Superlux®
JUST PLAY IT

ECM 888B

1/4" Measurement Microphone

User Guide

GOANG-FANN CO., LTD.

LB100888B01EN (Rev. 1)

Specifications

Type
Back electret condenser

Element
Pressure, FET preamplifier.

Polar pattern
Omnidirectional (Figure 1)

Frequency response
20 to 20,000 Hz (Figure 2)

Sensitivity
(at 1,000 Hz Open Circuit Voltage)
-43dBV/Pa (7.1mV/Pa) ±3dB
1Pa=94dB SPL

Rated impedance
800Ω

Minimum load impedance
3,000Ω

Equivalent noise level
(A-weighted)
22dB

Max. SPL (1 kΩ load)
128dB SPL (THD≦1% 1kHz)

Dynamic range (1 kΩ Load)
106dB

Signal-to-noise ratio
72 dB

Power supply
4LR44 6V battery

Current consumption
0.5mA, >300 hour

Polarity
Pin 2 output positive voltage (related to pin 3) when diaphragm receives positive pressure. (Diaphragm moving inward)

Connector
3 pin male XLR type

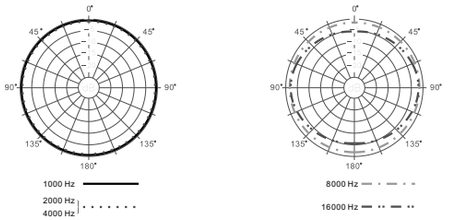
Finish
Metal construction with champagne painted finish

Environmental conditions
The ECM888B operates between -10℃ to +50℃(14℉ to 122℉) with relative humidity between 0 to 95%.

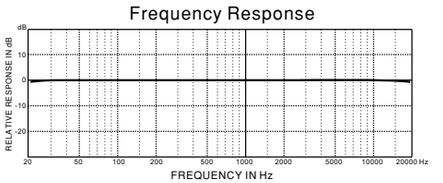
Dimensions
Φ21.0x170.0mm (0.83x6.70 in.)
Figure 3

Weight
150g (5.30 oz.), Battery excluded

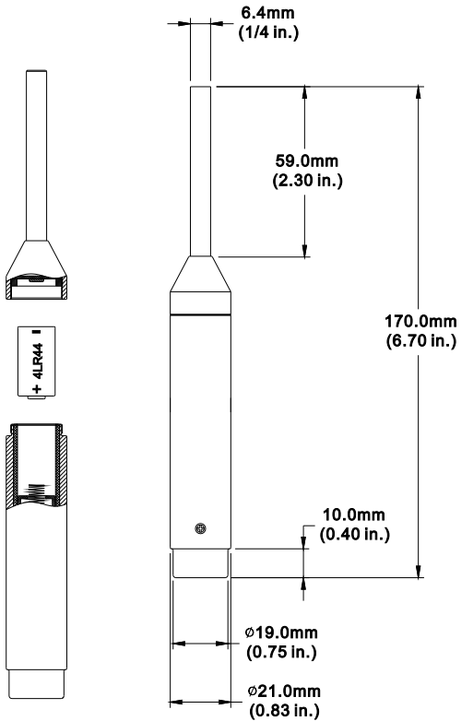
RoHS
The ECM888B, including the product and packages follow the instruction of EU 2002/95/EC and comply to RoHS.



TYPICAL POLAR PATTERN (Figure 1)



TYPICAL FREQUENCY RESPONSE
(Figure2)



Dimensions(Figure 3)

Description

The ECM888B is a 1/4" standard measurement microphone with internal battery. No external power needed for easier connection to various devices. Such as real time analyzer, PC based measurements, or palm size devices. Wide and flat frequency response makes this ECM888B an ideal measurement and recording microphone.

Features

- Wide frequency response from 20Hz to 20KHz.
- 1/4" industrial standard dimension.
- Omni directional.
- Internal battery, 4LV44, 6V battery.
- All metal structure, durable and long lasting live time.

Cautions

1. When the microphone is connected, do not un-screw the microphone that may cause impact signal to the connected system.
2. Turn off the level on the audio system before disconnecting the microphone.
3. Battery life time is 300 hours. If the signal is low or no signal, replace the battery.
4. Before replace the battery, disconnect the microphone from the system.
5. Insert the battery according to the illustrated polarity on the body. Anode shall point toward the XLR3M plug. Cathode shall point to the capsule tip. If the battery is not properly inserted, the microphone will not be damaged, but will not work either.
6. To save the battery power, remove the battery when the microphone will not be used for a long period.
7. Place foam wind screen when in outdoor to reduce wind noise.

Accessories

Supplied accessories

Shock mount ---------- HM32
6V alkaline battery ---------- 4LR44

HM32
Shock Mount

4LR44
6V Alkaline Battery

Optional accessories

Foam windscreen ----------S02
Mic clip ---------- HM10B
Instrument boom stand ----------MS104
Table top microphone stand ---------- HM6
Adjustable boom stand ----------MS131

S02
Foam windscreen

HM6
Table stand

HM10B
Mic clip

MS104
Instrument boom stand

MS131
Adjustable boom stand

Knowing your microphone

Superlux provides variety selection of microphones for professionals and amatures. To know your microphone is the first step to successful result.

Type of transducer

Condenser

Extremely light weight diaphragm, very sensitive to sound. Very small versions available for hiding applications. High performance condenser microphones are regarded as standard equipment of recording studios for extreme detail capturing. Operates with power, such as phantom or battery.

About Frequency Response

Flat

Suitable for working at controlled environment, or for acoustic measurements. Although people persuit flatness, but for none-professionals, it is a challenge to makes it works as expectation.

Popular curve response

Based on years of practical experience of pro users. There are curves to be build for various applications, so that it is very simple to use the microphone for the purpose. Limiting bandwidth, and emphasing are typical skill.

Variable response

Incorporating switchable filters to elliminates interference, such as sub-sonic filter to cut air-conditioner and floor vibrations. And allows full flat when used in controlled environment.

Directivity

Select or set the directivity of your microphone for stereo recording, for various music instrument, vocal, speech, and environmental sound pick-up. Pair of spaced omni for A/B stereo, pair of near coincident cardioid for ORTF, and pair of coincident XY for Blumlein stereo.

Omni

Equal sensitivity to all direction, so that the microphone doesn t need to pointing toward the sound source. Low handling and wind noise. Welcome by news gathering, and music recording applications.

Distance to source

Close miking or distant miking sound very differently. Vocal recording or live performance practice close miking mostly. Suitable proximity effect is one desired target, and lower feedback problem is another factor for live sound application.

While distant miking is common practice for recording, especially stereo pair recording with large group of performers, such as orchestra or choir.

Distant miking generally picks up less bass section with pressure gradient type of microphone (cardioid, figure-8, shotgun...) due to acoustic nature and lack of proximity effects.

Rich bass with distant miking can be recorded with pressure type of microphone (Omni), which performs the same frequency response with close or distant pick-up.

Mounting the microphone

Pressure gradient microphone is very sensitive to vibration. Suitable shock mount for high performance microphone is necessary for extreme low noise recording. Sturdy stand can set the microphone excatly at the sweet spot and keep it there. Choose heavy duty microphone stand for studio condenser microphone which weights much more than handle microphone.

Superlux provides wide range of microphone stands for various demands. Big Foot Willie is specially developed for large condenser microphones that able to support 2 large microphones with stereo bracket for single point stereo recording.

Extension foot on all the 'E' versions serve to mount heavy studio microphone in limit space live sound applications.

Maintainence

Condenser microphone shall be kept in low humidity environment for best sound performance. Store the condenser microphones in airconditioned room or dehumidifier to keep away form moisture. Clean air is another important factor. Keep away from smoking environment to avoid tar residuals.

Superlux®

marketing and sales
Superlux, Taiwan
+886-2-26931323
sales@superlux.com.tw
manufacturing & logistics.
Superlux Enterprise
Development(Shanghai)Co., Ltd.

superlux.tw