# Mobile Microphone Rack

## Contents (In the Mobile Rack)

- Shure SCM800 (Mixing Board)
- 2 - Sennheiser Antenna Splitter
- 8 – Sennheiser ew100 g3 Wireless Receivers
- PFPower D-10 Power Distributor

## Contents (To use with the mobile rack)

- 2 – Sennheiser A 1031-U Wireless Antennas
- 8 Sennheiser ew100 g3 Wireless Body Packs with dual hook headsets

## The Rack

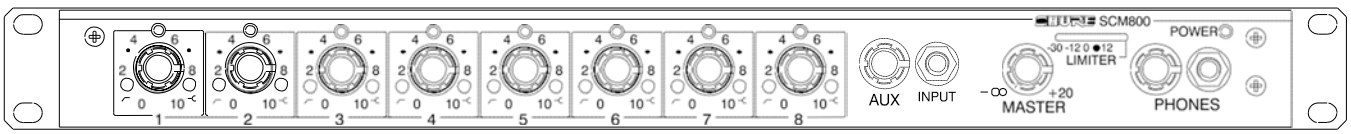
The Mobile Microphone rack is to be used in addition to an existing sound system. This rack contains all of the equipment needed to hook eight wireless headsets to any of the pre-installed sound systems in the district thru a single XLR connection. This allows for buildings with smaller mixers such as Arborwood or Custer to have access to a larger amount of microphones for a special event.

This rack is designed to be used with some additional external items. The first ate the wireless antennas. As this is a rack designed with wireless headsets in mind, external antennas are what will be used with this system. The reason for this is so that if this system is used in a larger area such as the MHS Auditorium or football field the microphones will work at a larger range.

The other key element to this rack is the wireless bodypacks with dual hook headsets. These body packs are stored at the AD Building along with the wireless rack. Each of the bodypacks use two AA batteries which should be changed before any event (or verified still at full charge). Each body pack is labeled to match the corresponding receiver in the mobile microphone rack.

## Shure SCM800

The ShureSCM800 is the main mixer for the Mobile Microphone system. This piece of hardware is used to connect all of the incoming signals, mix the audio levels, and then output the sound to the sound system you are attaching the rack to. This mixer has eight channels for the eight microphones. Each channel on the mixing board allows for gain control, low cut and high frequency shelf filter.




**Microhpone Gain Control** – Controls the gain level for the specific channel

**Low-Cut Filter** - Recessed screwdriver adjustment provides adjustable low-frequency rolloff (high pass) to reduce undesirable low-frequency signals.

**High-Frequency Shelving Filter** - Recessed screwdriver adjustment provides level boost or cut in mid/high frequency region for compensation of off-axis lavaliere microphones, or for cutting the high-frequency sibilance of vocal microphones.

**Master Volume Control –** Controls the output level for the entire mix. This level is used to make all channels louder or quieter.

***Note:*** If hooking the microphones to the MHS or MMS auditorium sound systems it is recommended you bypass the audio mixer connecting the Sennheiser receivers directly to the mixing console. This will allow for better control over the audio levels in those environments. This is done by running individual XLR cables from each receiver to the mixing consol.

## Sennheiser Wireless Microphones

The Sennheiser Wireless Microphones installed are Headset with Bodypack( Sennheiser ew100 g3 ). This microphone is a dual ear hook headset designed to be worn. These work well for those who want to have free range motion of their hands while presenting, or for use with plays and other similar events. These can work for vocals, but being more sensitive than the standard handset is more likely to have issues with feedback if standing too close to a speaker.

## Sennheiser Antenna Splitter

The Sennheiser Antenna Splitter allows for the use of external antennas for multiple receivers. Each of the two splitters in this rack allow for up to four of the wireless receivers to have extended antennas, as well as power to the receiver using the BNC connector cable.

On the back of the rack there are two BNC connector ports to attach the external antennas to. These antennas can be mounted to microphone stands and placed in locations to provide the best reception possible.