

LiFe and Eco Series Battery Settings for Victron Products

Settings listed are only applicable to battery charge and discharge. All other settings are the responsibility of the integrator.

It is the responsibility of the integrator to have a full understanding of the Victron product prior to programming, and it is preferred that they have attended the manufacturer's training or integration course should they be available.

It is highly recommended to use State of Charge control.

It is highly recommend that a system Current Sensor (current shunt) is installed for more accurate SoC monitoring. Follow Victron requirements for installing and setting up.

Note: If a Victron MPPT Solar Charge controller is used with a MultiPlus or Quattro, there can be some conflicting of charging due to cable impedances. You may need to set the MPPT 0.3V higher than Quattro or MultiPlus charge target settings or ensure your cable impedances are the same.

Note: If enabling Low SoC Shutdown in Victron Connect on the MultiPlus, ensure any MPPT's are connected via VE Direct cables to a VenusGX device otherwise SoC may be inaccurate and system may or may not shutdown as required.

Always consult and read the manufactures documentation before designing, installing and programming their devices.

Installers should ensure an adequate system design is carried out at all times. PPE accepts no responsibility for underperforming system designs.

As part of our continued improvement process, settings are subject to change without notice and are correct at time of publishing.

General Overview of Settings for Victron

	LiFe2433P	LiFe2433PS	LiFe4833P	LiFe4833PS	Eco4840P	Eco4840PS
Battery Charge Curve	Fixed					
Capacity	Total Ah Capacity of PPE Battery Bank Installed					
Absorb Voltage	28.8V	28.4V	57.6V	56.8V	57.6V	56.8V
Absorb Time	4 hours					
Float Voltage Standby (Short Term Float) (Example Cyclic Application)	28.8V	28.4V	57.6V	56.8V	57.6V	56.8V
Float Voltage Standby (Long Term Float) (Example Standby Application)	27.2V to 28V	27.2V to 28V	54.4V to 56V	54.4V to 56V	54.4V to 56V	54.4V to 56V
Discharge Voltage "LBCO"	24V 0% SoC 24.75V 10% SoC 25.10 20% SoC	24V 0% SoC 24.75V 10% SoC 25.10 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC
Re-Charge Voltage	26V	26V	52V	52V	52V	52V
Max Charge Current	0.5C (C2) / 50% of Overall Battery Capacity					
Peukert Exponent	1.02					
Charge Efficiency	96%					
SoC When Bulk Finished	95%					
SoC Low Shut Down (ESS Mode only)	20%					
SoC Low Restart	30%					

Victron BMV Settings

Quick Start	LiFe2433P	LiFe2433PS	LiFe4833P	LiFe4833PS	Eco4840P	Eco4840PS
Battery Capacity	Total Ah Capacity of PPE Battery Bank Installed					
Charged Voltage	28.6V	28.2V	57.4V	56.6V	57.4V	56.6V
Tail Current	4%					
Charge Detection Time	1 min					
Peukert Exponent	1.02					
Charge Efficiency	96%					
Current Threshold	0.1A					
Time to go Averaging Period	3 min					
Low SOC Alarm	15%					
Low Voltage Alarm	24.4V 0% SoC 25.25V 10% SoC 25.6 20% SoC	24.4V 0% SoC 25.25V 10% SoC 25.6 20% SoC	48.8V 0% SoC 40.40V 10% SoC 51V 20% SoC	48.8V 0% SoC 40.40V 10% SoC 51V 20% SoC	48.8V 0% SoC 40.40V 10% SoC 51V 20% SoC	48.8V 0% SoC 40.40V 10% SoC 51V 20% SoC
Clear Low Voltage Alarm	24.6V 0% SoC 25.50V 10% SoC 25.8 20% SoC	24.6V 0% SoC 25.50V 10% SoC 25.8 20% SoC	49.2V 0% SoC 49.60V 10% SoC 51.20V 20% SoC	49.2V 0% SoC 49.60V 10% SoC 51.20V 20% SoC	49.2V 0% SoC 49.60V 10% SoC 51.20V 20% SoC	49.2V 0% SoC 49.60V 10% SoC 51.20V 20% SoC

Victron Phoenix VE.Direct Inverters

Victron Connect	LiFe2433P	LiFe2433PS	LiFe4833P	LiFe4833PS	Eco4840P	Eco4840PS
Dynamic Cut-Off	OFF					
Low Battery Shut Down	24V 0% SoC 24.75V 10% SoC 25.10 20% SoC	24V 0% SoC 24.75V 10% SoC 25.10 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC
Low Battery Restart & Alarm	24.4V 0% SoC 25.25V 10% SoC 25.6 20% SoC	24.4V 0% SoC 25.25V 10% SoC 25.6 20% SoC	48.8V 0% SoC 49.40V 10% SoC 51V 20% SoC	48.8V 0% SoC 49.40V 10% SoC 51V 20% SoC	48.8V 0% SoC 49.40V 10% SoC 51V 20% SoC	48.8V 0% SoC 49.40V 10% SoC 51V 20% SoC
Charge Detect	26V	26V	52V	52V	52V	52V
Enable Dynamic Cut-off	ON					
Dynamic Low Voltage Cut-off						
Battery Type	Custom					
Battery Capacity	Total Ah Capacity of PPE Battery Bank Installed					
Voltage Discharge 0A	24V	24V	48V	48V	48V	48V
Voltage Discharge 8A	24V	24V	48V	48V	48V	48V

Victron Connect	LiFe2433P	LiFe2433PS	LiFe4833P	LiFe4833PS	Eco4840P	Eco4840PS
Voltage Discharge 23A	24V	24V	48V	48V	48V	48V

MultiPlus and Quatro Inverter Chargers

VE Configure	LiFe2433P	LiFe2433PS	LiFe4833P	LiFe4833PS	Eco4840P	Eco4840PS
General Tab						
Enable Battery Monitor	Yes					
SoC When Bulk Finished	95%					
Total Battery Capacity	Total Ah Capacity of PPE Battery Bank Installed					
Charge Efficiency	96%					
Inverter Tab						
DC Input Low Shut Down	24V 0% SoC 24.75V 10% SoC 25.10 20% SoC	24V 0% SoC 24.75V 10% SoC 25.10 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC	48V 0% SoC 49.50V 10% SoC 50.20V 20% SoC
DC Input Low Restart	24.4V 0% SoC 25.25V 10% SoC 25.6 20% SoC	24.4V 0% SoC 25.25V 10% SoC 25.6 20% SoC	48.8V 0% SoC 49.40V 10% SoC 51V 20% SoC	48.8V 0% SoC 49.40V 10% SoC 51V 20% SoC	48.8V 0% SoC 49.40V 10% SoC 51V 20% SoC	48.8V 0% SoC 49.40V 10% SoC 51V 20% SoC
DC Input Low Pre-Alarm	25V	25V	49V	49V	49V	49V
Shut Down on SoC (ESS Mode Only)	Yes					
SoC Low Shut Down (ESS mode Only)	20% Recommendation only					
SoC Low Restart (ESS mode Only)	30% Recommendation only					
Charger Tab						
Battery Type	Lithium					
Lithium > Yes	Lithium Ion Phosphate					
Battery Charge Curve	Fixed					
Absorb Voltage	28.8V	28.4V	57.6V	56.8V	57.6V	56.8V
Float Voltage Cyclic (Short Term Float) (Example Solar Application)	28.8V	28.4V	57.6V	56.8V	57.6V	56.8V
Float Voltage Standby (Long Term Float) (Example UPS Application)	27.2V to 28V	27.2V to 28V	54.4V to 56V	54.4V to 56V	54.4V to 56V	54.4V to 56V
Charge Current	50% or C2 of Total Battery Capacity					
Repeated Absorb Time	4 hours					

VE Configure	LiFe2433P	LiFe2433PS	LiFe4833P	LiFe4833PS	Eco4840P	Eco4840PS
Repeated Absorb Interval	7 days					
Absorb Time	4 hours					

MPPT and Charge Controllers

Victron Connect	LiFe2433P	LiFe2433PS	LiFe4833P	LiFe4833PS	Eco4840P	Eco4840PS
Battery Voltage	24V	24V	48V	48V	48V	48V
Max Charge Current (C/2)	50% or C2 of total battery Capacity					
Charge Enabled	ON					
Default Charge Setting	OFF					
Absorb Voltage	28.8V	28.4V	57.6V	56.8V	57.6V	56.8V
Maximum Absorb Time	6 hours					
Float Voltage Cyclic (Long Term Float) (Example Solar Application)	28.8V	28.4V	57.6V	56.8V	57.6V	56.8V
Float Voltage Standby (Long Term Float) (Example UPS Application)	28V	28V	56V	56V	56V	56V
Equalisation Voltage	28.8V	28.4V	57.6V	56.8V	57.6V	56.8V
Auto Equalisation	Disabled					
Temperature Compensation	OFF					