

High Sound Pressure Calibrator & Full Frequency Coupler

CA915 / CA916

CA915 is a high sound pressure calibrator using the comparison method. The built-in compression driver delivers up to 164 dB at a small cavity. Two 1/2" (or 1/4" with the adaptor) holes where the



reference and test microphones are installed were connected to the cavity. The sound pressure levels were measured simultaneously by the reference and test microphones. The comparison was made between two microphones and calibration value was then obtained. The compression driver can handle the frequency from 2 KHz to 10 kHz and it is possible to calibrate the microphone at multi-frequencies.

The MKV451 (optional item) is recommended as the reference microphone with upper-limit of 167 dB. A power amplifier (SWA100) is also required to drive the CA915.

CA916 The comparison method plays an important role in frequency response measurement, especially for nonmetal diaphragm transducer which cannot be tested by electrostatic actuator. Nonmetal diaphragm

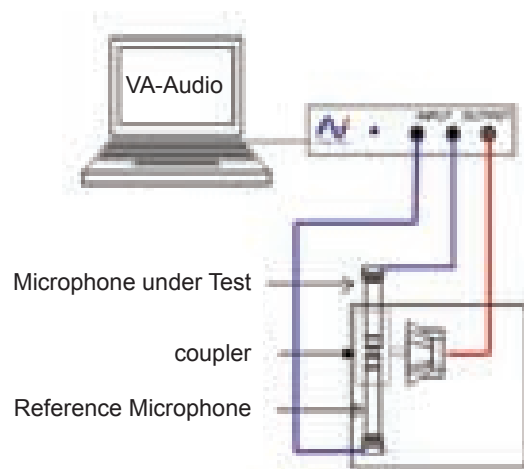


transducer can only be tested in direct method or the comparison method. Since the direct method is more susceptible to the environment, we have to turn to the comparison method which can eliminate the environmental effect.

The BSWA full frequency coupler CA916 is designed based on the comparison method. A 1/2" microphone is mounted inside the housing of the coupler as a reference. Properly designed cavity ensures that the sound pressure on the DUT transducer diaphragm is the same as the one on the reference microphone. The measurement frequency range is from 20~20K Hz.

SPECIFICATIONS

High Sound Pressure Calibrator CA915	
Working Principles	Comparison Method
Test Objects	1/2" and 1/4"
Build-in Loudspeaker	280W Compression
Max output SPL	> 154 dB SPL @ 2000 ~ 10000 Hz > 164 dB SPL @ 2000 ~ 2500 Hz, 6200 ~ 6600 Hz
Frequency response	2 kHz ~ 8 kHz
Connector for Input	BNC
Net weight	14.5 kg



SPECIFICATIONS

Full Frequency Coupler CA916	
Working Principles	Comparison Method
Test objects	1/4" or 1/2" microphone
Frequency response	20 ~ 20k Hz
Size	110 mm × 95 mm × 90 mm
Net weight	1.2 kg
Build-in Loudspeaker	0.8W
Coupler Volume	1.13 cm ³
Reference Microphone	MPA231