



CRY3203-S01

1/2" Free-field Prepolarized High-Sensitivity Microphone Set



Features

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Sensitivity	50 mV/Pa
Dynamic Range	15 dBA to 136 dB
Frequency Range	3.15 Hz to 20 kHz ±2 dB

Applications

Anechoic chamber test
Electroacoustic test
Noise test

Standards

IEC 61094 4:1995 Measurement microphones - Part 4

Components

CRY3203 1/2 Free-field Prepolarized Microphone CRY3501
1/2 IEPE Preamplifier

Introduction

CRY3203-S01 is a free-field prepolarized microphone and preamplifier set widely used in acoustic testing environments, such as anechoic chambers and quiet rooms. Its frequency response range matches the auditory frequency range of the human ear, making it highly suitable for noise detection. Additionally, it is also widely applicable in various fields including electroacoustic measurements, audio measurements, and acoustical research.

Check out our Microphone Selection Guide

acsoft.co.uk/microphone-selection-tool

Highlights

Use of High-level Pressure-field Microphones

High-sensitivity microphone sets have a broad measurement frequency range and are applicable to a variety of measurement scenarios.

Free-field microphone sets are specifically designed for measurements in environments that are free from reflections or echoes and are widely used in fields such as acoustic research, noise monitoring, and sound system testing

Compatibility

The CRY SOUND prepolarized microphone kit requires a constant current source power module (IEPE power supply) that can provide a current of 2mA to 20mA and a no-load voltage of 24V.

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

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 guarantees in the world

Technical Specifications

Specifications

Field Type	Free-field
Sensitivity (± 3 dB)	50 mV/Pa, -26 re 1V/Pa
Frequency Response	3.15 Hz to 20 kHz ± 2 dB
Polarization Voltage	0 V
Dynamic Range (re.20uPa)	15dBA to 136 dB
Operating Temperature	-30°C to +70°C (-22°F to +158°F)
Temperature Stability	0.012 dB/°C (-10°C to +50°C) 0.007 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	WS2F
Output Impedance	< 50 Ω
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	BNC

Frequency Response

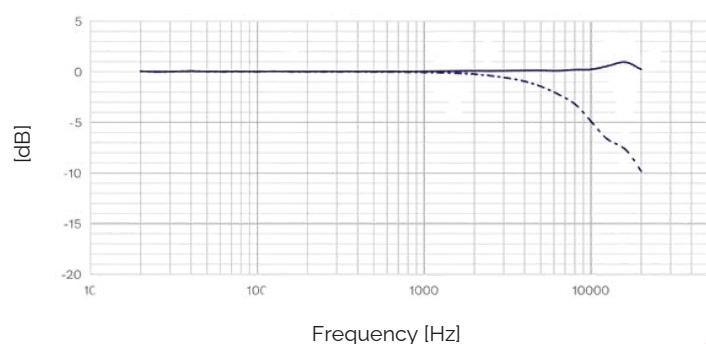


Fig.1 CRY3203-S01 Microphone Set Typical Frequency Response

Dimensions

Height with Grid	91.5 mm (3.6")
Diameter with Grid	13.2 mm (0.52")

Drawings (mm) [inch]

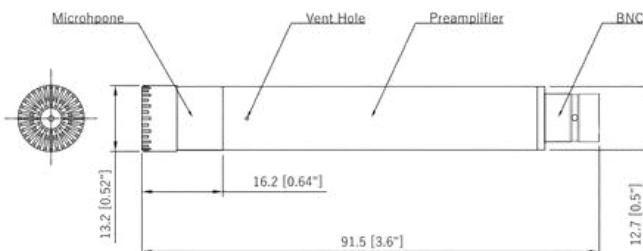


Fig.2 CRY3203-S01 Microphone Set Drawings

Ordering information

Consisting of

Measurement Microphone	CRY3203 1/2 Free-field Prepolarized Microphone
Preamplifier	CRY3501 1/2 IEPE Preamplifier
Cable	BL5001 BNC to BNC Cable /1.6m

Optional Accessories

Microphone Clamp	1/2 Microphone Clamp
Power Supply	CRY575 Three-channel Microphone Power Supply
Power Supply	BL5001 BNC to BNC Cable /1.0m BL5001 BNC to BNC Cable /3.2m BL5001 BNC to BNC Cable /5.0m

Related Products

CRY3203 S02	1/2 free field prepolarized high sensitivity microphone set, 50 mV/Pa, 3.15 Hz 20kHz, 15 dBA 136dB
CRY3101 S01	1 free field prepolarized low noise microphone set, 50 mV/Pa, 4 Hz 16kHz, 12 dBA 136dB
CRY3201 S01	1/2 free field prepolarized high frequency microphone set, 12.5 mV/Pa, 3.15 Hz 40 kHz, 23 dBA 148dB
CRY3403 S01	1/4 free field prepolarized high frequency microphone set, 4 mV/Pa, 4 Hz 90kHz, 35dBA 158dB