



Trig-Tek™ DC-200A

Displacement Clipper

MATURE

The Trig-Tek™ DC-200A Displacement Clipper is designed to prevent over-modulation of an air modulator in an acoustic testing system.

Key Features

- Four selectable filters
- Clipper monitor
- Master gain control
- Isolated output
- SE or DIFF Input
- 115 or 230 V_{rms} power

Product Information

The purpose of the DC-200A is to (1) provide constant air modulator valve displacement over the rated frequency range; and (2) prevent the over-modulation of the air modulator valve during either Sine or Random wave acoustic testing by clipping the input signal.

The DC-200A provides four variations of air modulators for selection of the equalizer roll-off characteristics. These four variations are compatible with the following Ling Electronics Electropneumatic Transducers (EPT): DC-200A-1 is used with the

EPT-94B 110; DC-200A-2 with the EPT200; DC-200A-3 with the EPT-110; and the DC-200A-4 is used with the EPT-1094 Electropneumatic transducer. The four modes of operation are selectable by movable jumpers inside the unit.

The DC-200A is installed in the signal processing system ahead of the power amplifier. This provides the proper frequency band shaping and the master gain control for the acoustic testing system.

The unit will operate with Sine or Random wave signal inputs.

Specifications

Note: The Astronics Test Systems policy is one of continuous development and improvement. Consequently, the equipment may vary in detail from the description and specifications in this publication.

Reference Data

Input Impedance

- 100 k Ω

Output Impedance (monitor)

- <50 Ω

Isolated Output Impedance

- <600 Ω across the secondary of the output impedance transformer (Pin 2 SIG and Pin 1 COM) of the XLR connector

Noise Level

- 65 dB below maximum output

Maximum Output

- 14 V_{pk-pk} at 2 kHz

Distortion

- <1%, 10 Hz to 2 kHz

Input Level

- 2 V_{rms} max

Clipping Ratio

- Adjustable from 9 to 1

Interface

Power

- 115 V or 230 V_{rms} at 50/60 Hz, 6 W

Mechanical

Dimensions

- 3.5" H x 19" W x 7.5" D
(8.9 cm x 48.3 cm x 19 cm)

Ordering Information

408323-001 : Trig-Tek™ DC-200A
(Mature)

Displacement Clipper



ASTRONICS
TEST SYSTEMS