



# CRY3602

# Mouth Simulator With Built in 20W Power Amplifier

## **Features**

#### **Key Specifications**

Maximum Continuous Output SPL 200 Hz to 10 kHz: 110 dB (25mmMRP) THD (25mmMRP)

100 Hz to 10 kHz: 100 dB 200 Hz to 10 KHz: <1.5%, Typical: <1.0%

### **Applications**

Sound source for acoustic measurements Acoustic parameter measurement of microphone

#### **Standards**

IEEE 269 Standard for Measuring Electroacoustic Performance of Communication Devices IEEE 661 Standard Method for Determining Objective Loudness Ratings of Telephone Connections ITU-T P51 Artificial mouth

# Introduction

The CRY3602 mouth simulator is designed to simulate the acoustic environment of the human mouth, providing an accurate re-creation of the sound field for measuring audio devices. With a frequency response up to 10k Hz, the CRY3602 is ideal for testing microphone and telecommunications headsets, ensuring that these devices meet acoustic performance standards.

# Highlights

## Use of Mouth Simulator Built-in 20W Power Amplifier

The CRY3602 mouth simulator is equipped with a built-in 20W power amplifier that offers a gain of 20 dB. This feature allows for a direct connection to a signal generator, eliminating the need for an external amplifiersimplifying the test setup and reducing system cost.

#### Compatibility

The CRY3602 mouth simulator is equipped with a standard BNC interface and is compatible with various electroacoustic analysis instruments. This characteristic ensures the wide applicability and great convenience of the mouth simulator in various testing scenarios.

#### Calibration

All CRYSOUND mouth simulators are calibrated at the using traceable calibration equipment. CRYSOUND recommends recalibration at least once a year.

#### **Quality & Warranty**

The CRY3602 mouth simulator features a metal casing design, ensuring its exceptional durability and stable performance. Prior to being released to the market, this mouth simulator undergoes a three-month stress relief testing to guarantee its long-term reliability and enduring performance.

CRYSOUND mouth simulators are supported by a 10-year warranty-offering one of the best service guarantee in the world.



# **Technical Specifications**

Specifications		
Maximum Continuous Output SPL (25mmMRP)	200 Hz to 10 kHz: 110 dB 100 Hz to 10 kHz: 100 dB	
THD(94dB, 25 mmMRP)	200 Hz to 10 KHz: <1.5%, Typical: <1.0% (25 mmMRP)	
Output Sound Pressure (After compensation)	94 dB ± 1 dB (100Hz to 10kHz)	
Built-in Power Amplifier Gain	20 dB	
Built-in Power Amplifier Power	20 W	
Maximum Input Signal	1 Vrms	

19 VDC

**BNC** 

1.0 kg

MRP: Mouth Reference Point

Built-in Power Amplifier

Power Supply

Connector

Weight

### Frequency Response (At 1V)

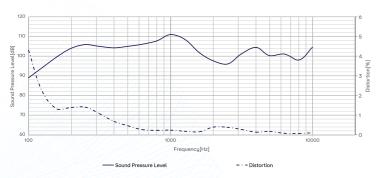


Fig.1 CRY3602 Mouth Simulator Set Typical Frequency Response and Distortion at 1V  $\,$ 

### Frequency Response (At 94dB After Compensation)

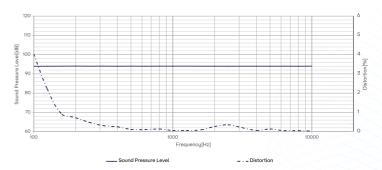


Fig.2 CRY3602 Mouth Simulator Set Typical Frequency Response and Distortion at 94dB after compensation

#### **Dimensions**

Mouth Opening Diameter	ø 20 mm	
Diameter of Lip Ring	ø 51 mm	
Height of Lip Ring	25 mm	
Diameter	ø 99 mm	
Height	90 mm	

### Drawings(mm)[inch]

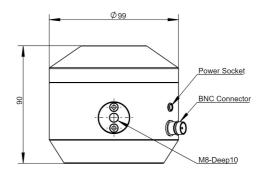


Fig.3 CRY3602 Mouth Simulator Drawings

# **Ordering Information**

Consisting of		Related Products	
Mouth simulator	CRY3602 Mouth Simulator with built in 20W power amplifier	CRY3603	High-frequency Mouth Simulator
Cable	BL5001 BNC to BNC Cable /1.6m	CRY3605	Low Distortion Mouth Simulator
Optional Accessories			
Electroacoustic Analyzer	CRY6151B Electroacoustic Analyzer	CRY3611	Reference sound source