INDELAC CONTROLS, INC.

FEEDBACK TRANSMITTER BOARD
0-10VDC

Installation, Operation & Maintenance Manual
The Peaktronics XMA-106 is a 0-5/10VDC transmitter that is specifically designed for use with the Peaktronics AMC/LRC/SVC Series controllers. When a feedback potentiometer of 1K to 10K ohms is used with the AMC/LRC/SVC unit, the XMA-106 can be used to provide a 0 to 5 VDC or a 0 to 10 VDC signal that is proportional to the potentiometer value. Since the feedback potentiometer monitors the position of an actuator, the 0-5/10V signal can be used by a remote instrument to monitor or display actuator position.

The zero and span adjustments on the XMA-106 allow the user to scale the 0-5/10VDC signal to correspond with the zero and span positions set by the AMC/LRC/SVC controller. After the controller has been set, position the actuator to the zero position and adjust the XMA-106 zero to achieve the desired output (usually 0VDC). Then position the actuator to the span position and adjust the XMA-106 span to achieve the desired output (usually 5 or 10 VDC). Repeat this process until the zero and span positions yield the desired output from the XMA-106 without further adjustment.

The XMA-106 can be used when no actuator controller is used. In this application, the XMA-106 will need to be powered by an AMI/PWR Series unit or an equivalent power supply of 10 to 32 VDC - see wiring diagram for details. The XMA-106 can also be used with the DMC Series DC controllers - consult factory for application details.

### SPECIFICATIONS

**OPERATING VOLTAGE**
- 10 to 32 VDC (5V output)
- 12 to 32 VDC (10V output)

**OPERATING CURRENT**
(not including output load and feedback pot)
- 5 to 8 mA

**INPUT SPECIFICATIONS**
- Zero (output = 0V) 0.1 to 5 VDC
- Span (output = 5 to 10 VDC) 0.52 to 10 VDC
- Zero-to-Span Differential 0.42 VDC minimum
- Input Impedance 133K ohms

**FEEDBACK POTENTIOMETER** (total resistance)
- 1K to 10K ohms

**OUTPUT LOAD**
- 1K ohms minimum

**ENVIRONMENTAL**
- Operating Temperature -40 to 65 °C
- Storage Temperature -40 to 85 °C
- Relative Humidity (non-condensing) 0 to 90%
Throughout the document, there are diagrams and text related to the wiring and setup of the XMA-106 device. The diagrams illustrate the connections and components involved in setting up the device with AMC/LRC/SVC Series Controllers and as a standalone feedback transmitter. The text provides instructions on how to connect the device, including the necessary components and their configurations. The diagrams display the pinouts and wiring layouts, along with labels for the various ports and connections. The text also notes that the feedback potentiometer wiper should have 1/2 total pot resistance at midstroke to guarantee zero and span calibration.