Turnstile Audio TAC1100

Turnstile Audio Concourse Series TAC1100

Multi-Pattern Cardioid Condenser Microphone Instruction Manual

1. Introduction

The Turnstile Audio Concourse Series TAC1100 is a versatile multi-pattern cardioid condenser microphone designed for high-quality audio capture. It is suitable for various applications including vocal recording, podcasting, streaming, and instrument recording. This microphone delivers a clean and warm vintage sound, enhanced by a built-in output transformer that naturally boosts the mid-range frequencies. Its robust metal construction ensures durability and reliable performance.

This manual provides essential information for setting up, operating, and maintaining your TAC1100 microphone to ensure optimal performance and longevity.

2. What's in the Box

Upon opening your Turnstile Audio Concourse Series TAC1100 package, you should find the following items:

- Turnstile Audio TAC1100 Multi-Pattern Microphone
- Shock Mount
- Windscreen
- Metal Carrying Case
- Warranty Card



Figure 2.1: All components included with the Turnstile Audio TAC1100 microphone.



Figure 2.2: The microphone, shock mount, and windscreen neatly organized within the metal carrying case.

3. Features

The TAC1100 microphone offers a range of features designed for high-fidelity audio recording:

- **Clean & Warm Vintage Sound:** Delivers a rich and clear audio profile.
- **Built-in Output Transformer:** Naturally boosts mid-range frequencies for enhanced audio presence.
- **Low Handling Noise:** Designed for cleaner recordings by minimizing mechanical noise.
- **Multiple Polar Patterns:** Features 3 selectable polar patterns (Cardioid, Figure-8, Omni) for versatile recording scenarios.
- **Tone Control:** Includes a -10 dB Pad to prevent overloading when recording loud sources.
- **Tone Contouring:** A 100 Hz Low-cut Filter Switch reduces unwanted rumble and low-frequency noise.
- **Durable Construction:** Housed in a solid metal body for longevity and reliability.
- **Phantom Power:** Operates on standard 48V phantom power.
- **Windscreen:** Included to reduce plosive sounds (e.g., 'p' and 'b' sounds).
- **Metal Carrying Case:** Provides secure storage and easy transport.

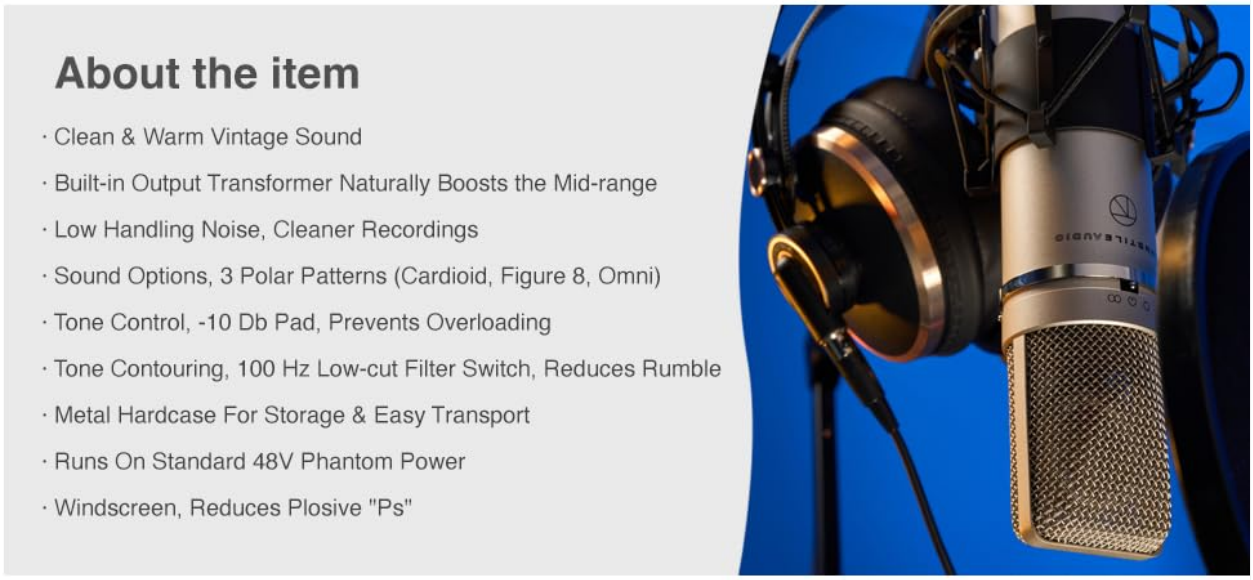


Figure 3.1: Overview of the TAC1100 microphone's main features.

4. Setup

Follow these steps to set up your TAC1100 microphone:

1. **Attach Shock Mount:** Securely screw the microphone into the provided shock mount. The shock mount helps to isolate the microphone from vibrations and handling noise.
2. **Mount Microphone:** Attach the shock mount (with the microphone) to a microphone stand or boom arm. Ensure it is stable and positioned correctly for your recording needs.
3. **Connect XLR Cable:** Plug one end of a standard XLR cable into the XLR output port at the bottom of the microphone.
4. **Connect to Audio Interface:** Connect the other end of the XLR cable to an input on your audio interface, mixer, or recorder. Ensure your device provides 48V phantom power, as this is required for the condenser microphone to operate.
5. **Apply Windscreen:** Gently place the foam windscreen over the microphone's grille to reduce plosive sounds during vocal recordings.



Figure 4.1: The TAC1100 microphone properly set up on a boom arm, ready for recording.



Figure 4.2: Detail of the XLR connection point at the base of the microphone.

5. Operating Instructions

The TAC1100 offers flexible operation through its multi-pattern design and integrated controls:

- **Polar Pattern Selection:** Use the switch on the microphone body to select one of three polar patterns: Cardioid, Figure-8, or Omni.
- **-10 dB Pad:** Engage the -10 dB pad switch when recording very loud sound sources to prevent input overload and distortion.
- **100 Hz Low-cut Filter:** Activate the 100 Hz low-cut filter switch to reduce unwanted low-frequency noise, such as rumble from air conditioning or handling noise.
- **Optimal Positioning:** Position the microphone appropriately for your chosen polar pattern and sound source to achieve the best audio quality.

Polar Pattern Guide

Polar Pattern	Direction of Sound	Application	Miking Technique
Cardioid	Sound is picked up from the front of the microphone and not the back or sides.	Best for podcasts, live streaming, voice-overs, vocals, and single instruments.	Close miking or single source miking with the Cardioid pattern.
Figure-8	Sound is picked up from the front and rear of the microphone and not the sides.	Best for interviews and vocal/instrument duets.	Single mic in Figure-8 pattern or two mics set up in Blumlein pair for controlled room sound.
Omni	Sound is picked up equally from every direction in 360 degrees.	Best for conference calls, meetings, or capturing ambient room sound.	Traditional orchestral or choir-style recording with the Omni pattern.

6. Maintenance

To ensure the longevity and optimal performance of your TAC1100 microphone, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the microphone body. Avoid using liquid cleaners or solvents, as these can damage the finish or internal components.
- **Storage:** When not in use, store the microphone in its provided metal carrying case. This protects it from dust, moisture, and physical damage.
- **Handle with Care:** Avoid dropping or subjecting the microphone to harsh impacts. The internal capsule is delicate and can be damaged by rough handling.
- **Moisture:** Keep the microphone away from excessive moisture or humidity, which can affect its performance and lifespan.

7. Troubleshooting

If you encounter issues with your TAC1100 microphone, consider the following troubleshooting steps:

- **No Sound:**
  - Ensure the XLR cable is securely connected at both the microphone and the audio interface.
  - Verify that 48V phantom power is enabled on your audio interface.
  - Check the gain settings on your audio interface; increase gradually.
  - Test with a different XLR cable or audio interface if possible.
- **Distorted Sound:**
  - Engage the -10 dB pad on the microphone if the sound source is very loud.
  - Reduce the gain on your audio interface.
  - Ensure the microphone is not positioned too close to the sound source (proximity effect).
- **Excessive Low-Frequency Noise/Rumble:**
  - Activate the 100 Hz low-cut filter on the microphone.
  - Ensure the microphone is properly isolated using the shock mount.

8. Specifications

Specification	Value
Model Number	TAC1100
Item Weight	4.62 pounds
Product Dimensions	15.25 x 9.5 x 5 inches
Compatible Devices	Audio Interfaces, Mixers, Recorders
Connector Type	XLR Connector
Material Type	Metal
Power Source	Corded Electric (48V Phantom Power required)

Specification	Value
Date First Available	October 31, 2022

9. Warranty and Support

Your Turnstile Audio Concourse Series TAC1100 microphone includes a warranty card. Please refer to this card for detailed information regarding warranty coverage, terms, and conditions.

For technical support, service, or any inquiries not covered in this manual, please contact Turnstile Audio customer support through their official website or the contact information provided on your warranty card.