# **IB-ACH-01 (Amplifier Box)**

Designed to interface with the ACH-01 Cost

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.



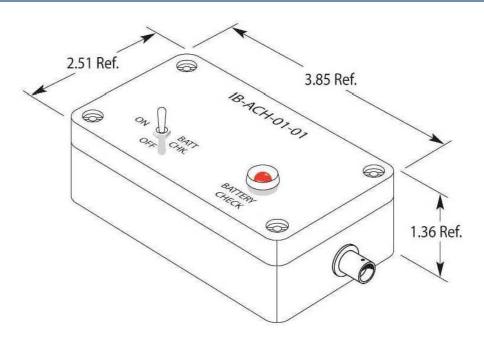
#### **FEATURES**

- Gain 10X
- Low Frequency Filter -3dB @ 2kHz 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

#### dimensions



#### specifications

Frequency Response:

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

± 3% from 2 Hz to 30 kHz

Phase: <+1.5%@10Hz

<-5.0%@20kHz

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

Output Impedance: AC Coupled – 1 µF

Current Draw: (w/o Battery Check LED)

Typical: 4.0 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.

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.

## ordering information

Description Part Number

IB-ACH-01 1003058

Measurement Specialties (China), Ltd.