

## Photocell Receptacle (PCR) Related F.A.Qs.

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*This F.A.Q was developed to explain the various features and benefits associated with Leotek's PCR based control options. Refer to our Web site for additional details.*

### **Why did we introduce the PCR7-CR (Control Ready) option?**

The CR (Control Ready) option was introduced in response to sporadic customer complaints with having to connect the internal wires (refer to diagram on page three) to fully enable the dimming signal wires on PCR7 if and when a 'smart' control node was attached.

### **How should I decide when PCR7-CR should be specified?**

The PCR7-CR should be specified in either of two basic conditions:

- a) Wireless nodes will be installed immediately upon luminaire installation,
- b) Wireless nodes will not be installed until later time, and you are willing to give up field adjustability in return for CR.

### **When we introduced the PCR7-CR option, why didn't we elect to make it the default rather than an option?**

There was universal agreement from our sales channel that the PCR7 (not PRC7-CR) should remain the default because the majority of customers do not plan on using a wireless node immediately (if ever) and they want to retain the current selector option, and the incremental time to connect those control wires was negligible.

### **Why do most specifications/orders call out a PCR7 when most customers (according to knowledgeable industry sources) do not actually install wireless nodes?**

Most customers want to "future proof" their installations just in case they decide that they want to install a wireless node at some future date.

### **I have heard that the PRC7-CR option is only available at the maximum drive current. Is that correct?**

No, initially the PRC7-CR option was only available at the maximum drive current, but it is now available at any cataloged current offering that is selected. The spec sheets have been updated.

### **Approximately how long does it take to engage the two connectors to fully enable the PCR7 when the product is not ordered as CR (Control Ready)**

The connection is completed with quick connect Molex connectors and takes only a couple minutes however this is once the bucket truck is in place. It can be very costly if you are expecting CR but must field wire. Therefore, care must be taken to ensure that you are ordering the product that meets your requirements.

### **Why does Leotek use primarily snap-in connectors to adjust light output rather than a rotary dial which is used by most of the industry.**

The snap in connectors ensure that the specified drive current is maintained as they cannot be inadvertently set to the wrong setting, which can easily occur with a dial.

**Can a wireless node (by others) adjust the light levels above the factory set output code?**

No, the wireless node can not adjust the light levels above the set (ordered) output code. If this is not desired, the customer should order the maximum output code.

**Is it possible to provide a product that is adjustable with a wireless node to go above the specified output code?**

No, the set output code establishes the maximum and can not be adjusted higher.

**How low can a wireless node adjust the output?**

To 10% of the maximum power supply (700 or 1A) output.

**The spec sheet states that a CR product is not provided with a current selector and therefore can not be field adjusted without a wireless node (by others). Is it possible to get a CR with an adjustable current selector?**

Yes, as a special modification, Leotek offers a PCR7-CRSCS, which is a PCR7-CR provided with a current selector. Contact your Leotek salesperson for details.

**Can the output be adjusted above the specified output code when PCR7 is specified?**

Yes, the full range of output codes (see spec sheets) are available. For example, on a CC2-30J 30K if output code 080 is specified, it may be field adjusted with the current selectors down to 070 or up to 095. (If you do not want to be able to adjust above the specified output code, you should order either the a) fixed output b) CR or c) request a special current selector be provided which eliminates the higher output leads).

**Can a product with a PCR7 be provided to limit the adjustability to downward only (i.e. cannot adjust above the specified output)?**

Yes, we can provide a current selector that can only be adjusted downwards by removing the higher power current selector leads.

**Can the factory provide a specific requested drive current that differs from what is cataloged?**

Yes, providing that the requested drive current is below the maximum driver current offered (for example, we can provide 690 drive current on a product rated for 700, but cannot provide 710).

**Which other manufactures offer field adjustability standard (as opposed to an option)?**

We are not aware of any other manufacturer that offers field adjustability as a standard feature. Others offer as an option at additional cost.

**I have heard the term "SimpleSet" drivers. What are they and when are they used?**

SimpleSet drivers are factory programable drivers. They are primarily used on PCR7CR and when special drive currents are requested.

**What documents are available that best explain the PCR7(CR) control options?**

The specification sheet notes section does an excellent job of explaining the PCR7(CR) details. There is also a full color brochure entitled LED Street Light Control Options available (11-07-18). The following has been extracted from this brochure.

**Comparison Chart**

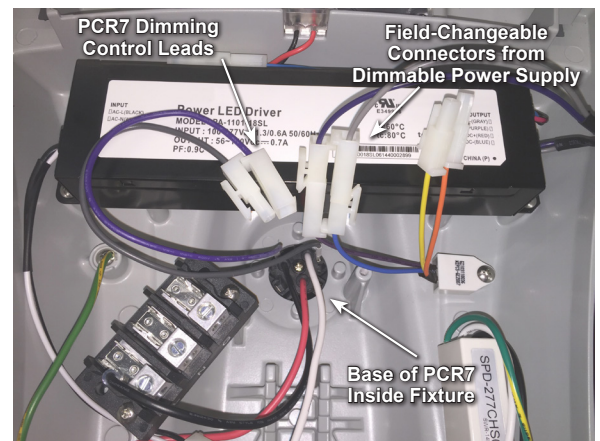
Option Code	Receptacle	Wireless Dimming Node Control-Ready	Requires Field Connections for Wireless Node	Supplied with Field-Adjustable Selector to Change Light Output
Standard Photocell Receptacle <sup>1,2</sup>	3-Wire	N/A	N/A	Yes
PCR7 <sup>2</sup>	7-Wire	No	Yes	Yes
PCR7-CR <sup>3</sup>	7-Wire	Yes	No	No

1. A 3-wire photocell receptacle is standard on the ComfortView, GreenCobra and E-Cobra series and an option (PCR) on the AR series.
2. Current selector or output selector included to allow field selection of desired current to change light output.
3. Furnished "control-ready" at factory for wireless node (by others). Control-ready option will be set at luminaire's maximum output per product specification. (Refer to specification sheet for complete details).

**PCR7 options**

(ANSI C136.41 Compliant)

- Field-adjustable light output
- All factory drive current or output settings available
- Connectors supplied for tool-less conversion to wireless dimming via PCR-7
- Field-changeable connectors quickly enable wireless node dimming, if desired in the future (As shown in photo example on right)
- Also accepts standard (3-wire) photocell

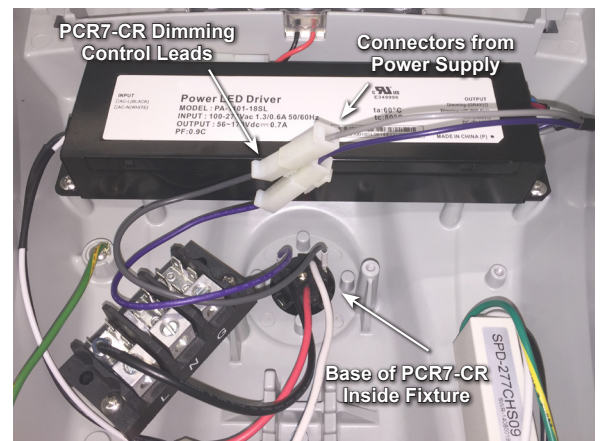


Example of PCR7 Option

**PCR7-CR options**

(ANSI C136.41 Compliant)

- Factory-wired for "control-ready" 1-10V dimming with wireless node (by others)
- Maximum output will be set per product specifications
- Also accepts standard (3-wire) photocell



Example of PCR7-CR Option

## Which Leotek products come standard with a three wire (PCR3) photocell?

Three wire photocells are standard on the GC and EC series and optional on all other product lines.

### Detailed Chart

Option	Factory Dimming Wiring	Current Selector Included for Full Field Adjustability	Factory Set Drive Current using C/S	Field Adjustable Dimming Via Current Selector	Dimming Via Wireless Node (node by others)	Auto Switch from Current Selector Dimming to Wireless Dimming	Comment
PCR7	Wired to CS	Yes	Any available catalog drive current can be specified	Current selector enables field adjustability of light levels when no wireless dimming signal is present	Yes	N/A	1) Connectors included to allow easy upgrade of wireless dimming via PCR7. Wireless node by others. 2) Consult factory to limit current selector to downward adjustment only from a specified-drive current. 3) Consult factory if a non-catalog drive current is required
PCR7-CR	Wired to PCR7	No	N/A*		Yes	N/A	Not able to adjust above specified drive current.
PCR7-CRSCS	Wired to CS & PCR7	Yes	Any available catalog drive current can be specified	1) Current selector enables field adjustability of light levels when no wireless dimming signal is present OR 2) Wireless dimming takes over when dimming signal is present from wireless node	Yes	Fixture light output set by wireless dimming node when wireless dimming signal is present. The drive current setting on CS is then bypassed.	1) Standard non-programmable power supply is used. 2) Consult factory to limit current selector to downward adjustment only from a specified drive current (not apply to CV). 3) Non-catalog drive currents are not available. 4) PCR7-CRSCS is currently an internal option, not a standard offering. Additional price, lead time, and minimum order quantity apply.

\* Lumen package and wattage can be set per cataloged output code using Programmable Driver.

### Summary Chart

Application	Specify
Fixed Drive Current	FOC/FDC
Control Ready; not field adjustable (i.e. no current selector)	PCR7-CR
Control Ready; field adjustable (current selector included)	PCR7-CRSCS*
Field adjustable through current selector (Field wire for PCR7 use with node)	PCR7

\*Contact your Leotek sales person for details.