

CRY371-CRY507

½-INCH FREE-FIELD MICROPHONE SET

Components & Description:

- ◆ CRY371 pre-polarized 1/2 inch free field condenser microphone
- ◆ CRY507 IEPE Preamplifier



Introduction

CRY371 measurement microphone is a pre-polarized 1/2 inch free field condenser microphone. It's mainly used for measuring the real sound pressure of the microphone's diaphragm. It can be compatible with CRY500 series preamplifier, and it also can be compatible with other brands like B&K, G.R.A.S., etc. It is applicable to the acoustic tester, multi-channel noise analyzer and other instruments.

CRY507 preamplifier can combine with 1/2 inch measurement microphone to transform the impedance and amplify the acoustic signal. It also compatible with other 1/2 inch measurement microphone like B&K, G.R.A.S.. BNC connector for easy installation and use with inexpensive BNC cable. This preamplifier has the characteristic of high input impedance, low output impedance, lower noise, wide frequency response range, etc. It can be used for the condition of electroacoustic test system or multi-noise analysis.

Standard

- CRY371 Meet IEC 61094-4:1995 Measurement microphones-Part 4: Specifications for working standard microphones
- CRY371 Meet GB/T 20441.4-2006 Measurement microphones-Part 4: Specifications for working standard microphones

CRY371 Parameter

CRY371 Measurement Microphone	
Field Type	Free Field
Sensitive mV/Pa (dBV/Pa)	12.5mV(-38dB) ±2dB
Frequency Response (dB)	3.15Hz-40kHz ±2dB 12.5Hz-20kHz ±1dB
Polarity Voltage (V)	0V (pre-polarized)
Typical Capacitance	13pF (@250Hz)
Linearity Range (ref. 20uPa)	20-160dB (@250Hz sensitivity changes 0.2dB/10dB)
Dynamic Range (ref. 20uPa)	≥160dB (THD<3%)
Inherent Noise (ref. 20uPa)	≤20dBA
Working Temperature	-30°C to +80°C
Temperature Coefficient	0.005dB/°C (-10°C to +50°C @250Hz)
Static Pressure Coefficient	0.01dB/kPa
Relative Humidity Range	0-90% no condensation
Relative Humidity Coefficient	<0.1dB (0-90% no condensation)
Long Period Stability	<0.03dB/a (20°C dry air)
Short Period Stability	<0.03dB (20°C dry air)
Pressure Equalization Vent	Rear vented
IEC 61094-4 Type Designation	WS2F

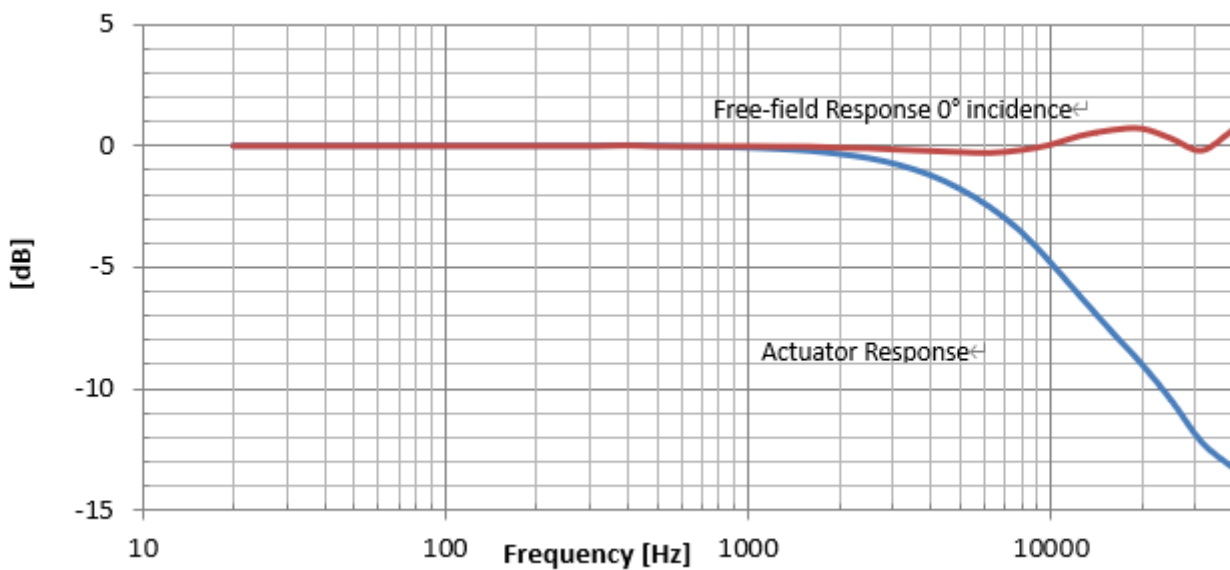


Fig1 Typical Response

CRY507 Parameter

CRY507 Preamplifier	
Frequency Response (dB)	20Hz-50kHz \pm 0.2dB
	10Hz-100kHz \pm 0.5dB
Input Impedance	> 10G Ω /0.5pF
Output Impedance	< 20 Ω
	< 0.1%
Max. Output Voltage	> 5.0Vrms (power supply for +24V)
Power Supply	IEPE (2mA-10mA)
Nominal Operating Current	4mA
Noise (A-weighting)	< 3 μ Vrms
Linearity (20-20kHz)	< 10 μ Vrms
Gain	-0.3dB
Connector Type	BNC
Working Temperature	-30 $^{\circ}$ C to +70 $^{\circ}$ C
Thread Fitting Port	11.7mm-60UNS (M11.7 \times 0.423mm)
Output Interface	BL5001 BNC to BNC Cable / 1.6m
Diameter	12.7mm (1/2inch)
Length	61mm

CRY371-507 Dimension

