Imagine a world where you program your electrical system to automatically use the sources necessary to maintain it, while staying as energy efficient as possible. Sound like something out of science fiction? GREAT NEWS: The future is NOW! With the right components -- including an AGS -- this automated world and all of its exciting benefits – is here and available now!

**So, what is an “AGS” and why do I want one?**

If you’re a power junkie or a generator enthusiast, you may be familiar with AGS. If not, there’s no time like the present to learn and put this highly efficient technology to work, to your full advantage.

AGS is the acronym for Automatic Generator Start. It is one of the least understood, but one of the most versatile and powerful, accessories available on the market today!

At its basic function, AGS automatically starts and stops the generator using pre-defined parameters, thus relieving the user from having to actively manage his electrical system.

Most AGS modules start the generator when the batteries are low, and automatically shut it off when the batteries are recharged. Some models can even start and stop the generator based on the climate control system, or even the inverter load.

In the beginning, AGS was primarily developed for usage in the RV and marine markets, allowing enthusiasts to leave their cabin or boat for a day on the town, without having to burn excessive fuel via their generators to keep things comfortable. As the concept developed, early adopters responded favorably. One of the first consumer demands was for air conditioner triggers, so beloved pets could be kept safe and cool while their owners were out and about. Inverter load triggering was an obvious addition when networked power systems were developed, thus allowing the AGS to launch the generator when a long-term heavy load was in place, thereby preventing an overload.

**While the concept itself sounds simple enough, is AGS difficult to program and use?**

The only challenge with AGS may be experienced at the very outset.
Once these connections are made and the parameters are set, the AGS simply works to simulate the regular manual switches by closing/opening relays in the proper timing, based on the generator model. In other words, when the system receives a trigger (low DC voltage, thermostat input, or inverter load), the AGS simply closes a relay, or series of relays, thus simulating the user pushing the start button. If preheat is required, it will push the proper sequence to preheat, then start the generator. When the trigger is no longer active, or has been satisfied, the AGS closes another relay that simulates the user pushing the stop button. Some AGSs have a minimum runtime to prevent premature wear on the generator’s engine.

That, friends, is AGS in a nutshell.

If you might benefit from AGS in your personal application, make sure that the model of choice offers only those features you really want and need; take care not to get overwhelmed by a model with more features than are necessary for your usage. There are models that have over 20 wire connections, but for a minimal installation, you may only need three! The rest of the wires are for different generator models, or optional features that you may not want to incorporate right away.

Also consider the difference between stand-alone AGS systems, which simply work with the hard-wired inputs they have, vs. networked AGS systems which can take data and generator start triggers from other devices like Inverters and Energy Management Systems. Some of the networked systems can also help the other devices make decisions like shedding loads, or supporting heavy generator loads, based on data shared between all devices.

When you’re ready to move up to today’s latest technology and enjoy the benefits of an easier and more efficient system, AGS delivers!

**WE WELCOME YOUR QUESTIONS FOR TECH DOCTOR!**

If you have a topic you’d like to see our Tech Doctor handle, please send us an email with your ideas and suggestions! Send your comments and feedback to mitul.chandrani@xantrex.com.

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Over the years of running a mobile RV repair service, having a dedicated place to access service manuals for all the different appliances and components found on RVs was something that I always had a desire to create.

I hope this resource makes your RV repairs easier, as it has mine, but please be careful and follow proper safety practices when attempting to repair your own RV.

If in doubt, please consult with a professional RV technician!

DARREN KOEPP  -  OWNER, MY RV WORKS, INC.

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