



# Case Study: Advanced RV

OutBack Mobile Power System Installation



## Overview

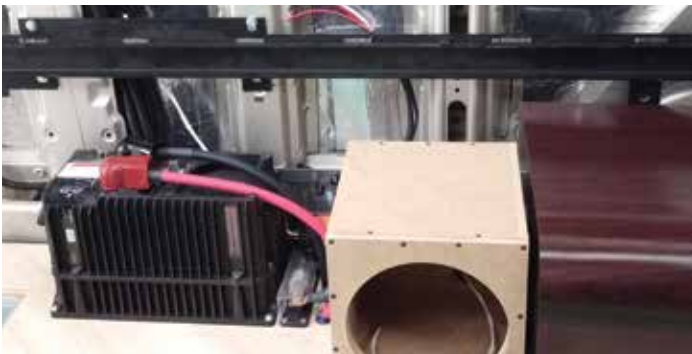
Advanced RV, based in Willoughby, Ohio and founded in 2012, builds Class B motor homes for people who seek elegant, aesthetic solutions in high-end recreational vehicles. Advanced RV creates living spaces in Mercedes Benz 3500 Sprinter chassis, using the latest technology available for appliances and stereo equipment, including color touchscreens, subwoofers and surround-sound speakers.

The company caters to an active audience: people who like to travel with pets without worrying whether hotels will allow animals, business travelers, doctors that commute from hospital to hospital between shifts, and others.

Because Advanced RV's discerning customers want the creature comforts of a designer home on the road, the chassis plan requires energy efficiency and a reliable power source that can support the demanding electrical loads of high-tech HVAC, appliances and entertainment equipment while living off-grid. RV owners traveling with pets especially need to ensure a comfortable, controlled climate 24/7 if they ever step away from the vehicle for a hike or other extended activity. Advanced RV designs electrical systems that operate flawlessly despite the vibrations, temperature extremes and high-demand energy loads in mobile living spaces.

### System Specifications

- Location:** Willoughby, Ohio
- System Power:** Custom, Varies
- Components:** VFX Inverter/Charger, FLEXmax Charge Controller



*One of the largest selling factors for the RV owners we talk to is having the freedom to continue their active lifestyle, using electricity as they normally would, without depending on shore power to plug in to the local grid or an electrical outlet. Customers appreciate that we offer a robust, reliable electrical system, thanks in part to the durability and control of the OutBack Power equipment, since it can work with power well beyond its design capacity."*

**Mike Neundorfer**  
Founder, of Advanced RV



## Objectives

- Create super-efficient living space using green or low-energy technologies.
- Design RVs that can operate independently from the grid for extended periods of time.
- Provide mobile living that is quiet and comfortable regardless of local or seasonal temperature extremes.

## Solution

To ensure customers enjoy the freedom “dry camp”(sustain daily activities without shore power from the grid), Advanced RV selected OutBack Power’s equipment to expertly manage the energy demands onboard and provide solar electricity to its vehicles. For maximum electricity savings, Advanced RV uses OutBack products in addition to other green technologies, including LED lighting, weather proofing and insulation, and top-of-the-line energy-efficient appliances. Because Advanced RV customers travel to many different climates, the design requires a reliable charging power source for the batteries and insulation to maintain comfortable interior temperatures during the winter and summer.

Advanced RV uses the OutBack Power VFX2812 inverter/chargers which stand up to extreme variations in climate and temperature, as well as the vibrations onboard during long road trips or over rough terrain. Because the OutBack inverter/charger has a cast aluminum heatsink enclosure, as well as an internal fan, it has superior surge capability and can operate beyond its design rate of capacity. Advanced RV and its customers find this feature especially useful when air conditioning is in greater need on hot nights and powered by the onboard battery bank.

## Benefits

- Clients have excellent mobility and flexibility when traveling due to attention to the systems approach.
- RV owners can successfully power their induction cook tops, refrigerators, lighting, televisions, microwaves, coffeemakers, air conditioning, heating or high-power stereo equipment from the battery bank alone.
- Customers enjoy a quieter, more comfortable ride without needing to mount a propane-powered generator that can cause disruptive noise and vibrations during operation.