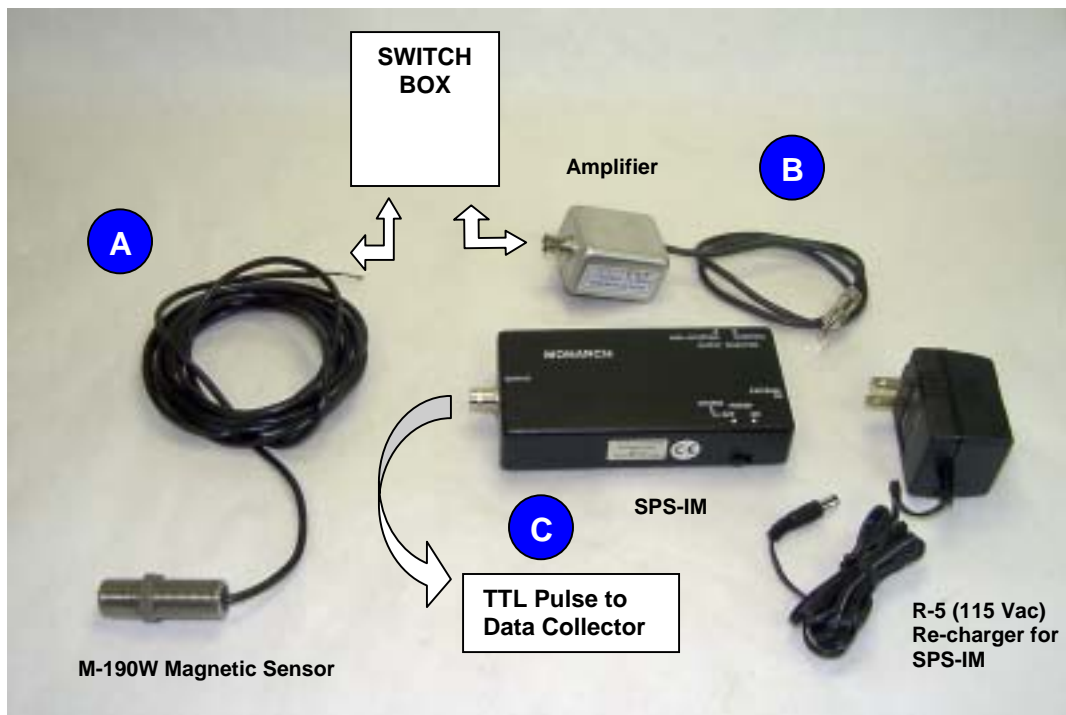




Portable Power for Permanent Speed Sensors

Overview

Allows accurate speed measurements and TTL trigger pulses for vibration monitoring, dynamic balancing and synchronous time averaging, Monarch provides a combination of a permanently mounted speed sensor, which is wired to a "switch box" and powered by a portable self-powered interface module.



System Configuration

A = Monarch M-190W Magnetic Sensor. 1-99,999 RPM mounted at the machine shaft with a gap of 0.25" (6.35 mm) from the ferrous target. A bolt head or shaft key are commonly used. The M-190W is wired to the Switch Box using a twisted pair. Maximum cable length is 150 feet.

B = the portable Magnetic Amplifier. The Amplifier for the MT-190 Magnetic Sensor extends the operating gap range to the above stated 0.25". In this configuration, the Amplifier is connected to the switch box via BNC to amplify power to the sensor and condition the return signal.

C = the SPS-IM (Self-Powered Sensor) Interface Module. The SPS-IM contains re-chargeable Ni-Cad Batteries (8 hours continuous use) and will provide power to the Magnetic Sensor through the Amplifier. The SPS-IM will also provide the TTL pulse to a Vibration Data Collector or Portable Balancer. Re-chargers are available for 115 and 230 Vac.

Using the System

The User will charge the batteries in the SPS-IM prior to use. The SPS-IM and the Amplifier are portable items carried to the Switch Box along with the portable Data Collector. The Amplifier is connected to the Switch Box via BNC and the SPS-IM via 1/8" mono plug, energizing the M-190 Sensor. A single TTL pulse, representing the speed of the target (shaft), is available through the BNC output of the SPS-IM.