LARGE-DIAPHRAGM CAPSULE SPOTTER'S GUIDE

CK-12 (AKG)



Edge Terminated
Dual Backplate

K47 (Neumann)



Center Terminated
Single Backplate
Concentric Holes



K67 (Neumann)



Center Terminated
Dual Backplates
Holes in Square Grid



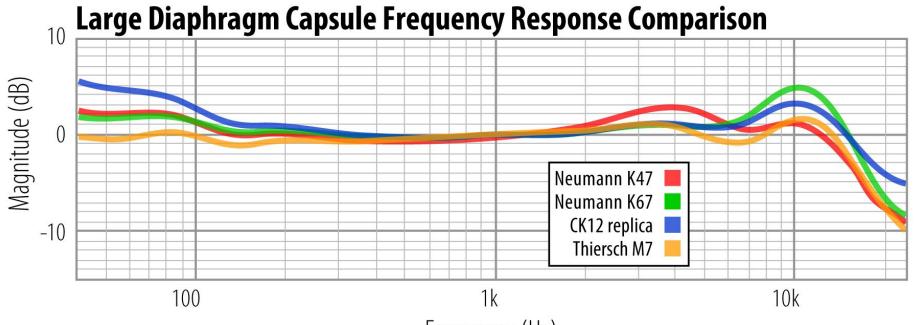
M7 (Gefell)



Center Terminated Single Backplate Glued Diaphragms



WHAT DO THESE CAPSULES SOUND LIKE?



For this test, all four capsules were mounted in the same microphone: same housing, same circuit. All were tested in the same acoustic sweep rig, with consistent distance to the speaker, at identical ambient temperature and humidity

Frequency (Hz)



SONIC EFFECTS OF MIC CIRCUIT TOPOLOGY (SIMPLIFIED)

Transformerless FET:

- Low distortion
- Low noise
- Excellent transient response

Transformer:

- Potential for harmonic content
- Risk of unwanted coloration/artifacts
- Risk of audible rolloff at either end of the audible spectrum

Tube:

- Potential for harmonic content
- Risk of noise/microphonics



HOW TO BUILD DIVERSITY INTO YOUR CONDENSER MIC COLLECTION

	<u>K47</u>	<u>K67</u>	<u>CK12</u>	<u>M7</u>	<u>SDC</u>
JFET/ Transformerless	Roswell Mini K47 Neumann TLM49 Kel Audio HM7U	Neumann TLM67 Roswell Delphos Studio Proj C1/C3	Josephson C716 AKG C414 XL/XLS MicParts S3-12	Gefell UMT800 Gefell UMT70S	Beyer MC930 Schoeps CMC5 Oktava MK-012 MXL 603S MXL 990 (!)
JFET/ Transformer	Neumann Fet 47 MicParts T-47 Bock iFet ADK Berlin 47-T	Neumann U87 AKG P220 Mojave MA-201 MXL V67/2001 CAD GXL3000	MicParts T-12 AKG C414 EB ADK Vienna 12-T	CP St Jean Baptiste	Neumann KM84 Telefunken M60 3 Zigma HA-FX sE RN-17
Tube/ Transformer	Neumann M149 Neumann U47 Soundelux E47C (many U47 clones)	Neumann U67 Mojave MA-200 Lewitt LCT-940 Manley Ref Card. Brauner VH1 KHE	Mojave MA1000 MicParts 12-251 Bock 251 AKG C12 Telefunken 251	Lawson L47MP Gefell UM92.1 Wunder CM7S CP Regensburg Dom	Neumann KM54 Groove Tubes GT44 Telefunken M260
		Apex 460			recording had

matthew

(The point of this chart is NOT that all of the microphones within any single box sound the same, but rather that microphones from different boxes probably sound pretty different. Find more examples of each classification at RecordingHacks.com; the table above is not intended to be comprehensive.)

CONTACT INFO

Roswell Pro Audio microphones: http://RoswellProAudio.com/



DIY microphone kits: http://MicParts.com/



Microphone info: http://recordinghacks.com/

