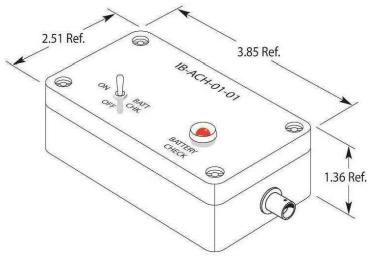




# **DIMENSIONS**



# IB-ACH-01

(Interface Amplifier)

# **SPECIFICATIONS**

- Designed to interface with the ACH-01 Accelerometer
- 10X Amplification
- Impedance Buffered
- BNC Output Connector

The IB-ACH-01 Amplifier Box is a low cost interface amplifier developed by MEAS. The IB-ACH-01 is designed to mate directly to the connector supplied with the ACH-01-03 assembly. An adapter is required to interface the two components for use with either the ACH-01-02 or the ACH-01-04 because of the different cables.

# **FEATURES**

- Gain 10X
- Low Frequency Filter -3dB @ 2Hz Fixed
- High Frequency Filter +3dB @ 30kHz Fixed
- Power Supply One 9-Volt Battery
- Input Interface FET for IB-ACH-01
- Supply Current 4.0 mA
- Battery Life 80 Hours
- Low Battery Cutoff 7.2V
- Output Impedance 100 Ohm
- Output Connector BNC

# **APPLICATIONS**

 Signal Amplification Box for ACH-01 Series Accelerometer

# PERFORMANCE SPECIFICATIONS

Frequency Response:

Output Impedance:

Amplitude: Fixed 10 x Gain (90 mv/g Typical w/ ACH-01)

± 3% from 2 Hz to 30 kHz

<u>Phase:</u> <+1.5%@10Hz

<-5.0%@20kHz

Inherent Noise: (2Hz to 30kHz): <2mv<sub>pk-pk</sub>

AC Coupled - 1 µF

Current Draw: (w/o Battery Check LED)

Typical: 4.0 ma Maximum: 7.6 ma

Maximum: 7.6 ma
Cut-off Voltage: @7.2V

Battery Life: (w/o Battery Check LED): 80 hrs Typical (alkaline)

Rise Time: 13V/µs Typical

Maximum Output: 9V<sub>pk-pk</sub>

## **BATTERY INSTALLATION**

To replace or install battery, remove the housing cover by loosening the four screws on the box. Lift the lid slowly. Be sure not to tear the wires between the lid and the main housing. Replace the battery and reattach the lid by tightening the screws. The IB-ACH-01 is NOT shipped with a battery.

### **OPERATION**

Prior to operation check the Battery Low indicator LED by pushing the switch to the Battery Check (Batt. Chk.) Position. If the LED does not light replace the battery. The switch must be in the ON position for the amplifier box to function.

After checking the battery check the connection between the ACH-01 and the amplifier for correct orientation (see Figure 1 and the ACH-01 specification sheet). Depending on the ACH-01 configuration it may be necessary to use the supplied female-to-female cable for connection to the IB-ACH-01 amplifier.

## ORDERING INFORMATION

Description

**Part Number** 

IB-ACH-01

1003058

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