

## Is the SureShade ATF Legacy unit voltage sensitive?

It is assumed our SureShade ATF Legacy unit is voltage sensitive due to the racking that occurs when the system is supplied with insufficient voltage. The older system (Legacy) controller would take in the voltage and feed both motors, whatever it had to supply. Being that no 2 motors spin at the same speed, we added sensors to those motors to count turns.

When the system runs low on voltage, the motors will start to get out of sync, and the shade starts to rack. The farther the racking, the more load on the motors, the higher the amp draw, so on and so on... The system reaches a threshold and now the memory is lost. This is what causes over extension/retraction.

Please view the attached video showing our shade running and operating at 9.3V!! The shade did not rack. The industry standard I believe is 10.5V for a 12V system to operate normally. I wouldn't say that's voltage sensitive, would you?

[https://www.dropbox.com/s/80gsbwm7ujj4kby/img\\_5288.mov?dl=0](https://www.dropbox.com/s/80gsbwm7ujj4kby/img_5288.mov?dl=0)

We created a new controller to fix the issues we had with the previous one.

The new SurePower controller was created from the ground up to work on all our systems across the board.

The advancement in hardware and software developments allowed this change. The giant difference in this new controller is the ability for the hardware to modulate the incoming voltage for accuracy. We can run the new controller from 9-30 Volts and the hardware does the output control. The large capacitor, advanced sensors and superfast writing chip help to control that.

We invented a controller to live in an insufficient voltage environment that we know will be less than perfect. So the new system will work all the way down to 9V and then discontinue functions until batteries are brought back up.

**If you have any additional questions or concerns, do not hesitate to reach out to our service department who will be happy to assist!**