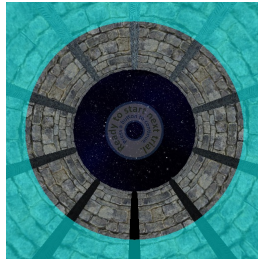
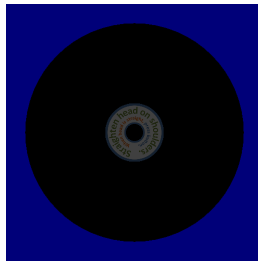


The Visual-Manual task starts with a welcome screen that prompts the subject to press a button in order to start a block of trials:

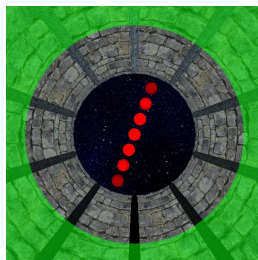


The subject is prompted to look straight ahead and bring the head to an upright position with respect to the shoulders.

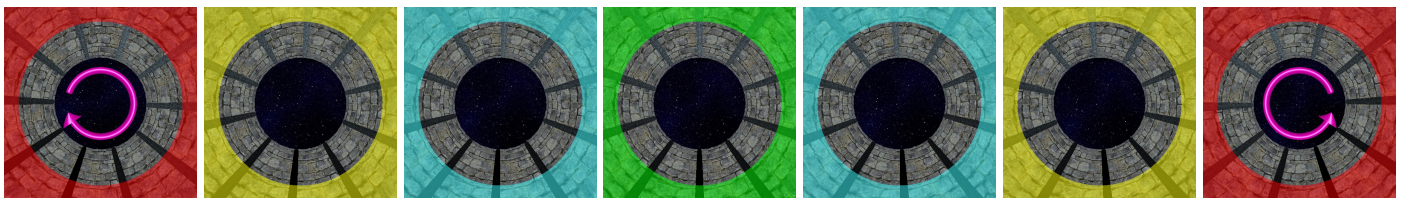


The subject should straighten the head first, then press the Select button on the VR Remote to continue.

A target orientation is then presented to the subject in the form of a line of balls presented at the end of the tunnel:



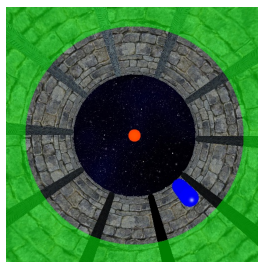
The target disappears and the subject is prompted to tilt the head to a new orientation through the same system of halo colors and direction arrows as described previously:



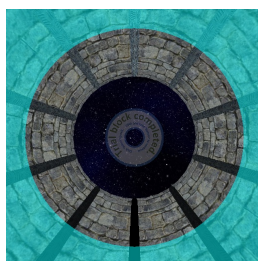
Tilted to the Left ----- Correct Orientation ----- Tilted to the Right

The subject then reproduces the remembered target orientation with the hand. The subject sees a) an orange spherical target at the end of the tunnel, b) a virtual representation of a tool in the visual scene (a cylinder) that moves with the hand in 3D visual space and c) a 'laser pointer' that projects from the tool along the axis of the fingers. The subject must raise the arm in front of the body, aim the tool by moving the arm in azimuth and elevation until the laser pointer falls on the spherical target and then rotate the palm of the hand to align with the

remembered orientation of the visual target.

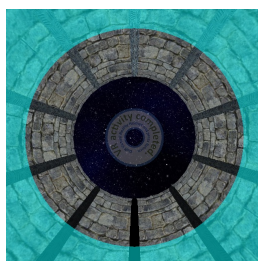


The subject presses the Center Button on the Remote Control to validate the trial and move on to the next. If the block of trials is completed, a message is displayed to let the subject know:



The subject may press the Select button on the VR Remote to exit the VR scene and pause the experiment. Or he or she can press and hold the Return button on the VR Remote to continue to the next block of trials.

If all blocks in the subsession are completed, the subject is prompted to doff the Virtual Reality Headset.



Note that other circular prompt with text instructions may appear at different times in response to different conditions or actions by the subject. For instance, a message will be generated if the subject does not maintain the head in the specified tilted position. All possible messages are shown in a separate section of this document.