



CRY3282

1/2" Pressure-field External-polarized Full- range Microphone

Features

- **Key Specifications**

Sensitivity	12.5 mV/Pa
Dynamic Range	23 dBA to 160 dB
Frequency Range	3.15 Hz to 20 kHz ± 2 dB

- **Applications**

In-ear monitor measurements - used in conjunction with a coupler

Wideband earbud measurements - used in conjunction with a coupler

- **Standards**

IEC 61094 4:1995 Measurement microphones - Part 4

Introduction

CRY3282 is a 1/2" externally polarized measurement microphone designed for pressure field measurements. It is specifically designed to be used in conjunction with a coupler chamber for related electroacoustic testing.

The unique design of CRY3282 enables high-quality and wide-frequency response testing of in-ear monitors and earplugs. Its frequency range extends up to 20kHz, surpassing the testing capabilities of most simulated ears.

Highlights

- **Use of Full-range Pressure-field Microphones**

Full-range microphones can cover a wide frequency range from very low frequencies to high frequencies, making them highly suitable for testing and measuring various acoustic environments and sound sources.

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.

- **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)	12.5 mV/Pa, -38 dB re 1V/Pa
Frequency Response	3.15 Hz to 20 kHz ± 2 dB
Polarization Voltage	200 V
Capacitance	13 pF (@250 Hz)
Dynamic Range(re.20uPa)	23 dBA to 160 dB
Operating Temperature	-30°C to +80°C (-22°F to +176°F)
Temperature Stability	0.005 dB/°C (-10°C to +50°C) 0.003 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	Rear vented
IEC 61094-4 Type	WS2P

Dimensions

Height with Grid	12.7 mm (0.500")
Diameter with Grid	13.2 mm (0.520")

Drawings(mm)[inch]

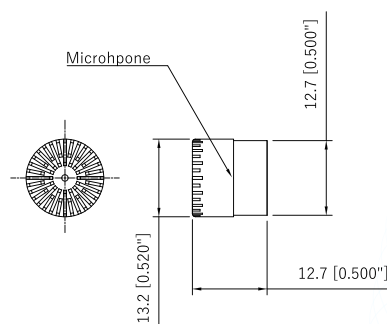


Fig.1 CRY3282 Microphone Drawings

Frequency Response

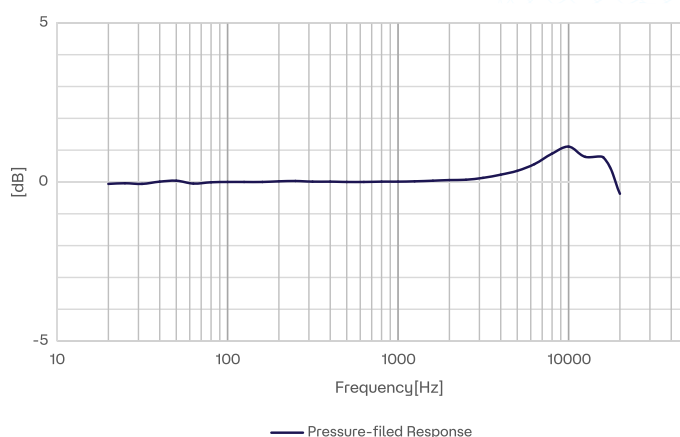


Fig.2 CRY3282 Microphone Typical Frequency Response

Ordering Information

Optional Accessories

Electrostatic Actuator	TA0302 1/2" IEPE Electrostatic Actuator
Power Supply	CRY575 Three-channel Microphone Power Supply
Electroacoustic Analyzer	CRY6151B Electroacoustic Analyzer

Related Products

CRY3281	1/2" free-field ex-polarized high-frequency microphone, 12.5 mV/Pa, 3.15 Hz-40 kHz, 23 dBA-160 dB
CRY3284	1/2" pressure-field ex-polarized high-sensitivity microphone, 50 mV/Pa, 3.15 Hz-10 kHz, 16 dBA-146 dB
CRY3285	1/2" free-field ex-polarized high-sensitivity microphone, 50 mV/Pa, 3.15 Hz-20kHz, 16 dBA-146 dB
CRY3482	1/4" pressure-field ex-polarized ultra-high frequency microphone, 1.6 mV/Pa, 4 Hz-70kHz, 45dB-170 dB
CRY3485	1/4" free-field ex-polarized high-frequency microphone, 4 mV/Pa, 4 Hz-90kHz, 35dBA-165dB