Power Control System works with the MAGNUM Energy Inverter/Charger to bring the RV industry a revolutionary new concept. In the past, energy management systems operated when 120VAC was available and inverters operated when 120VAC was not available from either shore power or generator.

The Power Control System brings these two worlds together. While plugged into shore power, or when the generator is running, the Power Control System (PCS) will allow the RV to have more power than available on the shore power or generator, for short periods of time. When the PCS senses that 120VAC power has reached its maximum current, the PCS communicates to the MAGNUM inverter requesting additional power be generated from the battery. If more demands are put on the RV with additional appliances, the PCS will shed non-critical loads and avoid nuisance tripping of circuit breakers.

Features:

- Only RV system that is UL Rated for 60°C operation.
- Monitor and Manage total RV current to avoid nuisance circuit breaker tripping.
- Manage battery charging during high peak demands.
- Provide additional power from battery bank to smooth high peak demands.
- Shed non-critical loads during high peak loads.
- Remote Panel displays Service Type, Load Status, and RV Current & Voltage.

Central Monitor Panel

Panelboard (Optional Subpanel)
Operation:

50-amp Service - PCS senses 240VAC between L1 and L2 to determine this mode of operation. It has two current sensors which monitor the current on each leg of 50-amp service. When the current on either leg exceeds the 50-amp limit, because possibly the owner has turned on the Microwave, the PCS will independently limit the current on each leg by performing the following in order:
1. Reduce Battery Charging Current
2. Operate appliances from Inverter
Once the total RV current has dropped, for example because an owner operated appliance has been turned off, the PCS will reverse the above procedure, returning power to appliances whose operation was not immediately critical. Appliance shed order is easily determined by the manufacturer by wiring the appliances to the appropriate number relay.

30-amp Service - PCS senses 0VAC between L1 and L2. It performs the same functions as above except that it adds the current of the two sensors and limits total current to 30 amps.

20-amp Service - PCS senses 0VAC between L1 and L2, and the owner selects 20A on the Remote Display. PCS performs the same functions as above except that it adds the current of the two sensors and limits total current to 20amps.

Generator - PCS senses power to the Gen Hour Meter and performs the above functions, but sets the maximum allowable current to match the generator.

Inverter - PCS communicate to bring the owner the most trouble-free camping possible.

Remote Display - Features include:
- 4-Line LCD Display
- Displays Load Names and Status
- Digital Amp meter which shows total RV current.
- Digital Volt meter
- Camp Ground Shore Power Wiring Check and warning

Specifications:

- Part Numbers:
  - 00-10020-000 Power Control Center w/Subpanel; 8-Main, 4-Sub positions
  - 00-10020-100 Power Control Center with 12 breaker positions
  - 00-10019-000 Central Monitor Panel
  - 00-10020-500 50amp PCS Controller (Included with either panelboard)

- Service type: 120/240VAC 50amp service

- Main Breakers: 50amp max

- Branch Breakers: (8) Breaker stab positions (2 Main & 12 breakers max using twin type)

- Subpanel Breaker: 30amp max

- Subpanel branch: (4) Breaker stab positions (2 Main & 4 breakers max using twin type)

- Breaker Type:
  - Cutler-Hammer Cat No.: BR, BD, GFCB; Filler Plate BRFP;
  - SquareD Cat No.: HOM, HOMT;
  - Siemens Cat No.: QP, QT, MP-T, MHT; Filler Plate QF3;
  - Connecticut Electric Cat No.: TB, (TBBD)

- Generator: 120/240VAC Dual 50 amp breakers

- Relays:
  - (3) DC 16VDC, 1.0A (Thermostat)
  - (4) AC 120VAC, 18A, 1HP (Main Panel)

- Delay: 2 minute minimum off time on all loads

- Environment: Indoor, Out of direct weather

- Dimensions: 17-1/4” wide, 10-1/4” high, 4-1/2” deep

- Mounting Hole: 15-1/2” wide, 8-5/8” high

- Minimum  Typical  Maximum
- Volts DC  9.0VDC  12.0VDC  16.0VDC
- Volts AC  90VAC/line  240VAC  135VAC/line
- Main Feed  50 amps
- Ambient Temperature  -40°C  -85°C