



CRY3406

1/4" Pressure-field Pre-polarized Low-noise Microphone

Features

- **Key Specifications**

Sensitivity	15.8 mV/Pa
Dynamic Range	26 dBA to 144 dB
Frequency Range	4 Hz to 20 kHz ± 2 dB

- **Applications**

Anechoic chamber test
Speaker test
Environmental test

- **Standards**

IEC 61094 4:1995 Measurement microphones - Part 4

Introduction

CRY3406 is a 1/4-inch pressure-field prepolarized measurement microphone designed specifically for sensitive acoustic testing in low-noise environments.

The unique design of CRY3406 provides it with very low self-noise, and it is capable of withstanding sound pressure levels up to 144 dB. It is an excellent general-purpose measurement microphone suitable for high-definition audio measurements.

Highlights

- **Use of Low-noise Pressure-field Microphones**

Low-noise microphones have very low internal noise, allowing them to conduct acoustic measurements without significantly adding to the background noise.

Pressure-field microphones are specifically designed for measurements in small enclosed cavities or near the sound source ports, and are widely used in fields such as acoustic research and electroacoustic testing.

- **Compatibility**

The CRY3406 measuring microphone is compatible with the IEPE preamplifier of CRY SOUND.

IEPE is a universal constant current source power supply technology used on sensors. Each manufacturer has different names, such as ICP, CCP, etc.

- **Calibration**

Each CRY SOUND microphone is calibrated at the factory using traceable calibration equipment. Calibration certificates are provided with each unit. CRY SOUND recommends recalibration at least once a year.

- **Quality & Warranty**

All CRY SOUND microphone capsules use 3rd generation titanium diaphragms and protection grids and synthetic sapphire insulators - resulting in the most rugged and reliable measurement microphones on the market. Titanium provides superior corrosion resistance, high temperature stability, impact resistance and strength-to-mass than traditional nickel and stainless steel. All capsules are assembled in strict clean-room environments for maximum quality.

CRY SOUND microphones are supported by a 10-year warranty—offering one of the best service guarantee in the world.

Technical Specifications

Specifications

Field Type	Pressure-field
Sensitivity(± 1.5 dB)	15.8 mV/Pa, -36 dB re 1V/Pa
Frequency Response	4 Hz to 20kHz ± 2 dB
Polarization Voltage	0 V
Capacitance	7 pF (@250 Hz)
Dynamic Range(re.20uPa)	26 dBA to 144 dB
Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Temperature Stability	0.01 dB/°C (-10°C to +50°C) 0.006 dB/°F (+14°F to +122°F)
Static Pressure Stability	-0.01 dB/kPa
Operating Humidity Range	0 to 90%RH no condensation
Humidity Stability	< 0.1 dB (0 to 90%RH no condensation)
Pressure Equalization Vent	Side vented
IEC 61094-4 Type	WS3P

Dimensions

Height with Grid	10.5 mm (0.413")
Diameter with Grid	7 mm (0.276")

Ordering Information

Optional Accessories

Preamplifier	CRY3541 1/4" SMB Interface CRY3543 1/4" Microdot Interface CRY3501 1/2" BNC Interface
Electrostatic Actuator	TA0303 1/4" IEPE Electrostatic Actuator
Adapter	TA0503 1/2" to 1/4" Adapter Ring
Electroacoustic Analyzer	CRY6151B Electroacoustic Analyzer
Power Supply	CRY575 Three-channel Microphone Power Supply
Cable	BL5001 BNC to BNC Cable /1.6m SMB to BNC Cable /1.5m Microdot to BNC Cable /1.5m

Drawings(mm)[inch]

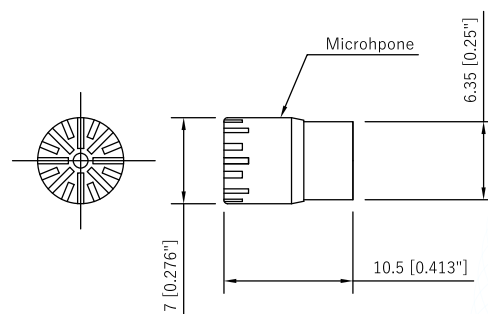


Fig.1 CRY3406 Microphone Drawings

Frequency Response

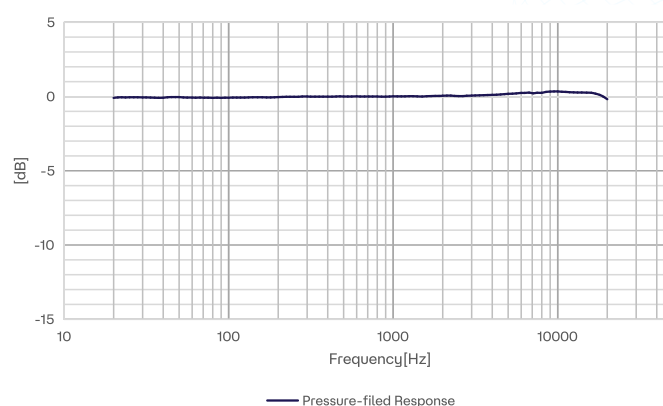


Fig.2 CRY3406 Microphone Typical Frequency Response

Related Products

CRY3102	1" pressure-field prepolarized low-noise microphone, 50 mV/Pa, 4 Hz-8 kHz, 12 dBA-146 dB
CRY3202	1/2" pressure-field prepolarized wide-frequency microphone, 12.5 mV/Pa, 3.15 Hz-20kHz, 23 dBA-160 dB
CRY3204	1/2" pressure-field prepolarized high-sensitivity microphone, 50 mV/Pa, 3.15 Hz-10 kHz, 16 dBA-146 dB
CRY3402	1/4" pressure-field prepolarized ultra-high frequency microphone, 1.6 mV/Pa, 4 Hz-70kHz, 45dB-170 dB
CRY3404	1/4" pressure-field prepolarized high-level microphone, 0.56 mV/Pa, 10 Hz-20kHz, 59dB-175dB