CRY361-S02

1/2" Free-Field, Prepolarized, Ultra-low noise Microphone Set

Features

- **Key Specifications**

Nominal Sensitivity	450 mV/Pa
Dynamic Range	6.5 dBA to 100 dB
Frequency Range	6 Hz to 20 kHz

- **Applications**

Low-noise Testing
Product Self-noise Testing
Home Appliance Noise Measurement

- **Components**

CRY361 1/2" Free-field Prepolarized Microphone
CRY517 1/2" IEPE Preamplifier

Introduction

The CRY361 - S02 is a 1/2 - inch free - field pre - polarized measuring microphone and pre - amplifier, specifically designed for noise measurements below 10 dB.

The CRY361 - S02 has a background noise as low as 6.5 dBA, making it an ideal choice for detecting and measuring ultra - low noise levels. Typical applications include measuring product self - noise, home appliance noise, transformer current noise, and evaluating environmental noise.

Highlights

- **Use of Ultra-low noise Free-field Microphones**

The dynamic range of the low-noise microphone can be as low as 6.5 dBA, enabling it to measure sound pressure levels close to the threshold of human hearing. It is an ideal choice for the detection of extremely low noise.
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 CRY361 - S02 low - noise microphone set abandons the pre - amplifier that requires a traditional power supply module for power supply. Instead, it adopts the IEPE power - supply method and can be directly connected to data analysis instruments compatible with IEPE.

- **TEDS Microphone Set**

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

- **Calibration**

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

- **Quality & Warranty**

All CRYSOUND 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.

CRYSOUND microphones enjoy a one-year warranty period. We will provide users with comprehensive after-sales support services.

Technical Specifications

Specifications

Field Type	Free-field
Sensitivity(±2 dB)	450 mV/Pa, -7 dB re 1V/Pa
Frequency Response	10 Hz to 16kHz ±2dB 6 Hz to 20kHz ±3dB
Polarization Voltage	0 V
Dynamic Range Lower Limit	6.5 dBA Typical:<6.0 dB
Dynamic Range Upper Limit(re.20uPa)	100 dB（20Hz - 8kHz） 85 dB（8kHz - 20kHz）
Power Supply (IEPE)	4mA -20mA, typical 4mA
Operating Temperature	-20℃ to +60℃ (-4℉ to +140℉)
Temperature Stability	0.012 dB/℃ (-10℃ to +50℃) 0.008 dB/℉ (+14℉ to +122℉)
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	35 Ω
Interface Type	BNC

Frequency Response

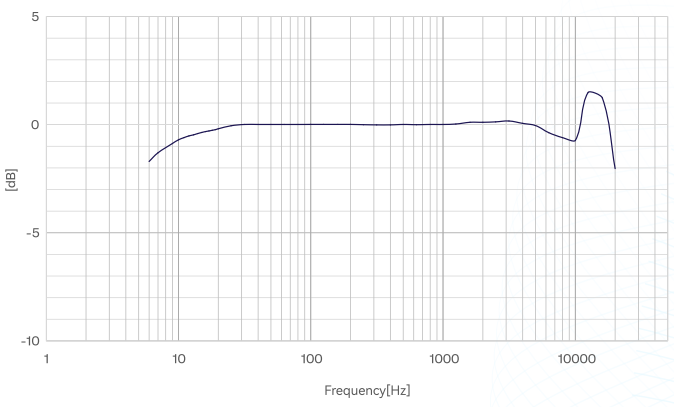

Fig.1 CRY361-S02 Microphone Set Typical Frequency Response

Dimensions

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

Drawings(mm)[inch]

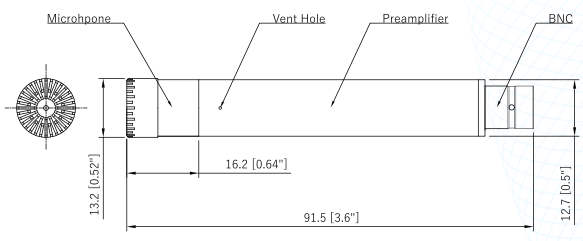

Fig.2 CRY361-S02 Microphone Set Drawings

Ordering Information

Consisting of

Measurement Microphone	CRY361 1/2" Free-field Prepolarized Microphone
Preamplifier	CRY517 IEPE Preamplifier
Cable	BL5001 BNC to BNC Cable /1.6m

Optional Accessories

Microphone Clamp	1/2" Microphone Clamp
Cable	BL5001 BNC to BNC Cable /1.0m BL5001 BNC to BNC Cable /3.2m BL5001 BNC to BNC Cable /5.0m

Related Products

CRY333-S01	1/2" free-field prepolarized microphone set， 50mV/Pa, 3.15Hz-20kHz, 17dBA-132dB
CRY351-S01	1/4" free-field prepolarized low-noise microphone set, 15.8 mV/Pa, 4 Hz-40 kHz, 26 dBA-143dB
CRY717-S01	IEC 60318 - 4 Ear simulator set for the measurement of Insert earphones, 9 dBA - 110 dB
CRY718-S01	IEC 60318 - 4 Ear simulator set for the measurement of Insert earphones, 12 dBA - 115 dB