





Dear valued MVP consumer,

Thank you for bringing to my attention your concern with the flickering LEDs. I have researched the issue and found some useful information to share with you.

TWACS (Two Way Automatic Communication System) is a metering system that uses the power line to communicate. A small pulse is induced onto the power line at a specific point on the waveform to communicate. This pulse may slightly modify the waveform and can interfere with devices that are highly sensitive to voltage or current waveform disturbance. However, TWACS complies with the Institute of Electrical and Electronics Engineers (IEEE) industry standards for lineconnected devices, specifically IEEE-519.

LED flickering can be caused by various variables ranging across the utility and customer's respective system. Certain brands of LED bulbs may have more reported issues than others. It is recommended to use well-known brand names to avoid issues. Also, certain brands of LEDs are not compatible with dimmer switches, and some dimmer switches are not compatible with LEDs. There are standard dimmer switches and reverse-phase dimmer switches. A reverse-phase dimmer is most likely to perform better because of the LED characteristics.

To address the issue, here are some possible customer solutions:

- Use name-brand LED bulbs and dimmers.
- Only use dimmable LEDs with dimmers.
- Only use LEDs with dimmers that are intended for LEDs, rather than older dimmers used for incandescent lighting.
- Use a reverse-phase dimmer switch if the manufacturer offers one.

We encourage you to try these solutions. If these attempts are unsuccessful, we will investigate other probable causes that may be due to the utility infrastructure.

Please feel free to contact me if you have any further questions.

Thank you,

Joe Caye Engineering Supervisor Mission Valley Power