



Add Your Light's LED Lamps

What makes our lamps better than any lamp we are aware of on the market?

- 1 Every component of our lamps is selected for quality and purchased from reputable companies. For example, we use Japanese-made Nichia diodes now, rather than Chinese diodes (due to a very bad and costly experience with one Chinese manufacturer). And we are careful not to substitute quality semiconductors with cheap generics.
- 2 The lamps are assembled in a factory in Calgary (Innovative Manufacturing Source) that follows strict protocols for soldering, anti-static handling, inspection and testing.
- 3 All components are intentionally rated to 30 volts or higher. Therefore, directly connecting a lamp to a 5 watt solar panel that is producing 22 to 24 volts will not harm it. Many off-the-shelf lamps are not even rated.
- 4 Each lamp draws only 60 mAmp of current at 12 volts. Therefore, each lamp uses only 0.72 watts per hour. (A normal incandescent will use 60 to 100 watts per hour. A compact fluorescent will use 14 to 18 watts per hour.)
- 5 The lamps can be run off a 12 volt or 24 volt battery.
- 6 The circuitry clamps the current through the LEDs, so that a consistent amount of light is emitted from each diode. The light doesn't begin to dim until the battery is deeply discharged. Deep discharge should not happen during normal use of a good battery. Of course, over 4-5 years, the battery will simply get old and start losing its charge. Then the lamps will, as expected, get dimmer and the battery will need replacement.
- 7 We purposely do not use the "maximum allowable current" through the diodes, because, although this makes the light very bright at first, it damages the diodes and results in early failures. The diodes in our lamps are run at a current that will protect them and result in a very long life (ie., they are "run cool"). Our lamps should last for over 30 years.
- 8 The plastic housing is made in Canada and is durable and virtually unbreakable. Although it is not waterproof, the only vulnerable point is where the wires come through at the back. This area is carefully siliconed to prevent water entry.
9. The plastic housing is shaped so that light from the top or the sides of the LEDs is not blocked in any way. We obtain excellent general area lighting, and if the lamp is installed 8' to 12' from the floor, it is easy to read under this light. That is the feedback that we get from the children.

