimens.
- Statistical analysis package specially developed for feedback training.

Options

Units - Metric or English

Date - select by country

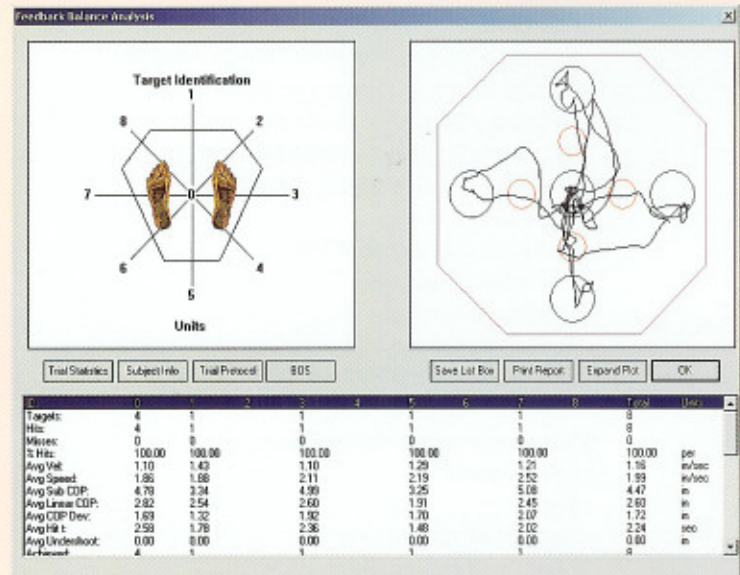
Filter - select 1, 2, 3, 5, 10, 20, 30, 50, or 100 Hz

Display - choice of plot colors

File Naming - manual or automatic

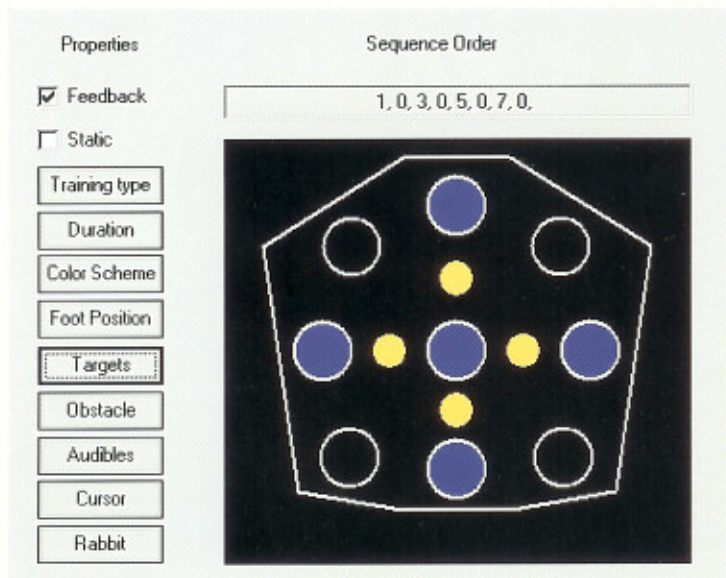
Trigger Setup - keystroke, force level, external trigger

User Variables - add up to 4 variables of your choice to be exported with the batch analysis.



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STATIC TRIAL MEASURES (for X and Y)

Average
Standard Deviation
Range
Maximum
Minimum
Average Deviation
Skew
Kurtosis
Average Radial Position Vector Length
Radial Position Standard Deviation
Circular Area encompassing 100% of data points
Rectangular Area encompassing 100% of data points
Effective area (66% of data points)
Path Length
Path Length per unit time
Maximum Velocity
Minimum Velocity
Average Velocity
Deviation of COP from BOS centroid

95th Percentile Ellipse Measures

Covariance
Area
Length of major axis
Length of minor axis
Tangent of minor axis
Angle between X axis and minor axis

FEEDBACK TRIAL MEASURES

Target Identification
Target Uses
Target Hits
Target Misses
Target Percent Hits
Average Velocity
Average Speed
Average Subject COP Path
Average Linear COP Path
Average COP Deviation
Average Target Hit Time
Average Undershoot
Targets Achieved
Targets Not Achieved
Target Achievement Percent
Average Achievement Time
Average Excursion Percent
Average Wandering
Average Overshoot
Average Selection Time
Average Area Deviation
Average Area Unit Deviation
Average Reaction Time
Average LOS Radii
LOS Percent
Distance to Center
Target Radii
Target Area
Target Coordinates
Obstacle Uses
Obstacle Hits
Obstacle Misses
Obstacle Hit Percent
Obstacle Radii
Obstacle Area
Average Rabbit Proximity

ISO 9001:2000 CERTIFIED

AMTI

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