

# SOP

## DBIC Standard Operating Procedures for Sensimetrics Ear Buds Model 14 Audio Stimulus delivery system for fMRI

For training on how to use the Sensimetrics ear buds and for technical support, contact Terry Sackett or Andy Connolly.

Terry Sackett

[terry.j.sackett@dartmouth.edu](mailto:terry.j.sackett@dartmouth.edu)

Scan room: 6-0155, Office: 6-0178

Andy Connolly

[andrew.c.connolly@dartmouth.edu](mailto:andrew.c.connolly@dartmouth.edu)

(603)-266-9709



## INTRODUCTION

The Sensimetrics ear buds deliver auditory stimuli to subjects while in the scanner. Like most other fMRI peripherals they use fiberoptic MR-safe cables and electronics. The ear buds use disposable foam tips that screw on to the blue and red sound actuators. The ear phones are located on the wall at the front of the scanner room. These ear buds are easy to use, but they are delicate and expensive. Always use caution when handling the ear buds.

## QUICK START

**Step 1:** Attach the eighth-inch audio cable labelled “AUDIO” cable into your experiment presentation computer or laptop, and make sure that the Pyle PCA1 Stereo Amplifier is turned ON:



**Step 2:** Select the correct size of foam canal tips for your subject. The canal tips are located in the scan room on the counter near where the linens are stored. They look like this:



For sanitary reasons, always use a fresh pair of ear buds for each subject. Also, because it is necessary to gently squeeze and roll each foam earphone between your fingers, please wear rubber gloves when handling earphones destined for other people’s ears. There are rubber gloves in the scan suite.

**Step 3:** To insert each earphone, first compress the foam tip by rolling it between thumb and forefinger, narrowing its diameter. While continuing to roll it, screw it onto the post. Then have the subject quickly insert it into their ear, holding it in the ear for about 10 seconds while the foam expands.

**CAUTION:** Never try to push or pull the foam canal tip when connecting and disconnecting the post. The posts of the earphones are delicate and very expensive to replace. Always be careful when screwing the tips on and off.

**Step 4:** Test the sound and adjust sound level to the comfort of your subject. The volume level may be controlled by the dial on the Pyle amplifier or by the volume setting on your laptop.

**CAUTION:** All fiberoptic cables are delicate and very expensive, including the cables that attach Ear Buds to the Pyle Amplifier.. Please always use care to ensure that cables never get kinked or caught by the edge of the sliding bed. *Never step on any cables.*

## RESOURCES

To get more information about the Sensimetrics Model 14 Earphones, including documentation, specs, and a FAQs page, visit the Sensimetrics webpage:

<https://www.sens.com/products/model-s14/>