# STI Vibration Monitoring Inc.

#### Vibration Monitoring and Machine Protection Systems

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# CMCP-TKAP Accelerometer Power Rugged, Portable Power Source for Standard Accelerometers



#### Features:

- Powers one (1) Standard Accelerometer (IEPE\*)
- Standard BNC Connectors for Input and Output
- BNC to Terminal Adapters Provided (2)
- Battery Powered, Standard 9V Alkaline (3)
- AC Coupled Output
- 3.3 mA Constant Current Diode
- 0.5" (12.5mm) LCD Display (Battery and Accelerometer Bias)
- 125+ Hours Battery Life (When connected to Accelerometer)
- Small and Lightweight
- Molded Carry Case
- Batteries Included

\*IEPE stands for Integrated Electronics Piezo-Electric.

The IEPE power scheme is unique in that it uses constant current, rather than constant voltage, to power the accelerometer's internal electronics.

## **Typical Applications**

This handy device is used as a power source for accelerometers and to verify sensor and cable installations. It can be used to check bias voltages but was designed to power an accelerometer in settings such as laboratories and such.

The alternative way, with a common +24V power supply and diode can destroy the accelerometer if done incorrectly. In addition, power supplies can be noisy (ripple) and the battery operated TKAP provides ripple and noise-free power.

The outstanding Highlights:

- 1. Simple to use
- 2. Made in USA
- 3. LCD Display
- 4. No Noise added
- 5. Carrying Case provided!

#### **CMCP-TKAP Product Overview**

The CMCP-TKAP is used to power IEPE Accelerometers using a 3.3 mA Constant Current Diode. Both Battery Power and Accelerometer Bias can be checked using the LCD Displays two position momentary switch. As the LCD may add noise to the Accelerometer Signal the display is only powered and used when not taking data. The CMCP-TKAP is provided with an Off/On Switch but the unit does not draw power from the batteries unless an Accelerometer is connected, or the display is selected.

The CMCP-TKAP uses three (3) Standard 9 Volt Alkaline Batteries. To replace simply remove the four cover screws and remove



module to change. Two standard BNC Connectors are provided, one for connection of the Accelerometer and one AC Coupled for connection to Oscilloscope or Analyzer. The kit is provided with two Male BNC to Terminal Adapters to make connections easier

### **Specifications**

Input: IEPE Accelerometer

Display: 0.5" (12.5 mm) LCD Display for Battery and

**Accelerometer Bias** 

**Electrical** 

Power: Battery Powered, Standard 9V Alkaline (3)
Battery Life: 125+ Hours (when connected to Accelerometer)

Diode: 3.3 mA Constant Current Diode

Coupling: AC Coupled Output Connection: Two BNC Sockets

Leads: Two Male BNC to Terminal Adapters

Mechanical

Dimension:  $4.3 \times 3.3 \times 2.2$  inches (110 x 82 x 55 mm)

Weight: 1.5 lbs. (0.68 kg) with hard case and accessories

# **Ordering Information**

## **CMCP-TKAP Accelerometer Power**



**Includes:** TKAP device with three 9V Alkaline Batteries. Two Male BNC to Terminal Adapters and hard Carrying Case.