## Introduction

A microphone is a device that captures audio by converting sound waves into an electrical signal. The signal can be amplified for public address purposes or converted to a digital signal which can be processed by a computer or other digital audio device.

## Terminology

<table>
<thead>
<tr>
<th>Definition</th>
<th>Mic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wired Microphone</td>
<td>Wired microphones are tethered to the sound equipment with a cable. Advantages of using a wired mic are: Reliability, easy to setup and use, no batteries required and no loss of signal. Disadvantages include: Limited range/mobility, wiring increases tripping hazards and wiring can make staging unpresentable.</td>
</tr>
<tr>
<td>Wireless Microphone</td>
<td>Wired microphones are tethered to the sound equipment with a cable. Advantages of using a wired mic are: Reliability, easy to setup and use, no batteries required and no loss of signal. Disadvantages include: Limited range/mobility, wiring increases tripping hazards and wiring can make staging unpresentable.</td>
</tr>
<tr>
<td>Mic Level</td>
<td>Mic level is typically adjusted by increasing or decreasing the amount of signal being sent from the microphone.</td>
</tr>
</tbody>
</table>

## Need Help?

If you would like to book a training session, please call the Audiovisual Technician at the campus nearest you to setup an appointment.

- Cloverdale: 604 598 6041
- Langley: 604 599 3209
- Richmond: 604 599 3350
- Surrey: 604 599 2216
**Operating tips**
Always perform a sound check to test microphone levels by speaking directly into the microphone with your normal voice.

To avoid feedback, do not place microphone directly in front of PA speaker.

Microphone placements should be no more than two hand widths away from the person speaking.

No sound? Check all connections. Ensure all components are on, and mic level are adjusted for desired output. Check Mute is off. Check viability of batteries and replace.

**Advanced Features**
Wireless microphones will have an ON/Off switch on the handheld or belt pack device, as well as on the receiver.

Hand held wireless microphones may have a Mute button.

Advanced features depend on the make and model. Consult the user manual for specifics.

---

<table>
<thead>
<tr>
<th>XLR</th>
<th>A common connector from microphone to a device.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback</td>
<td>A high-pitched sound loop that occurs when a microphone is placed too near an audio output device such as a PA speaker.</td>
</tr>
</tbody>
</table>

**Care & Handling**
Microphones are easily damaged if dropped on a hard surface, exposed to extreme heat or cold and moisture.

**Get Familiar With**
Mic to Amplifier connection cables
Mic level adjustment knob
Wireless receiver & Antenna

**Batteries and battery installation for wireless microphone
Receiver power supply**

**Basic Operation**
1. While all equipment is powered Off, connect the microphone to the PA using the cable or wireless option.
2. Ensure the mic level input and PA volume level output are adjusted to minimal or “0” setting.
3. Turn PA and (wireless mic receiver if used) power to ON Basic operation
4. Adjust PA volume output level to 3/4 power. Adjust mic level input to 1/2 power.
5. Speak into mic to check sound level and adjust PA output volume and mic input levels accordingly.