CRY3711

IEC 60318-4 Insert Earphones Measurement Occluded-ear Simulator

Features

- **Key Specifications**

Dynamic Range	23 dB to 160 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

Introduction

CRY3711 simulation ear simulates the way in which the earplug catheter is inserted into the ear canal or auricle to measure the performance of the earphone. It has a 1/2" prepolarized pressure field measurement microphone inside.

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

Highlights

- **Use of Ear Simulator 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 is built-in with the CRY3202 microphone that conforms to IEC 61094-4 standard. It can be connected to CRY series instruments such as the CRY6151B electro-acoustic analyzer by cooperating with a preamplifier.

- **Calibration**

  Each CRYSOUND ear simulator 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 ear simulators are primarily made of stainless steel, which offers high corrosion resistance, durability, and the ability to withstand high pressure and temper-ature.

  CRYSOUND ear simulators 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 ± 1 kHz
Frequency Response	100 Hz to 10 kHz ± 1 dB (simulate human ear impedance) 20 Hz to 16kHz (coupling cavity use)
Dynamic Range(re.20uPa)	23 dB to 160 dB
Weight	72g

Dimensions

Height	34.2(1.346")
Diameter	23.77(0.935")

Frequency Response

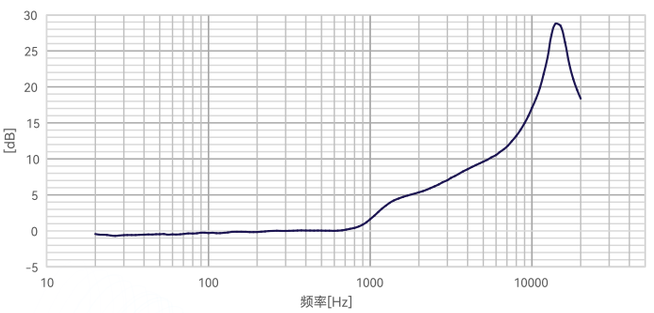

Fig.1 CRY3711 Ear Simulator + CRY3521 Preamplifier Frequency Response

Drawings(mm)[inch]

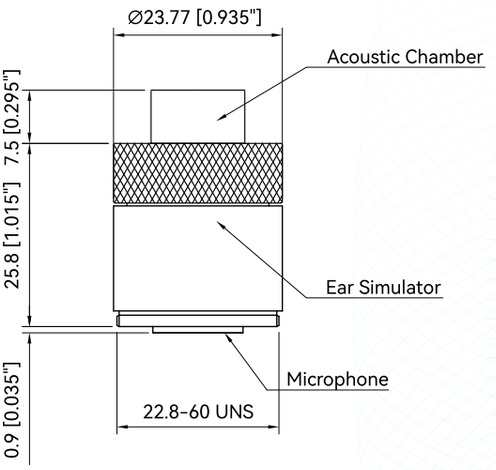

Fig.2 CRY3711 Ear Simulator Drawings

Ordering Information

Optional Accessories

Preamplifier	CRY3521 1/2" IEPE Preamplifier
Cable	BL5001 BNC to BNC Cable /1.6m
Electroacoustic Analyzer	CRY6151B Electroacoustic Analyzer
Power Supply	CRY575 Three-channel Microphone Power Supply

Related Products

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