



Product Presentation

SPIRIT PROGRAMMING



SPIRIT



**SPIRIT Plus
Series**

**SPIRIT
Series**



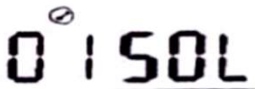

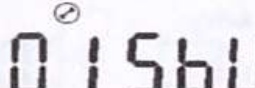
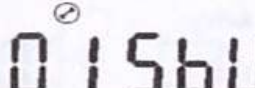
Mercury™

Program settings in SPIRIT PLUS Inverters

LCD Setting

After pressing and holding “Configuration” button for 1 second, the unit will enter setting mode and switch between different setting items. Press “Up/down” button to switch between different setting parameters. And then, press “ENTER” button to confirm the selection or ESC button to exit.

Setting Programs:

Program	Description	Selectable option	
01	Output source priority: To configure load power source priority	Solar first 	Solar energy provides power to the loads as first priority. If solar energy is not sufficient to power all connected loads, battery energy will supply power the loads at the same time. Utility provides power to the loads only when any one condition happens: -Solar energy is not available -Battery voltage drops to low-level warning voltage or the setting point in program 05.
		Utility first (default) 	Utility will provide power to the loads as first priority. Solar and battery energy will provide power to the loads only when utility power is not available.
		SBU priority 	Solar energy provides power to the loads as first priority.
			If solar energy is not sufficient to power all connected loads, battery energy will supply power to the loads at the same time. Utility provides power to the loads only when battery voltage drops to either low-level warning voltage or the setting point In program 05.



Setting Programs:

Program	Description	Selectable option	
02	AC input voltage range	Appliances (default) ⊗ 02 <u>APl</u>	If selected, acceptable AC input voltage range will be within 90-280VAC
		UPS ⊗ 02 <u>UPS</u>	If selected, acceptable AC input voltage range will be within 170-280VAC
03	Battery type	AGM (default) ⊗ 03 <u>AGM</u>	Flooded ⊗ 03 <u>FLD</u>
		User-Defined ⊗ 03 <u>USE</u>	If "User-Defined" is selected, battery charge voltage and low DC cut-off voltage can be set up in program 9,10 and 11.



Setting Programs:

Program	Description	Selectable option	
04	Maximum utility charging current	10A ⊖ 04 10A	25A(default) ⊖ 04 25A
05	Setting voltage point back to utility source when selecting "SBU priority" or "Solar first" in program 01.	Available options in 3KVA model:	
		22.1V ⊖ 05 22.1 _v BATT.	22.5V ⊖ 05 22.5 _v BATT.
		23.0V ⊖ 05 23.0 _v BATT.	23.4V ⊖ 05 23.4 _v BATT.
		23.8V ⊖ 05 23.8 _v BATT.	24.3V ⊖ 05 24.3 _v BATT.
		24.7V ⊖ 05 24.7 _v BATT.	25.1V ⊖ 05 25.1 _v BATT.
06	Setting voltage point back to battery mode	Available options In 3KVA model:	
		Battery fully charged	24.6V



Setting Programs:


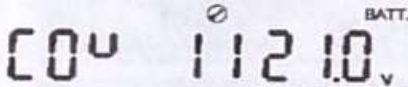
Program	Description	Selectable option	
06	Setting voltage point back to battery mode when selecting "SBU priority" or "Solar first" in program 01.	Available options In 3KVA model:	
		Battery fully charged	24.6V
		06 FUL BATT.	06 24.6 _v BATT.
		25.0V	25.4V
		06 25.0 _v BATT.	06 25.4 _v BATT.
		25.8V	26.3V
		06 25.8 _v BATT.	06 26.3 _v BATT.
		26.7V	27.2V
06 26.7 _v BATT.	06 27.2 _v BATT.		
27.6V	28.0V		
06 27.6 _v BATT.	06 28.0 _v BATT.		
28.5V	28.9V		
06 28.5 _v BATT.	06 28.9 _v BATT.		





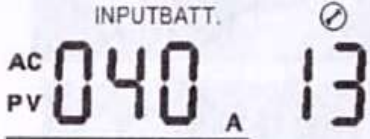


Setting Programs:

Program	Description	Selectable option	
07	Charger source priority: To configure charger source priority	If this hybrid inverter is working in Line, Standby or Fault mode, charger source can be programmed as below:	
		Solar first 07 C50	Solar energy will charge battery as first priority. Utility will charge battery only when solar energy is not available.
		Utility first 07 CUL	Utility will charge battery as first priority. Solar energy will charge battery only when utility power is not available.
		Solar and Utility (default) 07 SNU	Solar energy and utility will charge battery at the same time.
		Only Solar 07 O50	Solar energy will be the only charger source no matter utility is available or not.
		If this hybrid inverter is working in Battery mode only solar energy can charge battery. Solar energy will charge battery if it's available and sufficient.	
08	Alarm control	Alarm on (default) 08 60N	Alarm off 08 60F
09	Bulk charging voltage (C.V voltage)	3KVA setting: 28.2V	
		CU 09 28.2 ^{BATT.} _v	
		If self-defined is selected in program 3, this program can be set up. Setting range is from 25.0V to 32.0V for 3KVA model. Increment of each dick is about 0.1V.	

Setting Programs:

Program	Description	Selectable option
10	Floating charging voltage	3KVA setting: 27.0V  <p>If self-defined is selected in program 3, this program can be set up. Setting range is from 25.0V to 32.0V for 3KVA. Increment of each dick is about 0.1V.</p>
11	Low DC cut-off voltage	3KVA default setting: 20.0V  <p>If self-defined is selected in program 3, this program can be set up. Setting range is from 20.0V to 24.0V for 3KVA model. Increment of each dick is about 0.1V. Low DC cut-off voltage will be fixed to setting value no matter what percentage of load is connected.</p>

Setting Programs:

Program	Description	Selectable option	
12	Output frequency	50Hz(default) 	60Hz 
13	Maximum charging current: To configure total charging current for solar and utility chargers.(Max. charging current = utility charging current + solar charging current	40A (default) 	Setting range is from 10A to 120A. Increment of each click is 10A.
14	Output mode when in stand-by mode(Switch off)		
		When set on , the inverter will has AC output in stand-by mode(switch off) if utility is available. When set off , the inverter will has no output in stand-by mode(switch off) even if utility is available.	



The End