The FLR7700, previously CRLP77-UL-M-KIT is a field-installable motorized latch-pullback kit for the Cal Royal 77 series exit devices.

**KIT INCLUDES**

A. 1 - Motor Mount w/ MM4S Series Module  
B. 1 - 8' Lead with VD Connector  
C. 1 - Push & Go Connector  
D. 1 - Dogging Hole Cap  
E. 2 - Phillips Head Screw  
F. 1 - MM4S Switch Program Sticker

**TOOLS REQUIRED**

- Cordless Drill  
- Phillips Head Screwdriver
Select your preferred torque mode (ships in standard torque) Press the device push pad to the desired setting. (Recommend to fully depress and release 5%, giving the device room for changing door conditions.)

Step 2-
While depressing the push pad, apply power. (i.e. presenting the credential to the reader).

Step 3-
Continue to keep pad depressed, the device will beep 6 times. After the beeps have stopped, release the pad and now the adjustment is complete. If not to your liking repeat the 3 steps.

Step 4-
Once you found the correct location, turn PTS switch to OFF position.

**IMPORTANT INFO**
Make sure to set PTS before finishing installation

**SPECIFICATIONS**
- **INPUT VOLTAGE**: 24 VDC +/- 10%
- **AVERAGE LATCH RETRACTION CURRENT**: 1 AMP
- **AVERAGE HOLDING CURRENT**: 125 MA
- **WIRE GAUGE**: MINIMUM 18 GAUGE

**LOW TORQUE MODE**
- **AVERAGE LATCH RETRACTION CURRENT**: 900 MA
- **AVERAGE HOLDING CURRENT**: 250 MA

**STANDARD TORQUE MODE**
- **AVERAGE LATCH RETRACTION CURRENT**: 900 MA
- **AVERAGE HOLDING CURRENT**: 215 MA

**HIGH TORQUE MODE**
- **AVERAGE LATCH RETRACTION CURRENT**: 2 AMP
- **AVERAGE HOLDING CURRENT**: 250 MA

**TROUBLESHOOTING & DIAGNOSTICS**

<table>
<thead>
<tr>
<th>BEEPS</th>
<th>EXPLANATION</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 BEEPS</td>
<td>OVER VOLTAGE</td>
<td>&gt; 28V UNIT WILL SHUT DOWN. CHECK VOLTAGE &amp; ADJUST TO 24 V.</td>
</tr>
<tr>
<td>3 BEEPS</td>
<td>UNDER VOLTAGE</td>
<td>&lt; 22V UNIT WILL SHUT DOWN. CHECK VOLTAGE &amp; ADJUST TO 24 V.</td>
</tr>
<tr>
<td>4 BEEPS</td>
<td>FAILED SENSOR</td>
<td>VERIFY ALL 3 SENSOR WIRES ARE INSTALLED CORRECTLY. REPLACE SENSOR IF PROBLEM PERSISTS BY CONTACTING CAT TECH SUPPORT.</td>
</tr>
<tr>
<td>5 BEEPS</td>
<td>RETRACTION OR DOGGING FAILURE</td>
<td>DEVICE WILL AUTOMATICALLY RE-ENGAGE WITHIN 5 SECONDS.</td>
</tr>
<tr>
<td>6 BEEPS</td>
<td>PUSH TO SET</td>
<td>CHECK TO MAKE SURE THE PUSH PAD IS NOT STUCK OR CATCHING ON ANYTHING.</td>
</tr>
<tr>
<td>6 BEEPS</td>
<td>PUSH TO SET</td>
<td>IF MECHANICAL OBSTRUCTION, REMOVE &amp; PUSH PAD DOWN UNTIL BEEPING STOPS TO RESET. IF NO OBSTRUCTION, THE PAD MAY HAVE BEEN PUSHED IN TOO FAR DURING PTS CALIBRATION. RECALIBRATE WITH THE PAD SLIGHTLY OUT. IF PROBLEM PERSISTS, VERIFY THE MAGNET IS WITHIN 1/4&quot; OF THE SENSOR AT THE END OF TRAVEL.</td>
</tr>
</tbody>
</table>
ELECTRIFIED EXIT DEVICE
INSTALLATION EXAMPLE

Legend

Standard Placement
1. UN-DOG PUSH PAD WITH DOGGING KEY FOUND IN BOX.

2. ONCE LOOSE, SLIDE OFF BACK FILLER PLATE EXPOSING DOGGING.

3. LOOSEN SCREWS (2) AND REMOVE DOGGING BRACKET.

4. ONCE REMOVED, SLIDE PUSH PAD ASSEMBLY OUT THE BACK OF THE DEVICE.

5. WHEN TOP PUSH PAD IS REMOVED, FLIP THE DEVICE OVER AND REMOVE DOGGING SCREW.
6. **Remove roll pin from back of connecting rod by detaching “C” clip from either side.**
   1. Remove pin completely.
   2. **Remove roll pin from PD25 kit (3) and line up holes with device holes.**

7. **Remove roll pin completely.**

8. **Push roll pin through kit and device holes and attach “C” clips.**
   5. Once attached, motor should be secure.

9. **Once the kit is secure with the pin, lift up and insert back screw into the bottom dogging hole. Do not tighten until device is assembled.**

10. **Once kit is connected, flip device over and put screws back in dogging holes.**
11. Flip back over and slide push pad with motor back into exit device.

12. Push all the way to the front of device (1) and push latch under top of pad. (2)

13. Once push pad is back inside device and the screw lines up with existing hole, (1) tighten back screw to hold motor in place. (2)

14. Slide filler plate back into place. Connect to power supply to test and set "Push to Set" technology.

15. Add MM4S program sticker behind motor

**Setting PTS**

**Step 1:** Select your preferred torque mode (ships in standard torque) press the device push pad to the desired setting. (Recommend to fully depress and release 5%, giving the device room for changing door conditions.)

**Step 2:** While depressing the push pad, apply power. (i.e. presenting the credential to the reader).

**Step 3:** Continue to keep pad depressed, the device will beep 6 times. After the beeps have stopped, release the pad and now the adjustment is complete. If not to your liking repeat the three steps.