



# CRY547

## 1/4", IEPE Microphone Preamplifier with SMB Connector and TEDS

### Features

- **Key Specifications**

Frequency Range	1 Hz to 150 kHz ( $\pm 0.2$ dB)
Power Supply	IEPE (2mA to 20mA)
Max Output Voltage	>8.0 Vp

- **Applications**

For use with prepolarized condenser microphones

### Introduction

The CRY547 is a general purpose measurement microphone preamplifier that can be used with all prepolarized condenser microphones.

CRY547 converts high input impedance to low output impedance, allowing the use of longer extension cables; The advantages of low background noise, almost will not cause load to the microphone; It supports TEDS function, which can reduce the test time; Good design and toughness make it suitable for a wide range of environmental conditions.

### Highlights

- **What is IEPE?**

IEPE is a generic name for CRY SOUND products which operate on a constant current power supply. IEPE products give output signals in the form of voltage modulation on the power supply line. One of the advantages of this is that you can use inexpensive coaxial cables.

- **Compatibility**

The CRY547 IEPE preamplifier can be used with prepolarized measurement microphones that comply with the IEC 61094 standard. It can also be used with data acquisition hardware that supports IEPE microphones, such as the CRY6151B electroacoustic analyzer.

- **TEDS**

CRY547 supports the Transducer Electronic Data Sheet (TEDS) conforming to the IEEE 1451.4 V1.0 standard. It is capable of being compatible with smart sensor technology to facilitate the integration and automated management of sensor information.

- **Calibration**

Each CRY SOUND preamplifier 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 preamplifiers are made of stainless steel with good corrosion resistance and robustness, suitable for long-term storage.

CRY SOUND preamplifiers enjoy a one-year warranty period. We will provide users with comprehensive after-sales support services.

## Technical Specifications

### Specifications

Frequency Response	1 Hz to 150 kHz ( $\pm 0.2$ dB)
Input Impedance	$> 28 \text{ G}\Omega / 0.4 \text{ pF}$
Output Impedance	$< 50 \Omega$
Attenuation	-0.4 dB
Distortion (THD) at 1V <sub>out</sub>	-74dB @1kHz (0.01%) -74dB @10kHz (0.01%)
Power Supply	2 mA to 20mA (Typical 4 mA)
Max Output Voltage	$> 8.0 \text{ Vp}$
Noise (A-weighting)	$< 3.5 \mu\text{Vrms}$
Noise (linear 20 ~ 20kHz)	$< 4 \mu\text{Vrms}$
DC Bias Voltage	12 V $\pm 2$ V
Output Slew rate	3 V/ $\mu\text{s}$
Voltage Linearity	$< 0.2$ (-90dBV to +15dBV)
Temperature	-30°C to +70°C (-22°F to 158°F)
Storage Temperature	-40°C to +80°C (-40°F to 176°F)
Humidity	0 to 90%RH, no condensation
Connector Type	SMB
Thread Interface Diameter	5.7 mm-60 UNS

### Dimensions

Height	47.75mm (1.88")
Diameter	6.35mm (0.25")

### Drawings(mm) [inch]

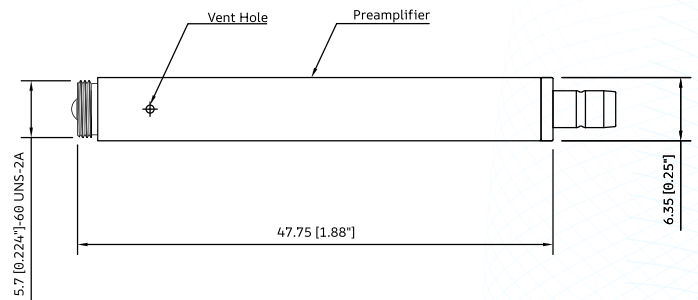


Fig.1 CRY547 preamplifier Drawings

## Ordering Information

### Optional Accessories

Microphone Cartridges	CRY333 1/2" Free-field Preamplifier Microphone CRY344 1/4" Pressure-field Pre-polarized Microphone
Adapter	TA0503 1/2" to 1/4" Adapter Ring
Electroacoustic Analyzer	CRY6151B Electroacoustic Analyzer
Power Supply	CRY575 Three-Channel Microphone Power Supply
Cable	SMB to BNC Cable /1.5m SMB to BNC Cable /0.8m SMB to BNC Cable /2.0m SMB to BNC Cable /0.6m

### Related Products

CRY507L	1/2" IEPE microphone preamplifier with BNC connector and TEDS
CRY508	1/2" IEPE microphone preamplifier with BNC connector, base-type
CRY510B	1/2" IEPE microphone preamplifier with 10-32UNF connector and TEDS, very short
CRY548	1/4", IEPE microphone preamplifier with SMB connector and TEDS, short
CRY547B	1/4" IEPE microphone preamplifier with 10-32UNF connector and TEDS