

16b Solar Charged System



The solar option allows you to install the gate operator in remote areas or in applications where you prefer to be solar charged. Solar charging provides isolation from lightning that might damage the unit via the AC power needed for the transformer. The use of solar friendly accessories will help prevent premature battery failure.

The Solar model Patriot gate operator comes with a 6 watt solar panel and is designed to provide enough cycles a day for most installations without needing more than one solar panel. Care must be taken to ensure the solar panel has full sun throughout the day; partial sun will give partial results. If no sun is present then a solar system is not practical no matter how many panels might be installed. The solar panel must be kept clean and in full sunlight.

The location of the solar panel is critical for proper battery charging. The panel needs to face a South to Southwest direction and be installed at the angle of the supplied solar panel bracket. For proper operation the panel must have unobstructed sun. Even a small amount of shade or blockage will cause the Solar Panel to cease charging. Something as tiny as a fingertip shadow will affect the Solar Panel.

The solar panel may be moved up to 500 feet from the control box to achieve adequate sunlight. See power source cable extension chart Appendix A for proper wire size. For convenience use the USAutomatic 75' Cable Kit Part #520016 or USAutomatic Charge Cable Extension Pigtails part #630038.

See Region Map below to determine cycles that can be expected. These numbers are based on a basic system with the standard 6 watt solar panel. Adding solar friendly accessories will not have any great affect on the numbers stated. Using other accessories can cause premature battery failure.

GATE CYCLES PER DAY SOLAR CHARGED SYSTEM (Optional Solar Kit PN #520025)

Model Type	ZONE 1	ZONE 2	ZONE 3
Patriot I Single Gate	22 cycles per day	36 cycles per day	65 cycles per day
Patriot II Dual Gate	11 cycles per day	18 cycles per day	32 cycles per day

Region 1 covers the area of the country receiving the least amount of solar radiation. On average the amount of charge time is 2.5 hours in region 1, 3.5 hours in region 2 and 5.5 hours in region 3.

