

# CRY342-CRY547 1/4-INCH PRESSURE-FIELD MICROPHONE SET

## Components & Description:

- ◆ CRY342 pre-polarized 1/4 inch pressure field condenser microphone
- ◆ CRY547 IEPE Preamplifier



## Introduction

The CRY342 microphone is a pre-polarized 1/4" pressure field measurement microphone, which is a transducer that converts acoustic signals into electrical signals. It used the metal diaphragm and special materials with special stability treatment. With various features like the wide frequency range, good frequency characteristics, wide dynamic range, good dynamic characteristics, long-term stability, it is particularly suitable for high frequency and high sound pressure level measurements.

The CRY547 IEPE preamplifier is a constant current source powered preamplifier. The preamplifier has high input impedance, low noise and wide frequency response. It can be used with the CRY300 series of 1/4" pre-polarized measurement microphones. Its interface is SMB, and could be connected to a variety of electroacoustic testers via the SMB(M) to BNC(M) cable. The preamplifier utilizes stainless steel material to keep rugged and stable over time. Suitable for electroacoustic testers, multi-channel analysers and other instruments.

## Standard

- ✓ CRY342 Meet IEC 61094-4:1995 Measurement microphones—Part 4: Specifications for working standard microphone
- ✓ CRY342 Meet GBT 20441.4-2006 Measurement microphones—Part 4: Specifications for working standard microphone

## CRY342 Parameter

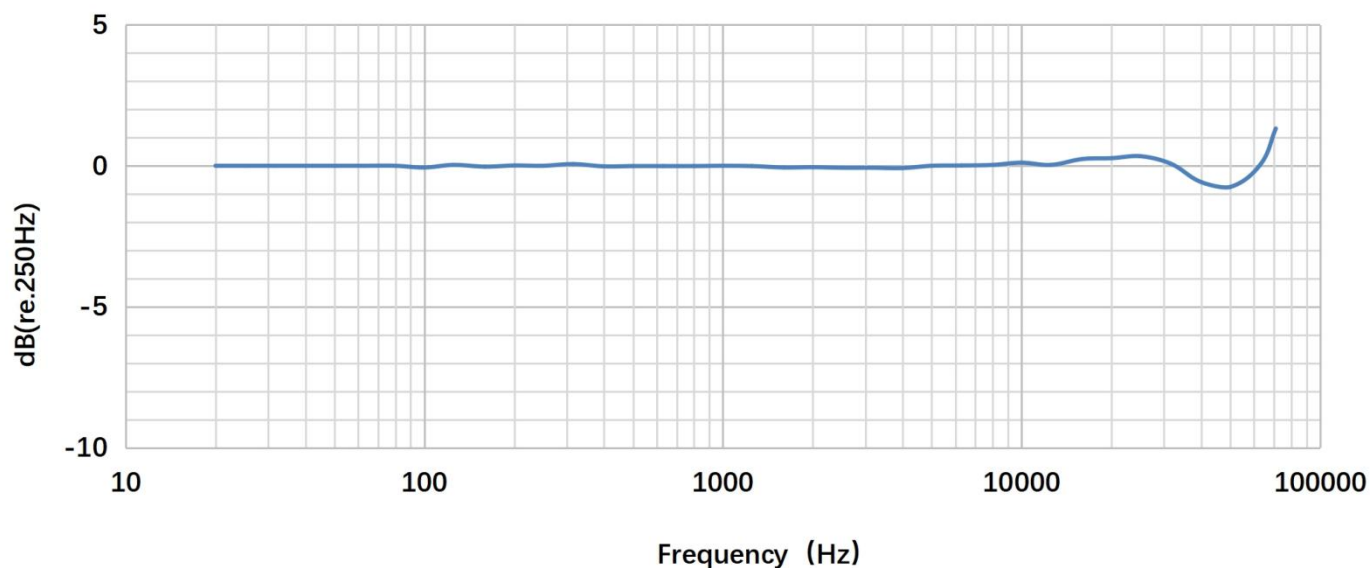
CRY342 Measurement Microphone	
Field Type	1/4" pressure field
Sensitivity mV/Pa (dBV/Pa)	1.6mV(-56dB) ±3dB
Frequency Response(dB)	4Hz - 70kHz ±2dB
Polarity Voltage (V)	0V (Pre-polarized)
Typical Capacitance (pF, @250Hz)	7pF(@250Hz)
Linearity Range (ref. 20uPa)	30-170dB (@250Hz sensitivity changes 0.2dB/10dB)
Dynamic Range (ref. 20uPa)	≥170dB (THD<3%)
Equivalent Noise (ref. 20uPa)	≤30dBA
Working Temperature	-20℃ to +60℃
Temperature Coefficient	0.015dB /℃ (-10℃ to +50℃)
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℃ under Dry air)
Short Period Stability	<0.03dB (20℃ under Dry air)
Microphone Venting	Side pressure
IEC 61094-4 Compliance	WS3P

**Mechanical dimensions**

Height (with protective grille)	10.5mm
Diameter (with protective grille)	7mm
Height (without protective grille)	9mm
Diameter (without protective grille)	6.35mm
Diaphragm ring	5.95mm
Mating threads for preamplifier	5.7mm-60UNS
Protective grille threads	6.35mm-60UNS

## Frequency Response Curve

CRY342 Pressure-field typical curve



## CRY547 Parameter

CRY547 Preamplifier	
Frequency Response Range	10Hz-100kHz( $\pm 0.2$ dB)
Input Impedance	$> 2\text{G}\Omega$ / 50pF
Output Impedance	$< 20\Omega$
Distortion (THD)	$< 0.1\%$
Max Output Voltage	$> 5.0$ Vrms (power supply for +24V)
Power Supply	IEPE (2mA-10mA)
Nominal Operating Current	4mA
Noise, A-weighting	$< 3\mu\text{Vrms}$
Noise, linearity (20 ~ 20kHz)	$< 10\mu\text{Vrms}$
Gain	-0.3 dB
Connector Type	SMB
Working Temperature	$-30^{\circ}\text{C}$ to $+70^{\circ}\text{C}$
Thread fitting port	5.7mm-60UNS (M5.7x0.423mm)
Output Interface	SMB to BNC Cable / 1.5m
Diameter	6.35mm ( 1/4 inch )
Length	53.5mm

CRY342-CRY547 Dimension

