

# 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.

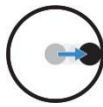
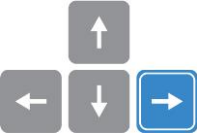

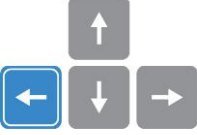

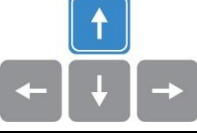

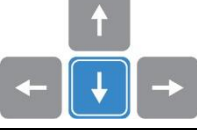


















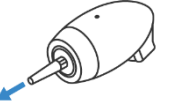




**For iOS devices** connect the LipSync Macro USB into a USB hub. Use a USB to USB C/Lightning (depending on the device used) to connect the USB hub to your device.

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	   

\*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*.

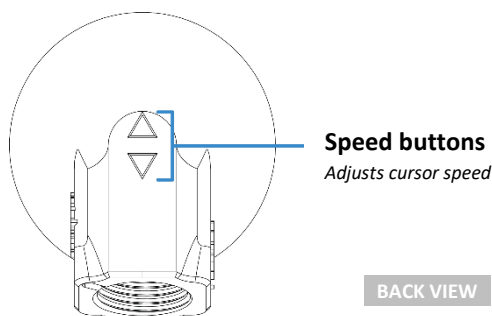
1. Open **Settings** > (iOS) **Accessibility** or (Android) **Accessibility** > **Dexterity & Interactions**
2. Go to (iOS) **Switch Control**/ (Android) **Universal Switch**
3. Tap on **Switches** to bring up the list of functions already programmed.
4. Tap on a saved function you want to modify and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

## Speed Control

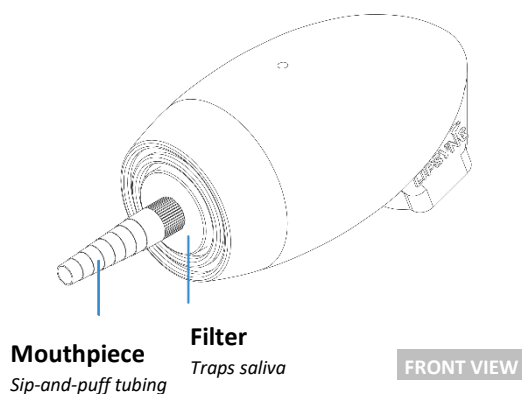


Press the ▲ button to increase the LipSync speed.  
Press the ▼ button to decrease the LipSync speed.

The LED will blink the speed level number. The previous speed 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.

Follow these steps to clean the pieces during its life cycle:

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 Cursor Issues

If users encounter drifting or inconsistent cursor movement, 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 doesn't resolve the cursor issue, contact your LipSync maker or go to Makers Making Change Forum (<https://forum.MakersMakingChange.com>) for assistance.