

M-AUDIO

PULSAR II

Small-Diaphragm Studio Condenser Microphone

English

Care and Usage

Introduction

Thank you for purchasing the Pulsar II small diaphragm condenser microphone from M-Audio. Studio artists around the world rely on M-Audio microphones to capture acoustic performances with clarity and accurate tonal balance. The Pulsar II improves upon that reputation with a new FET circuit, improved diaphragm damping, and a redesigned front grill and back plate. This results in a very smooth midrange response and adds more “air” to the top end (above 15kHz), allowing the Pulsar II to exhibit a frequency response curve surprisingly similar to that of some of the world’s greatest small diaphragm microphones.

Please take a few moments to familiarize yourself with your new microphone by reading this guide.

Features

- ▶ Top-address cardioid instrument microphone
- ▶ 20Hz-20kHz frequency response
- ▶ Switchable high-pass filter, 12dB per octave at 80Hz
- ▶ 3/4" diameter 6-micron evaporated-gold diaphragm
- ▶ Class A FET electronics
- ▶ 3-pin XLR
- ▶ Switchable -10dB pad
- ▶ Solid brass body
- ▶ Includes soft cloth bag, windscreen, and hard mount

What’s in the box?

If your box does not include the following items, please contact your dealer immediately:

- | | | |
|-----------------------------------|----------------------|--------------------------|
| (2) M-Audio Pulsar II microphones | (2) Windscreens | (1) Wooden case |
| (2) Hard Mounts | (1) Stereo Bar | (1) Care and Usage Guide |
| (2) Soft Cloth bags | (1) Microphone Riser | (1) Addendum |

Using the Pulsar II

The M-Audio Pulsar II microphone outputs a balanced low-impedance signal. It is designed to be connected to the mic-level inputs of a mixer channel or a dedicated high-quality preamp such as M-Audio’s DMP3, Octane, or Tampa. These are all very “neutral” sounding preamps that can amplify your microphone signal, while retaining its full dynamic range and clarity.

As with all condenser microphones, your Pulsar II requires power in order to operate. You will need to connect the Pulsar II via an XLR microphone cable to a preamp or mixer channel input that supplies +48V phantom power. (Phantom power shares the same XLR cable as the audio from the microphone.) In order to avoid pops and surges that can damage components like speakers and microphones, always perform the following steps (in the order listed) when connecting the mic and/or cable:

1. Turn the volume/gain on your preamp and/or mixer all the way down.
2. Make sure that phantom power is turned off.
3. Connect the microphone via a high-quality XLR cable.
4. Turn on phantom power.
5. Slowly turn up the gain on your preamp and/or mixer.

Before disconnecting the mic and/or cable, repeat steps 1 and 2 (in the order listed).

Applications

The Pulsar II’s clean electronics combine with an evaporated gold diaphragm to produce a smooth tone that makes it a great instrument-recording microphone. Use it on string instruments, wind instruments, as an overhead drum mic, or as a room ambience recording mic. When you’re ready to add more pro-quality microphones to your mic locker, consider the award-winning M-Audio Luna and the multi-pattern recording features of the M-Audio Solaris microphone and the Sputnik tube microphone.

Cardioid Pattern

Cardioid is the most commonly used polar pattern engineered into microphones. This design causes the rear of the microphone to reject incoming sound, allowing the engineer to isolate the signal source from other performance elements or background noise by just pointing the mic at the sound source.

Microphone Care

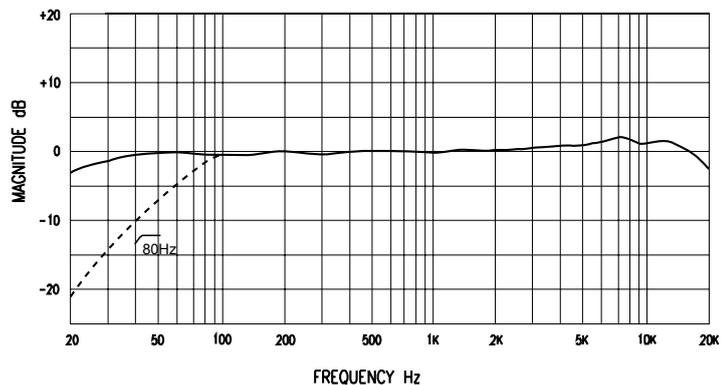
Here are a few tips for care of your Pulsar II microphone:

- ▶ Never subject the Pulsar II to physical shock.
- ▶ Always use a stand and always use the included hard mount when securing to a stand.
- ▶ Avoid harmful moisture condensation on the diaphragm when moving the microphone between outdoor and indoor environments by allowing the microphone to acclimate to room temperature before connection.
- ▶ Always use top-quality cables in order to avoid electrical problems that may damage the microphone’s electronics.
- ▶ Avoid subjecting the Pulsar II to any kind of moisture. In vocal applications, use the enclosed windscreen to protect the diaphragm from breath condensation and saliva build-up.
- ▶ Never disassemble the Pulsar II microphone. There are no user-serviceable parts inside.
- ▶ Avoid temperature extremes above 95°F and below 50°F.
- ▶ Always wipe the Pulsar II exterior down with a soft dry cloth and return it to its case after each use to prevent damage from dust.
- ▶ In the event that your Pulsar II needs more extensive cleaning, lightly dampen a soft cloth with water or mild household soap and clean the metal exterior, wiping it completely dry when finished. Never spray a cleaning agent on the microphone itself, as the moisture can damage the unit.

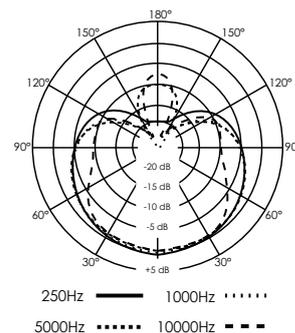
Specifications

- ▶ **Type:** small diaphragm condenser
- ▶ **Polar Pattern:** cardioid
- ▶ **Frequency Response:** 20Hz – 20kHz
- ▶ **Sensitivity:** 13.8 mV/Pa (-37dBV ref. 1V/Pa)
- ▶ **Max. SPL** (<0.5% threshold level): 134dB; 144dB SPL with -10dB pad
- ▶ **Equivalent Noise Level:** 15dB A-weighted
- ▶ **Output Impedance:** 300 - 600Ω
- ▶ **Suggested Mic Pre Input Impedance:** 1 – 2.5 kΩ
- ▶ **Preamplifier Topology:** Class A FET, transformerless
- ▶ **Power Requirement:** 30 VDC – 50 VDC phantom power
- ▶ **Connector:** 3-pin male XLR
- ▶ **Dimensions:** 22mm (0.87") diameter, 132mm (5.20") long
- ▶ **Weight:** 115 g (4.0 oz)

Frequency response representation for the M-Audio Pulsar II microphone:



Polar response representation for the M-Audio Pulsar II microphone:



Warranty Terms and Registration

Warranty Terms

M-Audio warrants products to be free from defects in materials and workmanship, under normal use and provided that the product is owned by the original, registered user. Visit www.m-audio.com/warranty for terms and limitations applying to your specific product.

Warranty Registration

Immediately registering your new M-Audio product entitles you to full warranty coverage and helps M-Audio develop and manufacture the finest quality products available. Register online at www.m-audio.com/register to receive FREE product updates and for the chance to win M-Audio giveaways.

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WARNING: This product contains chemicals, including lead, known to the State of California to cause cancer, and birth defects or other reproductive harm. **Wash hands after handling.**

