Bilateral Force Plate

- Advanced, high-quality and user-friendly solution for ground reaction force measurement.
- Simple and quick analyses of static balance, gait and explosive movements.
- Strong and rigid mechanical design with top-level electronics provides the highest level of accuracy and puts our force plates as a top solution for practice and science.

Product Description

Strong and rigid steel platform with 8 sensors is suitable for vertical jump assessment as well as for body sway measurements. Bi-lateral design allows comparison between left and right leg and calculation of bi-lateral indexes and is therefore extremely useful for rehabilitation and elite sports where symmetric force production is important (sprinting, weightlifting, cycling, etc). Top quality electronic strain gauge based force sensors are embedded into the platform to measure the ground reaction force. Construction of the plate is designed with a goal to enable high precision and top quality acquisition of the measured signals. High-tech strain-gauge sensors provide objective, reliable and repeatable measurements. High acquisition frequency, wide measuring range and high load capacity of the plate makes it possible to capture even highly dynamic processes in the top level sport or rehabilitation. Bi-lateral force plate can be used in kinesiology research, elite sports, rehabilitation and other related areas.

Basic Components of the Product

Provided by the manufacturer:
- Measurement device – Bilateral Force Plate
- Safety wooden frame
- USB cable
- D-SUB cable
- PC with licensed software

List of Requirements

Personal Computer:
- Windows 7 (Home, Professional, Ultimate)
- 2 GHz processor
- 2 GB RAM
- 1 GB available on the hard disk
- Video resolution 1280x760 pix
- CD-ROM or DVD-ROM
- 3 USB ports

Note: The manufacturer usually provides a personal computer. If the client wants to provide their own personal computer, it needs to have the above-mentioned minimal requirements to run official software.

Technical Specifications

Weight
Total weight of the Force Plate is 42.4 kg.

Maximum load
Maximum load per one plate is 7000 N.

Environmental conditions
The force plate should be stored in a dry space with a temperature range between 10 and 35 °C without direct exposure to the sun.

Dimensions

Figure: Bilateral Force Plate dimensions
Components

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<tr>
<th>Part</th>
<th>Description</th>
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</thead>
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<td>Safety frame</td>
<td>Safety frame around the force plate.</td>
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<tr>
<td>Left plate</td>
<td>Measuring plate on the left side.</td>
</tr>
<tr>
<td>Right plate</td>
<td>Measuring plate on the right side.</td>
</tr>
<tr>
<td>Leg(s)</td>
<td>Fixed.</td>
</tr>
<tr>
<td>Handle</td>
<td>Fixed.</td>
</tr>
<tr>
<td>USB Type B connector</td>
<td>Connector for the USB cable connecting the force plate and personal computer.</td>
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<tr>
<td>D-SUB connector</td>
<td>Connector for the D-SUB cable connecting left and right plate.</td>
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Figure: Components