TREAX is an innovative training system for many different kinds of training and movement. The system targets a variety of users and training situations, for example, rehabilitation after acquired brain injury, physical training for elderly, or development of children’s motor and cognitive skills.

The system is composed of a number of differently colored pads that respond to touch. It’s easy for the therapist or user to create individualized exercises for balance, coordination and weight-bearing.

TREAX is a highly flexible rehabilitation system that enables the therapist to design training activities to fit the functionality level and training needs of each user. The system can be expanded with more pads as the user’s skills improve. The system can be used on the floor or be mounted on the wall with the accessory wall mounting board.
The TREAX Pads were developed with the involvement of experts, persons with brain injuries and therapists. Their needs and preferences have defined the main features of the TREAX concept.

**The advantages of the TREAX Pads are:**
- High flexibility in level of difficulty and training goals.
- Combines training of cognitive and motor skills.
- Provide immediate and evaluative feedback.
- Easy to use!
Activities and play
– Use TREAX Pads to create activities and games for everyone, regardless of age and physical fitness!

Interactive TREAX Pads offer the perfect environment for creating entertaining physical activities and games. With an almost unlimited variation of possibilities, TREAX Pads can be placed in combinations, using floors and walls, to encourage many hours of exciting activities and challenges.

**Use the TREAX Pads for:**
- Training
- Activities
- Play
- Learning

Their unique shape, offers people of all ages, the opportunity to create various appealing designs.

Use the TREAX Pads when you want to create learning and playful environments.
Using the TREAX PADS™

The TREAX Pads offer three different functionalities:
– Force indication scale, Random light signals and Balance mode

**Force indication scale**

Before starting an exercise, the therapist first chooses whether the interaction will be by hand or foot. The scale will light up indicating the current user weight setting. By using the + and - buttons this setting is adjusted.

The force indication scale may be activated either by hand or foot to exercise either upper or lower extremities. When the appropriate mode is chosen, the pads react to the amount of force or weight applied to each of them. The light scale at the front of the pads responds dynamically to change in force or weight applied by the user. The feedback clarifies and aids understanding of how changes in motor actions or body posture affect the force or weight applied to the pads.
Random light signals

When the Random function is chosen, the TREAX Pads react to any activation by hand or foot with a random color light signal.

As the TREAX Pads come in three different colors, the random light signal corresponds to these three colors. When the user receives a light signal he/she should navigate to a pad of that specific color. Activating the next pad will then again provide a random color light signal, directing the user further. Unlike the force indication scale, this function does not react to the amount of force applied to it, but only to activation as such. Therefore, exercises using this mode have less focus on applied force or weight and more focus on cognitive challenges such as reaction time, concentration and visuo-motor coordination.
Here it is necessary to activate the pads before the time is up. If you activate the pad in time, it will respond with a blinking white light. The lights will be either blue or red, making it possible to make rules for advanced exercises. For example, you can let the user activate the red light with his/her left foot/hand and the blue light with his/her right foot/hand.

Use the reaction function for high speed activities, for example, or reaction exercises, eye/hand coordination or "neglect".

In addition to adjusting speed with the + and – buttons, variation in level of difficulty in exercises can be easily attained by adjusting number of pads used and the distances between them.
The balance mode is launched by pressing the foot button for approx. 2 sec. When the balance mode is chosen, the TREAX Pad visualizes the difference in the weight bearing on the heel and fore foot. By using the + and - buttons, the sensitivity can be adjusted.

As the weight increases on the fore foot in relation to the heel, the blue light moves towards the right.

As the weight increases on the heel in relation to the fore foot, the blue light moves towards the left.

When equilibrium is achieved, a white light will show up in the middle.

The balance mode is used to exercise postural control, balance, plantar/ dorsiflexion etc. The exercises may be adjusted according to the user’s skills. They could, for example, be used to exercise 1-leg stand or using two pads simultaneously by one foot on each. If the pads are placed with appropriate distance from each other as a track, the balance function can be used as a simple “gait analysis” to visualize how the force is distributed on the feet through the gait cycle.
More TREAX Pads™
- More possibilities!

The TREAX Pads sets can be expanded in multiples of three pads. This makes it possible to upgrade from Small to Medium, Medium to Large or to expand the Large set enabling larger social activities.
Accessories

To achieve the optimal effect of using the TREAX Pads, INNOVAID offers a wall mounting board where the pads can be easily mounted. This is primarily used in exercising the upper extremities. Once the board is mounted on the wall, the TREAX Pads can be placed in different positions on the board, creating different training patterns. Easy and flexible!
Flexible and scalable

The number of TREAX Pads available defines the number of different use scenarios.

The illustration above shows an example of applying the scale functionality combined with different colored TREAX Pads. When the user steps on each pad, he/she is challenged to control the amount of weight applied, in order to obtain the scale point defined by the color of each pad. By choosing the random functionality, the user is challenged to navigate onto different colored pads, using his/her concentration and visuo-motor coordination.

The scale functionality of the TREAX Pads supports training of weight distribution. It may also help the user to correct body posture by making weight distribution visible. This will improve the user’s awareness about how his/her weight is distributed as a result of motor actions.

When the TREAX Pads are used in combination with the wall mounting board (to be separately purchased), exercises targeting the upper extremities can be done. Particularly users with a paretic side can be challenged to activate both sides of their upper body. The scale functionality enables comparison of the force level of the two sides of the body. The random functionality includes both sides in an activity flow and camouflages the training of the weak side as part of the “game”.

<table>
<thead>
<tr>
<th>Large</th>
<th>Medium</th>
<th>Small</th>
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<tbody>
<tr>
<td>12 Units</td>
<td>9 Units</td>
<td>6 Units</td>
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Choosing larger sets provides greater freedom in all activities. The random functionality in particular can be fully exploited when larger sets are chosen. Using the Medium set it’s possible to create a field of pads, enabling a twister-like activity. With multiple pads of each color available, the user’s planning skills and executive functions are also challenged. Which purple pad is closest and easiest to access or which will get me across the field in the fewest steps?

With the Large set, it is possible to compose setups for social game play. As the field of pads that can be created is larger it can accommodate two users at a time. This adds a social aspect to the exercise and further challenges planning skills and executive functions. The users now have to pass each other and they can even strategically block one another’s route. The example shows two users responding to each other’s random light signals, trying to reach the other’s side first.
Changing batteries

The TREAX Pads are powered by four standard AAA (LR03) batteries. When the batteries run out of power, they can be easily changed by opening the battery lid on the back side of the pad.

Cleaning

All surfaces of the Pads can be wiped clean using alcohol (short term) or standard cleaning agents.
The size and shape of the TREAX Pads are designed to fit the hand or foot of the user. The rubber surface area defines the active area that responds to the applied force. It accommodates up to a European shoe size 48½. The force scale can be adjusted to respond to force levels suitable for users from approx. 15 to 150 kgs (33 lb - 330 lb).
Technical specifications:
Batteries: 4 x AAA (LR03)
Max. User weight: 150 kg (330 lb)
Ambient temperature: 5 – 35 °C (41 - 95 °F)
Storage temperature: 0 – 45 °C (14 - 113 °F)
Max. humidity: 90% RH
Approvals: CE (EN60950)

Item numbers:
920-999-006 TREAX Pads Small - 6 Units.
920-999-009 TREAX Pads Medium - 9 Units
920-999-012 TREAX Pads Large - 12 Units.
920-999-003 TREAX Pads Additional - 3 Units.
920-999-000 TREAX Pads Wall mounting board 116 x 76 cm (45.7” x 30”).

Patent pending. We reserve the right to make changes without notice.