

# BalanceTutor™

## On Site Installation

Apr 2018



*BalanceTutor a dynamic and static postural control trainer*

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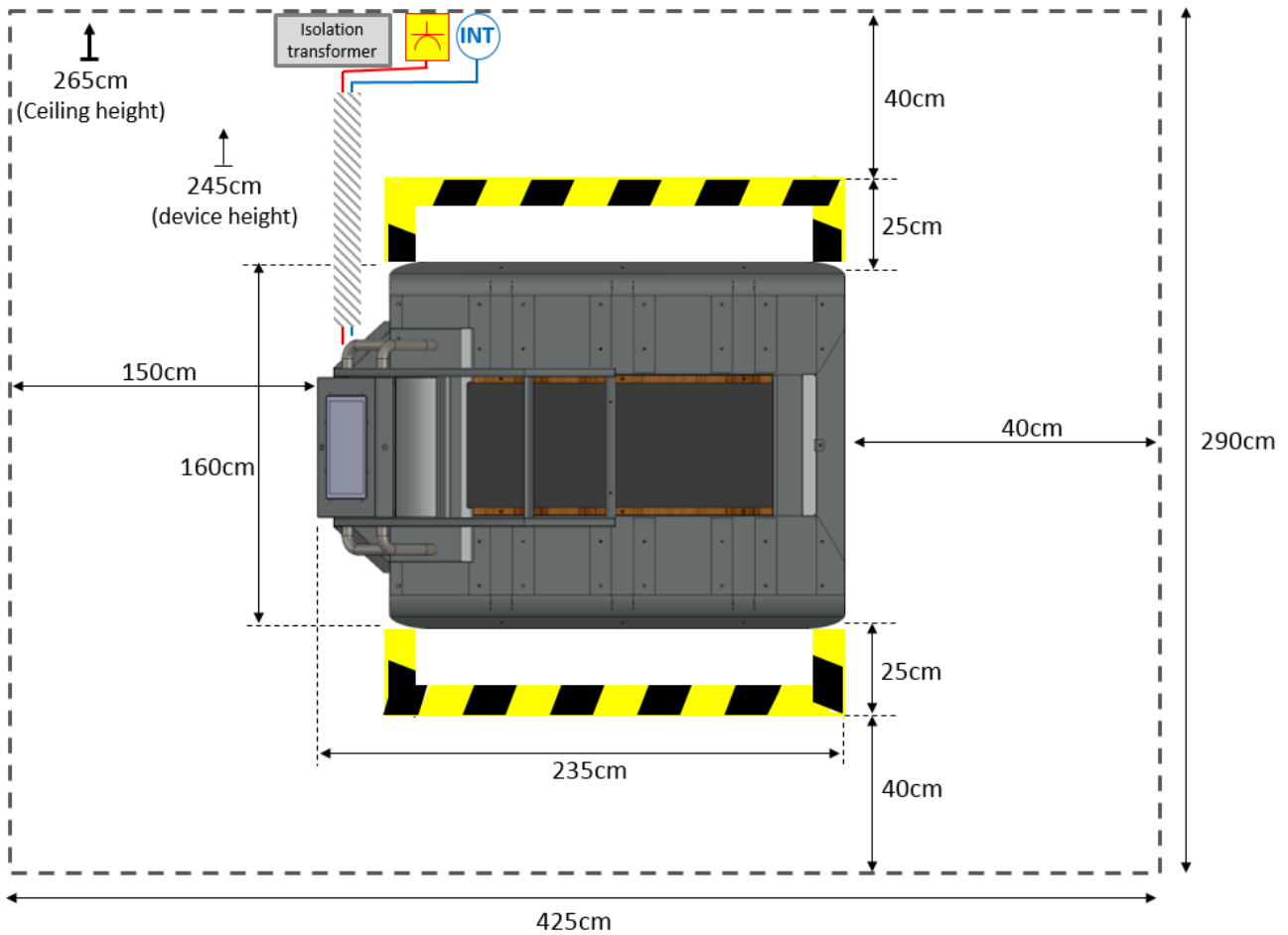
## 1 Version control

| Date        | Change description                          | Written by | Ver.   |
|-------------|---|------------|--------|
| 11 Feb 2016 | Initial version                             | Ziv K.     | 160211 |
| 9 Aug 2016  | Opening a section: Installation preparation | Ziv K.     | 160809 |
| 15 Apr 2018 | Requirement modifications                   | Ziv K.     | 180415 |

## 2 Installation preparation

### 2.1 Minimal required installment area

Following a minimal dimensions required from a dedicated area for the BalanceTutor instalment.



## 2.2 Taking pictures of installment area

Please take the following high resolution and good brightness photos and send them to MediTouch at [ziv@meditouch.co.il](mailto:ziv@meditouch.co.il) :

1. The dedicated area for the installment (recommended as shown in section 2.1).
2. Closest electrical power source and internet outlets (recommended as shown in section 2.1).
3. Circuit breaker from the electrical board dedicated for the BalanceTutor.
4. Access pathways from crate location to the instalment area. Consider taking pictures that will include the following: Stares, elevator, doors, corridors etc.

## 2.3 Installment area considerations

Consider the followings when you plan the location and orientation of the device:

1. The upper plate of the device is moving right and left  $\pm 20$ cm in high intensity. Therefore, consider device orientation to have minimal interaction with free walking area from the sides of the device.
2. Avoid any impact/collision with an entrance door (in case of a small room).
3. Insure there are no water source that might influence the BalanceTutor in case of a fault (air condition, pipelines, etc.), warranty of the voided in this case.
4. In case of camera capture system, consider appropriate distances.

## 2.4 Installation requirements

1. Prepare a dedicated power line with the following properties;

| Area      | Description  | Outlet type               |
|-----------|--|---------------------------|
| Worldwide | <ol style="list-style-type: none"> <li>1. Single Phase 230V AC L/N/PE 50/60 Hz 2Pole 16A circuit breaker.</li> <li>2. Electrical wire 2.5<sup>2</sup>X3</li> </ol> | According local standards |
| USA       | <ol style="list-style-type: none"> <li>1. 208V AC L1/L2/PE 60 Hz 2x10A circuit breaker.</li> <li>2. Electrical wire 2.5<sup>2</sup>X3</li> </ol>                   | 6-20R NEMA                |

2. Prepare an electrical power plug: right angle, non-fused, industrial grade, UL/EU standard compliance.
3. Prepare a dedicated internet physical line located near the electrical outlet and confirm this line exposed to internet without any port restrictions.
4. Power source will not exceed a 3m cable length.

### 3 Installation day

On this day the installation is conducted on the customer's site. Following items need to be ready or completed by that point of time.

#### 3.1 Staff members

The following staff members will need to be available/attend during the installation stages:

| PROCESS             | HUMAN RESOURCE  |
|---------------------|---|
| Device installation | Distributor's qualified technician or MediTouch technician and 2-3 assistants |
| Remote control      | Institution's system administrator  |
| Technical training  | Distributor's qualified technician, Hospital's clinical staff                 |
| Clinical training   | Distributor's or MediTouch clinician, Hospital's clinical staff               |

Note: The distributor needs to take in to account that a qualified technician must attend during the installation in order to learn all aspects of installation, maintenance, troubleshooting and service procedures for future maintenance.

#### 3.2 Onsite product arrival

The BalanceTutor arrives safely to the customer's site in a wooden crate.



Please see the following in regarding this stage:

1. Confirm BT wooden crate has arrived to the entrance of the hospital site and is ready for to be disassembled.
2. The location of the BT wooden crate should be kept in a safe location and away from people.
3. There are comfortable ways to the elevator and all the way to the installation area.

### 3.3 Component transfer to department

Duration: Appx. 1 hour

The BalanceTutor disassembled and transferred to the predefined installation area.



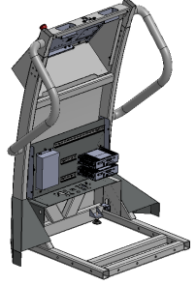
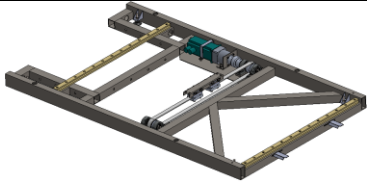
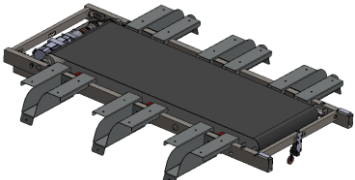
#### 3.3.1 Preparation and requirements

Please see the following regarding this stage:

1. All items included in the wooden crate are listed in a Packing List.  
MediTouch document number: DO-15-01-10
2. A standard pallet jack must be available.
3. 2-3 workers will help to deliver all product components to the installation site.
4. Throughout the disassembly process of the wooden crate and the transfer of components to the installation area, the attendance of a security officer from the hospital is highly recommended, in order to avoid any harm caused to people or the facility, and for guidance directly to the installation area.
5. An available elevator with a minimal size is required:  
Door width – 90cm, Door height – 210cm, Elevator length – 180cm
6. After the wooden crate is disassembled and emptied from BT components, it's required to be delivered to a recycle area or safely placed in a waste zone.

### 3.3.2 Heavy components

Following list of components that require special logistic attention due to physical dimensions:

| ITEM NAME   | DIMENSION  | WEIGHT | IMAGE  |
|-------------|--|--------|--|
| Bridge base | Height – 136cm<br>Width – 110cm<br>Depth – 81cm  | 90Kg   |   |
| Frame base  | Length – 190cm<br>Width – 110cm<br>Height – 10cm | 50Kg   |   |
| Frame upper | Length – 198cm<br>Width – 158cm<br>Height – 18cm | 80Kg   |  |

### 3.4 Installation process

Duration: 5-7 hours

The BalanceTutor fully assembled from piecewise to fully operational product.



#### 3.4.1 Installation

Installation process covers the following topics:

1. Device installation.
2. Isolation transformer installation.
3. Network printer connection. A system administrator of the hospital required to attend.
4. Remote access to the device from out LAN connection. A system administrator of the hospital required to attend.
5. Define a keep-out-zoon / secure-zone to avoid impact of the moving parts to a subject.
6. We recommend that an electrical engineer from the hospital (medical engineering department) will arrive after installation completed, and perform electrical testes to comply hospital's electrical acceptance procedures standard.

#### 3.4.2 Safety

Throughout all the installation period the assembly dedicated area and its near surroundings are very unsafe due to of many sharp metal elements and non-assembled components. Presence of unauthorized personal or patients is forbidden.

The following safety principles must be preserved:

1. A defined area for assembly must be set before a MediTouch authorized technician starts to assemble.
2. An interruption during assembly will be redundant and might harm the safety of the process.



## 4 Training

The BalanceTutor training process is divided to technical and clinical stages.



### 4.1 Technical training

Duration: 2-4 hours

The following topics covered and conducted by a MediTouch authorized technician on-site:

| # | ITEM                          | DETAILS  |
|---|-------------------------------|--|
| 1 | System components             | Familiarizing with all system components.  |
| 2 | Patient safety                | harness wearing and adjustment, correct operation and use, safety procedures, etc. |
| 3 | Users safety and precautions  | Moving parts, keep out zones during operation, etc.                                |
| 4 | Remote control procedure      | Software updates, training, inspection, maintenance, etc.                          |
| 5 | Functional operation          | Features, users, treatment modes, settings, etc.                                   |
| 6 | Perturbation principle        | Intensity, directions, safety, etc.  |
| 7 | After training procedure      |  |
| 8 | End of training day procedure | System shutdown, system clean up, touch screen clean up, obstacles, etc.           |
| 9 | Product maintenance           | Treadmill lubrication, treadmill tension adjustment, etc.                          |

## 4.2 Clinical training

Duration: 4-6 hours

The following topics covered and conducted by a MediTouch authorized clinician or therapist via an online connection:

| # | ITEM                             | DETAILS   |
|---|----------------------------------|---|
| 1 | Safety principals and procedures | Patient safety in evaluation and treatment mode.                        |
| 2 | Clinical aspects:                | Scientific background behind rehabilitation based perturbation concept. |
| 3 | Treatment protocols              | Creating of predefined treatment protocols and treatment sessions.      |
| 4 | Clinical indications             | Neurological, Orthopedic, Vestibular, Elderly and Sport rehabilitation. |
| 5 | Clinical contraindications       | Medical conditions that the system is not recommended for use.          |
| 6 | System operation                 | Operation of clinical applications, evaluation and treatment.           |
| 7 | Documentations                   | Reports of evaluation and treatment.                                    |