

LipSync Macro: User Guide

Introduction

The LipSync Macro is a sip-and-puff joystick that emulates keystrokes from a keyboard. It allows users to interact with their electronic device without having to physically touch it through a series of recorded touchscreen interactions. This works on phones and tablets that have switch access (*Switch Accessibility* in iOS devices, *Universal Switch* in Android).

Device Compatibility



iPhone (iOS 7-13.1)
iPad (iOS 7-13.1)



Phone (Android 5.0+)
Tablet (Android 5.0+)



Windows
MacOS

Powering the LipSync Macro

The LipSync Macro needs to be powered at all times with an external power source as there's no internal battery. There are several options:



USB power adapter



Computer USB port



Power bank
(>5000 mAh)



USB-C/Lightning to
USB adapter

Connecting via USB

For computers and Android & Windows devices connect the LipSync Macro USB into the device. Use an adapter if necessary.

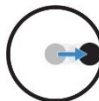

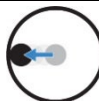



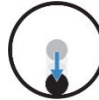
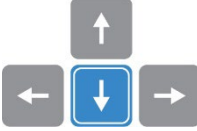


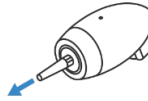



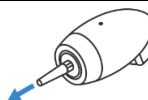
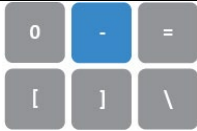
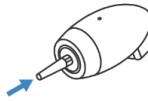
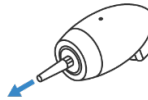
For iOS devices connect the LipSync Macro USB into a USB hub. Use a USB to USB C/Lightning (depending on the device used) to connect the USB hub to your device.

For more information, see *LipSync Macro: Setup Guide*.

Connecting Wirelessly

1. Open **Settings > Bluetooth** > Turn it on.
2. Tap on **LipSyncMacro** to connect.
3. A **Connected** message will show beside the device name when it successfully connects.

Default Functions for PC

| Action | Action Time (seconds) | Function |
|--|-----------------------|---|
|  MOUTHPIECE RIGHT | N/A |  |
|  MOUTHPIECE LEFT | N/A |  |
|  MOUTHPIECE UP | N/A |  |
|  MOUTHPIECE DOWN | N/A |  |
|  PUFF | 1 |  |
|  SIP | 1 |  |
|  PUFF | 3 |  |
|  SIP | 3 |  |
|  PUFF | 5 | Centre Reset |
|  SIP | 5 | No Action |

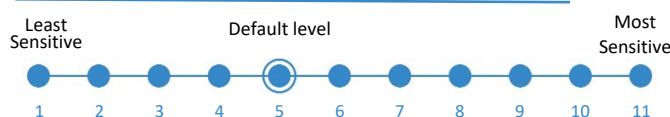
*No setup is required for the Macro to be used with computers.

Custom Functions on the Phone/Tablet

After the LipSync Macro is setup with a phone or tablet, users can modify the programmed functions within the device. For visual instructions and advanced setups, please see *LipSync Macro: Setup Guide*.

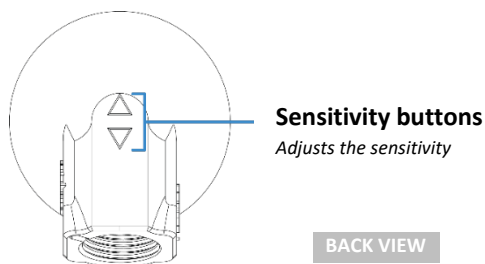
1. Open **Settings** > (iOS) **Accessibility** or (Android) **Accessibility** > **Dexterity & Interactions**
2. Go to (iOS) **Switch Control**/ (Android) **Universal Switch**
3. Tap on **Switches** to bring up the list of functions already programmed.
4. Tap on a saved function you want to modify and select the new function you want to assign it.

Sensitivity Control

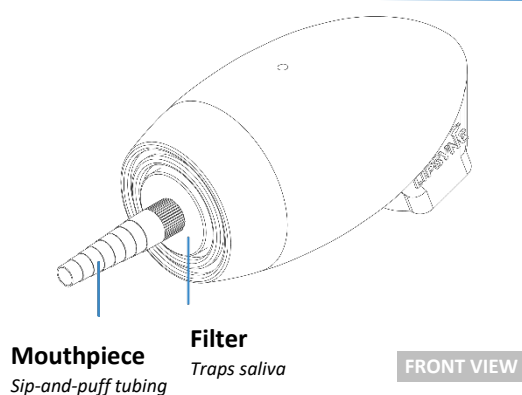


Press the ▲ button to increase the joystick sensitivity.
Press the ▼ button to decrease the joystick sensitivity.

The LED will blink the sensitivity level number. The previous setting will be saved the next time it's used.



Cleaning the Mouthpiece and Filter



Each user should have their own set of mouthpiece and filter for hygienic reasons. These pieces are made of acrylic plastic and have a 3–6-month life cycle depending on the usage.

1. With the LipSync facing you and wearing clean gloves, twist the mouthpiece and filter **counter clockwise** to remove them.



2. If the filter doesn't twist off or the filter stem is broken, use a hemostat or extra fine tip needle nose pliers to grip and carefully twist it off. See the *LipSync: Startup Guide* for in-depth instructions.
3. **To clean the mouthpiece:** mix 1 cup (250 mL) of water with 2 tsp (10 mL) of 5% bleach (sodium hypochlorite). Soak it for 10 minutes and let it air dry or wipe with clean cloth.
To clean the filter: throw away used filters that have trapped saliva and use a clean piece.
4. Wearing clean gloves, twist the mouthpiece and filter **clockwise until finger tight. Do not overtighten.**



Cleaning the LipSync Shell

- ✓ Wipe with a non-abrasive cloth lightly dampen with water or cleaning alcohol
- ✗ Don't use abrasive cleaning materials
- ✗ Don't soak the LipSync shell in any cleaning solutions

Troubleshooting Output Action Issues

If users encounter inconsistent output actions, follow these steps in order:

1. Unplug the LipSync USB from the power source (e.g. power bank or device), wait a few moments before plugging it back, and let the LipSync initialize.
2. Perform joystick calibration. See the last page on the *LipSync Macro: Startup Guide* or watch the calibration tutorial on YouTube (<https://tiny.cc/CalibrateLipSync>).

If steps 1-2 don't resolve the output action issue, contact your LipSync maker or go to Makers Making Change Forum (<https://MakersMakingChange.com/forum>) for assistance.