This unit was designed to reduce the heat, the current and extend the life of the solenoids used in locking devices energized for long periods of time (1/2 hour to always on). The ICEPK uses Pulse Width Modulation which rapidly pulses power to the lock. This allows the lock to draw less current and operate cooler due to the brief “off” cycles occurring several thousand times per second. When the solenoid operates cooler, the life of the solenoid is extended significantly.

**Installation:**

**Step 1** - Make sure that your operating conditions are compatible with the ICEPK specifications below. If you are not sure, please contact us or the dealer you purchased the unit from.

**Step 2** - Make sure the locking device used with the ICEPK does not have a bridge rectifier connected before the solenoid. A bridge rectifier may be round or square in shape and typically is no larger than 3/4” in length. If it does you will need to remove it from the circuit. The ICEPK is designed to work with AC/DC voltage.

**Step 3** - Connect the two white wires to the locking device. Connect the black leads on the ICEPK to the power supply. (Non Polarity Sensitive)

**Step 4** - Adjusting the current draw - The ICEPK has a small potentiometer located at the end of the unit that allows the amount of current drawn by the locking device during PWM to be adjusted. The unit is pre-set at the factory to about 70% of the start up current. The setting may be adjusted from 5% to 95% of full current. If the current is reduced too much the solenoid may “drop out” after energizing. If too much current is allowed to pass through the solenoid it may run too hot. Turn the adjustment screw **Counter Clockwise to reduce the current** and **Clockwise to increase the current**.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Operating Voltage range</th>
<th>12 to 30 volts AC/DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Current Load</td>
<td>1 Amp</td>
</tr>
<tr>
<td>Wires</td>
<td>Input to ICEPK black = Input not polarity sensitive</td>
</tr>
<tr>
<td></td>
<td>Output from ICEPK white or similar = non-polarized</td>
</tr>
</tbody>
</table>

Note: Do not use with solenoids that have coil resistance of less than 20 ohms. (solenoids under 12V may have less than 20 ohms)

**Fig.1 - Wiring diagram**

- **AC/DC Power Source**: 12 or 24VDC
- **Electrified Mortise or Cylindrical Electric Strike**
- **ICEPK**: non-polarized white