

Frequently Asked Questions on the *Elvo* power supplies for the M 222 Tube Microphone



Q: What are the similarities between the AC and DC versions of the NT 222 power supply?

A: The two versions are identical in size, weight, and overall performance specifications.

- Each version can power one M 222 tube microphone.
- Each version can use AC (mains) powering.
- Each version has a “harmonics” switch to emphasize typical “tube sound” if desired.
- Each version has a switchable low-frequency filter to reduce noise below 150 Hz or to compensate for proximity effect.
- Each version offers one operating mode in which there are no semiconductors or transformers in the signal path—pure direct coupling from the microphone’s output—and another mode in which a voltage and/or current amplifier is engaged (see next answer).

Q: What are the main differences between the versions?

A: The differences are in features, not quality.

- The DC version can be run from a 12-Volt battery while the AC version cannot (thus the names); the DC version can also use an external supply, which is included as standard equipment. The AC version’s power supply is internal.
- If the direct coupled output mode is not selected, an low-impedance amplifier circuit will be engaged, but the nature of that amplifier circuit differs. The AC version has a unity-gain line driver (current amplifier) which requires phantom powering in the preamp, mixer or recorder to which it is connected. The DC version has, instead, a preamplifier with a voltage gain of 10, 20, 30 or 40 dB, powered from the unit’s own supply circuit.

Q: Are there other differences?

A: Yes, in certain details.

- The “HARMONICS” switch can be set to four different levels (or 0) in the AC version, but is an on/off switch in the DC version (DC “on” setting = AC setting “3”).
- The low-cut filter in the DC version offers a 50 Hz 12 dB/octave setting which the AC version does not have.
- The DC version has a ground lift switch which the AC version does not need; it is for use in avoiding ground loops when several supplies are powered by the same battery.

Q: Is there an intended “target market” for each model?

A: To some extent, yes. The DC version is preferred by live concert “tapers” and others who want the absolute minimum number of “boxes” in the signal chain—two DC supplies can operate on one battery, while their built-in preamps provide all the circuitry needed to connect a pair of M 222 microphones to the line-level analog inputs of a DAT recorder, for example. For more general professional use, where one or more M 222 microphones are simply to be connected to a mixing console as any other condenser microphones would be, the AC supply version would probably be preferred.

Q: Can one version of supply be converted to the other?

A: It would be about equally expensive to buy a whole new power supply—so in effect, no.