



Axelero Gait & Balance - Device for training gait pattern disturbances and balance

Product short description:

AXELERO Gait & Balance is a device used for training and assessing gait and balance disorders in patients with neurological problems and dysfunctions of the lower limb motor system. **AXELERO Gait & Balance** will be useful in diagnosing gait, assessing balance, supporting rehabilitation and alleviating the effects of injuries and motor disabilities.

Product gallery:





Product description:

AXELERO Gait & Balance - Device for training gait pattern disturbances and balance

The **Axelero Gait & Balance** training device for gait and balance disorders is intended for use by patients with neurological disorders and dysfunctions of the lower limb motor system. The product can be used to determine gait parameters and balance disorders to support rehabilitation, alleviate symptoms of diseases and the effects of injury or impairment.

Axelero Gait & Balance is intended for exercising patients with balance or gait disorders that result from neurological, orthopedic diseases, muscle injuries or cardiovascular diseases.

These include:

stroke,

cerebellar disorders,

spinal cord damage,
Parkinson's disease,
cerebral palsy.

Features:

Adjustable (width, height), stable handrails along the entire length of the device.

Low suspension of the running belt, making it easier to get on the device.

Running belt with built-in strain gauge sensors.

Smooth and quiet operation of the drive in the full range of belt speed.

Precise increasing and decreasing the speed of the belt.

Device can be operated by both the therapist and the patient.

Patient can choose one of two trainings: time-measured training or distance training.

Possibility of cooperation with the Eleveo device.

Patient database embedded in the software, managed from the therapist's tablet.

Basic parameters on screen: distance, time, steps, average speed.

Tests and exercises : record of 6-minute patient gait, maximum deflection of the center of gravity, CoP eye open/closed, Romberg's test.

Visualization of: gait patterns (Butterfly, Path), gait symmetry, training course in the form of a graph and a table with parameters.

Equipped with USB communication interface, wireless remote control for patient, tablet for therapist, stand with computer, monitor, Neuroforma Gait & Balance software.

Advantages of Axelero Gait & Balance

Axelero Gait & Balance is used for training of gait symmetry, improving the balance and general motility of the patient. The device has a belt speed adjustment functions and a posturographic plate built under the belt. The most important features and advantages of the product include a built -in posturographic plate, which determines the location of the CoP (Center of Pressure) and allows the patient's presence on the device.

Another element that distinguishes **Axelero Gait & Balance** are integrated with it, adjustable width and height handrails that increase the patient's comfort and safety. The regulation range is large enough to allow patients of different heights to train on the device.

The product was created to improve the effectiveness of therapy and the level of involvement of patients in it by biofeedback functions. Large 43 "screen with adjustment allows the exercising patient to observe in real time of gait parameters, such as: symmetry of the step length, load symmetry or CoP point movement on the ground.

Axelero Gait & Balance was created for the patient's intuitive speed control and displayed content on the screen. To do this, use the wireless remote control attached to the system, which allows free navigation after the software menu, its activating and stopping.

Patient database:

Axelero Gait & Balance is also a device with intuitive controls and the ability to aggregate training data for the therapist. For this purpose, the device is equipped with a wireless tablet that allows the creation of patient accounts and the storage of parameters and results obtained by the patient in its memory.

Thanks to this solution, the therapist can always return to a previous session and compare the results obtained with the current ones. In addition, using the tablet, the therapist can remotely start or stop the patient's exercise and observe in real time the results obtained by the patient.

Feedback function

The feedback function allows you to observe in real time changing the parameters of the gait pattern. The main and measured parameters include:

"Butterfly"

It shows the change of CoP with the passage of time. The intensity of the blue color on the chart informs about the time of the entry. The less intense the color, the older the record. The cutting of thickened gray lines on the chart determines the center of the belt

Bar charts (data analysis)

The basic form of displaying data on the device are bar charts in the form of a simple and graphic presentation of gait symmetry (time and spatial parameters) for the patient and therapist. Thanks to the simple and legible bars that change in real time, both the patient and the therapist can react and introduce improvements in the gait pattern.

Temporal and spatial parameters

In addition to the data available in the form of percentage values, the therapist also has data with time, distance and weight values. The collected data relate to both the left and right limb, and additionally accumulate information about the term, speed, steps and the covered distance.

Symmetry analysis

A simple table in the interpretation allows you to combine the results obtained for the left and right limb, taking into account the parameters, i.e. the length of the step:

- average load,
- maximum load,
- the time of support phase,
- transfer phase time.

Charts (forces, CoP amplitude, belt speed)

The charts and tables with parameters available in the software summarize the course of training and help in the analysis of current and past data for:

- CoP in the x and y axes,
- pressure on the belt,
- belt speed,
- Phase of support of the gait.

Axelero Gait & Balance - "Butterfly"

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Axelero Gait & Balance - Breen charts (data analysis)

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Axelero Gait & Balance - Temporarily and spatial parameters

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Axelero Gait & Balance - Symmetry analysis

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Axelero Gait & Balance - Charts (forces, CoP amplitude, belt speed)

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Tests

In order to optimize the patient's objective assessment, device allows performing a 6 -minute gait test (6MWT).In addition, Axelero Gait & Balance also allows you to conduct static tests:

- Stability limit test (LoS - Limits of Stability),
- Romberg test (30-second open / closed eye test).

Belt speed [km/h]:	0,2 - 10
Belt speed resolution [km/h]:	0,1
Belt (the usable part) length [cm]:	140
Belt (the usable part) width [cm]:	52
Weight [kg]:	200
Power supply [V/Hz, A]:	230/ 50-60, 15

Dimensions (L x W x H) [cm]:	256 x 78 x 195
Handrails width [cm]:	43 - 69
Handrails height [cm]:	66 - 94,5
Monitor (diagonal) ["]:	43
Patient weight [kg]:	25 - 160

Video presentation:

Product codes:

Reference: 01-BIE-0212-001

EAN13: -

UPC: -

Product features:

Product attributes: