



CRY3711-S01

IEC 60318-4 Insert Earphones Measurement Occluded-ear Simulator set

Features

- **Key Specifications**

Sensitivity	12.5 mV/Pa
Dynamic Range	23 dBA to 146 dB
Frequency Range	100 Hz to 10 kHz ± 1 dB

- **Applications**

Hearing aids measurements
Insert earphone measurements

- **Standards**

IEC 60318-4 Electroacoustics - Simulators of human head and ear - Part 4
ITU-T P.57 Type 2

- **Components**

CRY3711 Ear Simulator
CRY3521 1/2" IEPE Preamplifier

Introduction

The CRY3711-S01 ear simulator set measures the performance of headphones by simulating the way the earplug catheter is inserted into the ear canal or auricle. It has a built in 1/2" prepolarized pressure - field measurement microphone.

The input impedance of CRY3711 - S01 is very close to that of an ordinary human ear and can achieve effective measurement up to 10 kHz. It is often used in acoustic testing of high - quality in - ear headphones.

Highlights

- **Use of Ear simulator Set Compliant with IEC 60318-4**

The IEC 60318-4 standard describes a closed-ear simulator. This closed-ear simulator is used to measure air-conduction hearing aids and headphones coupled to the ear through ear inserts (such as earmolds or similar devices) in the frequency range from 100 Hz to 10 kHz.

- **Compatibility**

The CRY3711-S01 coupling cavity kit requires a constant current source power module (IEPE power supply) that can provide 4 mA current and 24V no-load voltage. IEPE is a universal constant current source power supply technology used on sensors. Each manufacturer has different names, such as ICP, CCP, etc.

- **Calibration**

Each CRY SOUND ear simulator 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 ear simulator sets are primarily made of stainless steel, which offers high corrosion resistance, durability, and the ability to withstand high pressure and temperature.

CRY SOUND ear simulator sets are supported by a 10-year warranty—offering one of the best service guarantee in the world.

Technical Specifications

Specifications

Sensitivity(± 1.5 dB)	12.5 mV/Pa, -38 dB re 1V/Pa
Resonance Frequency	13.5 kHz $\pm$ 1 kHz
Frequency Response	100 Hz to 10 kHz $\pm$ 1 dB (simulate human ear impedance) 20 Hz to 16kHz (coupling cavity use)
Dynamic Range(re.20uPa)	23 dBA to 146 dB
Interface Type	BNC
Weight	387g

Frequency Response

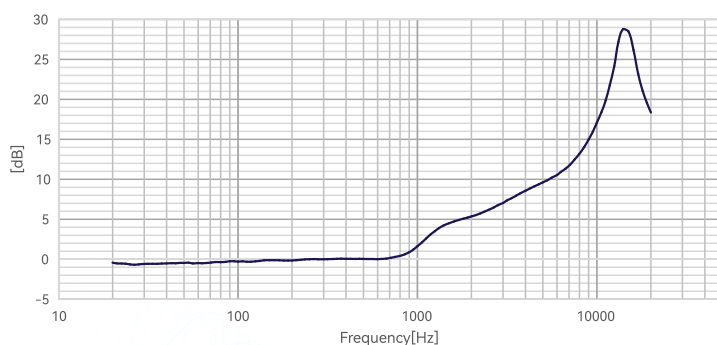


Fig.1 CRY3711-S01 Ear Simulator Set Typical Frequency Response

Dimensions

Height	55.5mm (2.025") (including connection adapter)
Diameter	61.0mm (including connection adapter)

Drawings(mm)[inch]

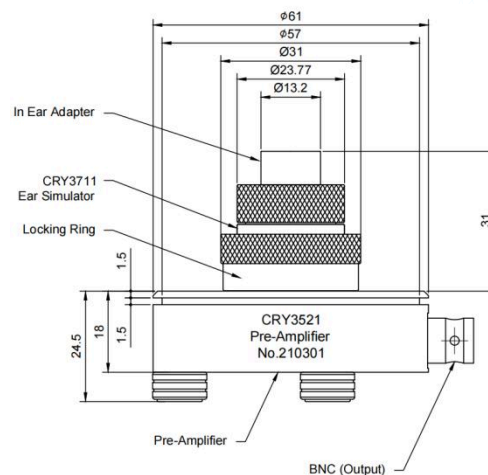


Fig.2 CRY3711-S01 Ear Simulator Set Drawings

Ordering Information

Consisting of

Ear Simulator	CRY3711 Ear Simulator
Preamplifier	CRY3521 1/2" IEPE Preamplifier
Cable	BL5001 BNC to BNC Cable /1.6m
Accessories	Coupler Chamber Accessories

Optional Accessories

Electroacoustic Analyzer	CRY6151B Electroacoustic Analyzer
Power Supply	CRY575 Three-channel Microphone Power Supply

Related Products

CRY3717-S01	IEC 60318-3 Supra-aural Audiometry Earphone Measurement 6cc Coupler Set
CRY3718-S01	IEC 60318-1 Supra-aural and Circumaural Earphone Measurement Ear Simulator Set
CRY3719-S01	IEC 60318-5 Hearing Aids and in-ear headphones Measurement 2cc Coupler Set
CRY3721-S01	IEC 60318-4, Ultra Low-noise, Full-frequency Ear Simulator Set