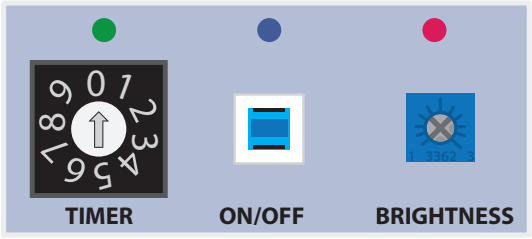
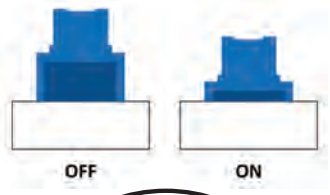
DEKOR®
LIGHTING FOR LIFE

DEKOR® NexGen SAVVY SOLAR® POST CAP Guide

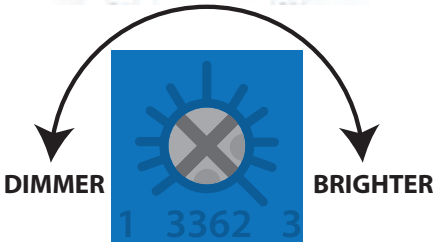
Customizing Your Lights
Inside the Post Cap, you see 3 Status Indicator LEDs with access to three components: an ON/OFF button, a brightness dial, and a timer dial.



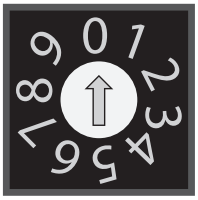
ON/OFF BUTTON
The Solar Post Cap arrives with the button in the OFF position. To use the solar collection system and illumination LEDs, firmly press the button to turn the cap ON. To conserve battery power, there is no dedicated LED that indicates the board is merely receiving power. See the "Normal Operation" section to verify the board is on and behaving as expected.



BRIGHTNESS DIAL
You may select the brightness of your LEDs using the infinite-resolution brightness dial. The Solar Post Cap arrives with the dial turned all the way to the right, indicating full brightness. Using the included tool, you may turn the dial counterclockwise to bring the brightness down to the desired level. The smooth movement of this dial gives you theoretically infinite resolution when it comes to the brightness of your illumination LEDs.



TIMER DIAL
The LEDs in your Solar Post Cap will turn on automatically at dusk and stay on for the length of time indicated by the timer dial. The top of the dial is marked "0", which means 12 hours. The other numbers correspond to that time in hours – "1" will set the timer to 1 hour, "2" sets it to 2, etc. up to "9" for 9 hours of on time. The default setting is 6 hours.

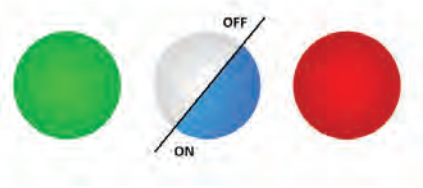


NOTE:The system is designed to be self-sufficient and adequately charge the battery through sunlight alone.

Normal Operation

The DEKOR® Solar Post Cap uses the solar panel to determine when there is adequate light to charge the battery and when it is dark enough to turn on the illumination LEDs.

There are 3 colored indication LEDs on the underside of the Post Cap that give you status information.



The green LED indicates that the light sensor has decided it's dark enough to turn on the illumination LEDs. The green LED will remain on with the illumination LEDs through the timer cycle. If the solar panel gets enough sunlight to turn off the post cap, this green light will go out as well.

The blue LED will turn off when the battery has reached its peak charge.

The red LED turns on when the solar panel is receiving enough light to actively charge the battery. Even if there is enough ambient light to turn off the illumination LEDs, the battery is not charging unless the red LED is on. Like the blue LED, this indicator will turn off if the battery reaches its peak charge. When the red LED starts blinking, your battery has experienced 1,000 discharge cycles and it is time to replace it before it stops working altogether.

There is not a normal operation mode that will cause more than 1 colored indication LED to turn on, but they may all be off if all the criteria in either column below are met:

- There is enough sunlight to turn off the post cap lights
- There is not enough sunlight to actively charge the battery

OR

- The battery has reached its peak charge, either via the solar panel.

FAQ and Troubleshooting (continued)

Q: Will the Solar Cap work in my climate?
A: The Solar Post Cap design itself has been tested to withstand extreme heat and all sorts of dramatic weather. Please note that while the heat is not dangerous to the inner workings of the cap, the Solar Cap can get very hot in direct sunlight. Always use caution when touching metal that has been sitting in the sun, even on a mild day.

Regarding extreme cold, the Solar Post Cap uses a Lithium-Ion battery that does not charge below 0°C (32°F). If the overnight low outside drops below freezing, the battery itself needs to warm back up before it will accept a charge from the solar panel.
If you are experiencing extremely cold weather that does not allow the battery to warm up during the day, you will need to warm up the battery indoors. If you are expecting a cold spell and are not planning on bringing the caps inside to regularly warm up, we recommend turning off the post caps entirely to extend your battery's life.

Q: Why don't my illumination LEDs come on as soon as I cover the solar panel?
A: The Solar Post Cap uses a timed delay to mitigate disturbances that can be caused by stray light such as lightning or a car's headlights. Your illumination LEDs come on about 10 seconds after the solar panel stops receiving light from a steady source and will go off after about 3 seconds of receiving steady light input.

FAQ and Troubleshooting (continued)

Q: What if my illumination LEDs don't come on at night?
A: The Post Caps are tuned to come on as a light level representative of dusk. However, if there is sufficient light at the appropriate wavelengths, the Post Cap may not turn on at night. For example, a Post Cap very near a bright, incandescent porch light may not turn on. This can be fixed by swapping out the porch light for an energy-efficient LED bulb that emits a narrower energy spectrum.

Q: What if the red light does not come on, even under direct light?
A: The solar panel must be receiving a certain level of energy before the red light will turn on. If you are indoors or in the shade, try again with bright sunlight since indirect sunlight and most artificial light sources will not charge the battery. If the red charging light does not come on when the ON/OFF button is depressed in full sunlight and there is no frost, etc. covering the panel, please contact us for troubleshooting assistance.

Q: Why are my illumination LEDs on at the same time as the red charging LED?
A: Under normal operating conditions, this will not occur. However, if the battery voltage is low when the lights turn on and sunlight is introduced to the panel within 90 seconds of the lights coming on, the illumination LEDs may stay on even though the sun is out. This will only happen if a low-battery cap is briefly covered in the sun, such as by a bird landing on your post in the early morning that is then scared away by the lights coming on. If this happens, simply power cycle the unit and normal operation will resume.

Q: Why are my illumination LEDs blinking?
A: Your Post Cap illumination LEDs (and the green indication LED) will blink 10 times, 3 times in a row, when it is dark enough for the lights to come on but the battery does not have a full charge. This may happen because the solar collector got covered by something or you had cloudy weather. The blinking pattern only happens once each time the lights turn on, but the lights may turn off earlier than scheduled due to the low battery. The battery will fully charge the next time you have a sunny day.

Q: How do I turn the dials to set the on-time and brightness?
A: The tool included with your Solar Post Cap has both a Phillips head and flat head screwdriver. The different tool heads are exposed by unscrewing different ends from the center part of the tool. Use the flat screw driver end to adjust both customization dials.

Q: How long will the battery last?
A: The battery voltage goes up while it is being charged by the solar panel and down while the post illumination LEDs are on. The lifetime of the battery largely depends on how much the battery voltage changes in your normal operation. For example, a configuration that runs the LEDs on full brightness for 12 hours every night will drop the battery to a lower voltage every night than a configuration that runs the LEDs at a dim setting for 4 hours a night. While the system is designed to support full-brightness LEDs for much longer than 12 hours, you will see a decrease in battery performance sooner in this configuration than if you use the battery more 'gently'. The default timer settings is 6 hours rather than the highest possible 12 because that is the average use case, and we want to make protecting your battery as easy as possible. As a reminder, turning the cap off completely during the freezing winter months greatly increases battery life.

Q: How will I know when to replace the battery?
A: When your battery has been charged and discharged 1,000 times (roughly 3 years of continuous operation) the red indication LED will start blinking continuously. This means the life of your battery is nearing its life cycle, and is time to consider replacing your battery. While the battery may still appear to be operating correctly after 1,000 cycles, the remaining life will degrade fairly quickly, so we recommend replacing the battery before it becomes unusable. We also recommend periodically checking the performance of your LEDs during the 3rd year of use for signs of battery degradation.

FAQ and Troubleshooting (continued)

Q: How do I replace the battery?
A: When you notice a decrease in battery life, you can easily replace the Solar Post Cap battery. Simply turn off power using the ON/OFF switch in the middle of the board, unscrew the plastic cover using the included tool, gently unplug the existing battery, and plug in the new battery. Note that the battery connector is notched to ensure correct orientation. When the battery is in place, replace the plastic cover, reinstall the screws, and turn the Post Cap back on.

Depleted batteries should be disposed of in accordance with your local laws. Drop-off locations are typically available in home improvement stores and some office buildings.

Q: What is the warranty on the Savvy Solar Post Cap?
A: We stand behind our solar products with **LIMITED LIFETIME** warranty on the lights and a 3-year warranty on the solar module and battery. While battery technology has limited most battery warranties to 1 year or less, we are proud to offer the same 3-year warranty on our state of the art lithium ion battery when used correctly in this device.

Caution: this product contains a Lithium-Ion battery.
Do not touch the battery if it displays any signs of physical abnormality, and never puncture or crush the battery.