

# Trumpet Assist Device User Guide

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The trumpet assist is designed to hold a standard trumpet on an adjustable stand while providing three low-profile buttons to allow pressing of the trumpet's finger buttons using less force. Two trumpet assist devices have been assembled, one with black and white components for school/concerts and another with blue+white components.

#### **Trumpet Assist Components:**

#### **Black + White Components**

Left Shell with controls box (x1):



Battery Connector (x1):



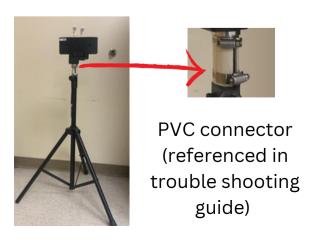
Thumb Screws (x2):



Shell Connector (x1):

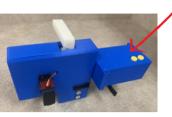


Stand for black device (right shell already attached):



**Blue + White Components** 

Left Shell with controls box (x1):



Right Shell (no buttons) (x1):



Battery Connector (x1):



Thumb Screws (x2):



Shell Connector (x1):



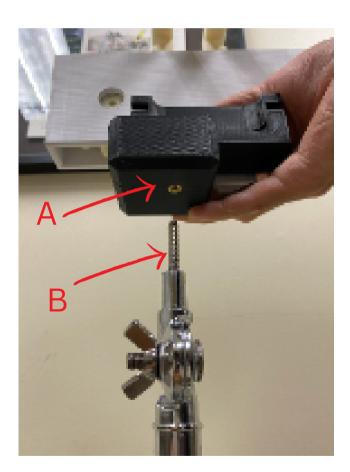
Stand for blue device:



# Assemble the Stand (Blue/White)

Note: The black and white stand is preassembled. The right shell for the black and white device is designed to never come off the stand.

- 1. Open and secure the three legs of the stand
- 2. Screw the right shell (A) onto the threaded post (B) at the top of the stand. Make sure to support the shell while it is rotated until snug (~7 rotations)





# Mounting + Securing Trumpet

Note: The following instructions show the black and white device but apply to both devices.

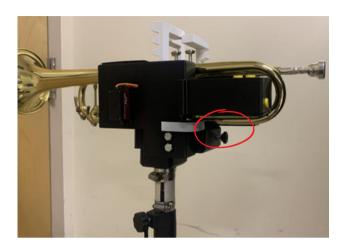
1. Slide the bottom of the trumpet (bottom valve casings/valve caps) into the slot on the right shell. Be sure to orient the trumpet so the mouthpiece is on the left when looking at the shell from the inside (see image)





2. With one person supporting the trumpet, have another slide the left shell into the bottom of the trumpet and next to the right shell. Mate the two shells by sliding the left shell slot onto the bottom of the trumpet. You may need to lightly wiggle/shake the shells and valves so they seat together.

3. Screw the two thumb screws into the left shell (in the front and back) as shown. Adjust the left shell so that it fits snugly/aligns well, and the screw tightens completely. When the shell is correctly assembled, the trumpet will be secure while still able to move slightly to accommodate the head movements of the trumpet player.

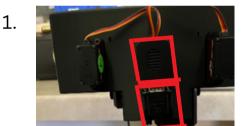




#### **Power Connections**

- 1. Use the shell connector to connect the right shell to the battery box. The connector ends are different, so check where each fits.
- 2. Make sure to secure the hook and loop strap to prevent the shell connector from disengaging.
- 3. Plug the battery connector into the controls box, then plug the power adapter into an outlet.

You are ready to play! Use the three low profile buttons to activate the valves.



2.



3.

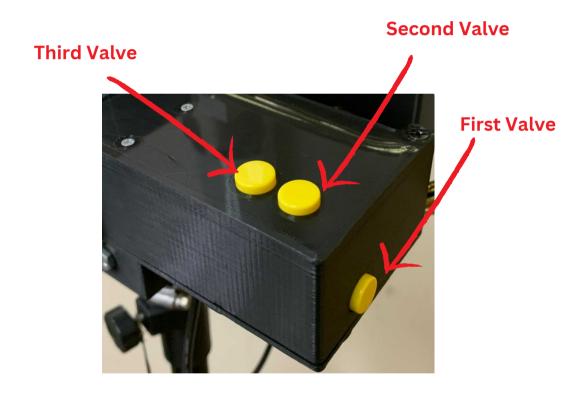




### Operating

The black and white trumpet assist device is designed to be used for school/concerts while the blue and white trumpet assist device is meant for use at home. The two devices work in the same way once completely assembled.

- Adjust the stand to the correct height before playing.
- Press the low-profile buttons to actuate the solenoids and press down the corresponding trumpet finger buttons.
- 1, 2, or 3 buttons can be pressed at a time.



For disassembly, first remove the power connections. Next, unscrew the two thumbscrews and remove the left shell and trumpet. For the blue and white device, the remaining right shell may be removed by unscrewing it (~7 turns).

#### Troubleshooting

Q1: What if the racks (white pieces) on the trumpet assist device go up and down rapidly or "twitch"?

• A1: Unplug/plug back in the black connector wire. Make sure both sides are firmly pushed all the way in.

Q2: What happens if the buttons don't work when pressed down?

• A2: Check the connection between the thick black wires and the power adapter cable as instructed in A1.

Q3: What happens if the servo (red motors sticking out of the mechanism) feel hot?

• A3: Unplug the power adapter and contact Gunn Robotics.

Q4: What if the black device's PVC connector loosens?

• A4: Use a flathead screwdriver to tighten the bottom hose clamp on the stand. If unable to adjust a hose clamp, contact Gunn Robotics.

If the instructions above do not solve the problem, or you encounter recurring problems or ones not described in this manual, please contact Gunn Robotics via gunnrobotics192@gmail.com