

The Ventriloscope



The Ventriloscope is a patient-controlled simulation tool capable of transmitting the associated sounds (heart, lung, bowel, etc...) a healthcare provider needs to diagnose a Standardized Patient (SP) physical exam role-play.

By using this mock stethoscope the student no longer needs to take time out of the role-play to access the sounds from a computer laptop.



Activating the Units:

1. Make sure that the blue square SD card is inserted into the side slot with the shiny metal strips of the card facing up.
2. Turn the switch on the transmitter box to the "on" position. A small green light should appear. The **transmitter box MUST be turned on BEFORE the stethoscope** for the system to function properly.





3. Turn on the stethoscope by flipping the gray switch on the side of the unit. Again, a green light should appear.
4. **NOTE:** If more than one Ventriloscope is being used at a time, they must be turned on one set at a time (transmitter box and stethoscope first set, transmitter box and stethoscope second set etc...). This allows the transmitter box and stethoscope to synchronize frequencies and act as a single unit (without interference from the other units).

	A	B	C
1	Heart Sound Normal		Inhale Normal
2	Heart Sound Abnormal		Exhale Normal
3			Abnormal Exhale
4			Abnormal Inhale



Playing Sounds:

- Each of the three positions on the top switch (A, B & C) will enable you to access four sounds (one for each of the four buttons) for a total of twelve different sounds per SD card.
- When you press a button the recorded sound will continue to play and loop until the button is released.
- Case Example:
 - You will synchronize the C sounds with your breathing.
 - When the student presses the “stethoscope” to your back and asks you to take a breath in - You will put the top switch to position C and press button 1 as you inhale (release the button when you stop inhaling)
 - When the student asks you to exhale you will leave the top switch in position C and press button 2. (release the button as you stop exhaling)

Playing Sounds: continued

- When the student listens to your heart you will place the top switch in position A and press button 1 as long as the student is pressing the stethoscope to your chest.

Remember: the sound is on a loop and will continue to play as long as you press the button.

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Release the button when the student removes the stethoscope from your body.

Unit Placement

You may discretely manipulate the controls concealed under the gown.

Hints to help you stay orientated –

Remember: when the Transmitter is facing down,

- the buttons are on the left
- the top switch position A is nearest the buttons

Troubleshooting

SD Card pops out and unit stops working:

- If the SD card should pop out of the unit during use you will need to reinsert the card, turn everything off and restart the Ventriloscope from the beginning.

Sound too low:

- Insert a paperclip into the "U" hole of the volume control and press in 6-10 times.
- Check that the student is wearing the stethoscope correctly.



Correct



Incorrect

Can't hear a sound on the stethoscope

- Test the transmitter box by plugging earphone into the "out" jack and listen for the sound as you press a button programmed with a sound on your SD card. If you hear sound, reset the system by turning everything off and restart.
- Check to be sure both the transmitter box and the stethoscope are fully charged, the power button is on, and that both are showing green lights. If you do not see a green light when the unit is on, it may need to be recharged.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS.

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital

device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment

generates, uses and can radiate radio frequency energy and, if not installed and used in

accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If

this equipment does cause harmful interference to radio or television reception, which can be

determined by turning the equipment off and on, the user is encouraged to try to correct the

interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.