Catchbox Microphone Tutorial

Introduction:

The Catchbox is a throwable microphone which will help engage your students with you -- and each other!

Included Components:

- UO Catchbox cover w/ transmitter inside
- Microphone receiver w/ two antennas
- AC Power Supply Cable
- Audio Cable Connector
- Extra AA batteries
- Manual

How to setup in the classroom:

1. Set up the microphone receiver at your lectern and arrange the antennas in a V-shape about 90 degrees apart.
2. Connect the power supply to the receiver and plug that cable into the nearest power outlet.
3. Plug the 1/8" room audio cable into Audio Cable Connector at A; plug 1/4" Audio Cable Connector end into the back of the receiver (receiver’s audio output port – image C).
4. Turn ON the receiver so that the light turns green, then adjust the volume knob to zero (fully counterclockwise).
5. Remove the transmitter from the Catchbox cover by twisting the cylinder 90 degrees and pulling upwards.
6. Confirm the transmitter has batteries and turn ON the transmitter so that a green status LED light is visible (it will be red if batteries are low so change the batteries).
7. Once the receiver and transmitter lights appear, confirm that they are solid green. If they are blinking then the devices must be paired. (Check Appendix A for pairing instructions).
8. Place the transmitter back into the cover making sure to align the magnetic locking mechanism so it is secure. Use the visual marker in the bottom of the cover and transmitter for guidance.
9. You need to turn on the room amplification system to use the Catchbox. Most rooms have a Crestron control panel to turn on the projector, etc. Turn on the panel and power on the projector. To get the Catchbox audio on older Crestron control panels press "Laptop" (it could also be "PC" depending on room) which selects the Catchbox as your audio source. With newer Crestron control panels either press or swipe the VGA icon or Source icon for systems that auto detect sources.

10. On the Catchbox receiver, turn up the volume no further than half way up at first.

11. While you or someone else is talking into the Catchbox increase the room volume control on the Crestron control panel.

12. Adjust each volume control as needed for the optimal sound level.

(AVOID excessive volume. Do not exceed 70 dBA for airborne noise)

Safety Tips:

- Prevent reckless throwing. Explain to your students safe Catchbox throwing techniques and protocols.
- Be aware of surroundings – fragile objects, electronics, ceilings, hanging ceiling lights, etc.
- Make sure intended recipient is paying attention before throwing the Catchbox toward them.
- Make eye contact; make sure people are ready to receive it and do not throw at an individual’s head.

Appendix A: Pairing Microphone Transmitter and Receiver

1. Make sure both devices are powered ON and the transmitter and receiver are within 6 ft. of each other.

2. Press and hold the small grey pairing button on each device and wait 20 seconds to complete pairing process.

3. When the Green status LEDs stop blinking, both devices have successfully been paired. If the devices did NOT pair successfully, then each device will continue blinking and you should repeat steps 1-2 again.

Appendix B: Troubleshooting Technical Issues

- Audio Feedback – The microphone may be too close to a speaker; immediately shake and move the microphone away from the speakers. In addition, mute the Crestron volume system to prevent speaker damage.
- No sound –
  - Check the status LED lights on the transmitter and receiver; if both are blinking, they are not paired. Please see Appendix A for instructions on pairing the transmitter and receiver.
  - Check to see if the transmitter’s batteries are out of power or incorrectly installed.
  - Confirm that the green status LED lights on the transmitter and receiver are on to indicate power is ON for both devices.
- Distorted Sound –
  - Check the audio cable or adapter to confirm it is properly attached and not damaged.
Volume may be too high; decrease the volume on the Crestron control panel on the Catchbox Receiver.

- **Audio Signal dropouts or breaks** –
  - Check to see if the Catchbox transmitter and receiver are too far away from each other or if there are obstacles interfering. Move the two devices together to see if that resolves the issue.
  - Check the receiver antennas to confirm they are properly attached and positioned.
  - 2.4 GHz devices such as mobile phones or laptops *can* interfere with the signal; ask your students to put their devices in Airplane Mode to see if that resolves the issue.

- **Transmitter falling out of cover** –
  - Check to see if the transmitter is properly aligned inside the cover to match magnets.
  - If the magnets are not locking, it's possible that the magnetic lock has been damaged or has lost strength.

**Appendix C: Credits**