Solis Energy Storage Inverter Menu Layout

1. Information

a. General Info

i. Inverter SN: xxxxxxxxxxxx
ii. Device Status: Generating
iii. Battery Status: Normal
iv. Backup Status: Normal
v. Grid Status: Normal
vi. Wakeup Status: Done
vii. DRM NO: 08
viii. Model No: C6
ix. Software Ver: 060007

b. System Info

i. Solar Power:
ii. Solar Voltage1: (Vdc)
iii. Solar Voltage2: (Vdc)
iv. Solar Current1: (A)
v. Solar Current2: (A)
vi. Grid Power: (kW)
vii. Grid Voltage: (Vac)
viii. Grid Frequency: (Hz)
ix. Battery Voltage: (Vdc)
x. Backup Voltage: (Vac)
xi. Charge Power: (kW)

c. Energy Records

i. Total Energy: (kWh)
ii. Today: (kWh)
iii. Yesterday (kWh)
iv. This Month: (kWh)
v. Last Month: (kWh)
vi. This Year: (kWh)
vii. Last year: (kWh)

d. BMS Info

i. Battery Voltage: (V)
ii. Battery Current: (A)
iii. Charge Limit: (A)
iv. Discharge Limit: (A)
v. SOC Value: (%)
vi. SOH Value: (%)
vii. BMS Status: Normal

e. Meter Info

i. External
    1. Meter VoltageL1: (V)
    2. Meter CurrentL1: (A)
    3. Meter VoltageL2: (V)
    4. Meter CurrentL2: (A)

5. Meter Power: (W)
6. Meter Energy: (kWh)
7. Input Energy: (kWh)
8. Output Energy: (kWh)

ii. Internal

1. Meter Voltage: (V)
2. Meter Current: (A)
3. Meter Power: (W)
4. Meter Energy: (kWh)
5. Input Energy: (kWh)
6. Output Energy: (kW)

2. Settings

a. Set Time/Date

i. YY-MM-DD and HH:MM

1. Save and Send
2. Cancel and Exit

b. Set Address

i. Slave Address: 01-99

1. Save and Send
2. Cancel and Exit

c. Set Language

i. English/Chinese

1. Save and Send
2. Cancel and Exit

3. Advanced Information

a. Alarm Message

i. Alarm Messages by date/time

b. Warning Message

i. Warning Messages by date/time

c. Running Status

i. General Status

1. DC Bus Voltage: (V)
2. Power Factor: (+1 to -1)
3. Power Limit (%)
4. Inverter Temperature: (C)
5. Grid Standard

ii. Advanced Status

1. Grid Filer NO:
2. Ground Voltage: (V)
3. Relay-Fault Func: (Run/Stop)
4. ILeak-Fault Func: (Run/Stop)
5. AFCI-Fault Func: (Run/Stop)
6. PV-G-Fault Func: (Run/Stop)
7. OV-F-Load Func: (Run/Stop)
8. GRID-INTF.02 Func: (Run/Stop)

d. Communication Data

i. Series of numbers and letters that is constantly changing

e. Yield Profile

i. Monthly Energy
   1. Shown in bar graph form – can be selected by month

ii. Yearly Energy
   1. Shown in bar graph form – can be selected by year

iii. Total Energy
   1. Shown in bar graph form

4. Advanced Settings (input 0010 for the password)

a. Select Standard

i. Choose from one of the many standards available
ii. For US it will most likely be UL-240V-A
iii. For California it will be R21P3-24A
iv. Upon selecting a standard, the screen will then display parameters

b. Switches

i. ON/OFF/Stop
   1. Stop is similar to standby mode – disables the inverter without turning off AC and DC power

c. Battery Control

i. Battery Select
   1. LG Chem RESU10H
      a. Lg_HV then enter
   2. BYD B-Box Series
      a. B-Box HV then enter
   3. User-Define
      a. Allows a custom setup to be configured
   4. Pylon
      a. Not available in the US
   5. Overdischg SOC: (%) will appear after selecting a battery
      a. This percentage determines when the battery will cease discharging energy
   6. ForceCharge SOC: (%) will appear after selecting Overdischg SOC
      a. This percentage is the point at which the battery will be forced to start accepting a charge
   7. Droop Curve Control (LG Chem RESU10H)
      a. Status Cmd:
      b. Deadband Lower Limit: (V)
      c. Deadband Upper Limit: (V)
      d. Charge Slope
      e. Max Charge Voltage: (V)
      f. Max Discharge Voltage: (V)
      g. Charge Power Limit: (W)
      h. Discharge Power Limit: (W)
      i. Heartbeat Timeout: (Seconds)
      j. LG Address
      k. Inverter Type
      l. BaudRate
      m. Black Out Start

ii. Battery Wakeup
    1. Select and then “Done!” will be displayed
    2. This tells the battery to turn on
    3. Use this function when the battery stopped working due to an alarm message

d. Backup Control

i. Backup ON/OFF
    1. Backup ON
    2. Backup OFF
ii. Backup Settings
    1. Backup Voltage: (V)
        a. Should be set to 240V if in the US
    2. Backup Frequency (Hz)
        a. Should be set to 60Hz
    3. Voltage Droop (disable/enable)

e. Storage Energy Set

i. Meter Select
    1. 1Ph Meter (single phase meter)
        a. Most of the time, this will be the correct selection
    2. 3Ph Meter (three phase meter)
ii. Storage Mode Select
    1. Time Charging
        a. Optimal Income: (Run/Stop)
        b. Charge Limit: (A)
        c. Discharge Limit: (A)
        d. Charge Time (HH-MM – HH-MM)
            i. Total Time (HH-MM)
            ii. The time window for when the battery will accept a charge
        e. Discharge Time (HH-MM – HH-MM)
            i. Total Time (HH-MM)
            ii. The time window for when the battery will discharge energy
    2. Off Grid Mode (energizes backup terminals)
        a. ON
        b. OFF
        c. Note: If a backup loads panel is being used then this mode must be turned on
        d. This mode should be used in the even of a power outage
    3. Note: Self Consumption is the default when neither Time Charging nor Off Grid modes are selected

f. STD. Mode Settings

i. Working Mode Set
    1. Null, Volt-watt, Volt-var, Fixed-PF, Reac-power, P-factor, VgWatt-UL
ii. Ramp Rate Limit
    1. Power Rate: (%)
    2. RateP_Sts-US: (Enable/Disable)
    3. Ramp_up-US: (%)
    4. Reconnect-US: (%)
iii. Freq. Derate Set
    1. Null/01/02/03/04

2. Null is used for no mode

iv. 10miins Voltage Set
    1. 10mins Voltage: (V)
    2. Used in Europe and not the US
v. Voltage PCC Set
    1. VRefPCC: (V)
    2. VRefOfs: (+V)
    3. Used in Europe and not the US
vi. Initial Settings (default settings reversion)
    1. Work Mode Default
    2. Ramp Rate Default
    3. Fre Derate Default
    4. 10mVoltage Default
    5. DRM ON/OFF
        a. ON/OFF

g. Software Update

i. HMI Update
    1. HMI stands for Human-Machine-Interface and refers to the inverter screen
    2. Current Version
ii. DSP Update
    1. DSP means Digital-Signal-Processor
    2. Current Version

h. Export Power Set

i. Backflow Power
    1. Backflow Power: (W)
    2. This is the amount of power that the inverter will allow to be exported to the grid
    3. Change this value with UP and DOWN buttons
ii. ON/OFF
iii. FailSafe ON/OFF

i. Calibrate

i. Total Energy
    1. Total Energy: (kWh) manually set
ii. Power Parameter
    1. Power Para: (1.000)

j. Reset Password

i. Please Input Current Password
ii. Create New Password

k. Restart HMI

i. HMI stands for Human-Machine-Interface and refers to the inverter screen
ii. Pressing Enter resets the screen

5. Advanced Settings Special Menu (input 2017 for the password)

a. Power Control

i. Output Power Control
    1. Output Power Control: (%)
ii. Reactive Power Control
    1. (+1 to -1)

iii. Output Power Control with Restore
    1. Output Power Control: (%)
iv. Reactive Power Control with Restore
    1. (+1 to -1)

b. Clear Energy

i. Are you sure (ESC or ENT)

c. Restore Settings

i. Are you sure (ESC or ENT)

d. Special Settings

i. Special_1 Set
    1. Grid Filter NO:
    2. Relay-Fault Func: (Run/Stop)
    3. ILeak-Fault Func: (Run/Stop)
    4. PV-G-Fault Func: (Run/Stop)
    5. GRID-INTF.02 Func: (Run/Stop)
    6. MPPT Parallel Mode: (Run/Stop)
    7. Constant Voltage: (Run/Stop)
    8. Voltage Select: (V)
    9. IgADCheckPRO: (Run/Stop)
    10. ARC Level
    11. ARC Fault Pro (protection): (OFF/ON)
    12. IgFollow Sts: (Run/Stop
ii. LVRT Control
    1. LVRT_CQC1: (Enable/Disable)
    2. LVRT_CQC2: Capactitive
    3. LVRT_BRA: (Enable/Disable)
        a. For Brazil only
    4. VRT_US: (Enable/Disable)
    5. FRT_US: (Enable/Disable)
    6. OV1FRT_US: (Hz)
    7. OV2FRT_US: (Hz)
    8. UN1FRT_US: (Hz)
    9. UN2FRT_US: (Hz)
iii. IgZero Set
    1. Igrid-A-Zero: (+00)
    2. Igrid-B-Zero: (+00)
    3. Igrid-C-Zero: (+00)
    4. VFB-AdJ-Scale: 80
iv. VgCompensation
    1. Vgrid-A-Zero: (+/- 00)
    2. Vgrid-B-Zero: (+/- 00)
    3. Vgrid-C-Zero: (+/- 00)

e. COM BaudRate

i. Baud Rate: (0000) manual set