

## The 600-Watt Light Unit

This light unit requires a power source that can provide at least 17 amps of 36-volt DC power. Usually this is accomplished by connecting three 12v batteries in series which triples the voltage. To determine how long you can run this light unit you must know the Amp hour or Ah rating of your batteries. Wiring batteries in series does not increase the Ah. So, if you are only using three batteries to get 36v you can divide the rated Ah of one battery by the amp draw of this light (17 amps) and the result is the run time in hours. Refer to table below to understand better.

**\*Remember** if you are running other things off those same batteries like a trolling motor, stereo, GPS, lights, etc... you need to add that amp draw to the 17 amp draw of the light then solve the equation with total amp draw. (36v trolling motors usually draw about 55 amps at full throttle.)

$$\text{Ah} / \text{total amp draw} = \text{Run time in hours}$$

**Example:** If your battery Amp hour or Ah rating is 70 Ah then its  $70 / 17 = 4.12$  hours of run time.

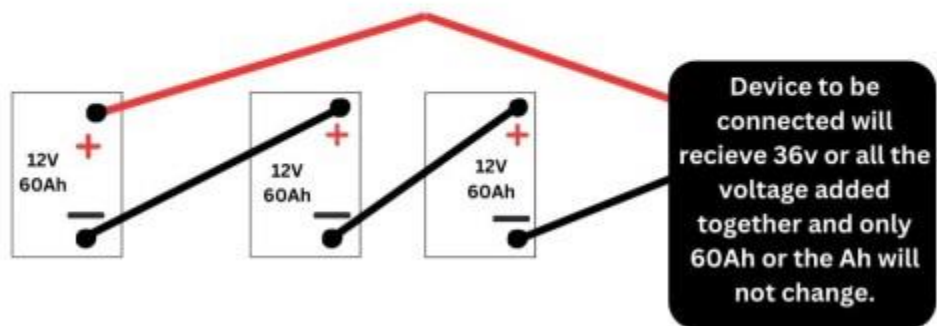
**\*\* Ah's:** If you cannot find the Ah labeled on your battery, you should be able to find the Reserve capacity or RC or BC. If you can find that number just divide it by 2.4 and that is your baseline Ah rating for your battery. The actual Ah rating is usually 10 – 30 Ah more than this number but at least you know the baseline Ah.

**You can increase run time** with this light unit by wiring 3 Sets of 12v batteries first in parallel to each other, then connecting the sets together in series. This chart is an example of that being done with batteries that have a 70 Ah rating. \* (your batteries may have a different Ah rating)

For further questions or more clarification contact us 786 218 2413

# OF BATTERIES	VOLTS	AMP-HR	AMP DRAW	RUN TIME
3	36	70	17	4.12 hrs
2+2+2	36	140	17	8.24 hrs
3+3+3	36	210	17	12.35 hrs

# ***SERIES***



Series and Parallel diagram coming soon.