

WELCOME



Thank you for purchasing the Musical Mushroom®, a new patent pending technology allowing you to operate your singing bowls with simple hand gestures! Before you begin, it is very important to read and follow the instructions below.

For the very latest updated information, including videos and documents and user support forums, scan the QR codes below or visit the links on our website.

	QR Code	URL
Installation and use videos and manuals		www.musicalmushroom.com/support

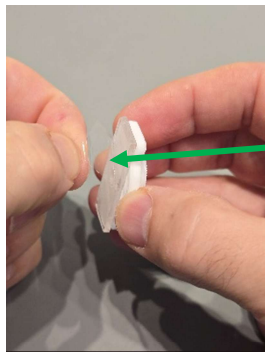
NOMENCLATURE



STEP 1 - INSTALLING THE MOUNTING DISC



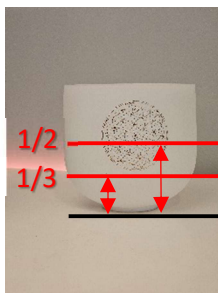
Locate a plastic mounting disc found inside your kit. This threaded disc will be glued to the inside wall of your bowl using the attached double-sided tape. It can remain glued onto your bowl permanently and still allow you to use your mallet if you want. Should you chose to remove it, you can do so either with your fingers or using the special removal tool provided as described below.



Peel off the protective strip to expose the sticky tape. Keep this strip in case you want to remove the mounting disc from your bowl and protect the tape from dust again.



Make sure the mounting disc is vertically aligned when gluing it and NOT sideways. This is necessary so the adhesive strip adheres completely to the curved surface of the bowl.



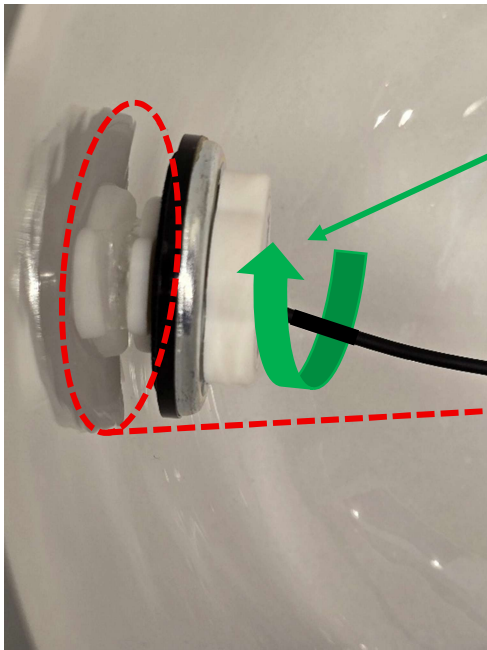
Glue the mounting disc on the inside surface of the singing bowl at a vertical elevation between $\frac{1}{3}$ to $\frac{1}{2}$ of the bowl's total height. Press the exciter against the bowl and apply full pressure with your fingers.

STEP 2 - INSTALLING THE EXCITER



Remove the protective plastic cover from the exciter by inserting your finger in the hole and carefully prying it away. It might be a bit tight if it has been sitting for a while.

Keep this cover aside for storing your exciter when it is not installed in your bowl. It is important to protect the exciter during transport to prevent damaging its delicate suspension.



Now that the mounting disc is securely glued to the bowl, screw the exciter clockwise onto the mounting disc, finger tight, being careful not to drop the exciter in the bowl in the process. If there is a loud chattering during normal use, check if the exciter is loose. If so, tighten it a bit more so there is no slack between the threads.

As shown in the picture, only the sticky tape should be contacting the crystal surface. NO part of the plastic housing should make any contact with the crystal. If so, it might also result in a loud buzzing / chattering sound during use.

The exciter is now installed and ready for use.



HOW TO REMOVE THE EXCITER: When you are finished playing with the Musical Mushroom®, you can remove the exciter by simply unscrewing it counterclockwise from the mounting disc and placing it into its protective plastic cover for transport or storage. You can safely leave the mounting disc glued in place and still use your bowl with a mallet if you want.

STEP 3 - INSTALLING THE MUSICAL MUSHROOM® UNIT



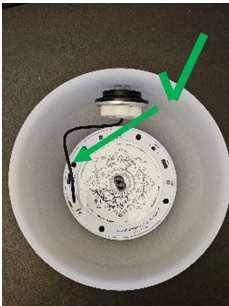
Remove the protective plastic lid from the Musical Mushroom® unit. Keep this lid aside for protecting your unit when storing or transporting it. Never stack units on top of each other unless the lid is installed, or this will damage the delicate buttons.

Underneath the lid, you will find a silicone O-ring.

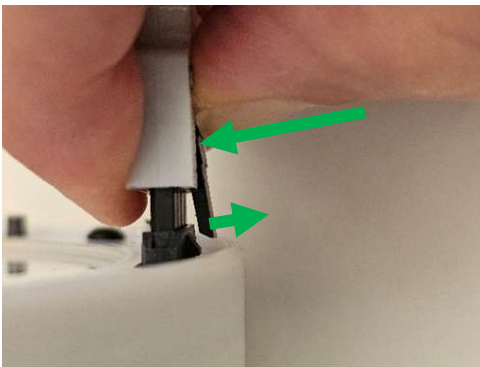


Place this O-ring underneath the Musical Mushroom while inside your bowl to adequately cushion it.

Once finished playing, replace the O-ring back inside the protective lid for storage.



Position the Mushroom unit at the base of your bowl, careful not to drop it. Connect the exciter cable connector to the unit until you feel a click. **IMPORTANT:** Ensure that the cable is not covering the light beam sensor (black lens in the center of the unit). If so, rotate the unit to move the cable away. Just make sure the cable also doesn't touch the crystal bowl. The unit is ready for use. Go to Step 3.



HOW TO REMOVE THE MUSHROOM FROM YOUR BOWL AFTER USE: Once you are finished playing and want to remove the unit, first disconnect the exciter by first unlocking its latch. Use your fingernail to squeeze down on the plastic latch lever end and make it pivot away from the connector body as shown in the picture. While keeping the pressure, pull out the connector by holding it from the white plastic body. **Never pull on the cable! Also, do not use excessive force or you will break off the connector!** If the plastic latch is pressed correctly, the connector should easily pull out. Practice makes perfect!



Once the exciter is disconnected, you may remove the Musical Mushroom® and replace the protective lid on top. Also, you may unscrew the exciter and also replace its protective plastic cover for storage.

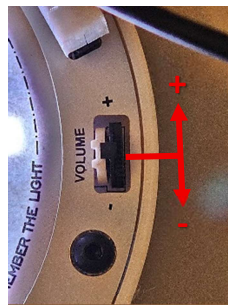
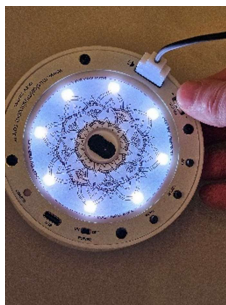
NOTE: NEVER screw or unscrew the exciter while the cable is connected to the unit. That will twist the cable and potentially damage it. Always disconnect first!

STEP 4 – CALIBRATING YOUR BOWL



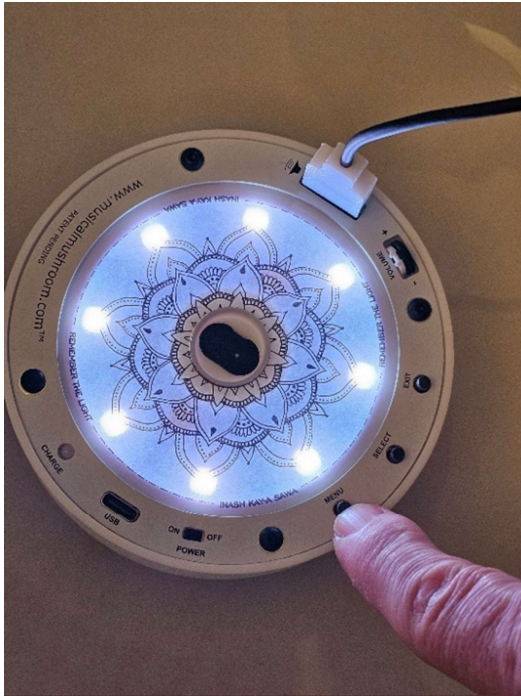
The very first time you install a Musical Mushroom® inside a new singing bowl, you need to perform a one-time automatic calibration so that it can figure out at what frequency your bowl sings. Once done, the Musical Mushroom® will remember that frequency as long as you keep using it in the same bowl. Repeat the calibration every time you move the Musical Mushroom® to a new bowl.

To calibrate, move the switch to the ON position. Wait 5 seconds for the internal computer to boot. The LED's should eventually turn ON (your color may vary).



To adjust the volume to a safe level, press the MENU button. You should hear a voice sounding from your bowl. Adjust the volume button by using the side of your thumb until the volume is at a comfortable loudness. The black portion of the volume wheel rotates back and forth, which may be a bit tricky at first. Practice makes perfect. Do not damage the wheel using excessive force!

Rotate towards the + to increase or – to decrease the volume. If the speech stops before you finished adjusting the volume, press MENU again and continue adjusting it. Once satisfied, press the EXIT button to exit the menu. For the purpose of calibration, a higher volume works better.



It is recommended to do the calibration in a quiet room away from any noise. See website for more information and tips. Only calibrate one unit at a time. During the calibration, an audible sweep is heard and a small microphone in the unit listens for the bowl sounds. You must remain totally silent during this phase, or the calibration may be incorrect. If that happens, try a new calibration.

Go ahead and launch the calibration process by pressing the MENU button until you hear “BOWL CALIBRATION”. Then press SELECT and wait for the calibration process to complete. If the calibration is successful, you will hear the voice speak the frequency of your bowl and other parameters. You can place your hand over the bowl and you should hear the bowl sing as you move your hand up and down.

PRO TIP: calibrate your bowls ahead of an event in a quiet space and match the unit to their calibrated bowl using a pair of color-coded stickers or by labeling them. At the venue, you can easily match them together and you won’t need to repeat this calibration process.

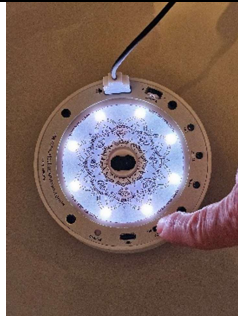
COMMON PROBLEMS ENCOUNTERED:

(1) if after calibration the bowl vibrates but doesn’t sing very loudly, it is likely due to a miscalibration. The mushroom is vibrating it at the wrong frequency. Calibration is a complex process that can fail. A quick thing to try is press MENU 4 times until you hear “select resonant frequency”, then press SELECT, then press SAVE/EXIT. This moves the frequency to the next higher overtone it found.

(2) if the hand sensor doesn’t respond to your hand movements and you see a white orbiting LED pattern, you might have a taller than usual bowl whose rim trips the gesture sensor light beam. The solution is to place a small box underneath the Mushroom to elevate it by at least 2 inches or so.

	If these solutions don't work, you can check out our full calibration tips troubleshooting guide as well as our calibration instructions video both found on our support page www.musicalmushroom.com/support
	ADJUST MAX VOLUME TO AVOID ANY BUZZING SOUNDS: At this point, we are assuming that your unit has already been calibrated to this bowl. The color of the LEDs will vary depending on your specific color settings. Start with your outstretched hand positioned completely off to the side of the bowl and at a vertical height of approximately 45 cm (1.5 feet) above the top of the bowl. Now quickly enter the invisible range sensing light beam by approaching your hand sideways towards the center of the bowl stopping it directly above its center. Now, lower your hand to get the full loudness and simultaneously use your other hand's thumb to adjust the maximum volume control knob to a comfortable maximum level as shown in the picture. Lower the max volume knob so that you don't hear any buzzing at full loudness. You can see step by step videos on how to do all of these steps at: www.musicalmushroom.com/support

STEP 5 – BASIC OPERATION



UNIT SETUP: During normal use, you setup your bowl by screwing the exciter onto the mounting disc. Then, position the Musical Mushroom® unit in the bottom of the bowl, placing the O-ring underneath. Connect the exciter cable to it. Finally, place the switch in the ON position, waiting 5 seconds for the unit to boot. Once the LED's are ON, you are ready to use the unit.

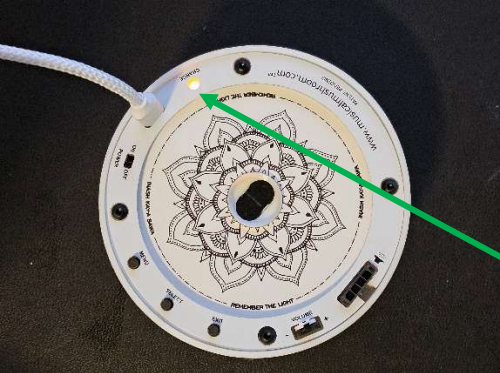


READY TO PLAY! To detect a hand, the Musical Mushroom® emits a series of invisible light beam pulses. This light beam has the shape of an inverted cone as illustrated in the image. To play, you must enter the beam sideways using your outstretched hand starting from outside the bowl moving towards its center relatively quickly. Once in the beam, move your hand up and down to control the loudness. Exit the beam relatively quickly by moving your hand sideways away from the center off to the side of the bowl.

PRO TIP: Your hand needs to move completely off to the side of the bowl to exit the beam cleanly. If you merely move your hand over the bowl edge, it might not detect the exit cleanly and continue playing. Also, if you move sideways too slowly, it may not detect the entry/exit correctly.

Whichever vertical height you choose to enter the beam becomes your home position. Going down from that position increases the bowl's volume relative to the entry point. Going up lowers it until 0%. The hand detection movement range from 0%-100% volume is set to 30 cm (1 foot) by default.

AUTOMATIC NOTE HOLD: If you exit sideways after having held your hand in the beam at least 1 second, the unit will automatically hold that note indefinitely at that same volume without you needing to hold your hand in the beam (at least until the battery runs out!). To stop the bowl, just move your hand sideways in and back out of the beam in less than 1 second or cut the beam sideways like a karate chop. This quiets the

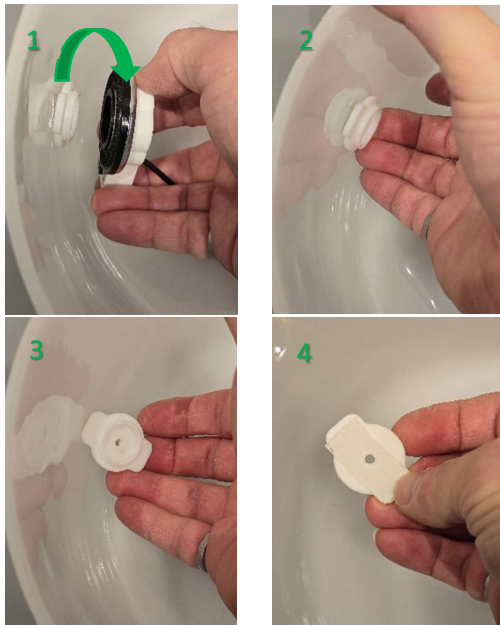
	bowl. When in doubt, karate chop! This will always stop everything and allow you to start again. WAVE PATTERN HOLD: To have the unit automatically continue a “woo-woo-woo” wave pattern (tremolo), simply make a smooth up and down wave motion with your hand in the beam for at least 5 seconds after which you will see a white flash, signaling that you may exit the beam sideways reasonably fast if you want the wave pattern to continue automatically. Karate chop to stop! Several videos showing the playing techniques above are available on our support page at: www.musicalmushroom.com/support
ADDITIONAL INFORMATION	
	USING THE REFLECTIVE WRIST BAND: If you play the Musical Mushroom® close up in a normal sitting position, you can simply use your bare hands. If you instead chose to play while standing up with the bowls on the floor, the gesture sensor might not see your hand as well due to the longer distance. It helps to use some retro-reflective material help the sensor detect your hand more accurately at the higher end of the 1m sensing range. A special reflective wrist band was provided for this purpose. Simply wrap the band around your playing wrist.
	CHARGING THE UNIT: The battery life lasts about 3.5 hours on a full charge (your mileage may vary depending on your chosen LED colors, volume setpoint and usage duty cycle). It is always recommended to fully charge your units using the provided USB charger and cable <u>before every event</u>. Once the battery is fully discharged, the unit will stop working. At that point switch OFF the unit and connect it to your USB charger. An amber charging LED indicates charging and GREEN indicates fully charged. WARNING: do not leave the switch in the ON position for long periods of time after the unit stops working due to battery depletion to prevent battery damage.



USING AN EXTERNAL USB BATTERY PACK: Should you require longer battery life, you can use any off-the-shelf USB charger battery pack plugged into the USB port while playing the Musical Mushroom®. The pack keeps the Musical Mushroom® topped up while it is playing.

You can easily get up to 16 hours on a battery pack. Of course, you need to manage the cable and battery placement to fit inside the bowl without disturbing it.

Alternatively, you can also mount the exciter on the outside surface of the bowl and place the Mushroom outside the bowl. This makes connecting it to a battery pack or even to the wall USB charger much simpler although your hand placement is now to the side of the bowl.

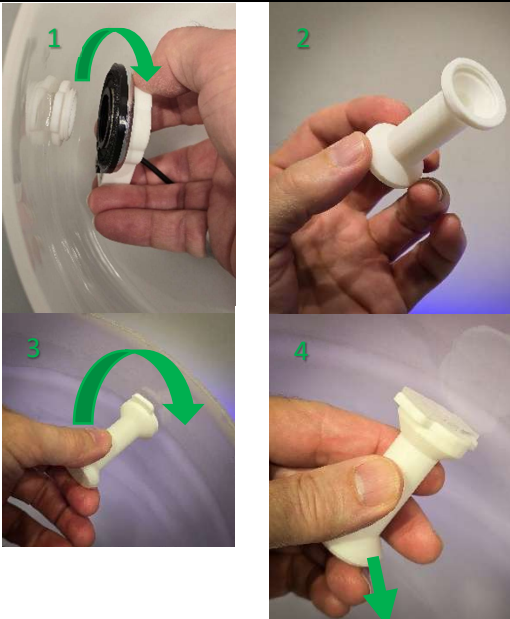
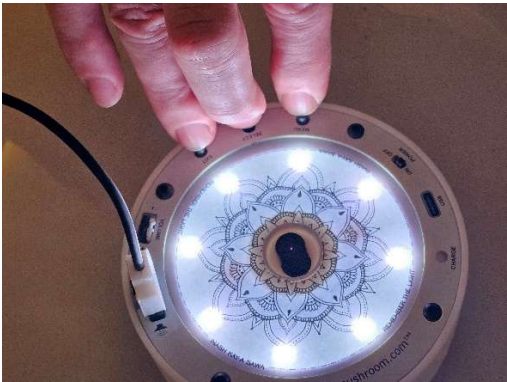


REMOVING THE MOUNTING DISC: Should you wish to entirely remove the mounting disc from your bowl, follow these steps:

IMPORTANT: never press or pull onto the exciter itself or on its cable to remove the disc! This will permanently damage the delicate suspension.

METHOD #1: MANUAL REMOVAL

- (1) Unscrew the exciter from the mounting disc and place its protective cover back onto it.
- (2) Place your fingertips firmly below the mounting disc.
- (3) Apply direct firm pressure upwards and wait. Be patient! It will come off! Don't wiggle back and forth. That just re-sticks it! Steady vertical pulling force will get it to come off over time. Some residue may be left behind. If the adhesive is damaged, you may need a replacement disc for future use.
- (4) You should place back the protective paper to cover the adhesive and keep it sticky.

	METHOD #2: USING THE REMOVAL TOOL Instead of using your fingers, you can also use the special removal tool. (1) Unscrew the exciter from the mounting disc. Place the protective cover back onto it. (2) Locate the exciter removal tool. (3) Screw the removal tool onto the disc's threads. (4) Using the tool as a level, gently press down as the adhesive slowly releases. Be patient! It will come off! Don't wiggle back and forth. That just re-sticks it! Once removed, you can place the protective paper to cover the adhesive to keep it sticky and unscrew the mounting disc from the removal tool.
	HOW TO PERFORM A FACTORY DEFAULT: In order to fully clear the unit of all settings and calibrations, start by placing the power switch in the OFF position. The USB charging cable must be unplugged. Using your three fingers hold down the MENU, SELECT and EXIT buttons simultaneously. While holding them down, move the power switch to the ON position and continue holding down the 3 buttons approximately 5 seconds until the LED's light up white. The unit is now in a factory default state. WARNING: all settings made to the config.txt file are lost and restored to defaults.
	CLEANING THE GESTURE SENSOR COVER: It is important not to obscure the dark plastic cover at the center of the unit. A light beam exits vertically from this aperture. It may need to be cleaned periodically if residue or fingerprints cover it. The hand gesture sensor may not work as well as usual. To clean it, use the same approach as cleaning eyeglasses. A fine cloth or Q-Tip may be used to wipe the dark lens clean. Do not use abrasives or chemicals other than lens cleaner.



PROBLEMS WITH LOW CEILINGS: It is important to understand that the unit measures any obstacle such as a hand hovering above the unit up to 1.0 m (3.3 feet). It can't tell the difference between a hand and a low ceiling, for example. This could happen if the unit is placed on a table under a low ceiling. The unit won't respond to your hand because it is already triggered by the ceiling thinking it is your hand. The way to tell is to see the white orbiting LED pattern. If you see this pattern, the light beam is detecting something. It should not orbit when no hand is present. Reposition the bowl so that no obstacles exist above it below the 1.0 m (3.3 feet) active detection range. Also keep a distance of about 3 feet to the nearest wall or gong rack because the vertical surface might reflect the widest part of the light cone thinking it is a hand.

LIABILITY WAIVER

NOT RESPONSIBLE FOR BOWL BREAKAGE OR INJURY - Although crystal singing bowls are generally very robust, they might have some rare defects in their internal structure leading to the possibility of breakage while using the Musical Mushrooms®, whether by using it in the intended manner or simply by accidentally dropping parts of it in the bowl during installation. By purchasing and using this product, you agree to release Musical Mushroom Inc. from any financial liability, whether material, physical injury or any other kind of liability. Use at your own risk.



GETTING STARTED INSTRUCTIONS

www.musicalmushroom.com

Revision 1.9

FOR LATEST INFORMATION & INSTRUCTION VIDEOS VISIT



www.musicalmushroom.com

