

HOW TO USE A PA SYSTEM



GRCV 2023

Equipment:

-Speakers: Powered or Passive



-Mixer: Powered or Passive



-Microphone or instrument



-Cables: XLR and Speaker Cables



-Bonus: mic stands and speaker stands

Speakers

Powered: A powered speaker contains a speaker and an amplifier inside which allows the user to bypass a mixer for a simple set up.

Pros – less equipment needed. Only need a speaker, XLR cable and mic to run a basic PA. Simple to use.

Cons – Heavy and more expensive.

How to use it:

1. Ensure speaker is turned off and dials at zero.
2. Plug speaker into power outlet.
3. Plug XLR Cable into the XLR input on speaker.
Powered speakers usually have two or three XLR inputs. If using two Speakers, connect them at this time using another XLR cable.
4. Plug other end of XLR cable into mic.
5. Keep mic pointed away from speaker and turn the speaker on (on/off switch).
6. Turn the master volume up half- way, and then slowly turn the dial on the mic input up while speaking into it to check the volume. Adjust to preferred volume.

7. Some powered speakers also have Bluetooth and AUX capabilities.
8. A mixer can also be used with Powered Speakers to increase the amount of inputs and frequency control.

Passive Speakers: Passive speakers require an amplifier and a mixer (can be the same machine) to produce sound.

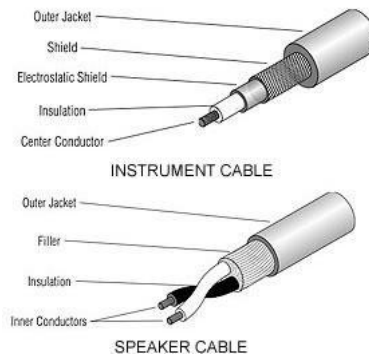
Pros – Lighter and cheaper.

Cons – requires more equipment.

How to use it:

1. Plug speaker into powered mixer using a speaker cable. Speaker cables look like instrument cables but they are different.* Instrument cables cannot handle the power of an amplifier so only use speaker cables.
2. Follow the instructions for how to use a Powered Speaker.





***While some cables are labeled clearly, sometimes you might not be sure. Don't use it if unsure! Using an instrument cable to connect a powered mixer to a speaker can be dangerous at loud volumes.**

Instead, unscrew an end of it and compare to the above diagram. An instrument cable has 1 main wire (conductor), and a speaker cable has 2.