

USER'S MANUAL
YPA M606



PROFESSIONAL
CONDENSER MICROPHONE

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Thank you for choosing YPA!

We have designed this product to give you reliable operation over many years. Over 10 years of accumulated expertise in the design and manufacture of high-quality electro-acoustic equipment have made YPA a Chinese leading company in this field.

Please take a few moments to read these instructions carefully, as we want you to enjoy your new YPA product quickly and to the fullest.

Introduction and Features

Thank you for purchasing the Ypa M606 Condenser Microphone. The M606 condenser microphone brings a high level of accuracy and audio performance to instrument miking applications.

The M606 is a pencil style condenser microphone that excels in both live performance and recording applications. Equipped with a linear frequency response for superior reproduction, it is also designed to withstand high sound pressure levels. Extremely sensitive, it employs a tight cardioid pattern to reduce feedback. A special shock-mounted mic holder is included to minimize noise and provide additional protection.

Feature

The Ypa M606 utilizes state-of-the-art microphone technology and is engineered to the finest detail. Here are some of its main features:

- Extended frequency response 40Hz to 20kHz which accurately reproduces audio with great detail while minimizing low frequency noise
- Tight cardioid polar pattern which minimizes pick up at the off-axis sections, eliminating ambient noise and reducing feedback
- High SPL response which reduces signal at high sound pressure levels without noise or distortion
- The included foam wind screen can be fitted to greatly reduce wind noise when used in an outdoor environment, or for reducing "P Popping" in vocal applications.

Operating the M606

Microphone Placement and Tone Quality

Listed are some common microphone placement techniques. Use these suggestions as a guide and let your ears determine what works best in your situation.

- Sound source less than 6 inches away from mic - Full sound, pronounced bass, increased isolation from background noise.
- Sound source 6 inches to 2 feet away from mic - Balanced natural sound, less bass, some background noise.
- Sound source 3 to 6 feet away from mic - Thinner ambient sound.

Guidelines for Microphone use

- Aim the microphone at the desired source. Keep unwanted sound sources at a 135 degree angle from the front of the microphone.
- Place the microphone as close to the sound source as possible.
- Use the proximity effect to your advantage: The closer the mic is to the sound source, the more emphasized the bass response will be.
- Use the windscreen to suppress unwanted wind noise.
Never cup your hand over the microphone grill.

Operating Notes

- The M606 will boost bass frequencies when the microphone is between 0-6 inches from the sound source. As you move the sound source further away from the microphone, the bass response will gradually roll off.
- The M606 has a built-in wind screen which protects against most wind and breathing noise. Under adverse conditions, such as high winds, an optional foam windscreen can be used.

M606 Applications Notes

Application Notes

The M606 is a great microphone choice for many instrument miking situations. Below is a brief guide on using the M606 in some typical applications.

Acoustic Guitar

There are a variety of ways that the M606 can be used to mic an acoustic guitar. The microphone placement will depend on the type of instrument and what kind of sound you're looking to capture, for example the tonal quality you want to focus on, and how much finger slide or pick noise you may or may not want. When miking a standard steel string acoustic, a good place to start is with the microphone positioned pointing towards the end of the fingerboard at a distance of about 6 inches to 2 feet away from the instrument. You can experiment by moving the microphone slightly in the direction of the sound hole, which will produce more low frequencies, or move it in the direction of the fingerboard to capture more high-end or to remove any unwanted boominess. For nylon string acoustic try positioning the microphone above the bridge to emphasize more of the attack from the sound of the finger picking, or for less, move the mic closer to the sound hole. If you have a pair of M606's, try one positioned at the fingerboard and the second over the sound hole.

Piano

You can achieve outstanding results using the M606 on acoustic piano. Several placement approaches can be used depending on the size of the piano, and the type of sound you are looking to record. When miking a Grand Piano for an ambient sound like that used in a classical recital, a single M606 can be positioned directly in front of the instrument. Open the lid to the full position and place the microphone five to twenty feet in front on the instrument. For a more contemporary ensemble sound, place two M606's in the piano positioning one over the low strings and the other of the high strings.

Overhead Drum Kit

Because of its extended high frequency response and fast transient response the M606 performs outstandingly when used as an overhead cymbal microphone. You can position one M606 on a boom mic stand directly above the kit pointing from front to back. For stereo miking, use two M606's placed over the drum set at a distance of three to five feet. You can experiment with the exact placement depending on the size of the room and whether you're looking for an ambient or close-miked sound. In general, when miking a drum kit it's a good idea to start with the overhead mics. Even though you use the overhead mics mostly for the cymbals, try to get the entire kit to sound great in the overheads. Then it will be easier to just bring up your individual mics for more attack and thickness in the overall sound.

Hi Hat

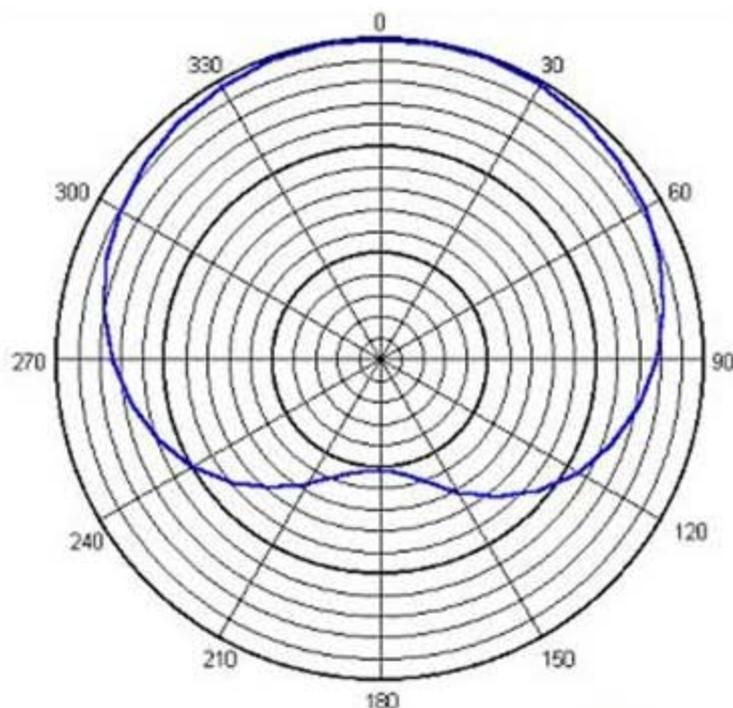
The M606 is a perfect microphone for miking Hi Hats thanks to its smooth top end and the ability to capture fast attack transients. Try placing the microphone over the edge of the top cymbal. Experiment by moving the mic further over the cymbal to produce more of a stick sound, but keep in mind it may pick up more of the kit. Remember that the M606 has a cardioid frequency response, so position the microphone in the direction of the Hi hat, but for increased separation, be sure to point the mic away from other drums or cymbals whenever possible.

M606 Characteristics

Every microphone has a characteristic polar pattern that determines how well it accepts or rejects signal coming from various areas around the microphone. For Example, omnidirectional mics accept all signals regardless of where those signals originate (in front of the mic, behind it, to the side, etc.).

In contrast, directional cardioid mics are specifically designed to accept mostly signal coming from directly in front, and to reject signal coming from behind or from the side. The cardioid pattern is utilized by

the M606 (as shown in the illustration below). For this reason, the M606 excels in environments where there is a good deal of unwanted ambient sound. It delivers those signals originating directly in front of the mic capsule itself while rejecting those that originate from behind. The polar pattern also determines how prone a particular mic is to inducing feedback. Feedback is that characteristic nasty howling sound that occurs when a mic is placed too close to a loudspeaker—the signal from the loudspeaker is fed into the mic, then into the loudspeaker, then into the mic, over and over again until an oscillating tone is generated. Because the cardioid pattern utilized by the M606 is so good at rejecting signal not coming from directly in front of the mic, you'll find that use of the M606 greatly minimizes feedback problems.

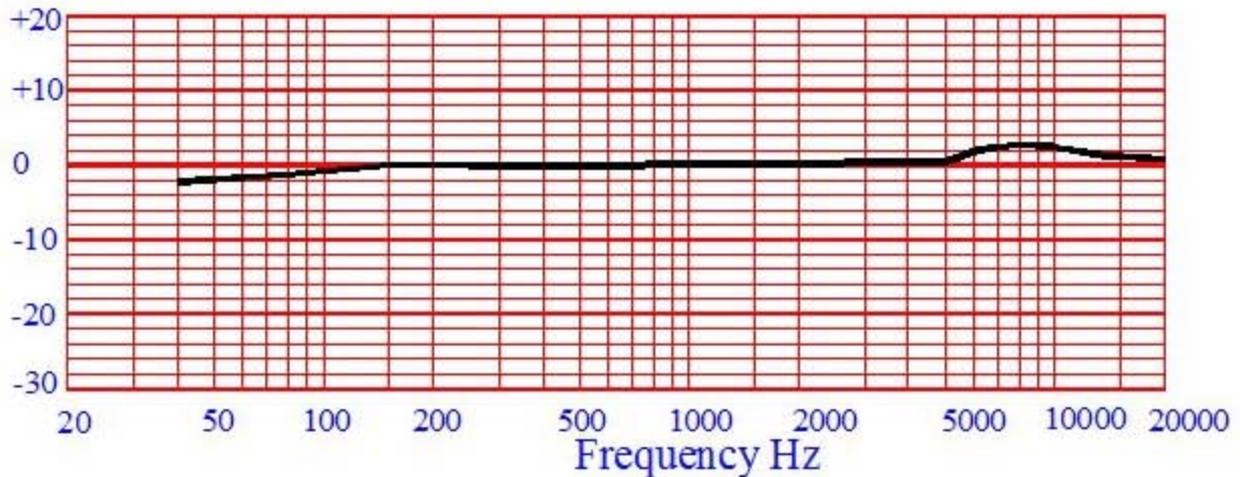


M 6 0 6 Polar Pattern

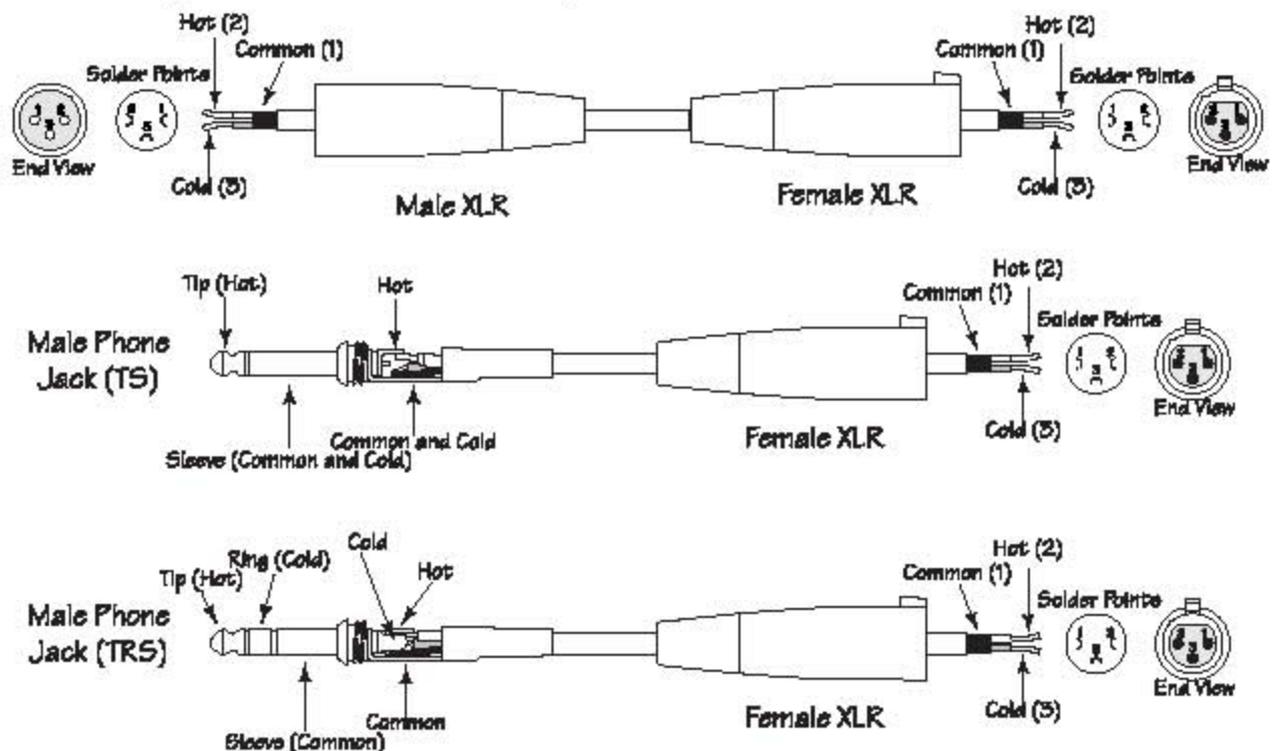
The M606 can be mounted to any standard microphone stand (using the included mic clip) or can be handheld. If handheld, take care not to cover any part of the head grille with your hand. Be aware of a phenomenon called the proximity effect which causes a noticeable increase in low frequencies (bass response) when a microphone is close to the audio source.

This can have positive impact - for example, it will cause your instrument or voice to sound much fuller when you sing close to the mic than when you mic it at a distance. The key to developing the best mic technique is experimentation, along with awareness of the general principle that, the closer your M606 is to a signal source, the greater the bass response.

Typical Frequency Response Curve



Wiring Guide and Specifications



The M606 can be connected to any mixer, mixer/amplifier, or mic preamp using a standard microphone cable. As shown in the wiring diagrams below, connect the female XLR end directly to the M606's gold-plated connector and the other end (normally a male XLR end, although some mixers use 1/4" connectors) to the mixer, mixer/amplifier, or mic preamp.

M606 Specifications

Type	Condenser
Polar pattern	Cardioid
FREQUENCY RESPONSE	40-20000Hz
Sensitivity (f=1KHZ, S.P.L=1Pa, 0dB=1V/Pa)	-45 dBV/Pa
Output impedance	6.8 k Ω (f=1000Hz)
Current Consumption (VS=1.5V RL=6.8K Ω)	500 μ A
Max S.P.L (THD < 1% 1000Hz)	120 dB
Signal to Noise Ratio S:(f=1KHz, S.P.L=1Pa) N:(A-Weighted curve)	66 dB
Power supply	48V Phantom Power
Dimensions	Ø14x6.3mm
Weight	63g

Manufacturer Declarations

Warranty

2 years

CE Declaration Conformity



The equipment is in compliance with the essential requirements and other relevant provisions of Directive 2011/202/CN. The declaration is available on the internet at www.ypaaudio.com

WEEE Declaration

	<p>Please dispose of this product at the end of its operational lifetime by taking it to your local collection point or recycling center for such equipment.</p>
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REPLACEMENT PARTS

Windscreen (2 per package).....	A66W
Storage bag.....	A6B

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