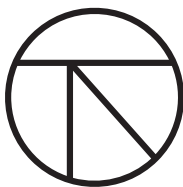


TURNSTILEAUDIO



Platform Series

TAP500

Broadcast Microphone



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▲ Important Safety Instructions

- Please read, follow, and keep all directions.
- Do not expose the microphone to extreme heat or cold.
- Do not expose the microphone to damp or wet conditions such as rain.
- Do not expose the microphone to excessive foreign particles as dirt or dust.
- Do not use any harsh chemical solvent to clean the microphone.
Do not attempt to disassemble the microphone as Turnstile Audio is not responsible for any damage caused.
- Do not attempt to modify the microphone as Turnstile Audio is not responsible for any damage caused by modifications.
- Keep the microphone in the box when it is not use.
- To clean the microphone use a dry cloth, do not use a damp cloth.

Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time.

The U.S. Government’s Occupational Safety and Health Administration (OSHA) has specified the permissible noise level exposures shown in the chart. According to OSHA, any exposure in excess of these permissible limits could result in some hearing loss:

Noise Exposure Limits

Exposure Time	NIOSH	OSHA	
	dB SPL	dB SPL	
8 hrs	85	85	NIOSH The National Institute for Occupational Safety and Health.
4 hrs	88	90	
2 hrs	91	95	OSHA Occupational Safety and Health Administration.
1 hr	94	100	
30 min	97	105	dB SPL Decibel sound pressure level.
15 min	100	110	
7.5 min	103	115	
3.75 min	106	120	
> 2 min	109	-	
> 1 min	111	-	

Introduction

Thank you for choosing the Turnstile Audio Platform Series TAP500 broadcast microphone. This guide will help you set up your TAP500 microphone so that you get a professional-grade audio recording. The TAP500 is optimized for podcasting, broadcast, and voice recording, giving you a clean and natural sound.

The microphone's hypercardioid polar pattern is designed to greatly reduce the amount of background noise on the sides of the mic, plus the sound behind the microphone, so you just pick up what is in front of the TAP500. For tone control and tone contouring, the low-cut switch reduces rumble.

The mid-range boost switch emphasizes vocal clarity in the frequency 6 kHz to 10 kHz range. The included shock mount enhances sonic clarity by isolating the microphone from the mic stand, perfect when you need to reposition the microphone on the fly. To reduce plosive "Ps" and "Bs", a windscreen is included, giving you a simple and easy solution to this common audio problem. The TAP500 is also a hypercardioid dynamic microphone that does not require the use of external power such as 48v phantom power. This makes it an ideal microphone for podcasting, broadcast, or voice recording.

Microphone Controls & Output

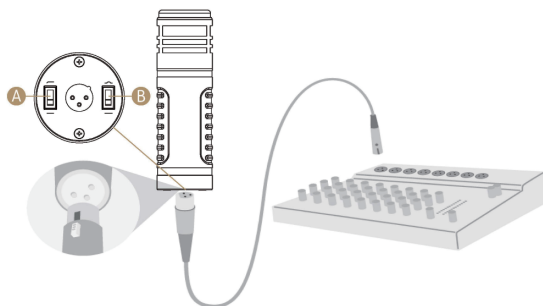
Microphone Setup: To mount the TAP500 microphone to the provided shock mount, simply press the clips on the mount to expand the mount's aperture and slide the mic into the desired position. The TAP500 also comes with a Euro mic stand adapter that can be added to the shock mount's mic stand thread.

A: The Low-Cut switch is used to remove the frequencies below 80Hz. The switch does this by reducing the levels at 80Hz and below by 10dB (10 Decibels), the frequency level where most of the low-end rumble occurs that is typically not desired. For tone control, the low-cut switch reduces rumble, especially when the audio source is too close to the microphone. For example: when a speaker gets too close to the microphone when talking and you hear too much bass in their voice. Note: Every 3dB up or down is doubling in either more sound or less sound. The decibel scale is logarithmic and not linear.

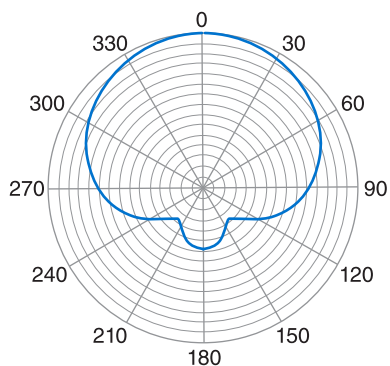
B: The Mid-Range Boost switch is used to bump up frequencies between 6kHz and 10kHz. This is frequency range for the human voice and the boost can help bring out more enunciation when someone is talking. Your voice will pop when this is engaged. Note: This may increase the sibilance in someone's voice, so the "S" sounds may become more pronounced, especially if the person speaking is too close to the microphone with a high gain or volume level.

Connection Example

Note: If the incoming signal level is too low, an external microphone preamplifier such as the TAP100MP may be needed.



How To Record



Hyper Cardioid

The microphone has a Hypercardioid polar pattern so the sound is picked up from the front of the microphone, not the back or sides. This works best for podcasts, live streaming, voiceovers, vocals, and recording single instruments.

There are two traditional ways to record with this polar pattern: close miking (near) and distant miking (far).

For podcast, voiceover, vocal, and instrument applications, start by positioning the microphone in front of you and close to your face or instrument. Speak or play directly into the mic with about 1-6 inches (2.5 - 15 cm) space between you and the microphone. The spacing will be determined by how loud you talk or play into the microphone.

Tip: If you need more presence or forward pop in your voice, turn on the mid-range boost switch. You will notice the microphone's sound has more crispness in the vocal/speaking frequency range. Note: this may increase the sibilance in someone's voice, so the "S" sounds may become more pronounced, especially if the person speaking is too close to the microphone with a high gain or volume level. Adjust the level as needed.

Note: Speaking closer to the microphone results in more bass response, like voices on a typical radio broadcast. Make additional gain adjustments if necessary. If you are getting too much low end, engage the low-cut filter to reduce the excessive bass sound.

For dealing with a sound source that is further away, such as in a live-streaming environment, or with a screen or distance miking an instrument.

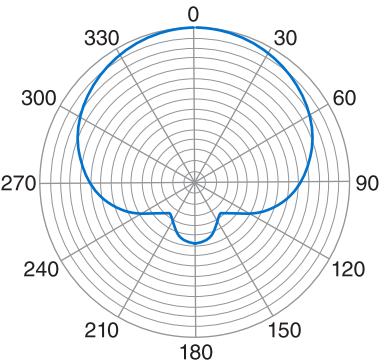
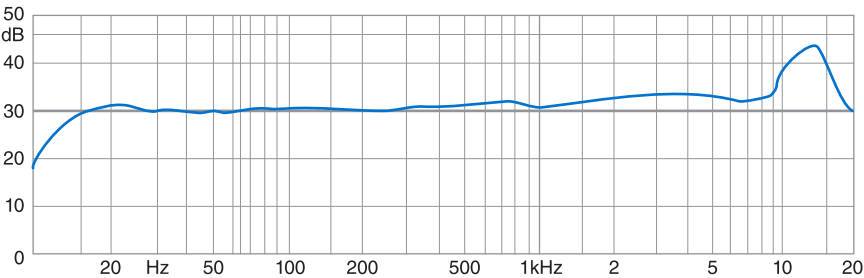
Point the microphone directly at the sound source with the placement being 6 to 18 inches (15 to 45 cm) away. Make additional gain adjustments.

Tip: Because the TAP500 is highly directional, ensure that the microphone is pointed directly at the source. If possible, experiment with mic placement to find where it sounds best. Make any additional level adjustments on your audio device as needed.

Specifications

Transducer	Capsule Dynamic
Polar Pattern	Hyper Cardioid
Frequency Range	20Hz to 20kHz
Maximum SPL	136dB SPL RMS
Impedance	250 Ohms
Sensitivity	-56dB ±3dB at 1kHz
Mid Range Boost Range	6kHz-10kHz
Low Cut Roll Off	80Hz
Output Connector	XLR 3-Pin
Dimensions	2.0" × 6.75" / 52 × 170mm
Weight lbs	8.2oz / 686g

The Frequency Response Curves And The Polar Diagram



Hyper Cardioid at 1 kHz

Customer Service

Turnstile Audio
42 West 18th Street
New York, NY 10011
1 (800) 223-2500

Turnstile Audio 2 Year Limited Warranty

Turnstile Audio warrants to the original purchaser that your Turnstile Audio product shall be free from defects in material and workmanship for the period of two (2) years from the date of purchase (or delivery as may be required in certain jurisdictions), or thirty (30) days after replacement, whichever comes later.

Turnstile Audio's entire liability and your exclusive remedy for any breach of warranty shall be, at Turnstile Audio's option, to repair or replace the hardware, provided that the hardware is returned to the point of purchase or such other place as Turnstile Audio may direct with a copy of the sales receipt or dated itemized receipt.

Turnstile Audio may, at its option, replace your product, offer to provide a functionally equivalent product, or repair any product with new, refurbished or used parts as long as such parts are in compliance with the product's technical specifications.

Any replacement hardware product will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer, or for any additional period of time that may be applicable in your jurisdiction.

If the product has been discontinued, the warranty provider reserves the right to replace it with a model of equivalent quality and function.

This warranty does not cover problems or damage resulting from accident, abuse, misapplication, or any unauthorized repair, modification or disassembly, improper operation or maintenance, normal wear and tear, or usage not in accordance with product instructions or connection to improper voltage supply, use of consumables, such as replacement batteries, not supplied by Turnstile Audio, except where such restriction is prohibited by applicable law.

Except where prohibited by applicable law, this warranty is nontransferable and is limited to the original purchaser and the country in which the product was purchased.

This warranty gives you specific legal rights, and you may also have other rights, including a longer warranty duration that may vary under local laws.

To start a warranty claim contact the Turnstile Audio Customer Service Department to obtain a return merchandise authorization ("RMA") number, and return the defective product to Turnstile Audio, along with the RMA number and proof of purchase.

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