

STEP 1

Work out the power needed for 12V appliances

12V POWER DEMANDS					
		(a)	(b)	(c)	(a) x (b) x (c)
12V Appliances	Brand / Model	Number of appliances	Amps per appliance Amps = Watts ÷ 12	Average hours of use per day	Amp Hours (AH) per day @12VDC
REFRIGERATION					
LIGHTING					
TELEVISION					
DVD / CD / RADIO					
AIR COMPRESSOR					
SUB TOTAL =					(d)

Need to run 240V appliances? If "NO" go to Step 3.

STEP 2

Work out the power needed for 240V appliances

240V POWER DEMANDS (FOR USE WITH POWER INVERTER)					
		(e)	(f)	(g)	(e) x (f) x (g) x 20
240V Appliances	Brand / Model	Number of appliances	Amps per appliance Amps = Watts ÷ 240	Average hours of use per day	Amp Hours (AH) per day @12VDC
REFRIGERATION					
LIGHTING					
TELEVISION					
DVD / CD / RADIO					
AIR COMPRESSOR					
SUB TOTAL =					(h)

An inverter will be needed to run the 240V appliances

¹ Check Amps power rating on inverter model

POWER INVERTER	
	= (h) x 0.15
Brand / Model ¹	Amp Hours (AH) per day @ 12VDC
	(i)

STEP 3

Don't forget to add 30% extra power for safety!

Should not exceed 368AH for 12V battery use (Based on 4 x 115AH deep cycle batteries to 80% D.O.D.)

TOTAL POWER DEMANDS	
= (d) + (h) + (i)	(A)
DAILY POWER DEMAND (AH) =	
= (A) x 1.3	(B)
ASSUMING %30 SAFETY MARGIN	
TOTAL DAILY POWER DEMAND (AH) =	

STEP 4

Choose quality batteries that will provide enough power

BATTERIES REQUIRED						
= (B) ÷ 0.8	(C)	(D)		(E)	(F)	= (E) x (F)
Daily Battery Capacity (AH) to 80% Depth of Discharge ¹	Number of Days Until Recharge (Daily = 1)	Total Power Required Until Recharge (AH) ² = (I) x (C)	Battery Description	Battery AH Rating	Number of Batteries Required	Total Battery Capacity Amp Hours (AH) ³
(I)						

¹ Deep cycle batteries should not be discharged below 20% state of charge ² Total should not exceed 460AH ³ Total should be greater than (D)

STEP 5

Choose a charger that will easily recharge your batteries

RECOMMENDED CHARGING METHOD SELECTION GUIDE (Based on recharging a 12 Volt battery over 12-15 hours)								
Total Battery Capacity Amp Hours (AH)	Solar Panel		Charger (240 Volt)				Generator (12 Volt)	
	60-80 Watt	80-100 Watt	Up to 5 Amps	5-10 Amps	15-20 Amps	40 Amps	40-60 Amps	80-100 Amps
45 to 55 AH	√	√	√	√			√	
65 to 70 AH		√		√	√	√	√	√
75 to 85 AH		√		√	√	√	√	√
95 to 115 AH					√	√		√
115 to 200 AH						√		√
200 to 400 AH								√
Greater than 400 AH	Seek assistance from a qualified auto electrical service provider							

NOTE: Based on recharging from approximately 30% state-of-charge. Where multiple charging options are shown, using a higher Amp charger may result in a slightly faster charging time.

BATTERY CHARGING OPTIONS ¹		
Type	Brand	Description
CHARGER ²		
GENERATOR ²		
SOLAR PANELS ³		

¹ Only one type of charger to be in operation at any one time. ² A charge of up to 15 hours is recommended when delivering 10-20 Amps to a standard deep cycle battery. Delivering more than 20 Amps will generally recharge the battery faster. ³ For more information on calculating solar requirements, please refer to the CenturyYuasa Recreational Power brochure.

For more information please contact (PLEASE HAVE THIS PAGE AVAILABLE FOR DISCUSSION):