

# WIRELESS MIC SYSTEMS

## Making Connections

1. Using 1/4" TRS cable, route the wireless receiver(s) of your choice into the mixing board. Be sure to use LINE IN and not the INSERT jacks. Be sure to select the 1/4" output from the receiver and not the XLR output (move the switch so that it points to the preferred output).
2. Plug in wireless receiver and be sure the power pack(s) is on the floor and not the tech table. This cuts down on interference.
3. Power ON wireless receiver(s), then outboard gear, then mixing board, then speakers.

## Matching Pack to Receiver

1. Do a CHANNEL SCAN to find an open and clear channel: Turn transmitter OFF. Select MODE on the receiver and hit the volume button up or down to cycle through the available channels. If the RF light illuminates, then interference is present, and you must continue to another channel. Select SET when you have found a clear channel.
2. Match the transmitter to the receiver: Turn the transmitter ON. Select MODE on the transmitter and hold it until only the GROUP number is shown. Select SET until the desired GROUP number is present. Select GROUP again so that only the CHANNEL number is shown. Select SET until the desired CHANNEL number is present. Select MODE one more time until both the group and channel numbers are shown.

## Setting Levels

1. Adjust GAIN on transmitter so that at the signal peak the RF indicator peaks at 2-3 lights.
2. Max out the RECEIVER volume at 99 by pressing the volume button up or down.
3. Set mixing board TRIM and fader as usual.

## Preparing the Transmitter

1. Insert a fully charged battery and secure the battery door
2. POWER LOCK the transmitter to prevent accidental power loss: depress and hold the SET button and then depress and hold the MODE button concurrently until the screen displays PO L. The same sequence unlocks it and the screen displays PO UL
3. FREQUENCY LOCK the transmitter to prevent accidental loss of signal: Turn the pack OFF. Press and hold the SET button as you turn power back on until the screen displays FQ L. The same unlocks it and the screen displays FQ UL

## Outfitting actors

1. Place transmitter pack securely on waist belt if possible, or bra strap is necessary (let a girl do this!)
2. Route mic cable underneath clothing to the back of actor's ear.
3. Secure mic cable with tape
4. Place mic over ear via ear piece and secure the mic to the face with tape
5. Be sure to turn the transmitter ON and POWER LOCK to prevent accidental power loss
6. Turn transmitter packs on NO MORE THAN 15 minutes prior to the show begins
7. Replace RECHARGABLE batteries in transmitters AS SOON AS indicator moves below FULL
8. NON-RECHARGABLE batteries SHOULD get you through an entire NIGHT

## Pairing mic to pack to actor

1. Be sure the use the SAME mic and transmitter for each actor with 100% consistency throughout the production. This will ensure your levels are accurate as each mic will respond differently
2. Prioritize best mics and transmitters for those actors with the most prominent roles

## Care and maintenance

1. Only TECHIES are allowed to outfit actors with wireless mics. NO ACTORS are allowed to do this
2. ALWAYS distribute and collect mics and transmitters in an orderly fashion to ensure mics and transmitters are matched properly. Be patient. Do not allow actors to rush you.
3. ALWAYS place mics and transmitters neatly back into the briefcases. They should NEVER be left out. They are either in the briefcase, in your hand, or on an actor.
4. ALWAYS coil mic cable properly to avoid tension on the cable
5. ALWAYS be sure no cables are protruding from briefcase before closing them. The cables WILL be destroyed if pinched
6. ALWAYS remove battery when mics and transmitters are put away
7. ALWAYS recharge batteries between rehearsals and shows

## Power management

1. Be sure ALL power bricks and power strips are placed on the FLOOR to avoid signal disruption

## Troubleshooting

1. SIGNAL IS CUTTING IN AND OUT:
  - a. Gain on transmitter may be set too low or actor is not projecting adequately. Determine which is true and adjust
  - b. Cable connections may not be secure. Disconnect and then reconnect
  - c. Battery life on transmitter may be too low. Change the battery
  - d. Mic or cable may be defective. Try a different combination
2. SIGNAL CONTAINS OCCASIONAL BLIPS
  - a. Chosen receiver/transmitter channel contains signal competition or interference. Conduct a channel scan to find an open channel
3. STATIC IS PRESENT IN THE SIGNAL
  - a. Mic is coming into contact with actor costume, clothing, or prop. Adjust placement of mic and/or cable
  - b. Cable and/or mic is defective. Try a different combination
  - c. Transmitter antenna is broken. Remove transmitter from the system if possible
4. FEEDBACK IS PROBLEMATIC
  - a. Gain on transmitter is set too high. Adjust it
  - b. Trim at board is set too high. Adjust it
  - c. Actors are in extreme close proximity. Be prepared with levels or change blocking
  - d. EQ specific to the actor involved is necessary. Redo your sound check for that actor
  - e. Actor is standing in front of a speaker. Be prepared with levels or change blocking
5. NO SIGNAL IS PRESENT
  - a. Transmitter is turned off
  - b. Receiver is turned off
  - c. Transmitter battery is dead
  - d. Transmitter and receiver are not matched. They must be set to the same channel
  - e. Connections have not been made or are not secure
  - f. Input and output levels are not set properly at board and/or receiver
6. AN "E" or "F" MESSAGE IS DISPLAYED ON THE TRANSMITTER
  - a. Turn on the transmitter. Hold SET button for 10 seconds. Release SET button when display changes. This will get the pack back to normal operation