

# For Sale

## House Electrical Solar System



**Summary:** In 2011 we bought a house which came with an electrical solar system. We will be remodeling the house and the solar system has to go. So we are putting the solar system up for sale. The system was installed in the fall of 1998. The system is currently running and working, although the batteries are past their useful life and therefore have little capacity left. You will need new batteries! The system includes; solar panels, invertors, disconnect switches, battery monitor, battery chargers and batteries (if you want them). The two 3300VA invertors each produce 120VAC at 33amps. The invertors are 90 degrees out of phase so that 220VAC is available. All manuals are included.

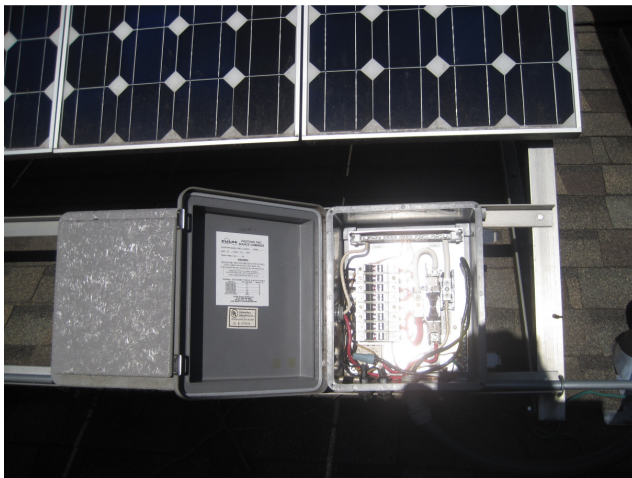
This system is a battery based system. Typical implementation is run the house off the batteries while they have stored energy and use the sun energy to charge up the batteries. If there is no sun for a few days the invertors can recharge the batteries from the grid or a optional generator. If the house load is larger (for example you switch on the house a/c) than the batteries can handle then the invertor will start using some or all of the power from the grid (if present).

System is located in Weston Ct, 06883. Local pickup only. System is currently running and in place. Information here is accurate to the best of my knowledge, but no guarantees are made. System is used and is sold as is, where is. Please email me with any questions. I will do my best to answer them. Wiring that goes thru the house is not included.

Price: \$6000 OBO

## Solar Panels

- Manuf: BP Solar Model:BP590ul
- 90Watt 12volt Solar Electrical Panels
- 24 Panels
- 18.5Vmax @ 4.96A
- Configure in 6 parallel sets of 4 panels in series for 48Volts.
- Roof mount included, except for the lower aluminum angle iron connected to the roof ( I don't want the roof to leak).
- Roof mounted fuse boxes to combines panels.
- Year: 1998 – Note Solar panel output degrades with time. Typical 0.5% to 1% per year. So figure worst case these panels are now producing 90watts x (100%-(1% $\times$ 13yrs))=78watts per panel.
- Condition: Good, no cracks or breaks.



## Invertors

- Manuf: Trace Engineering – Now owned by [www.xantrex.com](http://www.xantrex.com)
- Model: SW4048
- Quantity: 2
- 3300VA 120VAC 33Amps
- Efficiency: 95%
- Two AC inputs: Utility and backup generator.
- Weight: 105lbs each
- Condition: Good, work well.

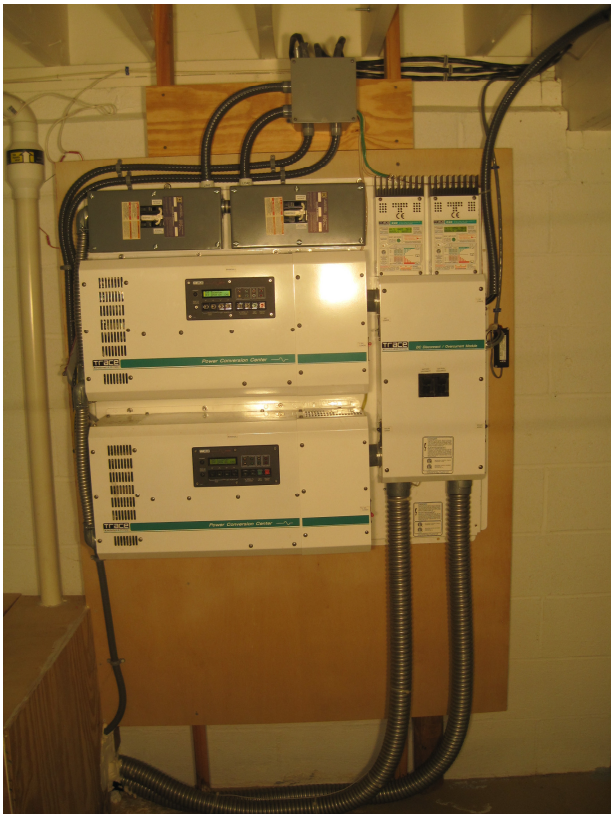
## Operating Modes

**Float** – The system will keep the batteries charged from either the solar panels or from the internal battery charges in the invertors. Regardless if the utility power is present or not the system will power the AC loads from the solar panels, batteries and if needed the utility power.

**Sell** – This mode sells the power from the solar panels to the utility company when ever excess power is available. For this mode you need to have a power meter that runs in reverse and have the system certified by your power company.

**Standby** – The system will keep the batteries charged and only turn on in the event of a power failure.

**Cycle** – In this mode that invertors will run of the batteries until there drained, then switch to utility power and recharge the batteries. Once batteries are charged the cycle repeats.

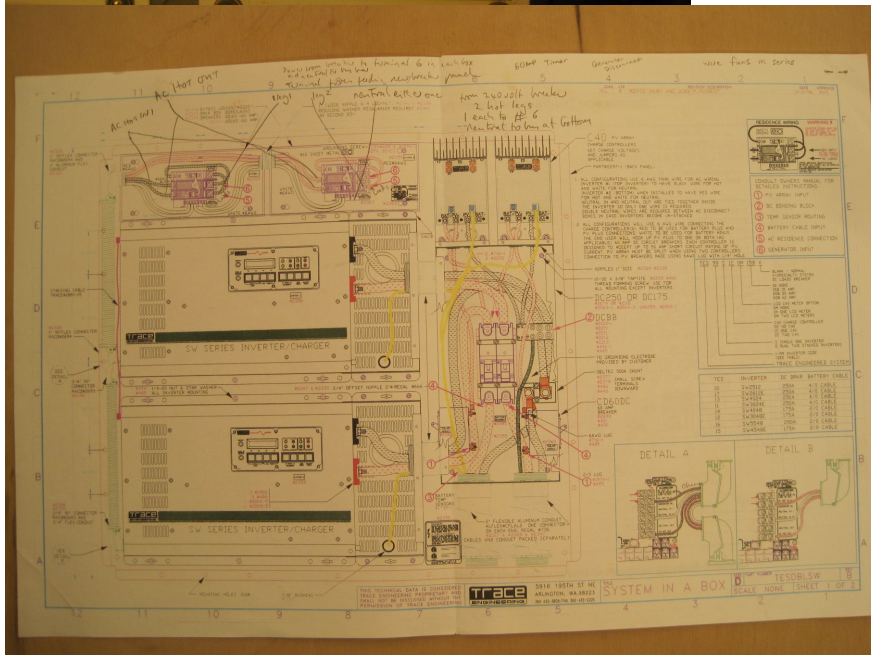


## Solar Battery Charger

- Manuf: Trace
- Model: C40
- Quantity: 2
- 40 Amp 3 Stage
- Condition: Good, work well.

## Battery Monitor (no picture)

- Manuf: Cursing Equipment Co.
- Model: 89015
- Digital meter
- Displays: Voltage, Amps, Amp-Hours and Time Remaining
- Condition: Good, work well.



## **Batteries**

Description: Lead Acid Battery

Manufacturer: Interstate Battery

Model: Unknow - No markings on batteries.

Type: Deep Cycle, Voltage: 6V

Weight: 120lb each Total 5760lbs

Dimensions: L16 16" x 11.625" x 7"

Quantity: 48

Capacity: Unknow - No markings on batteries. In one of the manuals there's a handwritten note that states 'Total System 2800amp hrs', so maybe the batteries are  $2800/48 = 58\text{amp hrs}$  batteries. But this seems a very low for L16 sized batteries.

Condition: No good, some shorted cells, past useful life. You will need new batteries!

Date: 1998 Q4 - Batteries placed in to service in 1998 Q4 - Batteries are 12 years old.

These batteries are currently working. But the batteries have pasted they use full life span and longer meet the capacity.

