

# TM-180

## Large-diaphragm condenser microphone



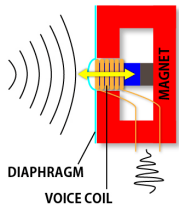
The TM-180 is a large-diaphragm condenser microphone that brings warmth and brightness to your home or project studio recordings. It offers a wide frequency response for precise and smooth reproduction of vocals, acoustic string instruments, brass instruments and other sound sources.

A switchable low-cut filter allows you to add clarity by reducing the amount of unwanted low-frequency sounds or to compensate for the proximity effect in close miking. There is also a switchable level attenuation that reduces the risk of distortion caused by excessively loud sounds. And the cardioid directivity pattern enables the TM-180 to pick up the intended source while rejecting off-axis sounds.

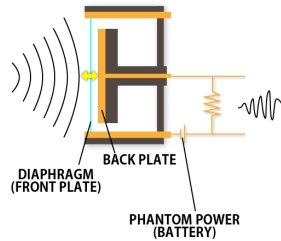
# Details

## Use a condenser microphone to easily capture precise, high-definition sound

### DYNAMIC MICROPHONE



### CONDENSER MICROPHONE



The TM-180 is a condenser microphone opposed to dynamic microphones which are usually being used in live performances. Unlike dynamic mics, a condenser mic does not need a relatively heavy magnet and voice coil to convert acoustic waves into electrical signals. Instead, it uses a diaphragm coupled to an electrical condenser where vibrations are converted to changes in capacitance, realising a lightweight structure that helps to create a wider and smoother frequency response. To derive a signal from the changes in capacitance, electrical power is required.

## Make your sound distinctive with a large-diaphragm mic

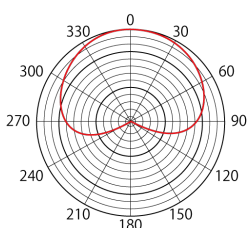


Condenser microphones are largely divided into two categories according to the size of diaphragm. While small-diaphragm mics are more robust and have a very even frequency response, large-diaphragm mics are known for low noise, they have higher sensitivity and can handle higher sound pressure levels. Large-diaphragm microphones are often used for vocals as they can help to create a distinctive sound due to their warm colouration.

With its 34-mm gold-plated diaphragm, the TM-180 offers the typical warm and bright sound of large-diaphragm microphones with a smoothly increased high-end presence.

## Unidirectional pattern is ideal for recording single sound sources

TM-180 Polar Pattern



The polar pattern of a microphone shows how well the mic picks up the sound from different directions (directivity). The TM-180 has a unidirectional, or cardioid, pattern. This type of directivity is ideal for vocals and other single sound sources because it mainly picks up the sound from the front and reduces off-axis sounds from the sides and rear.

## Switchable low-cut filter and level attenuation to tailor your sound

The TM-180 is equipped with a switchable low-cut filter and a second switch to reduce the microphone's sensitivity.

Use the low-cut filter (also called high-pass filter) to add clarity to your sound by reducing the amount of low frequencies. When you're close to the mic while singing or speaking, for instance, your voice may sound too rich due to the so-called proximity effect. Using the low-cut filter can compensate part of that effect.

When recording very loud sounds like brass instruments or very powerful voices, you can set the level attenuation switch to -10 dB to avoid distortion.



### **Protection through suspension shockmount and carrying case**

Since a large-diaphragm microphone is sensitive against structure-borne noise, the TM-180 comes with a suspension shockmount that minimises vibrations from the mic stand. A soft bag is also included to protect the mic when not in use and a hard case allows you to safely carry your mic set to a different location.



# Features at a glance

- Condenser microphone for capturing precise, high-definition sound at home or in the studio
- Large gold-plated diaphragm with a diameter of 34 mm
- High SPL (sound pressure level) capability and smooth sound curve with a decent peak around 9 kHz – ideal to emphasize lead vocals or lead instruments like saxophone or other brass instruments
- Unidirectional (cardioid) pattern is ideal to capture single sound sources
- Switchable low-cut filter to reduce unwanted low-frequency sounds
- Switchable level attenuation (-10 dB) to protect the mic from excessively loud audio sources
- Perfect for recording with any Tascam recorder or interface that supplies phantom power
- Included accessories: suspension shockmount, soft case, hard case, 5/8-inch to 3/8-inch screw adapter
  
- Optional accessories: **TM-AG1** microphone pop filter, **TM-AR1** acoustic control filter

## Specifications

- Frequency response: 20 Hz – 20 kHz
- Output impedance: 200  $\Omega$
- Load impedance: <1 k $\Omega$
- Sensitivity: -35 dB,  $\pm 2$  dB (0 dB = 1 V/Pa at 1 kHz)
- Maximum sound pressure level: 130 dB
- Signal-to-noise ratio: 79 dB
- Connector: 3-pin XLR, male
- Phantom power: DC 48 V
- External dimensions ( $\varnothing \times L$ ): 50 mm  $\times$  190 mm
- Weight: 420 g (mic body only)

# Options



**TM-AG1:** Microphone pop filter



**TM-AR1:** Acoustic control filter



**TM-AM1:** Boom Microphone Stand With Counterweight

# Related products



**TM-80:** Condenser microphone



**TM-60:** Battery-powered condenser microphone



**TM-DRUMS:** Microphone set for drums

Design and specifications subject to change without notice.

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