

SOLAR ELECTRIC SYSTEM KITS

We ship most solar kits within a week. We will match or beat most any sale price on any PV modules, Trojan batteries, and any other products we sell.

"Mail order pricing with the courtesy of a family owned New England business."

Photovoltaic systems naturally fit into the format of kits because they are modular. Once a price range is determined, a balance of components can quickly be chosen. It is helpful to estimate an average daily load requirement (kWhrs per day) in order to facilitate a system design. However, many users do not begin with an accurate value for load and then purchase a system to supply that load. Instead they begin with an affordable price range and need to know what they can power for their money.

New England Solar Electric Inc. can make a system of any price or size and then put it into kit form to facilitate easy owner installation. At your option we can prewire AC/DC disconnect equipment for generator, inverter and charge controller. Then all you or your electrician would need to do is mount and wire the array outside, and wire the array downlead to the pre-wired disconnect. Assemble the battery bank, hook up the the generator input, AC output and inverter to the pre-wired AC/DC disconnect and you're all powered up!

The following seven kits cover the full spectrum of sizes for most remote homes. Each kit is available in a basic model, an intermediate model, and an advanced model. You may chose which one meets your individual needs. The more expensive kits include more optional components, larger and more sophisticated inverters and more pre-wired controls while maintaining the same power production. You may mix and match any options from one level to the other. Tell us what you want or ask our advice as to what you need, and we will promptly give a price quotation.

The following kits include SunWize 110 watt solar modules, Power-Up 185W solar panels or Trina 240W solar panels and Trojan T-105 batteries. We can custom design a kit with any components you may want. Call for more information and a quote.

Each listed kit or custom kit comes with complete directions and custom plans to be used by you or your electrician. We offer technical support before, during, and after the installation.

Each kit description on the following pages has the approximate output, for the Northeast, from the solar array, and the approximate amount of electricity that can later be used from the charged batteries. This is given for an average daily condition. Weekend use only, of a camp or cottage, will mean heavier daily loads for two days, but five days to bring the batteries back to full charge.

PV/Gen Hybrid

We can make a PV/Gen hybrid that combines the best use of a generator for large AC loads and battery charging for short intervals, and a photovoltaic system and inverter for all other loads. This generator back up with automatic transfer switching allows a PV system to be smaller (hence less expensive) and still meet load demands of no-sun periods. The PV/inverter part of the system extends generator life and eliminates continuous noise. All inverters included in our kits have an integral battery charger.

We strongly recommend a sine-wave inverter for home use. Modern sine-wave inverters will power any device normally found in the home, including efficient washing machines, refrigerators, heating systems and computer and entertainment equipment.



THE NORMAL SEQUENCE OF EVENTS

1. Receive and read our catalog.
2. Make an appointment for one or two hours of free consultation at NESE, or do the equivalent by telephone.
3. Purchase your kit.
4. Call us for technical support for you or your electrician.
5. Call us later for advice on system use, maintenance, or appliance recommendations if our book does not adequately answer your questions.

About our advice and support: We pride ourselves in giving the best support in the industry. If you are unsure as to how to proceed to design your solar electric system or if you just want to talk about the system you've already planned—we're the place to call. Our book explains almost every aspect of solar electricity for remote home use, but there's nothing like a straight forward discussion directed towards your particular needs. We will make sure you get the system that's right for you and we will make sure it is properly installed and maintained.

NOTE 1: Every installation is different. Kits do not include the array wiring between the solar array combiner box and battery bank. We can quote this if you give us the distance.

NOTE 2: Batteries and large solar modules (over 125 watts) in the following kits ship by freight, not UPS. The large Schneider (Xantrex) inverters also must ship by freight. Call for freight quote.

NOTE 3: The following kits feature SunWize 110W, Power-UP 185W solar modules or Trina 240W solar modules. We can substitute any other solar module in the catalog in any kit. Call for quote.



Consultation at New England Solar Electric Inc.

For those of you who would like to travel to Worthington, we offer two hours of free consultation, by appointment, at New England Solar Electric Inc. For additional time we charge a rate of \$35 per hour. We are open 9am to 5pm Mon thru Fri for consultation and sales.

The complete descriptions of all the equipment featured in our kits can be found on the catalog pages following the kit listings.

SOLAR ELECTRIC KITS

KIT #1

12V DC 110 Peak Watt Array

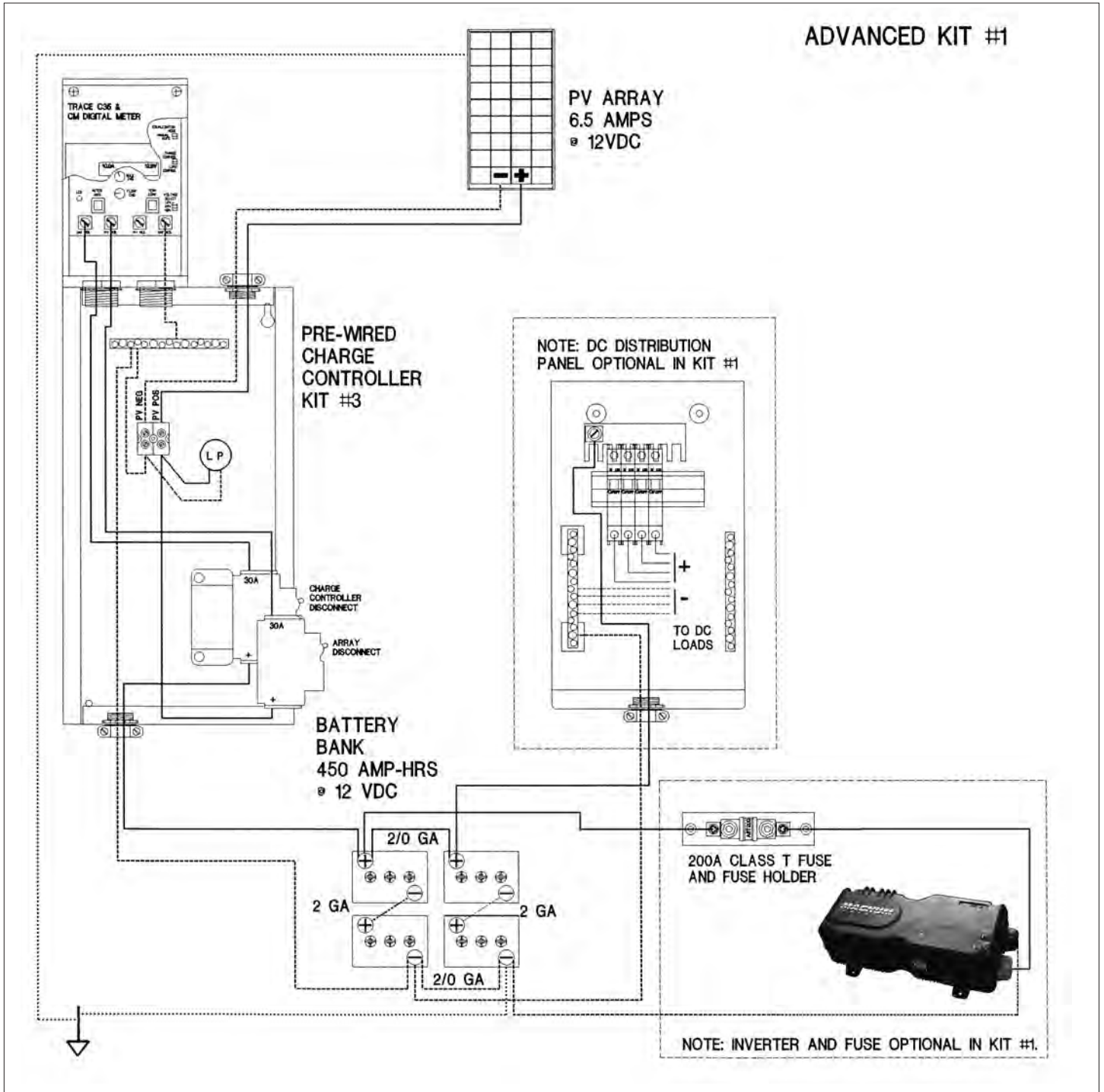
Average Array Output for Northeast:

Summer	550 watt-hr/day
Winter	225 watt-hr/day

Average Usable Energy from Batteries for NE:

Summer	468 watt-hr/day
Winter	232 watt-hr/day

This system will power 12V lights, TV, and CD player for a year round cabin or small remote home. You will count your kilowatts in the winter and have enough in the summer.



BASIC KIT #1

1	SunWize 110W Solar Module	\$369.00
1	Charge Controller Kit #1 Trace C-35 Controller Trace CM for C35	199.00
2	Trojan T-105 batteries	318.00
1	2 Ga. Battery cable	9.00
4	Battery anticorrosion rings	1.60
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	904.60

780-011 Special Kit Price \$869.00



INTERMEDIATE KIT #1

1	SunWize 110W Solar Module	\$369.00
1	Charge Controller Kit #2 Trace C-35 Controller Trace CM for C35 Big Baby Box w/ Two Breakers	279.00
4	Trojan T-105 batteries	636.00
2	2 Ga. Battery cables	18.00
2	2/0 Ga. Battery cables	24.00
8	Battery anticorrosion rings	3.20
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	1337.20

780-012 Special Kit Price \$1279.00

ADVANCED KIT #1

1	SunWize 110W Solar Module	\$369.00
1	Prewired Control Panel Trace C-35 controller Trace CM Digital meter MidNite Mini DC Disconnect 30A Array DC Circuit Breaker 40A Charge Controller DC Breaker 10' 6 Ga. wire to batteries	459.00
4	Trojan T-105 batteries	636.00
2	2 Ga. Battery cables	18.00
2	2/0 Ga. Battery cables	24.00
8	Battery anticorrosion rings	3.20
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	1517.20

780-013 Special Kit Price \$1459.00

OPTIONS

1	Magnum MM1512 Inverter w/70A Bat Charger	719.20
1	Class "T" Fuse Block and Fuse 200A	69.00
1	Set 10' 2/0 Inverter Cables	139.00
1	Two module adjustable frame	119.00
1	3 Position Array Combiner Box	99.00
1	10A Array Circuit Breaker	15.00
1	#12/2 Tray Cable (per foot)	0.69
1	Watertite connector	3.00
1	Prewired DC distribution panels: 6 Circuit 249.00 4 Circuit 219.00	
1	Solar Independent Home Book	10.95
1	Hydrometer	12.95
1	Digital Multimeter	25.00
1	Tri-Met System Monitor	169.00

NOTES:

1.This kit uses a 35 amp charge controller that allows the expansion of the array up to four 110W modules in a 12V system and eight 110W modules in a 24V system.

2.The Basic Kit#1 has no fuse or DC disconnect for the array or charge controller.

3.Array wiring and mounting are not included in any of the Kit#1's. See the "Options" section for possibilities.

SOLAR ELECTRIC KITS

KIT #2

12V DC 220 Peak Watt Array

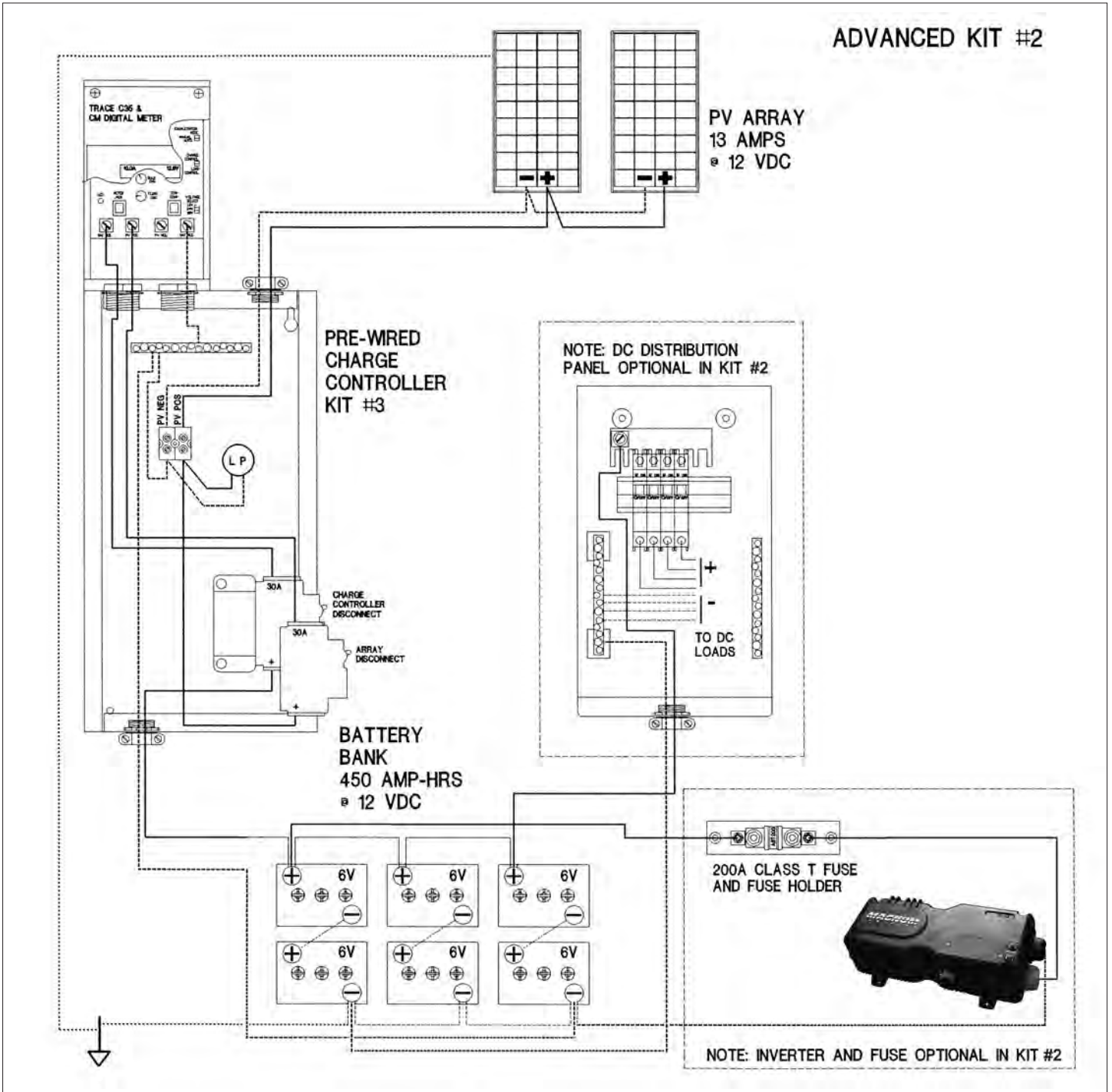
Average Array Output for Northeast:

Summer 1100 watt-hr/day
 Winter 550 watt-hr/day

Average Usable Energy from Batteries for NE:

Summer 935 watt-hr/day
 Winter 468 watt-hr/day

This is a good size system to run a DC remote home for a family that conserves and is used to living without electricity. With any small system, efficient 12V DC fluorescents keep demand low for winter months. This is also a good choice for a remote camp or cabin that is used a lot for summer vacationing. The addition of an inverter will allow you to 'camp' in luxury! (See Kit #3)



BASIC KIT #2

2	SunWize 110W Solar Modules	\$738.00
1	Charge Controller Kit #1 Trace C-35 Controller Trace CM for C35	199.00
4	Trojan T-105 batteries	636.00
2	2 Ga. Battery cables	18.00
2	2/0 Ga. Battery cables	24.00
8	Battery anticorrosion rings	3.20
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	1626.20

780-021 Special Kit Price \$1549.00



INTERMEDIATE KIT #2

2	SunWize 110W Solar Modules	\$738.00
1	3-Position Array Combiner Box	99.00
2	10A PV Circuit Breakers	30.00
2	Watertight Connectors	6.00
20'	#12/2 Tray Cable	13.80
1	Charge Controller Kit #2 Trace C-35 Controller Trace CM for C35 Big Baby Box w/ Two Breakers	279.00
6	Trojan T-105 batteries	954.00
3	2 Ga. Battery cables	27.00
4	2/0 Ga. Battery cables	48.00
12	Battery anticorrosion rings	4.80
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	2207.60

780-022 Special Kit Price \$2099.00

ADVANCED KIT #2

2	SunWize 110W Solar Modules	\$738.00
1	3-Position Array Combiner Box	99.00
2	10A PV Circuit Breakers	30.00
2	Watertight Connectors	6.00
20'	#12/2 Tray Cable	13.80
1	Prewired Control Panel Trace C-35 controller Trace CM Digital meter MidNite Mini DC Disconnect 30A Array DC Circuit Breaker 40A Charge Controller DC Breaker 10' 6 Ga. wire to batteries	459.00
6	Trojan T-105 batteries	954.00
3	2 Ga. Battery cables	27.00
4	2/0 Ga. Battery cables	48.00
12	Battery anticorrosion rings	4.80
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	2387.80

780-023 Special Kit Price \$2279.00

OPTIONS

1	Magnum MM1512 Inverter w/70A Bat Charger	719.20
1	Class "T" Fuse Block and Fuse 200A	69.00
1	Set 10' 2/0 Inverter Cables	139.00
1	Magnum RD2212 Inverter w/110A Bat Charger	1167.20
1	Class "T" Fuse Block and Fuse 400A	83.00
1	Set 10' 4/0 Inverter Cables	219.00
1	Two module adjustable frame	119.00
1	3 Position Array Combiner Box	99.00
1	10A Array Circuit Breaker	15.00
1	#12/2 Tray Cable (per foot)	0.69
1	Watertite connector	3.00
1	Prewired DC distribution panels: 6 Circuit 249.00 4 Circuit 219.00	
1	Solar Independent Home Book	10.95
1	Hydrometer	12.95
1	Digital Multimeter	25.00
1	Tri-Met System Monitor	169.00

NOTES:

1. This kit uses a 35 amp charge controller that allows the expansion of the array up to four 110W modules in a 12V system and eight 110W modules in a 24V system.

2. The Basic Kit#1 has no fuse or DC disconnect for the array or charge controller.

3. Array wiring and mounting are not included in any of the Kit#1's. See the "Options" section for possibilities.

SOLAR ELECTRIC KITS

KIT #3

12V DC 220 Peak Watt Array

Average Array Output for Northeast:

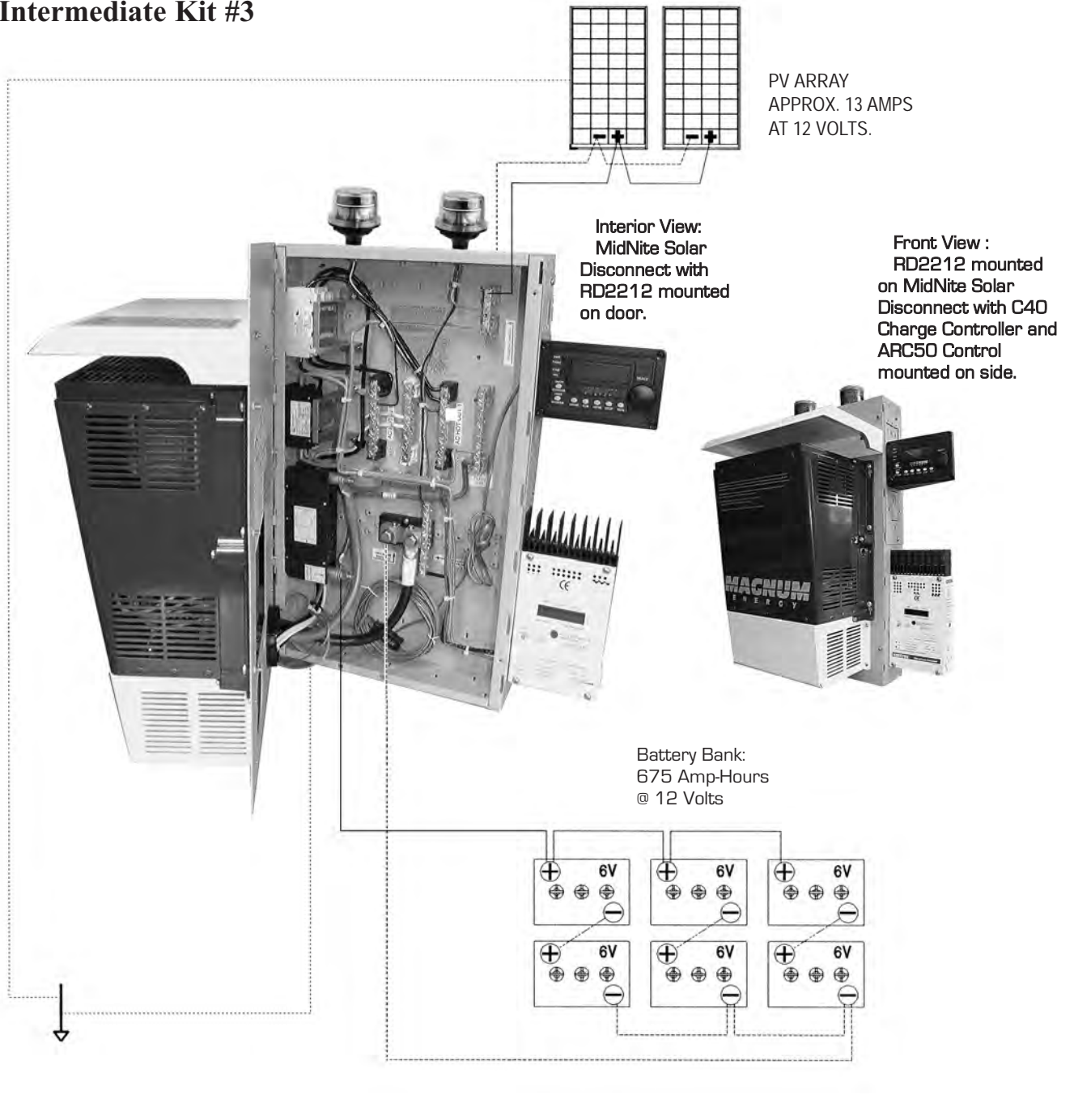
Summer	1100 watt-hr/day
Winter	550 watt-hr/day

Average Usable Energy from Batteries for NE:

Summer	935 watt-hr/day
Winter	468 watt-hr/day

This system supplies the same power as Kit #2. The addition of a medium sized inverter allows you to power almost all normal home appliances such as a vacuum, microwave, skill saw, and of course a TV and computer. This is a good beginning kit for a small home or an excellent kit for a summer (or winter for that matter) camp or cabin.

Intermediate Kit #3



BASIC KIT #3

2	SunWize 110W Modules	\$738.00
1	3-Position Array Combiner Box	99.00
2	10A PV Circuit Breakers	30.00
2	Watertight Connectors	6.00
20'	#12/2 Tray Cable	13.80
1	Charge Controller Kit #1 Trace C-35 controller Trace DVM for C35	199.00
6	Trojan T-105 batteries	954.00
3	2 Ga. Battery cables	27.00
4	2/0 Ga. Battery cables	48.00
12	Battery anticorrosion rings	4.80
1	Magnum MM1512AE 1500w Inverter	899.00
1	Magnum ME-ARC50 Inverter Control	299.00
1	Set 10' 2/0 Ga. inverter cables	139.00
1	Class "T" Fuse Block and Fuse 200A	69.00
1	302R Lightning Arrestor	39.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	3793.60

780-031 Special Kit Price \$3479.00

INTERMEDIATE KIT #3

2	SunWize 110W Modules	\$738.00
1	3-Position Array Combiner Box	99.00
2	10A PV Circuit Breakers	30.00
2	Watertight Connectors	6.00
20'	#12/2 Tray Cable	13.80
1	Prewired Control Panel Trace C-35 controller Trace CM Digital meter MidNite Mini DC Disconnect 30A Array DC Circuit Breaker 40A Charge Controller DC Breaker 10' 6 Ga. wire to batteries	459.00
6	Trojan T-105 batteries	954.00
3	2 Ga. Battery cables	27.00
4	2/0 Ga. Battery cables	48.00
12	Battery anticorrosion rings	4.80
1	Magnum RD2212 2200W Inverter	1459.00
1	Magnum ME-ARC50 Inverter Control	299.00
1	Set 10' 4/0 Ga. inverter cables	219.00
1	Class "T" Fuse Block and Fuse 200A	83.00
1	MidNite Lightning Arrestor	119.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	4566.60

780-032 Special Kit Price \$4129.00

ADVANCED KIT #3

2	SunWize 110W Modules	\$738.00
1	3-Position Array Combiner Box	99.00
2	10A PV Circuit Breakers	30.00
2	Watertight Connectors	6.00
20'	#12/2 Tray Cable	13.80
	<u>Prewired Control Panel:</u>	
1	MidNite Solar DC/AC Disconnect	619.00
1	Xantrex C40 Charge Controller	159.00
1	Xantrex CM Digital Meter	99.00
1	MidNite PV Ground Fault Breaker	69.00
2	Array & CC Disconnects 40A	30.00
2	MidNite Lightning Arrestors	238.00
8	Trojan T-105 batteries	1792.00
4	2 Ga. Battery cables R/B	36.00
6	2/0 Ga. Battery cables 3R & 3B	72.00
16	Battery anticorrosion rings	6.40
1	Magnum MS2012 2000W Inverter	2149.00
1	Magnum ME-ARC50 Inverter Control	299.00
1	Set 10' 2/0 Ga. inverter cables	219.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	6162.20

780-033 Special Kit Price \$5519.00



OPTIONS

1	Two module adjustable frame	119.00
1	Prewired DC distribution panels: 6 Circuit 249.00 4 Circuit 219.00	
1	Solar Independent Home Book	10.95
1	Hydrometer	12.95
1	Digital Multimeter	25.00
1	Tri-Met System Monitor	169.00

Advanced Kit #3 is available in 24V with a 24VDC Sine Wave inverter for \$5359.00. It is less expensive because both the inverter and cabling are less expensive.

SOLAR ELECTRIC KITS

KIT #4

24V DC 740 PEAK WATTS

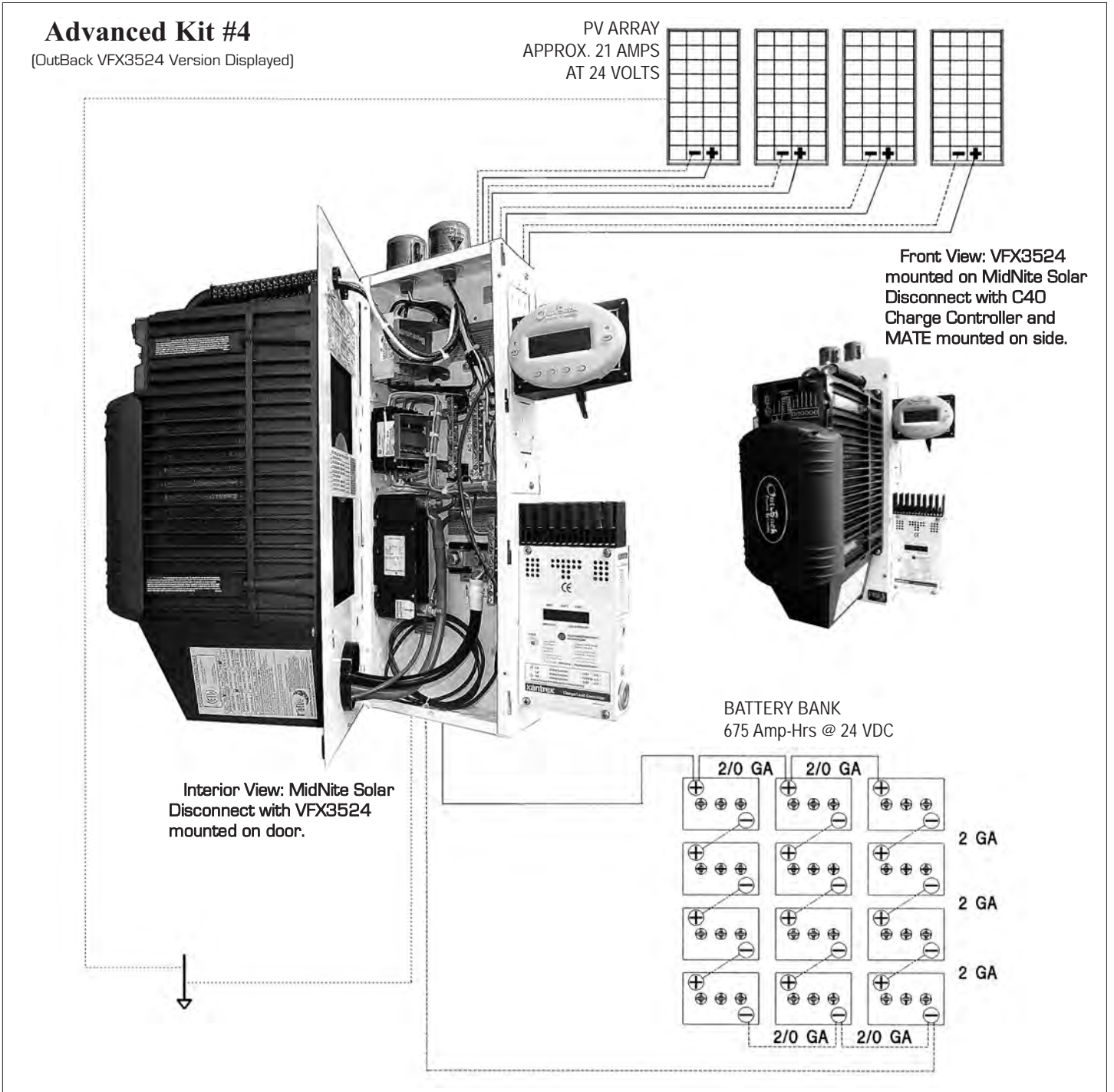
Average Array Output for Northeast:

Summer	3700 watt-hr/day
Winter	1850 watt-hr/day

Average Usable Energy from Batteries for NE:

Summer	3145 watt-hr/day
Winter	1572 watt-hr/day

This system will power needs of a small remote home. The large inverter will allow large AC loads such as a table saw, deep well pump, or washing machine. Without a generator back-up, loads must be monitored, especially in the winter months.



BASIC KIT #4

4	Power-Up 185W Modules	\$1076.00
1	6-Position Array Combiner Box	119.00
4	10A PV Circuit Breakers	60.00
4	Watertight Connectors	12.00
4	Pairs MC4 Array Cables	156.00
1	Prewired Control Panel	459.00
	Trace C-35 controller	
	Trace CM Digital meter	
	MidNite Mini DC Disconnect	
	30A Array DC Circuit Breaker	
	40A Charge Controller DC Breaker	
	10' 6 Ga. wire to batteries	
12	Trojan T-105 batteries	1908.00
9	2 Ga. Battery cables	81.00
4	2/O Ga. Battery cables	48.00
24	Battery anticorrosion rings	9.60
1	Magnum RD2824 2800W Inverter	1679.00
1	Magnum ME-ARC50 Inverter Control	299.00
1	Set 10' 2/O Ga. Inverter cables	139.00
1	Class "T" Fuse Block and Fuse 200A	69.00
1	MidNite MESP300 Lightning Arrestor	119.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	6241.60

780-041 Special Kit Price \$5679.00

INTERMEDIATE KIT #4

4	Power-Up 185W Modules	\$1076.00
1	6-Position Array Combiner Box	119.00
4	10A PV Circuit Breakers	60.00
4	Watertight Connectors	12.00
4	Pairs MC4 Array Cables	156.00
	<u>Prewired AC/DC Disconnect Panel:</u>	
1	MidNite Solar DC/AC Disconnect	619.00
1	Xantrex C40 Charge Controller	159.00
1	Xantrex CM Digital Meter	99.00
1	MidNite PV Ground Fault Breaker	69.00
2	Charge Controller 40A Breakers	30.00
2	MidNite MESP300 Lightning Arrestor	238.00
12	Trojan T-105 batteries	1908.00
9	2 Ga. Battery cables	81.00
4	2/O Ga. Battery cables	48.00
24	Battery anticorrosion rings	9.60
1	Magnum RD2824 2800W Inverter	1679.00
1	Magnum ME-ARC50 Inverter Control	299.00
1	Set 10' 2/O Ga. Inverter cables	139.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	6808.60

780-042 Special Kit Price \$6199.00

ADVANCED KIT #4

4	Power-Up 185W Modules	\$1076.00
1	6-Position Array Combiner Box	119.00
4	10A PV Circuit Breakers	60.00
4	Watertight Connectors	12.00
4	Pairs MC4 Array Cables	156.00
	<u>Prewired Control Panel:</u>	
1	MidNite Solar DC/AC Disconnect	619.00
1	Xantrex C40 Charge Controller	159.00
1	Xantrex CM Digital Meter	99.00
1	MidNite PV Ground Fault Breaker	69.00
2	Charge Controller 40A Breakers	30.00
2	MidNite MESP300 Lightning Arrestor	238.00
12	Trojan T-105 batteries	1908.00
9	2 Ga. Battery cables R/B	81.00
4	2/O Ga. Battery cables 2R & 2B	48.00
24	Battery anticorrosion rings	9.60
1	Magnum MS4024 4000W Inverter	2599.00
1	Magnum ME-ARC50 Inverter Control	299.00
1	Set 10' 4/O Ga. inverter cables	219.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	7808.60

780-043 Special Kit Price \$7009.00

Note: Advanced Kit #4 Can feature an OutBack VFX3524 inverter and Mate, complete with the pre-wired AC/DC disconnect for \$6,979. Call for details.



OPTIONS

2	2 Module adjustable frame -Vert. align	400.00
1	Solar Electric Independent Home Book	10.95
1	Hydrometer	12.95
1	Digital Multimeter	25.00
1	Tri-Met System Monitor	169.00

SOLAR ELECTRIC KITS

KIT #5

24 V DC 960 Peak Watt Array

Average Array Output for Northeast:

Summer	4800 watt-hr/day
Winter	2400 watt-hr/day

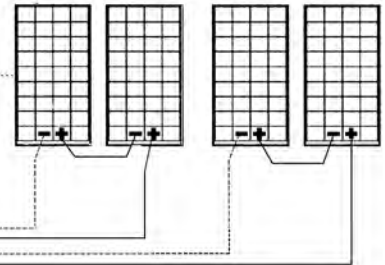
Average Usable Energy from Batteries for NE:

Summer	4080 watt-hr/day
Winter	2040 watt-hr/day

Many customers power a complete alternative energy household with this system. Conservation or alternative back up is employed in winter no-sun periods. All major heating or cooling loads, with the possible exception of a very efficient refrigerator (less than 1 kW-hr/day), must be powered by a fuel other than electricity. This system will easily power a Grundfos 1/2HP submersible water pump..

Advanced Kit #5

PV ARRAY APPROX.
30AMPS AT 24V into
Battery Bank

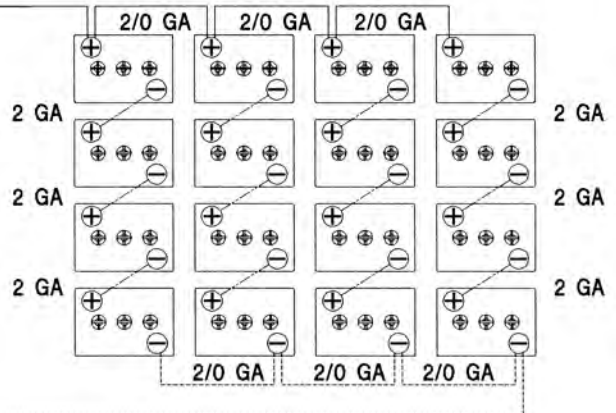


Interior View: MidNite Solar Disconnect with Magnum MS4024PAE mounted on door.

Front view: Magnum MS4024PAE mounted on MidNite Solar Disconnect with MidNite Classic 150 charge controller and ARC50 control mounted on side.



Battery Bank:
900 Amp-Hours at 24 VDC



BASIC KIT #5

4	Trina 240W Solar Modules	1116.00
2	MC Connector Cables	78.00
2	Watertight Connectors	6.00
1	MidNite 3-Pos Array Combiner Box	99.00
2	Outback 15A Array Circuit Breakers	30.00
<u>Prewired AC/DC Disconnect Panel:</u>		
1	MidNite Solar DC/AC Disconnect	619.00
1	MidNite Classic 150 Charge Controller	850.00
2	80A Breakers for Charge Cont & Array	50.00
2	MidNite MESP300 Lightning Arrestor	238.00
16	Trojan T-105 Batteries	2544.00
12	2 Ga. Battery Cables (R/B)	108.00
6	2/O Ga. Battery Cables (3R/3B)	72.00
24	Battery anticorrosion rings	12.80
1	Magnum MS2024 2000w 24V Inverter	2099.00
1	Magnum ME-ARC50 Remote Control	299.00
1	Set 10' 2/O Ga. inverter cables	139.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	8367.80

780-051 Special Kit Price \$7499.00

INTERMEDIATE KIT #5

4	Trina 240W Solar Modules	1116.00
2	MC Connector Cables	78.00
2	Watertight Connectors	6.00
1	MidNite 3-Pos Array Combiner Box	99.00
2	Outback 15A Array Circuit Breakers	30.00
<u>Prewired AC/DC Disconnect Panel:</u>		
1	MidNite Solar DC/AC Disconnect	619.00
1	MidNite Classic 150 Charge Controller	850.00
2	80A Breakers for Charge Cont & Array	50.00
2	MidNite MESP300 Lightning Arrestor	238.00
16	Trojan T-105 Batteries	2544.00
12	2 Ga. Battery Cables (R/B)	108.00
6	2/O Ga. Battery Cables (3R/3B)	72.00
24	Battery anticorrosion rings	12.80
1	Magnum MS4024 4000w 24V Inverter	2599.00
1	Magnum ME-ARC50 Remote Control	299.00
1	Set 10' 4/O Ga. inverter cables	219.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	8947.80

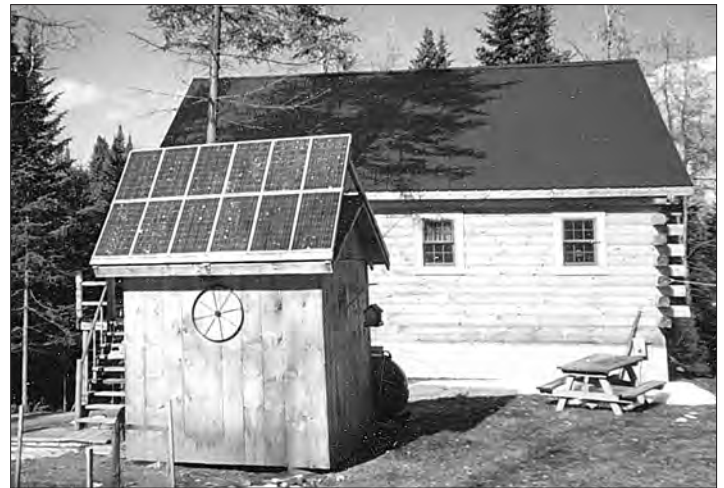
780-052 Special Kit Price \$7979.00

Note: Intermediate Kit #5 Can feature an OutBack VFX3524 inverter, complete with a pre-wired control panel for \$7,949.

ADVANCED KIT #5

4	Trina 240W Solar Modules	1116.00
2	MC Connector Cables	78.00
2	Watertight Connectors	6.00
1	MidNite 3-Pos Array Combiner Box	99.00
2	Outback 15A Array Circuit Breakers	30.00
<u>Prewired AC/DC Disconnect Panel:</u>		
1	MidNite Solar DC/AC Disconnect	799.00
1	MidNite Classic 150 Charge Controller	850.00
2	80A Breakers for Charge Cont & Array	50.00
2	MidNite MESP300 Lightning Arrestor	238.00
16	Trojan T-105 Batteries	2544.00
12	2 Ga. Battery Cables (R/B)	108.00
6	2/O Ga. Battery Cables (3R/3B)	72.00
24	Battery anticorrosion rings	12.80
1	Magnum MS4024PAE Inverter	2699.00
1	Magnum ME-ARC50 Remote Control	299.00
1	Set 10' 4/O Ga. inverter cables	219.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	9227.80

780-053 Special Kit Price \$8239.00



OPTIONS

2	2 Module Adjustable Mounting Racks	400.00
1	Top-of-Pole Rack for 4 Solar Modules	990.40
1	4-Module Set of UniRac (non-adjustable)	350.00
1	Solar Electric Independent Home Book	10.95
1	Hydrometer	12.95
1	Digital Multimeter	25.00
1	Tri-Met System Monitor	169.00

Note: Advanced Kit #5 includes a Magnum MS4024PAE inverter. This 4000W 24VDC inverter outputs 120/240 volt AC power. This system would be used if you had a 230 VAC submersible well pump and/or a large generator with 240/120 VAC output.

Advanced Kit #5 could also feature a Magnum MS4448PAE 4400W inverter using a 48VDC battery bank for \$8129.

SOLAR ELECTRIC KITS

KIT #6

24 V DC 1440 Peak Watt Array

Average Array Output for Northeast:

Summer 7200 watt-hr/day
 Winter 3600 watt-hr/day

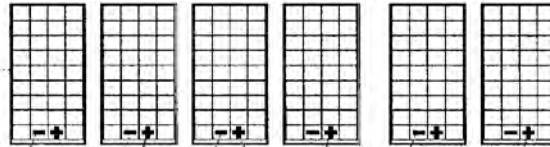
Average Usable Energy from Batteries for NE:

Summer 6120 watt-hr/day
 Winter 3060 watt-hr/day

Kit #6 will power the entire home of a conservation-minded alternative energy user. A back up generator may not be needed, but is always useful during long periods of bad weather. The Schneider (Xantrex) XW4024, the Magnum MS4024PAE or the Magnum MS4024 inverter will power almost anything you need to run! The XW4024 and the Magnum MS4024PAE provide 120/240VAC power. The Magnum MS4024 or the substitute OutBack VFX3524 are 120VAC only.

INTERMEDIATE KIT #6

Interior View of MidNite Solar Disconnect with Magnum MS4024PAE Inverter Mounted on door.

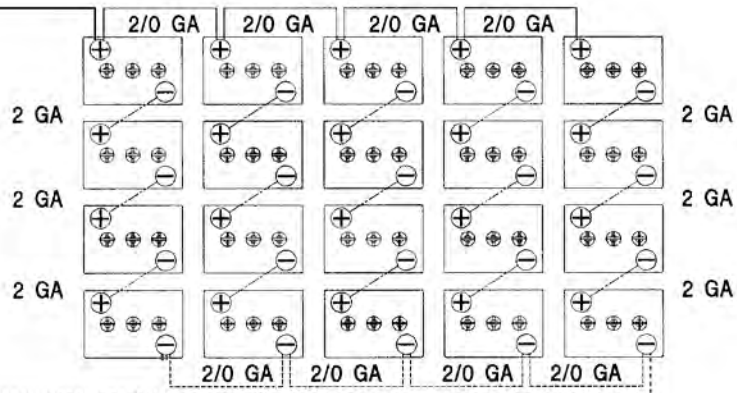


PV ARRAY:
 Six Trina 240W Solar Panels
 APPROX. 48 AMPS into a
 24V battery bank. (Note: Panels
 are wired in series-pairs and
 converted to 24V by the Classic
 150 charge controller)



Front View:
 Magnum MS4024PAE Inverter
 mounted on MidNite Solar
 Disconnect with a MidNite Classic
 150 Charge Controller and ME-
 ARC50 Control Panel mounted on
 the side.

BATTERY BANK 1125A-H @ 24 VDC



BASIC KIT #6

6	Trina 240W Solar Modules	1674.00
3	MC Connector Cables	117.00
3	Watertight Connectors	9.00
1	MidNite 6-Pos Array Combiner Box	119.00
3	Outback 15A Array Circuit Breakers	45.00
	<u>Prewired AC/DC Disconnect Panel:</u>	
1	MidNite Solar DC/AC Disconnect	619.00
1	MidNite Classic 150 Charge Controller	850.00
2	80A Breakers for Charge Cont & Array	50.00
2	MidNite MESP300 Lightning Arrestor	238.00
20	Trojan T-105 Batteries	3180.00
15	2 Ga. Battery Cables (R/B)	135.00
8	2/O Ga. Battery Cables (3R/3B)	96.00
40	Battery anticorrosion rings	16.00
1	Magnum MS4024 4000w 24V Inverter	2599.00
1	Magnum ME-ARC50 Remote Control	299.00
1	Set 10' 4/O Ga. inverter cables	219.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	9239.20

780-061 Special Kit Price \$9239.00

INTERMEDIATE KIT #6

6	Trina 240W Solar Modules	1674.00
3	MC Connector Cables	117.00
3	Watertight Connectors	9.00
1	MidNite 6-Pos Array Combiner Box	119.00
3	Outback 15A Array Circuit Breakers	45.00
	<u>Prewired AC/DC Disconnect Panel:</u>	
1	MidNite Solar DC/AC Disconnect	799.00
1	MidNite Classic 150 Charge Controller	850.00
2	80A Breakers for Charge Cont & Array	50.00
2	MidNite MESP300 Lightning Arrestor	238.00
20	Trojan T-105 Batteries	3180.00
15	2 Ga. Battery Cables (R/B)	135.00
8	2/O Ga. Battery Cables (3R/3B)	96.00
40	Battery anticorrosion rings	16.00
1	Magnum MS4024PAE 4000w Inverter	2699.00
1	Magnum ME-ARC50 Remote Control	299.00
1	Set 10' 4/O Ga. inverter cables	219.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	10,553.00

780-062 Special Kit Price \$9499.00

Note: Basic Kit #6 Can feature an OutBack VFX3524 inverter complete with a pre-wired control panel for \$9,189.

ADVANCED KIT #6

6	Trina 240W Solar Modules	1674.00
3	MC Connector Cables	117.00
3	Watertight Connectors	9.00
1	MidNite 6-Pos Array Combiner Box	119.00
3	Outback 15A Array Circuit Breakers	45.00
1	Xantrex XW 60 Charge Controller	685.00
2	Xantrex XW 60A Circuit Breakers	50.00
2	MidNite MESP300 Lightning Arrestor	238.00
1	XW AC/DC Disconnect - Prewired	1800.00
1	Xantrex XW4024 120/240V Inverter	3950.00
1	XW Control Panel	300.00
1	Set 10' 4/O Ga. inverter cables	219.00
20	Trojan T-105 batteries	3180.00
15	2 Ga. Battery cables R/B	135.00
8	2/O Ga. Battery cables 4R & 4B	96.00
40	Battery anticorrosion rings	16.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	12,641.00

780-063 Special Kit Price \$11,189.00



OPTIONS

3	2 Module adjustable frames	600.00
1	Top-of-Pole Rack for 6 Solar Modules	1066.40
2	3-Module Sets of UniRac (non-adjustable)	500.00
1	XW Auto Generator Start Module	180.00
1	Solar Electric Independent Home Book	10.95
1	Hydrometer	12.95
1	Digital Multimeter	25.00
1	Tri-Met System Monitor	169.00

SOLAR ELECTRIC KITS

KIT #7

48 V DC 1920 PEAK WATTS

Average Array Output for Northeast:

Summer	9600 watt-hr/day
Winter	4800 watt-hr/day

Average Useable Energy from Batteries for NE:

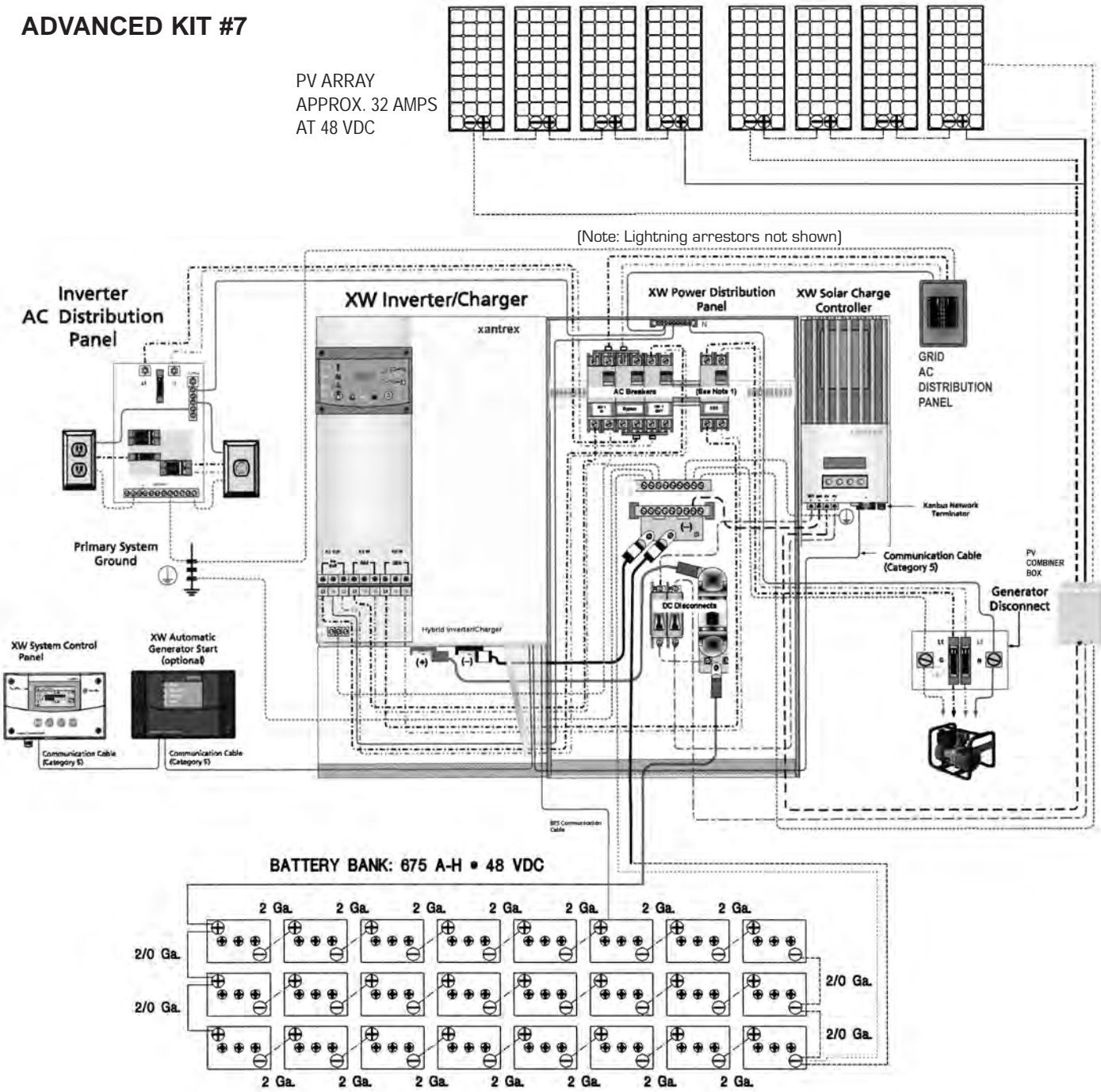
Summer	8160 watt-hr/day
Winter	4080 watt-hr/day

This deluxe kit features a large array and the Schneider (Xantrex) XW6048 6000 watt True Sine Wave Inverter which provides 120/240 volt power. This configuration can power an entire conventional home. Of course you're power consumption is still limited by the number of solar modules in your system. Because this is a 48 volt system, you can double the size of your array without adding another charge controller. Still not enough power for a "conventional" home in the northeast, but a real "Cadillac" of an alternative energy system!

ADVANCED KIT #7

PV ARRAY
APPROX. 32 AMPS
AT 48 VDC

(Note: Lightning arrestors not shown)



BASIC KIT #7

8	Trina 240W Solar Modules	2232.00
2	MC Connector Cables	78.00
2	Watertight Connectors	6.00
1	MidNite 6-Pos Array Combiner Box	119.00
2	Outback 15A Array Circuit Breakers	30.00
	<u>Prewired AC/DC Disconnect Panel:</u>	
1	MidNite Solar DC/AC Disconnect	799.00
1	MidNite Classic 150 Charge Controller	850.00
2	80A Breakers for Charge Cont & Array	50.00
2	MidNite MESP300 Lightning Arrestor	238.00
24	Trojan T-105 batteries	3816.00
21	2 Ga. Battery cables R/B	189.00
4	2/0 Ga. Battery cables 2R & 2B	48.00
48	Battery anticorrosion rings	19.20
1	Magnum MS4448AE Inverter	2,699.00
1	Magnum ME-ARC50 remote Control	299.00
1	Set 10' 2/0 Ga. inverter cables	139.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	11,619.20

780-071 Special Kit Price \$10,509.00

INTERMEDIATE KIT #7

8	Trina 240W Solar Modules	2232.00
2	MC Connector Cables	78.00
2	Watertight Connectors	6.00
1	MidNite 6-Pos Array Combiner Box	119.00
2	Outback 15A Array Circuit Breakers	30.00
1	Xantrex XW 60 MPPT Charge Controller	685.00
2	Xantrex XW 60A Circuit Breakers	50.00
2	MidNite MESP300 Lightning Arrestor	238.00
1	XW DC Disconnect - Prewired	1800.00
24	Trojan T-105 batteries	3816.00
21	2 Ga. Battery cables R/B	189.00
4	2/0 Ga. Battery cables 2R & 2B	48.00
48	Battery anticorrosion rings	19.20
1	Xantrex XW4548 120/240V Inverter	3950.00
1	Set 10' 4/0 Ga. inverter cables	219.00
1	XW Control Panel	300.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	13,787.20

780-072 Special Kit Price \$12,279.00

Kit #7 features the Magnum MS4448PAE, the Xantrex XW4548 or the Xantrex XW6048 120/240V inverter. We highly recommend a Sine Wave inverter for powering your home. The new Xantrex XW Series inverters not only feature 120/240 VAC output using only one inverter, but they also incorporate grid-tie capabilities. See the inverter section for more details on this fantastic new line of inverters.

ADVANCED KIT #7

8	Trina 240W Solar Modules	2232.00
2	MC Connector Cables	78.00
2	Watertight Connectors	6.00
1	MidNite 6-Pos Array Combiner Box	119.00
2	Outback 15A Array Circuit Breakers	30.00
1	Xantrex XW 60 MPPT Charge Controller	685.00
2	Xantrex XW 60A Circuit Breakers	50.00
2	MidNite MESP300 Lightning Arrestor	238.00
1	XW DC Disconnect - Prewired	1800.00
24	Trojan T-105 batteries	3816.00
21	2 Ga. Battery cables R/B	189.00
4	2/0 Ga. Battery cables 2R & 2B	48.00
48	Battery anticorrosion rings	19.20
1	Xantrex XW6048 120/240V Inverter	4650.00
1	Set 10' 4/0 Ga. inverter cables	219.00
1	XW Control Panel	300.00
1	Battery Book for Your PV Home	8.00
	Total Catalog Price	14,487.20

780-073 Special Kit Price \$12,839.00



OPTIONS

8	Trojan T-105 batteries	1,192.00
4	2 Module adjustable frames	800.00
1	Top-of-Pole Rack for 8 Solar Modules	1,316.80
2	4-Module Sets of UniRac (non-adjustable)	575.00
1	XW Auto Generator Start Module	180.00
1	Solar Electric Independent Home Book	10.95
1	Hydrometer	12.95
1	Digital Multimeter	25.00
1	Tri-Met System Monitor	169.00