

## SOUND PALETTE® Series

- The Mackie Industrial MT-3100 is an omnidirectional boundary condenser microphone designed for the ambient mic application on the SP1200 and SP2400 Program Controller/Amplifiers.
- When connected to the Ambient Mic connector on the SP1200 or SP2400, the microphone monitors the ambient noise in the room or zone, and the gain of the Paging Mic is automatically adjusted to compensate for room noise. This allows public address pages to be a little louder than the noise in the room so they can always be heard.
- When the SP-DSP1 card is installed in the SP1200 or SP2400, the signal from the ambient mic is also used to enable an automated controllable balance between changing ambient noise levels and the program level.
- The boundary microphone is specially designed to be placed on a flat surface, where the direct sound and the reflected sound, off of that surface, are added together in-phase at the microphone's capsule.
- The plastic microphone enclosure has a steel protective mesh, and is equipped with an indicator for power on as well as a connection cable with a 3-pin male XLR connector.
- A special elastic suspension isolates the microphone's capsule, and an electronic filter eliminates subsonic frequencies, allowing the MT-3100 to reject vibrations transmitted by the support surface.
- Operates on a phantom power supply ranging from 12 VDC to 48 VDC.

## Ambient Noise-Sensing Microphone

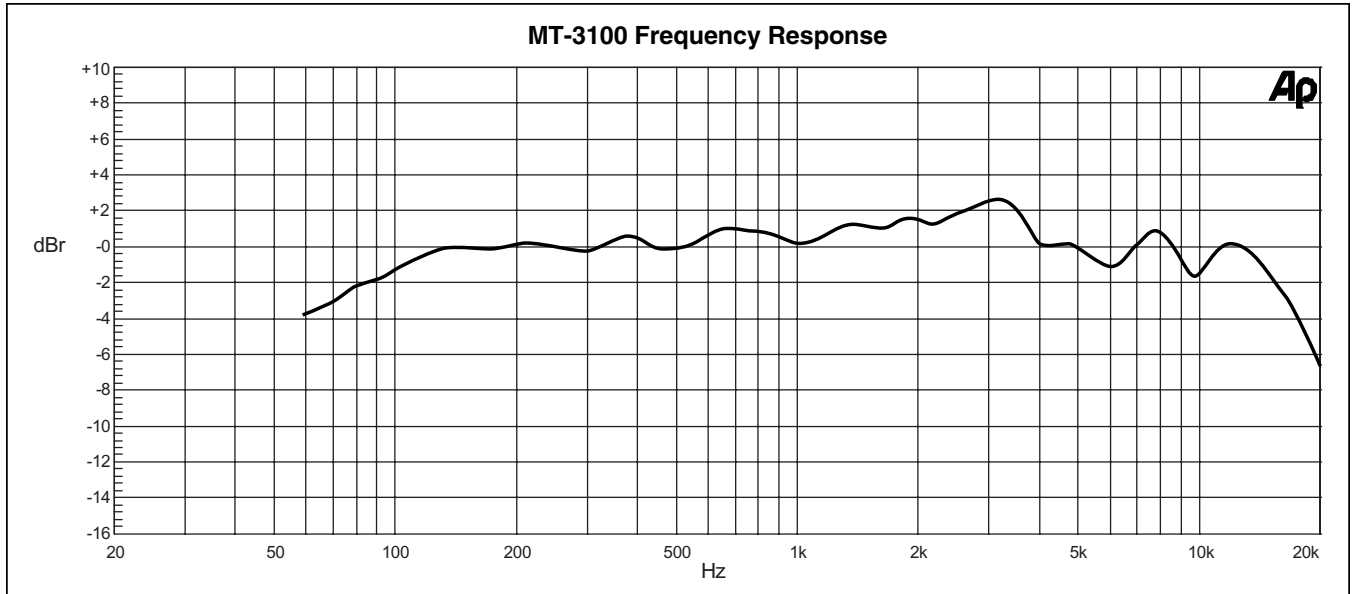


## Features

- Used for the ambient noise sensing feature on the SP1200 and SP2400
- Low profile for discreet placement
- Available in black or white
- Electret condenser capsule operates on phantom power
- Red power indicator

- Zoned Music Distribution
- Automated Noise-Compensating Gain Systems
- Multizone Paging/Music Systems
- Music/Speech Reinforcement Systems

# MT-3100 Ambient Noise-Sensing Microphone



## Specifications

### Electrical

Type:	Electret Condenser
Polar Characteristic:	Omnidirectional
Output Impedance:	600 ohms
Sensitivity (@ 1kHz):	20mV/Pa
Frequency Response:	50Hz-20kHz
Signal-to-Noise Ratio:	70 dB @ 94 dB SPL
Maximum Sound Pressure Level:	130 dB SPL
Power Supply:	11-52 VDC phantom supply according to DIN 45596 or IEC 268-15

### Physical

Connector:	XLR-M balanced
Dimensions:	4.7" diameter x 1.1" high (120mm x 27mm)
Net Weight:	4.6 oz. (130g)
Accessories:	2 strips of double-sided tape for microphone attachment

### Architects' and Engineers' Specifications

The microphone shall be a fixed-charge condenser type with an omnidirectional polar pattern and a frequency response of 50Hz to 20,000Hz. It shall operate from an external phantom power source, ranging from 11 VDC to 52 VDC, and it shall have a red indicating LED on the top. Nominal open-circuit output voltage shall be 20mV at 1kHz, 1 Pascal.

The microphone shall have a nominal output impedance of 600 ohms, and the output shall be balanced. It shall accept up to 130 dB SPL while producing no more than 1% THD.

The microphone shall have a diameter of 4.7" (120mm), a height of 1.1" (27mm), and a weight of 4.6 oz. (130g). It shall include 16.4 feet (5m) of connection cable with a professional XLRM-type 3-pin terminating connector.

The microphone shall be a model MT-3100 manufactured by Mackie Industrial.

Electronic files for this product available at:  
[www.mackieindustrial.com](http://www.mackieindustrial.com)

This Specification Sheet

MT3100.PDF



[www.mackieindustrial.com](http://www.mackieindustrial.com)

16220 Wood-Red Rd. NE, Woodinville, WA 98072 USA  
 888.337.7404, fax 425.487.4337, [industrial@mackie.com](mailto:industrial@mackie.com)

UK +44.1268.571.212, fax +44.1268.570.809, [info@rcf-uk.com](mailto:info@rcf-uk.com)  
 ITALY +39.0522.354.111, fax +39.0522.926.208, [industrial@rcf.it](mailto:industrial@rcf.it)  
 FRANCE +33.3.8546.9160, fax +33.3.8546.9161, [rcf.commercial@wanadoo.fr](mailto:rcf.commercial@wanadoo.fr)  
 GERMANY +49.2572.96042.0, fax +49.2572.96042.10, [industrial@mackie.de](mailto:industrial@mackie.de)

Mackie Designs continually engages in research related to product improvement. New material, production methods, and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current Mackie Industrial product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated. ©2002 Mackie Designs Inc. All rights Reserved. and are registered trademarks of Mackie Designs Inc. Mackie Industrial is a trademark of Mackie Designs Inc.

Part No. 0000760 Rev. A 1/02