

MICROPHONES

We have an assortment of decent microphones kept in the black tool case in 189. You may find it easier to (carefully) wheel this case into the studio for complicated sessions. It is essential to the continuing quality of recordings that these be packed up and returned to room 189 at the end of each session.

The current contents of the chest:

- 4 SM 81 for general purpose classical recording and drum overheads.
- 6 BG 4.1 for general purpose close miking of instruments
- 2 Rode NT 3 for general purpose close miking of instruments
- 2 Sennheiser 441 for close miking of instruments
- 4 Sennheiser e604 for close miking of instruments
- 2 Shure ksm 109 for close miking of instruments
- 4 SM 58 for hand held vocals
- 4 SM 57 for hand held vocals and snare drum
- 1 D 112 for bass drum and bass amps
- 1 Peavy 520 for bass drum and bass amps
- 2 MXL 2001 for vocals and instruments
- 1 MXL 2006 for vocals and instruments
- 1 Rode NT 1 for vocals and instruments

Note that each microphone has a labeled place in the case. This insures that any missing mics will be noticed immediately. **Keep the clips with their mic.** They are not interchangeable and clips left on stands are soon lost.

Some better quality microphones are available for checkout from pqe. You will sign for these, and will be held responsible for their condition upon return. Currently there is:

- 1 Neuman TLM 103 for vocal overdubs
- 1 Rode NT2000 for vocal overdubs

Stands and accessories

The top section and bottom drawer of the chest contain assorted accessories such as spare mic clips, stereo mic bars, windscreens, direct boxes and the like. Please return these to the chest instead of leaving them in the studio.

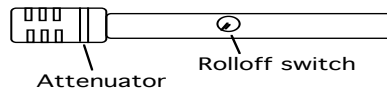
Mic stands and cables are kept in the rear of the studio, behind all chairs. Please return these, with two exceptions:

The heavy rolling stand with the permanently affixed microphone should be left at the front of the studio. Leave one cable with this stand.

One or two small stands and short cables can be left in 189 for recording directly in the room.

If you pull stands from other rooms, return them.

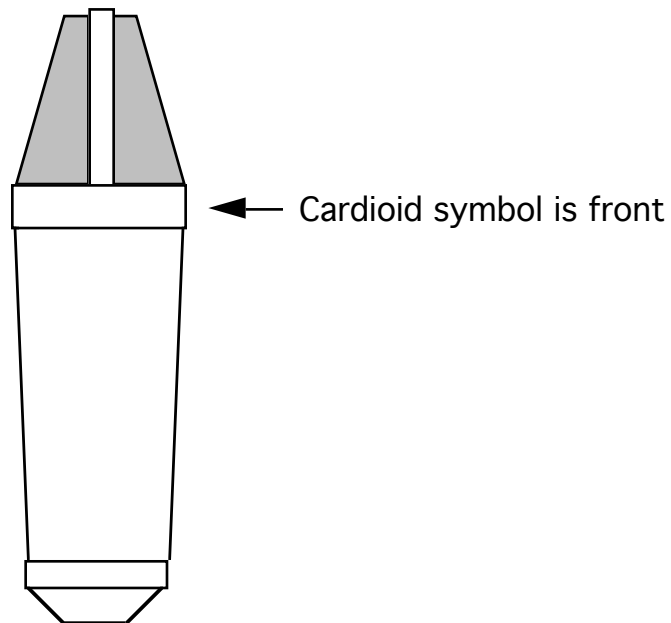
SM81



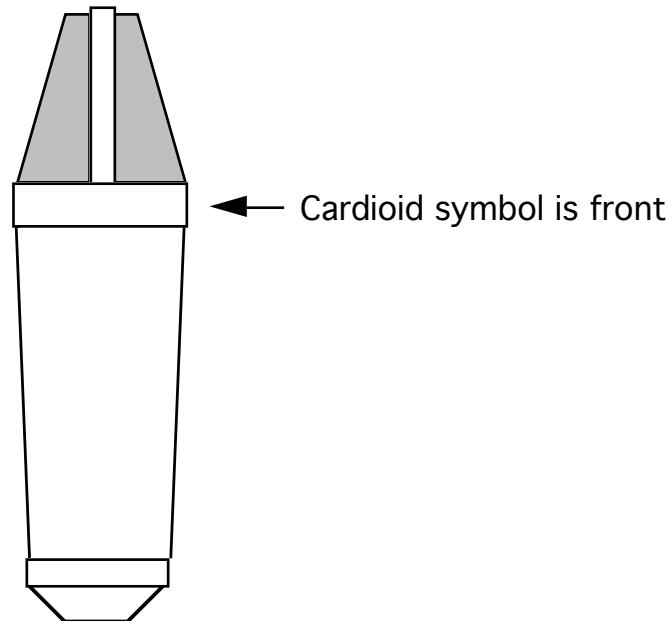
The Shure SM81 is a condenser cardioid type microphone much favored for providing a very natural sound on instruments, especially strings. It is generally used at a distance from the instrument to produce a natural blend. Used up close, it tends to overload. This can be mitigated by turning the attenuator ring to -10. In addition to the attenuator, there is a built in proximity filter switch with three positions: flat, some bass rolloff, heavy bass rolloff. Always check these switches before setting the mic up. This mic requires phantom power.

One special charm of this mic is the even off-axis frequency response. That makes it very popular for recording classical music with X-Y stereo techniques. It's also popular for drum overheads.

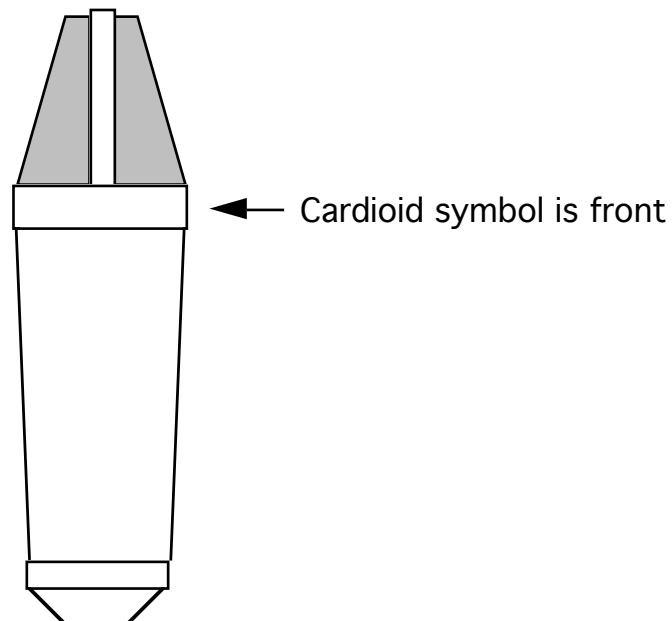
Marshall MXL 2001



This is an economy model large diaphragm condenser mic, identical in operation and use (if not quite in sound) to the classic studio mics of yesteryear. Treat it gently- for close vocals always use the pop screen. For best sound on instruments start about 18" away. Needs phantom power.

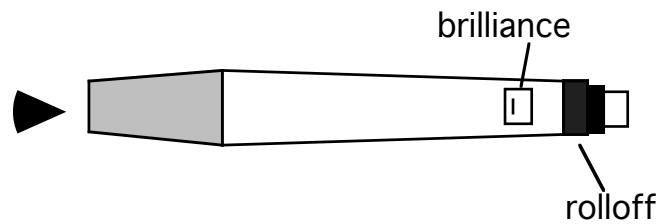
Marshall MXL 2006

This is an economy model large diaphragm condenser mic, identical in operation and use (if not quite in sound) to the classic studio mics of yesteryear. Treat it gently- for close vocals always use the pop screen. For best sound on instruments start about 18" away. Needs phantom power.

Rode NT1

This is an economy model large diaphragm condenser mic, identical in operation and use (if not quite in sound) to the classic studio mics of yesteryear. Treat it gently- for close vocals always use the pop screen. For best sound on instruments start about 18" away. Needs phantom power.

Sennheiser MD 441



The Sennheiser MD 441 is a dynamic cardioid microphone with a very bright, crisp sound. It is often used for percussion and brass. It works well up close, as it is practically impossible to overload. With the "brilliance" switch engaged it becomes a vocal mic with slight boost at 5kHz. It also features a 5 position bass rolloff switch for careful tailoring on close vocals ("M" = flat response). Despite the large side grills, the mic is addressed from the end. Note that the mic clip for this has been replaced by Velcro. New clips cost over \$100 and block the switches.

Sennheiser e609

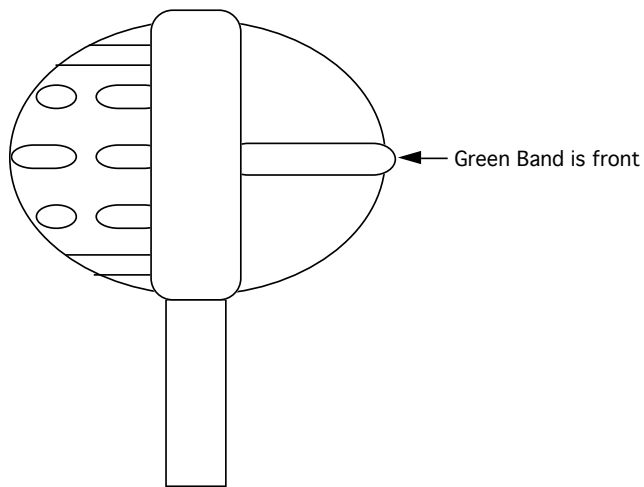


Another odd microphone from Sennheiser, the e609 is optimized for recording very loud sounds such as guitar amps and drums. This is a dynamic cardioid microphone. The flat shape makes it easy to get into tight spaces. The silver grill is the front.

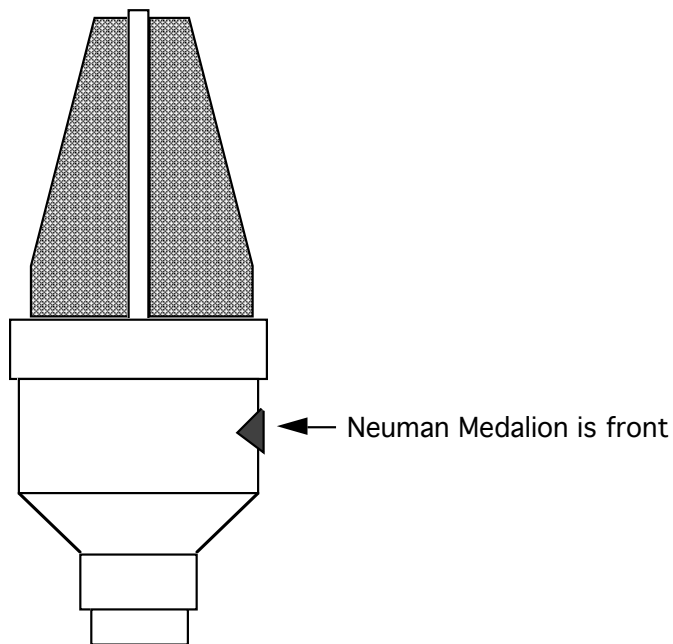
Shure ksm109



This is a small diaphragm condenser mic, similar to the sm81. It has a -15dB attenuator switch, making it ideal for drum overheads and close-in brass work. It needs Phantom power.

AKG D112

This strange looking mic is optimized for low frequency and high sound levels. It's specially designed for kick drums, and will give a mellow sound on bass amps. Can be used as a vocal mic for a sort of 'Elvis' sound.

Neuman TLM 103

Neuman is the magic name in microphones. The TLM 103 is a classic vocal mic. It cost nearly as much as all the other mics put together. The response is tailored for close mic work. Use for overdubs, and always use pop screen. Needs phantom power.

Rode NT2000

The Rode NT2000 is a large diaphragm (dual diaphragm actually) condenser mic. The dials give a lot of control.

The top knob adjusts the pickup pattern from omni through cardioid to bidirectional.
The middle knob sets a low cut at a frequency variable from 20-150 Hz
The bottom knob sets attenuation up to 10 dB.

Requires phantom power.

Utility mics, BG 4.1, SM57, SM58

These microphones should be thought of as second line mics, used to cover additional instruments or background vocals in complex setups. Even so, each has some functions on which it shines:

BG 4.1 -- a good small diaphragm condenser. Use for most of the band. Requires phantom power.

SM 57 -- Originally a stage mic, preferred by many engineers for snare drum. Has major peaks at 6khz and 12 khz that make vocals cut through a thick mix.

SM 58 -- Still the favorite for hand held mic work. Response like 57, but has extra shock mounting and built in pop filter.