The PM Series Panel Mount Encoder was developed to provide control manually. It is interchangeable with standard potentiometer type panel mounting, yet provides direct digital accuracy without A/D conversion and has an exponentially longer life expectancy.

The new BEI Panel Encoder is designed for applications where position control and analog to digital conversions require manual knob control. Standard output includes TTL quadrature with resolution up to 256. For zero referencing, an optional index is available.

Hybrid technology aids in reliable operation over a standard temperature range of 0° to 70°C. High reliability and accurate position control are possible by using non-contacting elements, including a slotted metal disc placed between a collimated infrared LED source and a common substrate sensor array. A strain relief is provided for securing of lead terminations.

BEI’s new Panel Mount Encoder is ideal for audio, instrumentation, medical and other related markets where accurate manual control is necessary.

### Mechanical Specifications

**Dimensions:** See Dimensions  
**Weight:** 2 oz.  
**Shaft Loads:** 2lbs. Axial, 1lb Radial  
**Torque:** 1.0 oz. max.  
**Shaft Speed:** 200 RPM max. (cont.)  
**Panel Thickness:** 0.10” max.  
**Materials:**  
- Housing: Polycarbonate  
- Bushing/Shaft: Metal  
- Code Disc: Stainless Steel

### Electrical Specifications

**Code:** Incremental  
**Resolution:** See ordering instructions  
**Supply Voltage:** 5VDC±10% @ 60 mA max.  
**Output Format:** TTL Dual Channel  
- 20 mA Source, 0.4V max.  
- 10 mA Source, 3.5V min.  
**Output Format Option:** Index

### Environmental Specifications

**Temperature:**  
- Operating: 0° to 70°C  
- Storage: -25° to 90°C  
**Shock:** 50 G’s for 11ms duration  
**Vibration:** 5Hz to 2kHz @ 20 G’s

### Termination Specifications

**Type:** 5 position terminal board  
**Pin Out:** See Pin out

### PMX Ordering Options

Use this diagram, working from left to right to construct your model number (example: PM2-256)

- **PMX**  
- **OUTPUT FORMAT**  
  - 2 = Quadrature  
  - 3 = Quadrature w/index  
- **PULSES PER REVOLUTION:** 256  
  - For additional or special resolutions, please contact the factory

Tel: 805-716-0322 / 800-350-2727  
www.beisensors.com

Specification No. 02119-001 Rev. 06/11
PMX Series—Panel Mount
Incremental Rotary Optical Encoder

Dimensions

Waveforms

Pin out

These commodities, technology or software if exported from the United States must be in accordance with the Bureau of Industry, and Security, Export Administration regulations. Diversion contrary to U.S law is prohibited.