



# CRY3408-S01

## 1/4" Pressure-field Prepolarized High-level Microphone Set

### Features

- **Key Specifications**

Sensitivity	0.14 mV/Pa
Dynamic Range	70 dB to 180 dB
Frequency Range	10 Hz to 20 kHz $\pm 2$ dB

- **Applications**

Industrial Blast Testing  
Aircraft Engine Noise Testing  
Close-range Rocket Launch Testing

- **Standards**

IEC 61094 4:1995 Measurement microphones - Part 4

- **Components**

CRY3408 1/4" Pressure-field Prepolarized Microphone  
CRY3543 1/4" IEPE Preamplifier

### Introduction

The CRY3408-S01 is a 1/4" pressure field prepolarization measurement microphone and preamplifier set designed for high sound pressure level acoustic measurement.

It is capable of acoustic testing in extremely high sound pressure environments and can withstand sound pressure levels up to 180 dB. It is suitable for measuring sound characteristics in high-volume environments and evaluating and optimizing acoustic environments.

### Highlights

- **Use of High-level Pressure-field Microphones**

High-level microphones enable acoustic testing in extremely high sound pressure environments and are particularly suitable for measuring sound characteristics in large volume environments as well as evaluating and optimizing acoustic environments.

Pressure-field microphone sets 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 CRY SOUND pre-polarized microphone kit requires a constant current source power module (IEPE power supply), also known as ICP, CCP, etc., capable of supplying a current ranging from 2mA to 20mA.

- **TEDS Microphone Set**

Supports TEDS, and TEDS programmed to the IEEE 1451.4 standard for SMART transducers, V 1.0 format.

- **Calibration**

Each CRY SOUND microphone set 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 and preamplifiers 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( $\pm 3$ dB)	0.14 mV/Pa, -77 dB re 1V/Pa
Frequency Response	10 Hz to 20 kHz $\pm 2$ dB
Dynamic Range(re.20uPa)	70 dB-180 dB
Inherent noise	70 dBA
Polarization Voltage	0 V
Operating Temperature	-30°C to +70°C (-22°F to +158°F)
Temperature Stability	-0.015 dB/°C (-10-+50°C)
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
Output Impedance	< 50 $\Omega$
Maximum Output Voltage	> 10.0 Vp
DC Bias Voltage	12V $\pm$ 2 V
Current Source	IEPE (2 mA to 20 mA)
Typical Operating Current	4 mA
Interface Type	10-32UNF(Microdot)

## Ordering Information

### Consisting of

Measurement Microphone	CRY3408 1/4" Pressure-field Prepolarized Microphone
Preamplifier	CRY3543 1/4" IEPE Preamplifier
Cable	Microdot to BNC Cable /1.5m

### Optional Accessories

Microphone Holder	1/4" Microphone Holder
Power Supply	CRY575 Three-channel Microphone Power Supply

### Frequency Response

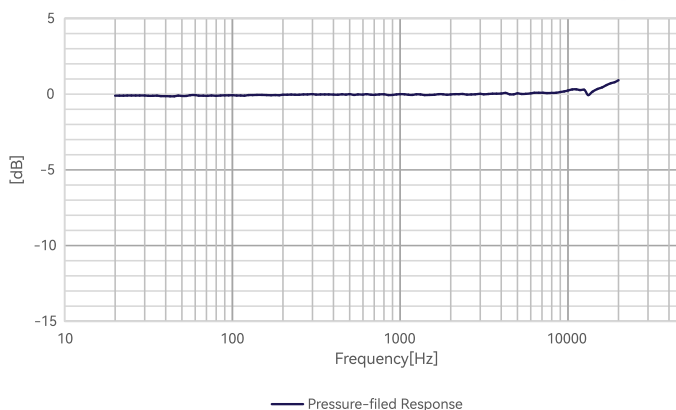


Fig.1 CRY3408-S01 Microphone Set Typical Frequency Response

### Dimensions

Height with Grid	56.2 mm (2.213")
Diameter with Grid	7 mm (0.276")

### Drawings(mm)[inch]

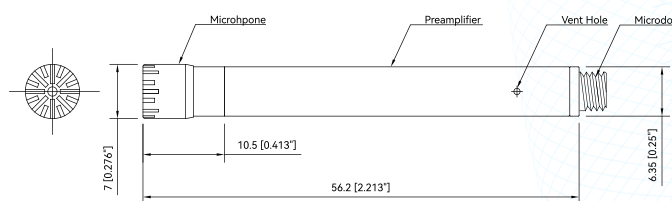


Fig.2 CRY3408-S01 Microphone Set Drawings

### Related Products

CRY3102-S01	1" pressure-field prepolarized low-noise microphone set, 50 mV/Pa, 4 Hz-8 kHz, 12 dB-138dB
CRY3202-S01	1/2" pressure-field prepolarized wide-frequency microphone set, 12.5 mV/Pa, 3.15 Hz-20kHz, 23 dB-150dB
CRY3402-S01	1/4" pressure-field prepolarized ultra-high frequency microphone set, 1.6 mV/Pa, 4 Hz-70kHz, 45dB-168 dB