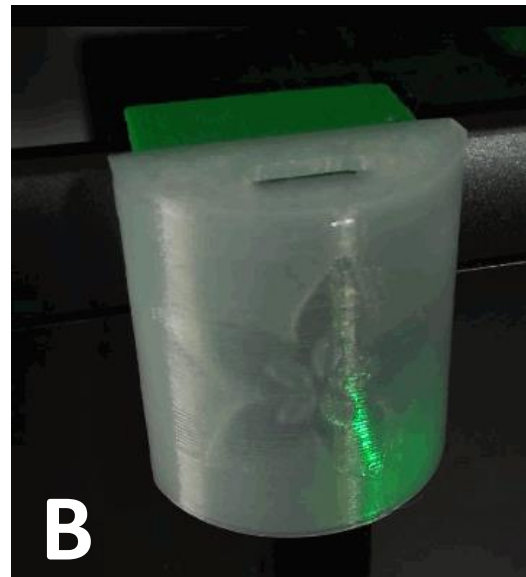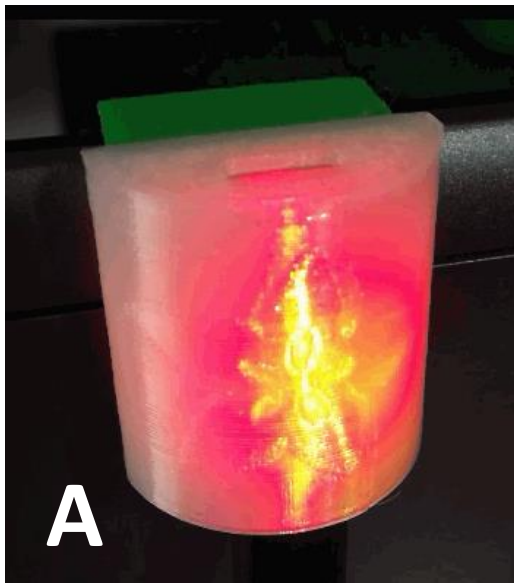# HAND-RAISER
USER QUICK GUIDE

Introduction

The Hand-Raiser is an assistive device used to catch the attention of a professor without a student having to raise their hand. This device would be beneficial for someone who has difficulty or is unable to raise their hand for an extended period of time.

Features

This device can flash different colour LED lights at different brightness levels and in different patterns. In the below figures, the LED light is red and is flashing on (A) and off (B).

Usage

 The Hand-Raiser works by listening to the incoming requests through the USB connection. The Hand-Raiser includes a set of Windows Shortcuts that can be used to change the LED by just double clicking on them.

HAND-RAISER
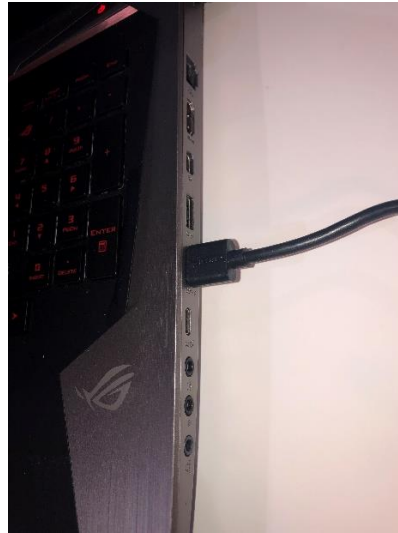# USER QUICK GUIDE

How to Use the Hand-Raiser

Step 1
Carefully plug the USB cable into the Hand-Raiser.

Step 2
Plug the other end of the USB cable into the desired device.

Step 3
Hang the Hand-Raiser on the back of the laptop or any other desired location.
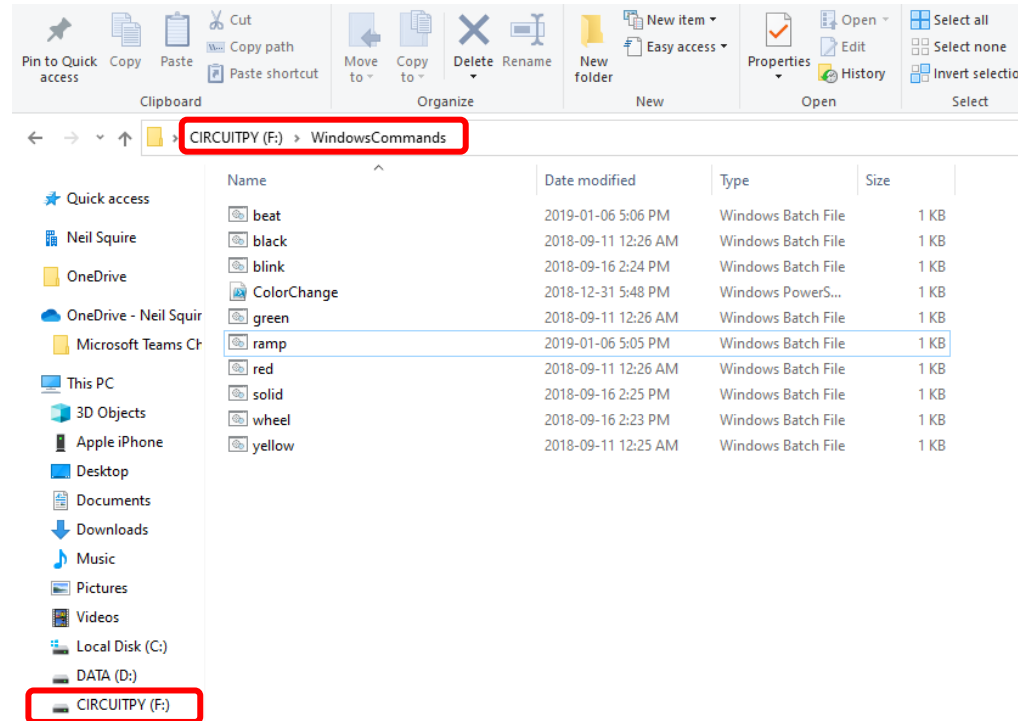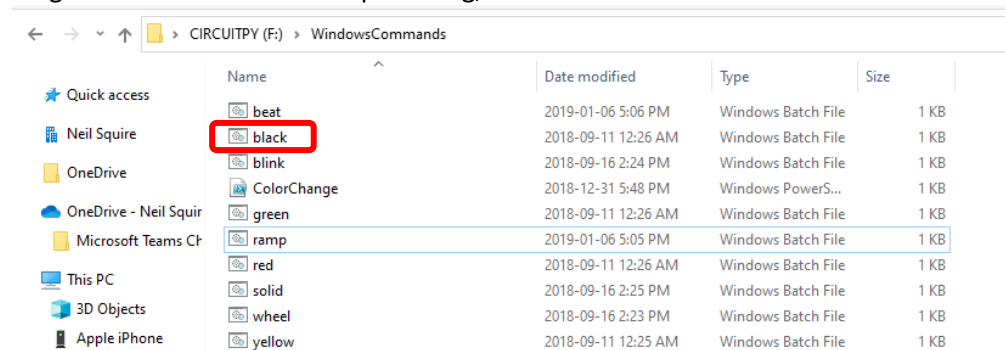
HAND-RAISER
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Step 4

In Files, locate and open the Hand-Raiser called CIRCUITPY (F:) , then open WindowsCommands. You will see listed all the colours and flashing patterns that are on the Hand-Raiser. If you want to display a colour or a pattern, you have to double click on each. For example, if you want a blinking red light, double click the "blinking" file, then double click the "red" file. If you then wanted to switch to a blinking yellow light, you would just double click on the "yellow" file.

Step 5

To get the Hand-Raiser to stop flashing, double click on the "black" file.

Compatibility

HAND-RAISER
USER QUICK GUIDE

The Hand-Raiser can work with any computer with Windows.

Specifications

There are several versions of the hook and the faceplate, so the specifications listed below are specific to the 15mm Snap Hanger, the Blank Faceplate, and the Snap Back. The specifications for the other hooks and faceplates are very similar to the ones mentioned. X Y and Z directions are determined when the 3D components are in the orientation that does not require the components to be printed with supports. The X direction is defined as the shorter of the 2 planes parallel to the print bed, Y is defined as the longer of the 2 planes parallel to the print bed, and Z is defined as the height of the print off the print bed.

	Mass (g)	Dimensions (mm)		
		Length	Width	Height
15mm Snap Hanger	3	22	30	12
Blank Faceplate	4	14	29	33
Snap Back	3	25	39	8

Cleaning

The Hand-Raiser can be wiped down with sanitizing cleaners. Do not wash the Hand-Raiser in high heat as it may cause it to melt or could damage the electronics inside (i.e., do not put it in the dishwasher, the washing machine, or soak it in hot water).