

# Basic Setup Commissioning



### You MUST press "OK" after any setting changes





Display	Time	Advanced	Factory Reset	Parallel
Parallel	Mast     Slave	ter Modibus S e	N 00	<ul> <li>Phase A</li> <li>Phase B</li> </ul>
Meter > 0	irid	Meter > Lo	ad	O Phase C
		No Mater		

 Deselect "Beep" Select "Auto Dim"

Display	Time	Adv	anc	ed F	actory	Re	set	Paral	lel	
			Year	r	N	Ion	th		Day	,
V AM/PM			202	1		10			26	
		ŀ	łou	r	M	linu	te	Se	co	nd
Time Sy	nc P	м	03			04			15	
_		Se	aso	n1	Se	asor	12	Sea	ISO	n 3
Season:	Start M-C	1	-	1	4	•	1	8	-	1
causes o	Evel M.C	4		1	8	1.	1	12		1

 Enable Time Sync Set TOU seasons (If needed)





If stacking in parallel:

- Select "Parallel"
- Main Inverter = "Master"

avoid overloading gens

avoid high TOU costs

- Master = "Modbus SN 01"
- Phase A if in 120/240V
- Paralleled inverters = "Slave"
- Slave = "Modbus SN 02...03+"



## Battery Setup Commissioning



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Batt Setup			
Batt Charge	Discharge	Smart Load	Wind Turbine
Batt Capacity	200Ah	🗸 Use Bat	t V Charged
Max A Charge	100A	Use Bat	t % Charged
Max A Discharg	e 185A	No Batt	ery
TEMPCO	-0mV/C/Cell	BMS Lit	hium Batt 00
		Activate	e Battery
C	ANCEL	ОК	

Batt Setu	р			
Batt C	harge	Discharge	Smart Load	Wind Turbine
Shutdown	46.0V	20%	Batt Resistance	e 25mOhms
Low Batt	47.5V	50%	Efficiancy	<sup>ge</sup> 99.0%
Batt Empty	v 4	7.0V		3MS_Err_Stop
	CA	NCEL	OK	

Batt S	etup					
Batt	Charge	Dischar	ge	Smart Loa	d Wind	Turbine
	DC1 for \	Vind Turb	ine	D	C2 for Win	d Turbine
V1 9	ov	0.0A	V7	210V	9.0A	]
V2 1	10V	1.5A	V8	230V	10.5A	]
V3 1	30V	3.0A	V9	250V	12.0A	]
V4 1	50V	4.5A	V10	270V	13.5A	CANCEL
V5 1	70V	6.0A	V11	290V	15.0A	]]
V6 19	90V	7.5A	V12	310V	16.5A	

 Set values according to battery specs

- No Batt systems = "No Battery"
- Use Batt % recommended
- Activate Battery

Batt Se	etup			
Batt	Charge	Discharge	Smart Load Wind Turbine	
StartV	49.0V	49.0V	Float V 54.8V	
Start%	6 30%	30%	Absorbtion V 54.9V	
A	40A	100A	Equalization V 55.0V	
			30 Days	
Ge	n Charge	Grid Charg	ge 0.0 Hours	
	С	ANCEL	ОК	

#### • Set proper batt values

• Gen/Grid Charge: Start% - value for batts to receive charge A-Amps used to charge

- Batt is full→Skips restart→Warns "Low Batt" →Shuts down
- Restart value when
   inverter restarts
- Batt empty from specs
- Batt resistance & charge efficiency from specs



- "Use gen input as load output" for Smart Load capabilities
- "On Grid always on" to keep the gen terminal on if the grid is active
- "For AC Coupled Input" if you use an external AC source such as micros
- "Zero Export" value always pulled from the grid to avoid selling back
- "Smart Load OFF/ON Batt" changes meaning if "For AC Coupled Input"

Tab for wind partners DO NOT use



## Grid Setup Commissioning



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Grid Param						
Limiter Sell Control Gri	id Input	FI	reqVolt	PowFa	c	
	Time		Power(W)	Batt	Charge	Sell
Grid Sell 08000	01:00A	М	2000	50%		
Limited Power to Home	05:00A	м	2000	50%		
Limited Power to Load	09:00A	м	2000	100%		
	01:00P	М	2000	100%		
Time of Use Setup	05:00P	м	2000	50%		
	09:00P	м	2000	50%		
			······			

imiter Sell Control	Grid Input	FreqVolt	PowF	ac	Relay
Grid Frequency	50Hz	Grid Vol	Protect I Hiah	Param	) V
	60Hz	Grid Vol	Low	185	5V
220V Single Pha	se	Grid Hz I	High	65.	0Hz
/ 120/240V Split P	hase	Grid Hz I	low	55.	0Hz

miter Sell Co	ontrol Grid Inp	out FreqVolt	PowFac
Q(V)		FW	vw
V1:216.0V	Q1: 0.44	Fstart-60.50Hz	Vstart254.4V
V2:225.6V	Q2: 0.00	Fstop:62.00Hz	Vitop:264.0V
V3:254.4V	Q3: 0.00	RT:5.0s	RT:10s
V4:264.0V	Q4: 0.44	Normal Ramp	rate 10.0%/s
Response Time	10s	Soft Start Ram	p rate 10.0%/s
CAN	CEL	ſ	ок

- Choose work mode
   Grid Sell: sells maximum
   production to the grid
- Lim to Home: matches demand of home (Grid + Load)
- Lim to Load: Matches demand of loads only
- Set up ToU if needed: Use batts with Grid ON

miter Sell Control Gri	id Input FreqVolt	PowFac
	Grid Reconnect T	ime 60s
General Standard	Power Fac	tor 1.000
UL1741 & IEEE1547	GEN	connect to Grid Input
UL17415A	Zero Exp	ort Power 20W
	Batt I	irst Load First
	CANCEL	ОК

- Select Grid Parameters
- Decrease grid reconnect time if you have a generator
- Zero Export: power drawn from the grid to prevent selling

- Select your Grid Frequency
- Select your Grid Type
- Set disconnect parameters
- Widen parameters for generators on grid

L/HVRT		L/HFRT	
HV2: 252.0V	0.165	HF2:62.00Hz	0.165
HV1: 231.0V	125	HF1:60.50Hz	2995
V1: 184.8V	205	LF1:S8.50Hz	2995
LV2: 147.0V	105	LF2:57.00Hz	0.165
V3: 105.0V	0.165		

- Low/High Voltage Ridethrough
- Low/High
   Frequency Ridethrough
   Hold on to the grid for longer

- If HECO requires it
- If Sol-Ark Support tells you to use it