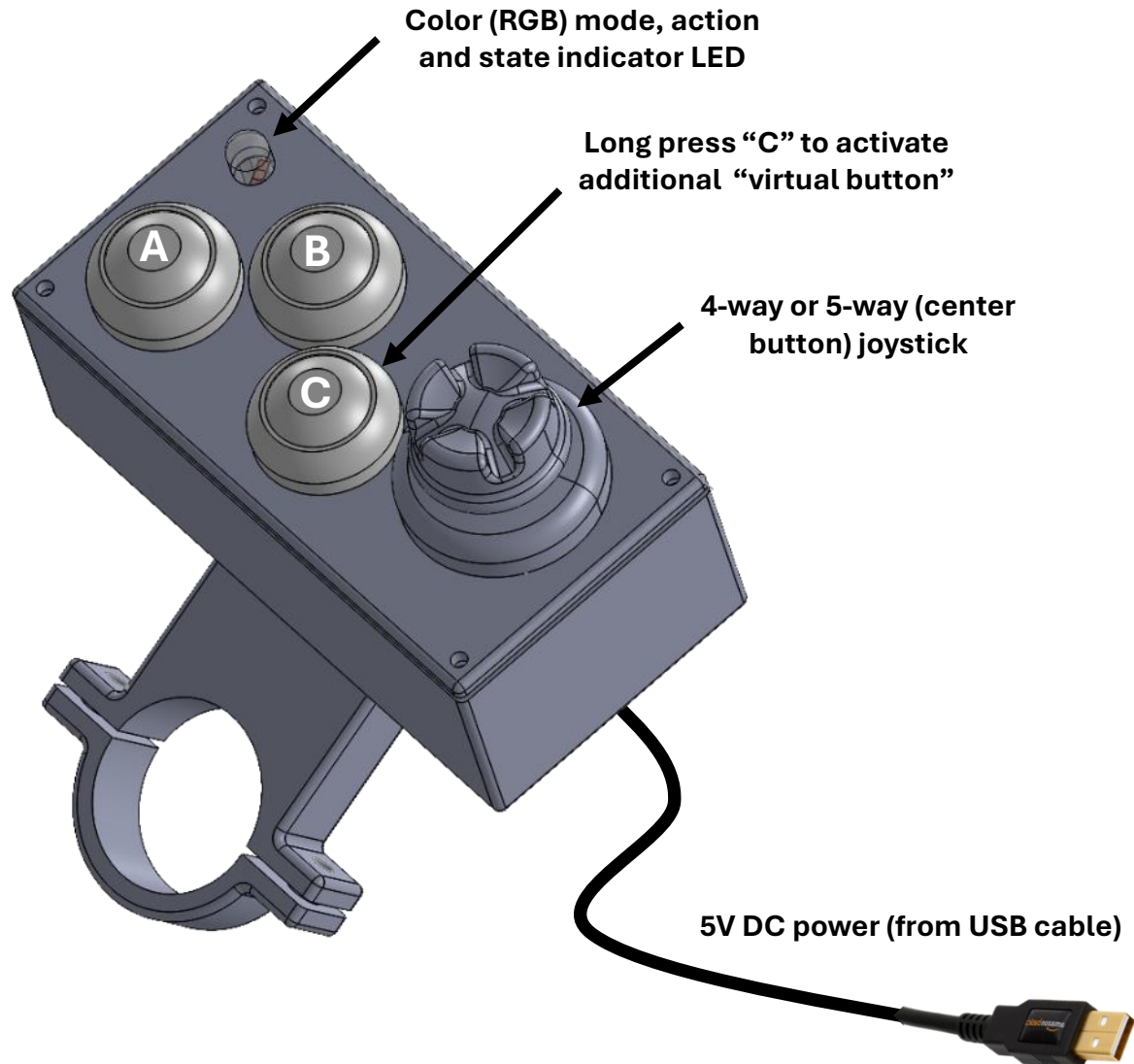


MotoButtons 2 User's Guide

September 27, 2024

Device Overview



LED Interpretation

Color	Meaning
Red	1. Initial power on 2. Virtual button activated 3. (<i>Flashing</i>) Controller orientation changed at power on
White	1. Power on completed 2. Keypress (optional)
Blue	Solid: Bluetooth enabled <i>Flashing</i> : Bluetooth searching for connection
Green	Mouse mode
Yellow	DMD2 Mode
Cyan	MyRouteApp mode
Magenta	Media player mode

All buttons (except joystick directional input) activate when released, not when pressed!

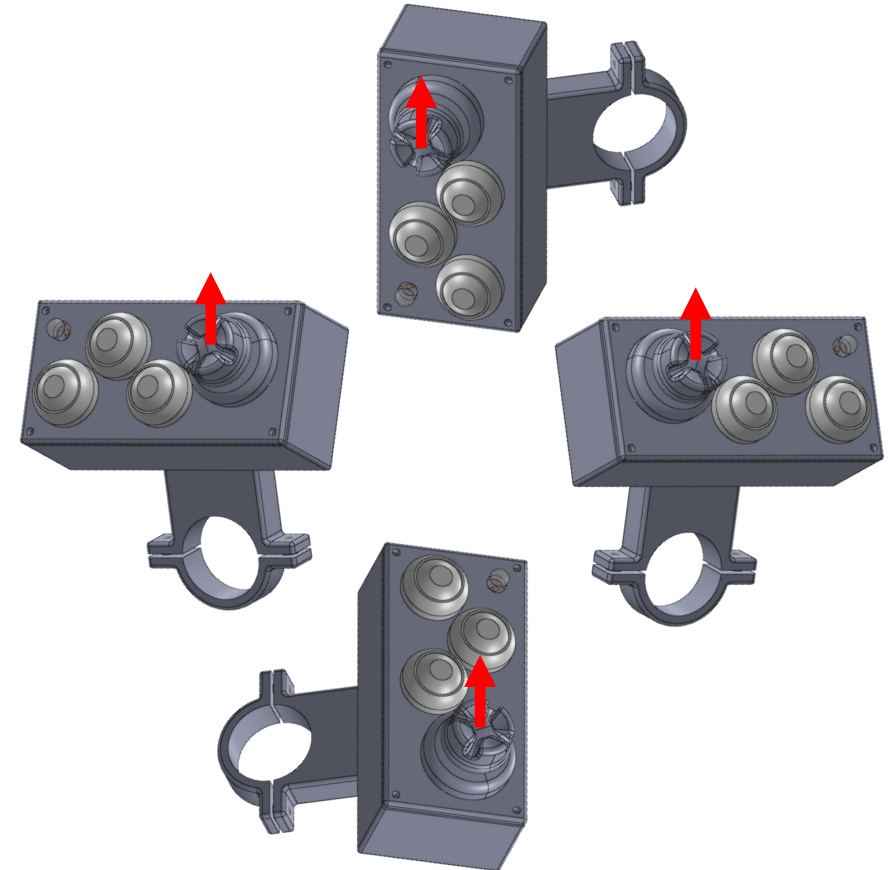
Changing the Installation Orientation

Depending on how you choose to install the unit, you may need to set the orientation of the device. This way, “up” on the joystick will be “up” on your phone or tablet.

Setting the orientation

Hold the joystick **UP** before applying power. Release once the LED *flashes RED*.

The setting will be stored for future power cycles.



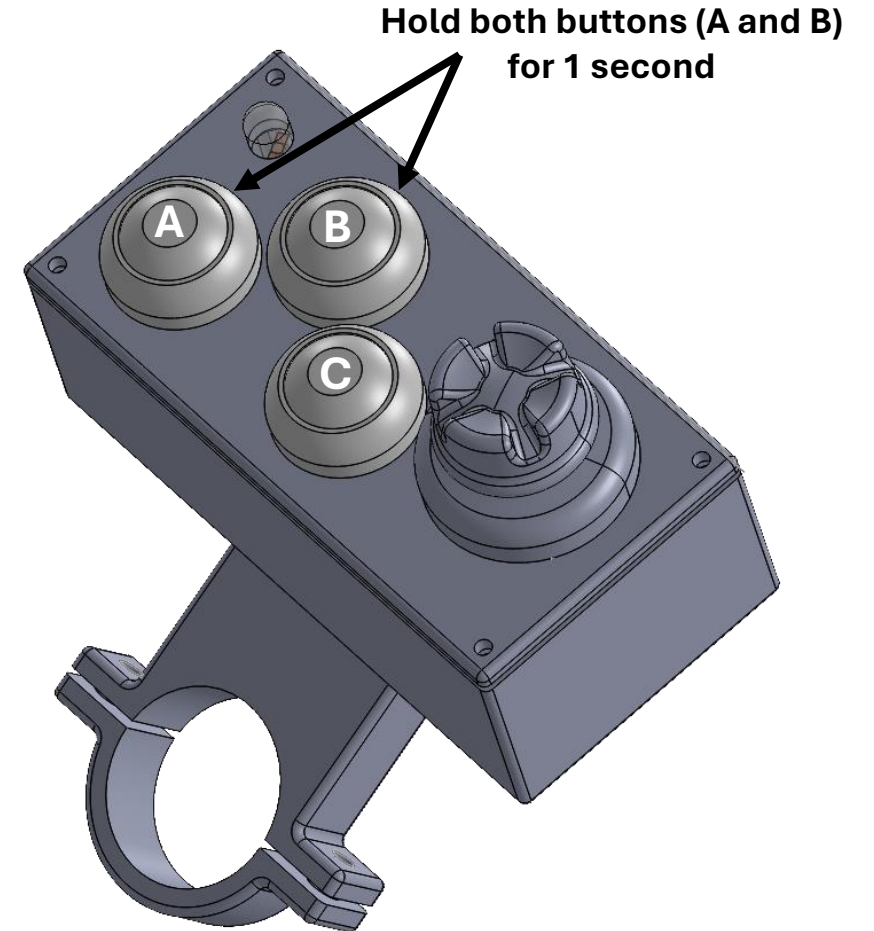
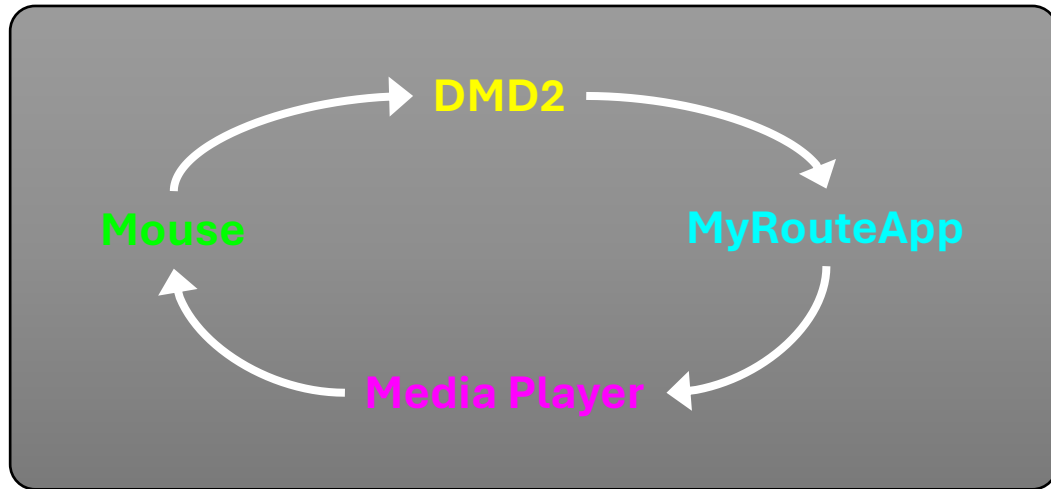
Changing the Mode

You can change the mode at any time by long pressing two buttons.

Changing the mode

Holding both the A and B buttons for 1 second. When the mode changes, the LED will cycle to the next color.

The device remembers the mode during power cycles.

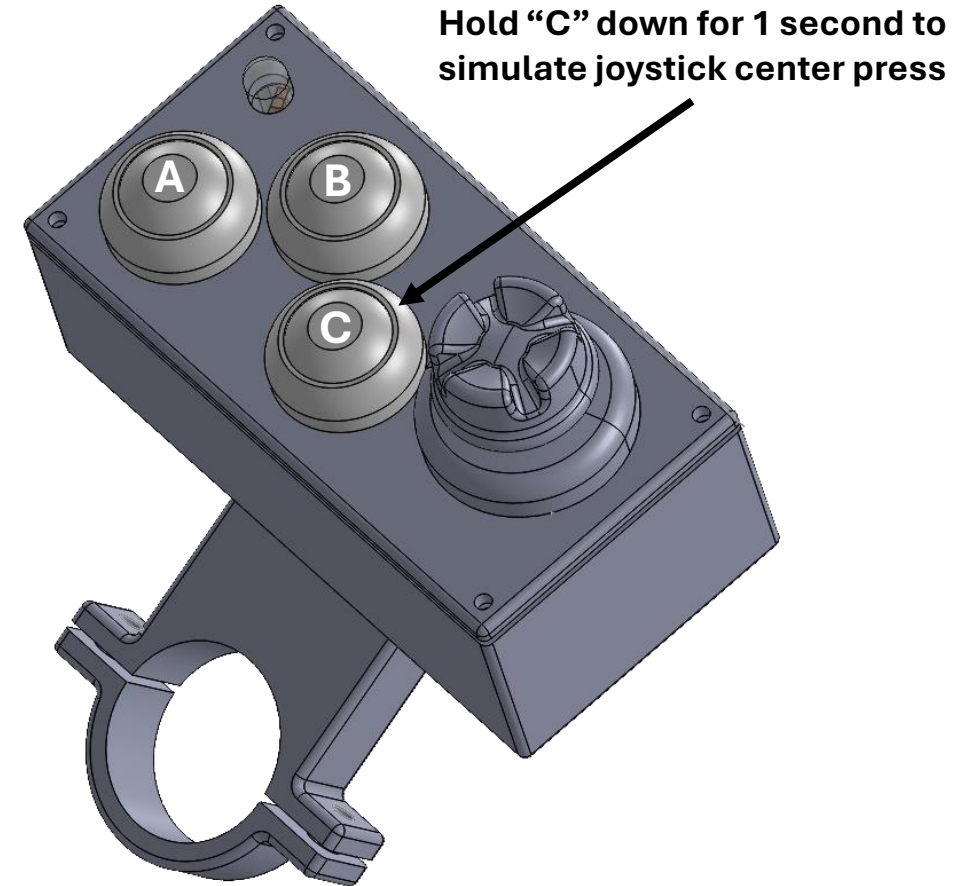


Activating the Virtual Button (4-way joysticks)

To accommodate controllers with only a 4-way joystick (no center press), button C can be held down (long press) to simulate the center click of the joystick.

Virtual joystick center press

Hold down Button C for 1 second. The LED will turn **RED**, then release the button.



Mouse Mode

Joystick

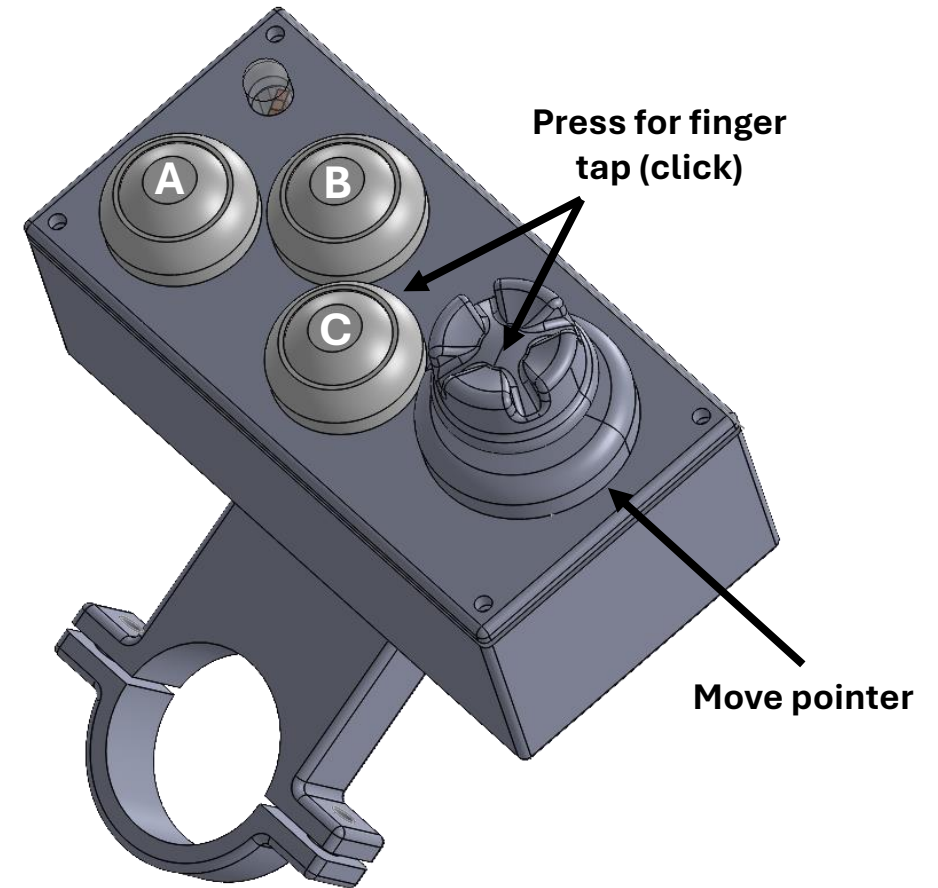
Hold up, down, left, right to move cursor.

Press center for mouse or finger press (5-way only).

Holding longer than half a second moves cursor rapidly.

Button C

Mouse or finger press (necessary for 4-way joysticks).



DMD2 Mode

Joystick

Press for enter or change direction/page.

Button A

F6 key

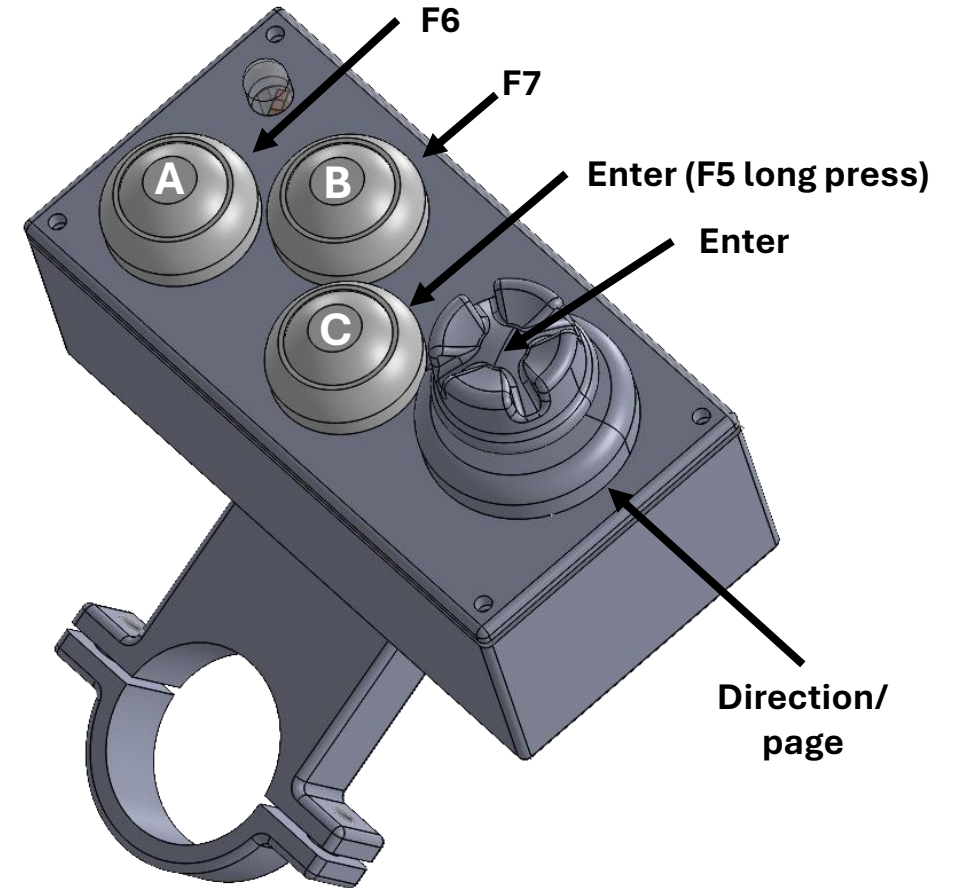
Button B

F7 key

Button C

Enter

Long press: F5 key



Media Player Mode

Joystick

Up/down: increase/decrease music volume
Left/right: previous/next track
Center press: mute music

Button A

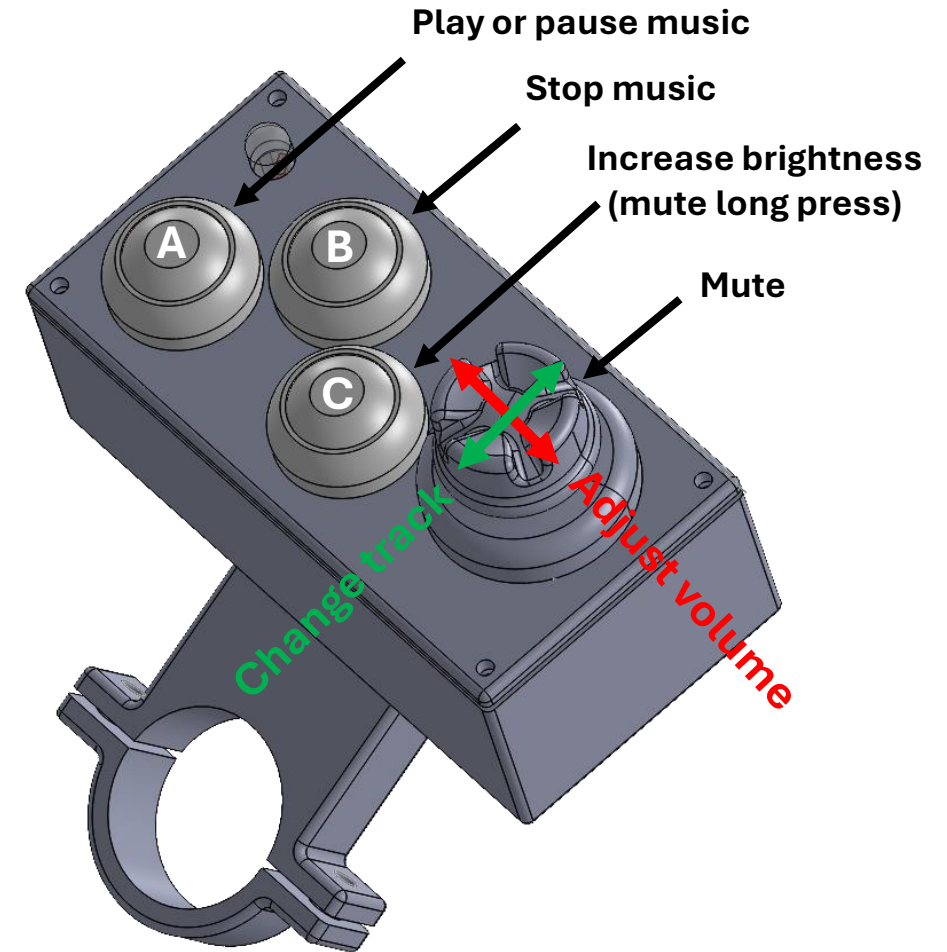
Play or pause music

Button B

Stop music

Button C

Increase display brightness
Long press: Mute music



MyRouteApp Mode

Joystick

Pan map or change field.

Center press: operate compass

Button A

Zoom in

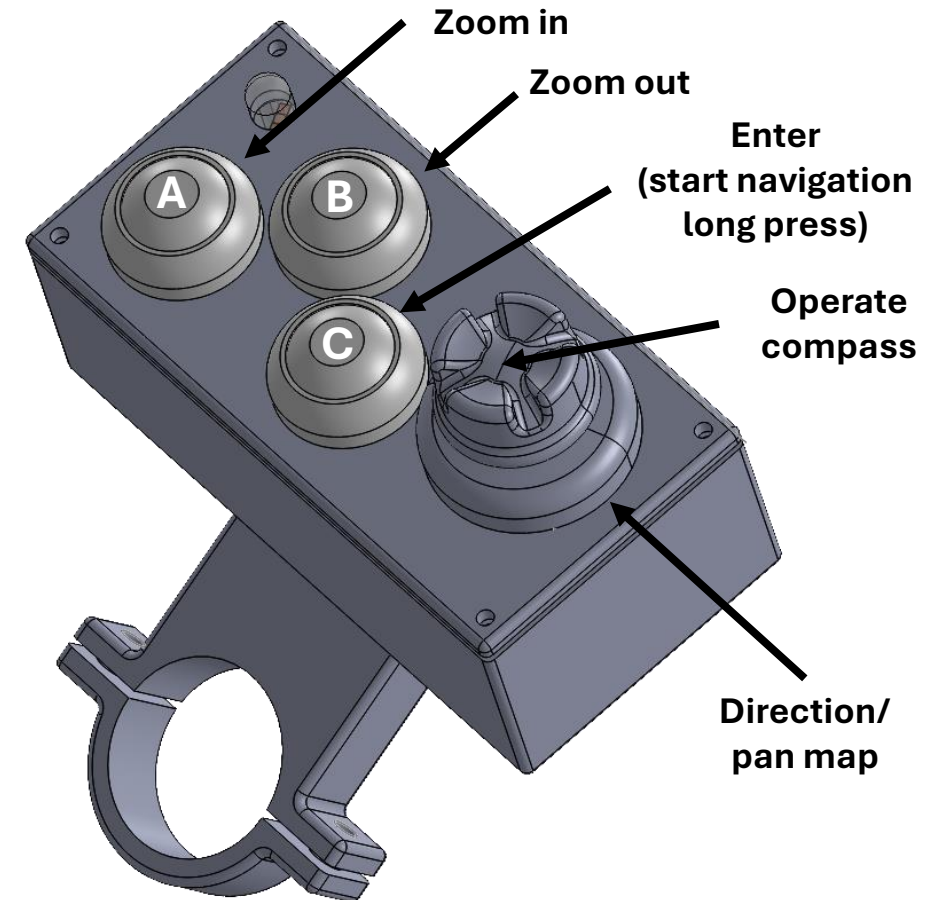
Button B

Zoom out

Button C

Open menu

Long press: start navigation

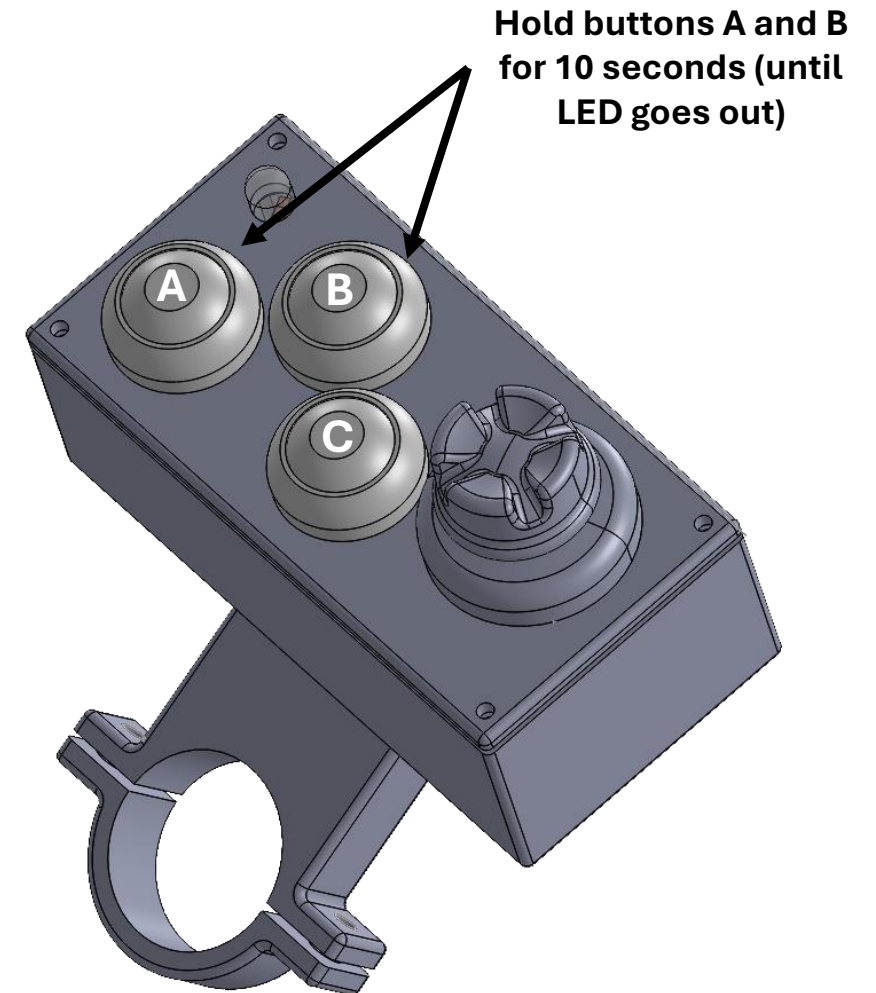


Reprogramming the Firmware

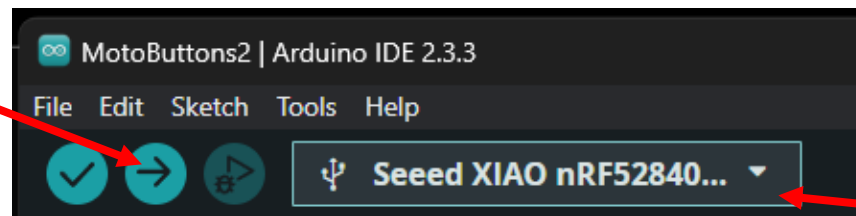
Due to a bug in the Seeed XIAO microcontroller (MCU), a special button combination is necessary to put the MCU in firmware upload mode. This is known as “DFU” mode.

Entering DFU mode

1. Connect the USB-C port on the MCU to a computer.
2. Simultaneously hold down **buttons A and B** for 10 seconds until the LED goes out.
3. The MCU enters DFU mode. Select the other / new COM (serial) port in the Arduino IDE and click the upload firmware button.



3. Click upload button



2. Select the other COM port for firmware upload

Issues, Suggestions or Questions?



If you encounter issues, have suggestions or other questions, please submit an “issue” in the GitHub repository page.

<https://github.com/joncox123/MotoButtons2/issues>

Alternatively, you may ask the community for help on the ADV Rider forum. However, bugs or issues must be submitted to the GitHub issue tracker.

[ADV Rider MotoButtons Forum](#)

Unfortunately, the author cannot respond directly to e-mails.