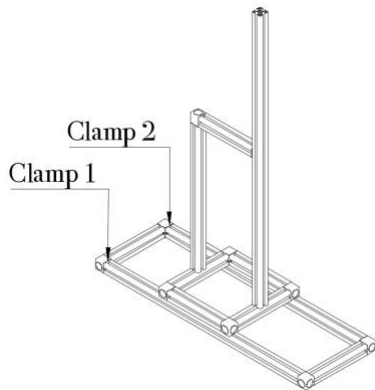


# IHITS User Manual

## Abstract

IHITS is a target system designed for use in motion tracking research involving stroke patients. The setup is adjustable and includes two sizes of target faces. The targets include objects to point at, shelves from which to take cans of soda, and doorknobs on which to mimic a twisting motion.



## Initial set up

Place the frame on the table you will be using such that the back of the frame is flush with the back of the table. Place the two C-clamps so that they secure the back of the frame to the table top. Tighten until the clamps are firmly secured.

## Adjusting frame

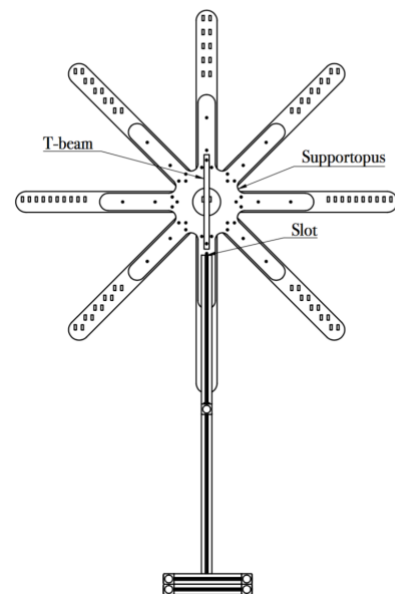
The upper portion frame can be adjusted to sit closer or farther from the user. To adjust the placement, loosen the round, silver thumb screws (pictured to the right) on either side of the frame.

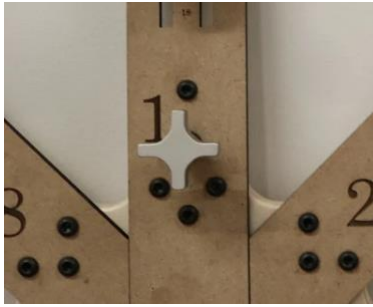


Then pull or push the upper frame into position, grabbing the center vertical beam. Use the tape measure on the right side of the lower frame for precise placement. When the upper frame is in the correct position, tighten both the thumb screws securely. Check that the upper frame is no longer free to slide with a push or pull.

## Changing faces

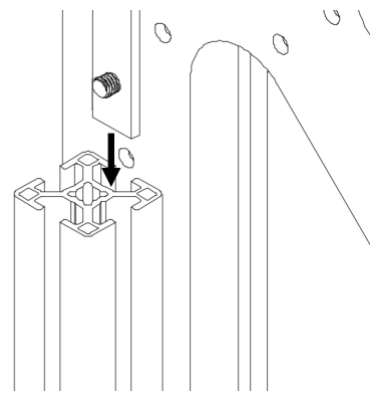
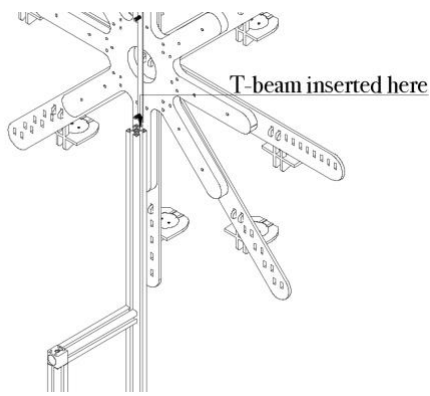
To lift or carry a target face, hold it only by the wooden supportopus that is attached to the back of the face.





When adjusting the faces, it is crucial that you do not over loosen the thumb screws (pictured to the left). This will cause them to come out of the T-beam at the back of the face. If the thumb screws do come out of the T-beam, align the screw with the hole of the T-beam and screw it back into place.

To secure a face to the frame, gently slide the T-beam into the slot of the frame's vertical beam. Keep the face parallel to the vertical beams the entire time you sliding the T-beam into place. Use the vertical tape measure to accurately place the target. When the target is in the correct location, tighten both thumb screws until the face is secure.



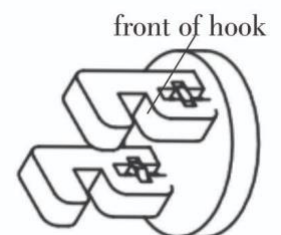
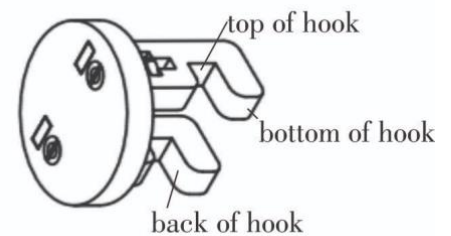
\*\*\*Special note: When using the small shelf face, do not adjust the hex head bolt. Secure this face to the frame using only the one thumb screw. If the hex head bolt is twisted, align it so that a flat side of the hex head is facing up for the shelf to rest on.

To remove the targets, twist the thumb screws through one and a half rotations. This will loosen the T-beam enough so that the face will easily slide. Carefully lift the face off of the frame, keeping the face parallel with the vertical beam.

### Adjusting targets

To remove the targets from the face, place one hand behind the face, with your finger flush against the bottom of the target hooks. With your other hand, steady the front portion of the target. Push up with even pressure on the target hooks, until the top of the hooks are against the top of the slot. Pull the target out from the front using the hand that had been steadying the target.

To place a target, slide the hooks of the target into the slots on the face. When sliding them in, the top of the hook should be flush with the top of the slot. When backs of the hooks have cleared with slots, gently push down on the target with even pressure until it is resting securely in the the slots.



When placing a target on the horizontal arms of the face, place the hooks through the slots on either side of the measurement you desire. Do not place the hooks from the slots on either sides of the unlabeled gaps.

\*\*\*Do not turn the doorknobs unless they are equipped with child-proof covers. The doorknobs are not designed to turn and attempting to do so could cause damage.