

Multi-user Sip/Puff Switch[™]

Getting Started and Installation Guide

Origin Instruments Sip/Puff Switch is the leading sip-puff system for individuals with motor disabilities and limited dexterity. The multi-user version of the Sip/Puff Switch provides healthcare institutions, assessment centers, hospitals, etc with a means to support multiple users while eliminating concerns over sanitation. The padded, head-referenced design affords dignity, comfort, and convenience. The disposable mouthpiece includes an in-line aseptic filter to enable hygienic, worry-free use by a succession of users. The Multi-user Sip/Puff Switch comes packaged in a plastic compact case¹ for storage and transport.



Figure 1: Multi-User Sip/Puff in durable plastic 1 case

- Padded headset
- Two (2) sealed mouthpiece assemblies, each with gloves and instruction sheet
- 6-foot air tube with quick-connects
- Compact Sip-Puff switch-box with integrated "sip" and "puff" push buttons for testing purposes
- Single cable connection to computer
- No AC plug and no batteries
- Optional Swifty[™] USB interface
- Portable plastic¹ case with foam cushioning

Each disposable mouthpiece is enclosed in a sealed package that includes a pair of latex-free gloves and an instruction sheet. The mouthpiece filter eliminates sanitary concerns on behalf of both the user and the attendant while retaining sip-puff convenience, accuracy, and reliability. The disposable mouthpiece installs in seconds using a snap-fit fastener to the padded headset. After usage, the mouthpiece is discarded and replaced so the system is immediately available for the next user.

The mouthpiece is connected by latex-free, vinyl tubing to the switchbox that converts sips and puffs into electrical signals. The switchbox is connected to a Speech Generating Device (SGD) or switch interface device using the included cable(s).



Figure 2: Using the snap-fit connector attach the mouthpiece to the headset.



Figure 3: Slip headset over the head and behind the neck

The switchbox has two connectors for the sip and puff switches and a pneumatic connector for the headset. The electrical jacks use 3.5mm connectors that are typical for adaptive switches. The switch contacts are normally open; closure is made with a sip or puff to the tube. The switches are designed for low current and low voltage applications.





Figure 4: Left: Switchbox electrical connectors and connector sense selector. For sip and puff over one cable, plug a stereo cable into the center jack. (Notice the sip and puff test buttons.) Right: Pneumatic Connector

Directions:

- 1) Plug one end of electrical cable(s) into the Sip/Puff switchbox (a), and the other into the Speech Generating Device (SGD) or switch interface, like our Swifty™.
- 2) The air tube is used to attach the mouthpiece to the Sip/Puff switchbox. Plug one end of the air tube into the switchbox (b) and the other into the disposable mouthpiece. Simply slide the halves together and "gently" twist the lock nut. *The nut should not be over tightened.*
- 3) The padded headset is easily adjusted to the user's head by slipping it over the ears and behind the neck.

The Sip/Puff Switch electrical functionality can be tested by depressing the "sip" and/or "puff" push buttons on the switchbox.

Two cables are included with the Sip/Puff Switch. Always use a stereo cable connected to the center jack if both sip and puff closures are communicated to the controlled device using one cable.



Figure 5: Mating plugs for Switchbox jacks are 3.5mm. (a) Mono plug has switched contact on the tip with the common contact on the sleeve. (b) Stereo plug has switched contacts on tip and ring with the common contact on the sleeve. Stereo cable is ALWAYS plugged into the center connector.

With connector sense switch to the "left" and a stereo cable, a sip will cause a closure between the "TIP" and "SLEEVE" and a puff will cause a closure between the "RING" and "SLEEVE." Slide switch to the right to reverse contacts on the center jack.

To transmit both sip and puff events over one cable, use a stereo cable in the center jack, and leave the right jack open.

Sip/Puff Switch Declaration of Conformity with European Directives







The Sip/Puff Switch contains two passive, normally open, pressure switches. Their contacts are brought out on two 1/8-inch (3.5mm) connectors. The switches are designed for low voltage and low current signal loads. They are not designed or rated for switching power loads. The switches are rated for switching voltages at or below 30-Volts AC/DC, and currents at or below 0.030-Amps.

The Sip/Puff Switch is a Low Voltage Device as defined in the Directive 2006/95/EC of 27 December 2006. It meets the criteria of Article 1 of 2006/95/EC of 27 December 2006 as a Safety Extra Low Voltage (SELV) device. The Sip/Puff Switch does not contain active electronics and Electromagnetic Compatibility (EMC) testing for Radio-electrical interference is not required.

The Sip/Puff Switch conforms to the Restriction of Hazardous Substances (RoHS), and the Waste Electrical and Electronic Equipment (WEEE) Directives.



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