

IATSE Local 31 Stagehand Basics: Audio

Audio: Deals specifically with the set-up/operation of mics, speakers and all other sound equipment, including flying Line Arrays, Working with Wireless and wired Microphones, and Patching the Stage. Often will be working directly with the clients/Band/Acts.

Positions include: FOH Mixer (Audio Engineer), Monitor Engineer, Stage Patch, and System Techs.

Basic Audio Tools: Leatherman, Pen/Pencil/Sharpie, Flashlight, Gloves.



XLR - 3 Pin Signal Cable (Most Common)



1/4" Cable (Tip, Ring, Sleeve: TRS : Between Equipment) (Tip, Sleeve: TS: Instruments)



1/8" Cable Typical In Adapting to dual 1/4" or XLR for Phone/Laptop



Audio DI (Signal Converter; Instruments to XLR or Un-Balanced to Balanced)



Cat 5,6//Ethernet (Signal/Networking)



Line Array (Typically Flown) Can be Powered or Passive Can be Ground Supported (Big Arena/Ballrooms)

Audio Console Or Mixer Controls what is heard (Many Sizes and kinds)



Edison: Quad Boxes, Splitting Power without Breakers



Edison: 120v (Stage Power/Most Common)



Subs: Larger Speakers Low end-Range On/Under Stage or Flown



Amps/Amplifiers Send Power and Signal to Passive Speakers Can be single Units or Rack Mounted



L6-20 : 208v Powercon: 120v (Speaker Power)



Powered Speaker Can Be used with Just one Mic (Smaller Rooms) On A Speaker Stand (Many Types)



Audio Snake/Stage Boxes/Patch Box Get Input/Output from Stage to Consoles in One Cable (Usually XLR)



Edison Breakout (Male Soca to Female Edison Can be 120v or 208 Be Careful!!)



L21-30 to Edison Can be A Fan Out or Box (120v)



Speakon (Speaker level Signal)

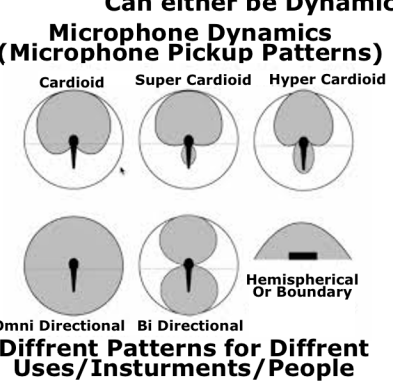


Speakon Barrels (Extenders)

**Learn how to coil cable: Over/Under is most common* When Coiling Separate by Type/Length*

Cable Management is a large part of an Audio Hands Job when Patching the stage. Keeping things tidy and run together helps with Paths for the Talent and Clients.

Microphones: Many Varieties to do different Jobs, Different Pickup patterns, Wired/Wireless, Preference of Engineers Can either be Dynamic (Basic:SM58) or Condenser (Need Phantom/More Delicate/good for Instruments)



Microphone Dynamics (Microphone Pickup Patterns) Different Patterns for Diffrent Uses/Insturments/People



Shure SM 57 Basic Instrument Mic



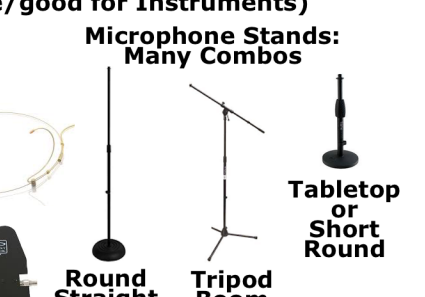
Shure SM 58 Basic Vocal Mic Wired Or Wireless



Wireless Bodypack Can be used with different Microphone Attachments (Lav/Headset)



Wireless Handheld



Microphone Stands: Many Combos

Boom Arms can Be added to any Base *Long/Short* *Tall/Short*



Wireless Receiver: Needs Antennas



AKG 414 Instrument Mic Can Choose Pattern

Most Companies follow a similar Cable Labeling Guide for Lengths, but they can be unique. (Look for a "Key") The Cable is usually labeled near the connectors in Stripes of Tape or Shrink Tube. Sometimes it is text. This is also where compaines put their lables to indicate ownership, remeber to not mix up gear. If the Cable is Longer than 100' Just count up the Stripes of color. 1 Yellow + 1 Orange = 150'

- 5'- Red
- 10'-Green
- 15'-Blue
- 25'-Purple
- 50'-Orange
- 75'-Grey
- 100'-Yellow