AIMS Operating Corp., Inc., dba AIMS Power

Part #: **SCC60MPPT**

Manual

Introduction

This manual contains instructions on installation, operation, usage and maintenance of the Solar Charge Controller. Please read carefully before installing. We recommend consulting professionals if you have any doubt about the installation process or setup with Solar Panels, Power Inverter and Batteries. Keep this manual in case you need it for future reference. Some brief descriptions of Symbols used in this manual are below:

⚠Warning

Damage to equipment or personnel may occur if you do not follow these instructions

⚠Danger

A hazardous situation may occur, including fire and/or shock, if you do not pay attention

iAttention

► Indicates additional data and/or information

Contents

1. Notes on this Manual

This manual describes how to install and service your Aims Power MPPT solar charge controller.

1.1 Validity

This manual applies to MPPT solar charge controller model produced by AIMS Power. Part # SCC60MPPT

1.2 Target Group

This manual is intended for the installer and the operator.

1.3 All manuals for the device and installed components should be stored in the immediate vicinity of the charge controller and should be accessible at all times.

1.4 Symbols Used (more)

The following types of safety messages and general information appear in this document:

Warning!

WARNING indicates a hazardous situation which, if not avoided, could result in machine stoppage or serious injury.

Warning!

WARNING indicates a hazardous situation which, if not avoided, could result in machine stoppage or serious injury.

Note!

In order to operate this device well, please read the operation instructions carefully.

2. Safety Instructions

2.1 General Safety Instructions

Warning!

The input voltage of this device may be extremely high and life threatening.

- All work on the charge controller must only be carried out by an electrically skilled person.
- The Controller is not to be used by children or persons with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- Children should be supervised to ensure that they do not play with the appliance.

Caution!

Surface may be extremely hot and may cause burns.

- Do not touch the enclosure of the charge controller during operation. If possible keep in a cool environment.

Caution!

Unit may emit some radiation which may be harmful.

- Do not stay within 1 foot of controller for any extended period of time.

2.2 Explanation of Symbols

Below is the explanation for all the symbols shown on the device and label.

Symbol	Explanation
	Risk of electric shock Energy stored in capacitors will remain for 5 minutes; don't touch within this period after disconnecting Both input and output lines have power, disconnect both and don't operate for at least 5 minutes after disconnection
	No self-serviceable parts are inside the enclosure, don't attempt to remove the cover. Only qualified persons are permitted to operate and maintain the equipment. Only insulated tools are permitted for use to reduce risks of hazard to individuals.

	Beware of hot surface. The solar charge controller can become hot during operation. Avoid contact during operation. Never put any goods onto the controller.

● Symbols Label

Symbol	Explanation
	CE FCC CB ROHS mark； The controller complies with the requirements of the applicable CE FCC CB ROHS guidelines.

●Important Safety Instructions

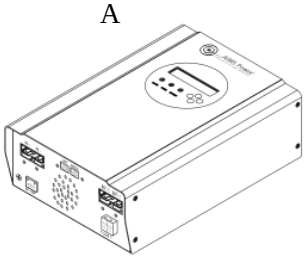
When using the product, please do remember the below information to avoid fire, lightning or other personal injury:

	Warning! Ensure input DC voltage is no more than Max. DC voltage (Voc) .Over voltage may cause permanent damage to solar charge controller or other losses, which will not be covered by the warranty! This chapter contains important safety and operating instructions. Read and keep this operation guide for future reference.
	Warning! Authorized service personnel must disconnect both DC and battery bank power from the solar charge controller before attempting any maintenance or cleaning or working on any circuits connected to the solar charge controller.

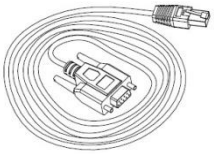
3. Unpacking

3.1 Parts List：

A



C

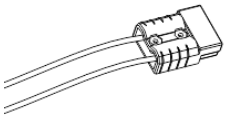


E

G

B

D



F

Object	Quantity	Description
A	1 unit	Charge controller
B	2 pcs & 4 pcs	Hang bracket & screws
C	1 pce	RS232 to RJ45 comm cable
D	2 pcs	PV input (blue), DC output (red)
E	1 pce	Manual
F	1 pce	CD
G	1 pce	Bat Temp Sensor
H	2 pcs	Spare Fuses

If there are any parts missing, please contact AIMS Power at Techsupport@AIMSCorp.net or (775)359-6703 ext 227.

3.2 Check for Transport Damage

Check the charge controller for visible external damage, such as dents on the enclosure. Contact AIMS Power at Techsupport@AIMSCorp.net or (775)359-6703 ext 227.

3.3 Identifying the Charge Controller

Our charger controller is MPPT and has a max charge rate of 60Amps. It will work on 12 through 48Vdc battery systems (charge details in sect 5.2.2)

4. Assembly

4.1 Operator：technical personnel

4.2 Selecting Mounting Location

Caution:

Enclosure may become hot to the touch and may cause burns

• Mount the charge controller in such a way that it cannot be touched inadvertently during operation.

Danger:

Possible fire and explosion hazard

The charge controller enclosure may become hot during operation.

• Do not mount the charge controller on flammable construction material.

• Do not mount the charge controller near highly flammable materials.

• Do not mount the charge controller in potentially explosive areas.

• Do not expose the charge controller to direct sunlight to avoid power loss due to overheating.

4.2.1 Dimensions

L * W * H： 10.63*5.91*3.46 in
270mm*150mm*88mm

4.2.2 Net Weight

Weight：6.6Lbs or 3kg

4.2.3 Ambient Conditions

• The mounting location and method must be suitable for the weight and dimensions.

• Mount on a solid surface.

• The mounting location should be accessible at all times.

• The charge controller should be easy to remove from the mounting location at any time.

• The ambient temperature should be between -4 and 140F (-20 and 60 °C) to guarantee optimal operation.

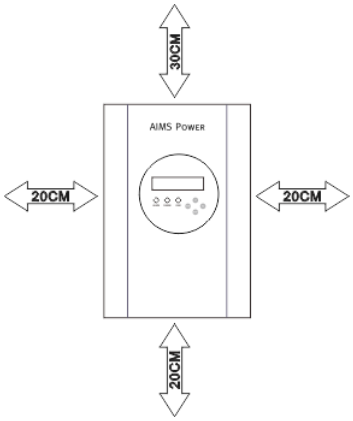
• Do not expose the charge controller to direct sunlight to avoid power losses due to

overheating.

4.2.4 Safety Clearance

Observe the following safety clearance to side walls, other devices or objects to ensure sufficient heat dissipation.

Direction	Safety clearance
Sides	8in or 20cm
Top	12in or 30cm
Bottom	8in or 20cm



5. MPPT controller Connection

5.1 Safety

Danger!

High voltages are present and dangerous

- Disconnect the PV array using a disconnection unit and secure it against accidental reactivation.
- Disconnect the circuit breaker and ensure that it cannot be reconnected.
- Ensure that no voltage is present in the system.

Warning:

Risk of injury due to electric shock。

If all cables with different voltages are routed in parallel, damaged cable insulations may lead to a short circuit.

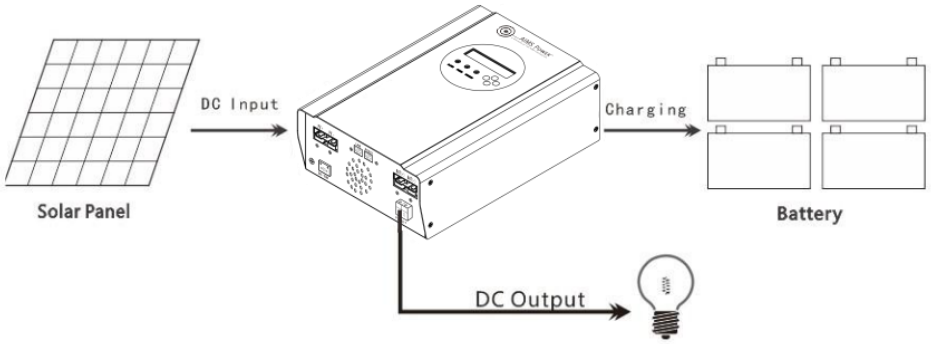
- Route all cables separately if possible.

Warning:

Over voltage can destroy the system.

- Use an external over voltage protector in areas with an increased risk of lightning.

5.2 Connections of the PV power system (Batteries must be connected prior to connecting Solar Panels or damage will occur!)



5.2.1 PV String

Solar panels may be connected in series or in parallel. Since all panels have different characteristics it is critical to know the specs. We recommend using AIMS Power solar panels. We will be more able to assist you in your system design. Open-circuit voltage (Voc) of module arrays connected in series should be less than Max. DC input Voltage (150V) of the charge controller; operating voltage (Vmax) should conform to MPPT voltage range.

Please use PV cable to connect modules to the charge controller. It should be outdoor uv rated and we recommend 10Awg to prevent excessive losses due to distance. It is beneficial to increase the dc voltage to optimize performance and decrease inefficiencies.

Note:
Do not connect the PV panel positive or negative to ground.

Warning:
PV module voltage may be very high! Electrical shock and fire may result due to improper connections. Please comply with electric safety rules when connecting.

5.2.2 The voltage and type of battery

1) This controller can charge DC: 12V, 24V and 48V battery systems. It will automatically recognize the system voltage

2) The controller has been pre-programmed to properly charge 4 battery types. See chart below. Any other types may be programmed using included software.

Pre-Programmed Charging Specs						
Battery Type	**Bulk Voltage**			**Floating Voltage**		
	12V	24V	48V	12V	24V	48V
Vented	14.2V	28.6V	57.2V	13.2V	26.4V	52.80V
Sealed	14.2V	28.6V	57.2V	13.4V	26.8V	53.60V
Gel	**14.2V**	**28.6V**	**57.2V**	**13.7V**	**27.40V**	**54.80V**
Ni-Cad	14.2V	28.6V	57.2V	14.0V	28.0V	56.0V
Other	**user-defined** (using included software)					
Battery Type is defaulted to agm. To change use the keypad on the display						

5.2.3 DC direct load and max current:

The Load voltage is based on the battery system voltage. A 48Vdc battery bank will make the load output 48Vdc etc.

1) Output Load control:
The Load output may be controlled in 6 different ways. It may be programmed through the charge controller or the included software. Modes: ON Mode / OFF Mode / Time Control Mode /PV Volt Ctrl / PV&Time Ctrl

2) How to set the low voltage protection of DC Load output ?

The low voltage shut off for the Load output is set at 10.5Vdc per 12Vdc. So a 24Vdc system is set at 21.0Vdc. When the output Load voltage drops below this level, the output will shut off. It will turn back on once the output Load voltage reaches 0.5Vdc higher than this shutoff voltage

3) Max DC Load output current

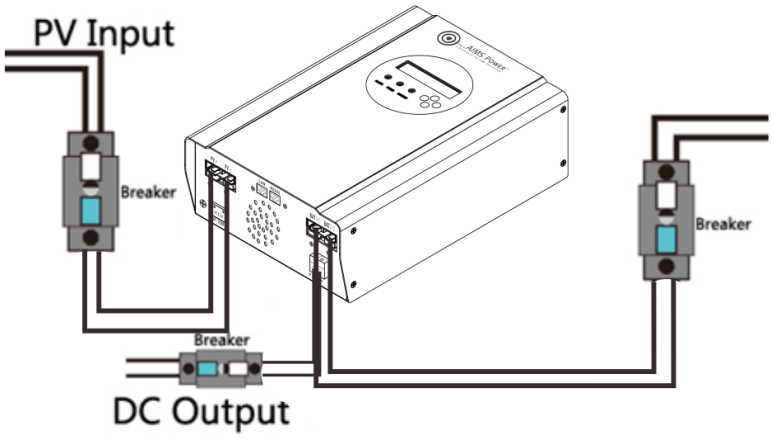
The maximum Load current is set at 50Amps. If exceeded an internal set of fuses will blow and will have to be replaced. A smaller external fuse is recommended.

5.2.4 Specification for cable and micro-breaker

Model		SCC60MPPT	
Cable (Cu)		≥0.16 in or 4mm	

Micro-Breaker		63A	

Micro-breaker should be installed between DC input and outputs. Kindly check the following picture (we do not provide external breakers):



5.2.5 MPPT controller work step

Caution: Please follow the steps to ensure proper programming

Please make sure the controller is properly wired.

Step 1: Close the battery breaker or make connection with the battery bank. Some led's and the lcd should illuminate.

Step 2: Now make the PV connection. If the PV module voltage is in the charging range, then the controller will start to work .

Step 3: If the DC Load will be used, set to proper settings and make the connection.

5.2.6 Steps for Proper Shutdown

Caution: Follow the steps for shutdown to avoid damage

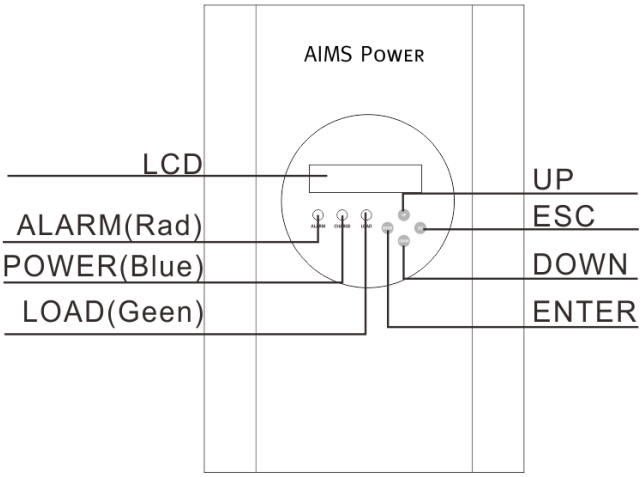
Step 1: Open the PV breaker to disconnect panels from controller.

Step 2: Open the battery breaker or disconnect controller from battery bank. This will completely shut the controller to off.

Warning：NEVER disconnect the battery while charging. This will cause permanent damage to the controller and is not covered under the warranty. Always disconnect PV panels first.

6. LED/LCD and function key

6.1 Panel Description



Meaning of LED and function key

ALARM (Red	-	Alarm indicating a fault
CHARGE (Blue)	-	Charging indicator
LOAD (Green)	-	Load Light indicates load output present
UP	-	UP Function Key for page up and to increase a number
DOWN	-	DOWN Function for page down and to decrease a number
ENTER	-	ENTER key to accept an entry
ESC	-	ESC Key to exit and save data

6.2 Smart Charge Modes

This controller has 3 modes: Constant charging stage (CC Mode) , Constant voltage charging stage (CV Mode) , Floating charge stage (FC Mode) :

In CC Mode the blue led flashes every second.

In CV Mode the blue led flashes every 3 seconds.

In CF Mode the blue led stays on.

(Note: Charging Mode can also be checked via lcd or included s/w)

Menu No.	Menu Type	Menu Description
1	Work Status	Checks state of charge
2	Setting	Parameter set
3	Information	Parameter check

6.3.1 Information from lcd display

SMART 2 MPPT LCD INFORMATION			**Note**
Work Status	Chg Cur（Charge current）		If charging, will have information
	Chg Model（Charging Mode）		Charging Mode
	Time		Time
	Bat Temp（The real time temperature）		If temperature sensing wire is connected, then it will show temperature
	Buck Temp（The main real time temperature）		
	PV Volt（Solar panel voltage）		PV input voltage
	Chg Power（Real time charge power ）		Charging power
	Bat Volt（Battery real time voltage）		Shows battery voltage, if it is charging, it will show charging voltage
			Will show fault mode under fault state
	Bat Type Sel Setting	Vented	Battery type set
		Gel	
		Nicd	
		Sealed	
		User Def	
	User Bat Set	Bulk Volt Set	Custom, need to set Main charging voltage and float charging voltage
		Float	

Setting	Max Chg Cur Set		Could set any data under 60Amps
	Date Set		Date Set
	Time		Time Set
	Gate Address Set		Gate Address Set
	Port Set		Port Set
	IP Address Set		IP Address Set
	Load Control	Time Control	Set the time to control the DC load output on / off
		Load Off Bat Volt	Set the low voltage protection of battery (based on one battery type)
		On/Off Mode	Keep on / off state
		PV Volt Ctrl	Could set the PV voltage to control DC load output turn on/off
		PV & Time Ctrl	Could set the PV voltage and time to control DC load output turn on/off
Information	Bat Chg SYS		System Voltage
	Total power		Total energy from this machine
	Firmware Ver.		Firmware Ver.
	Machine ID		Machine ID
	Bat Type		Battery Type display
	IP Address		IP Address
	Port		Port Number
	Time Load Ctrl		Last time load control mode

7、 Parameter Settings

When the controller is connected to the battery bank and it is in the on state, the controller will show Work Status information.

7.1 May set parameter of MPPT

Please check the details under Setting Interface

7.2 Steps for setting the parameters

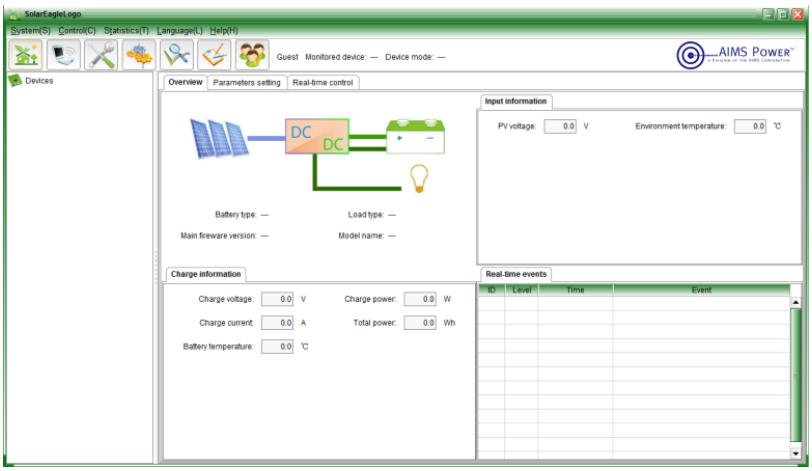
Press ESC in main menu ----> Press down to change the page to setting---->Press ENTER to get in ---->press down to choose the information needed to be set .For example:

Press ESC in main menu ----> Press down to change the page to setting---->Press ENTER to get in ---->Press DOWN to change to load control---->Press ENTER to get in ---->Press DOWN to On/Off Mode---->Press ENTER to get in ----> Press UP or down to Load On mode---->Press ESC to save and exit .

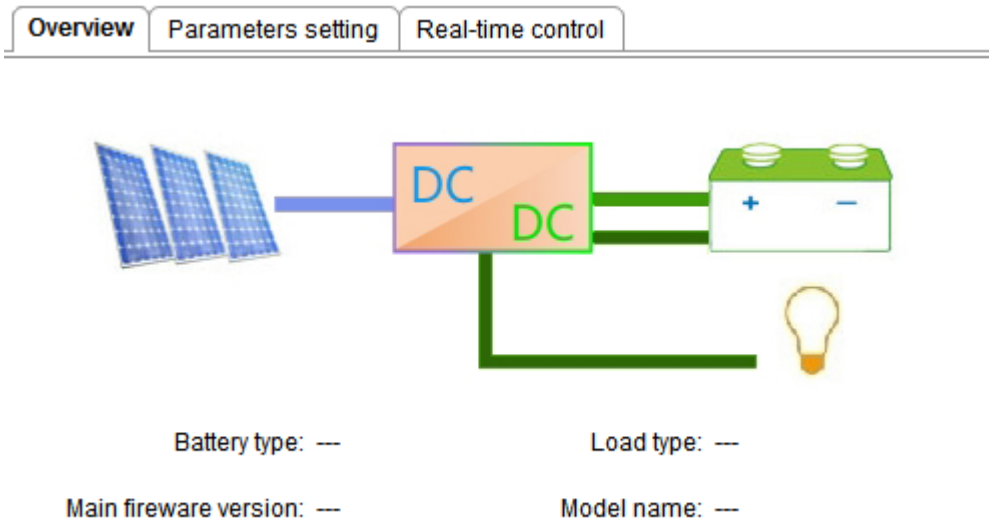
8、MPPT and PC Connection

8.1 Included software introduction

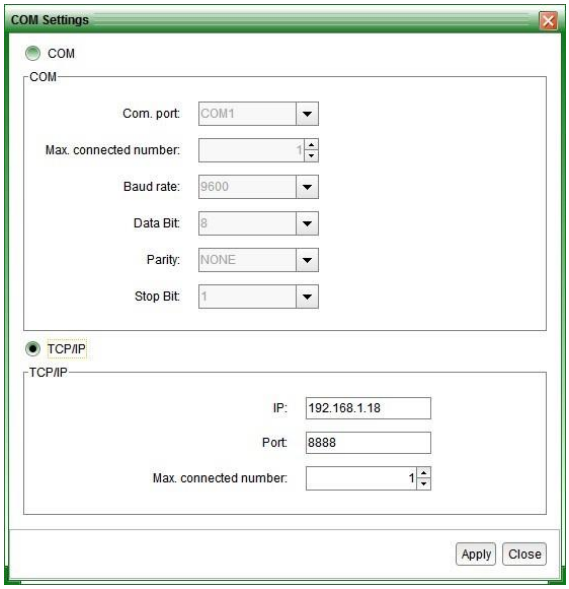
We have developed software that completely monitors and allows for many parameter changes via a computer. Below are some pics of what we've created:



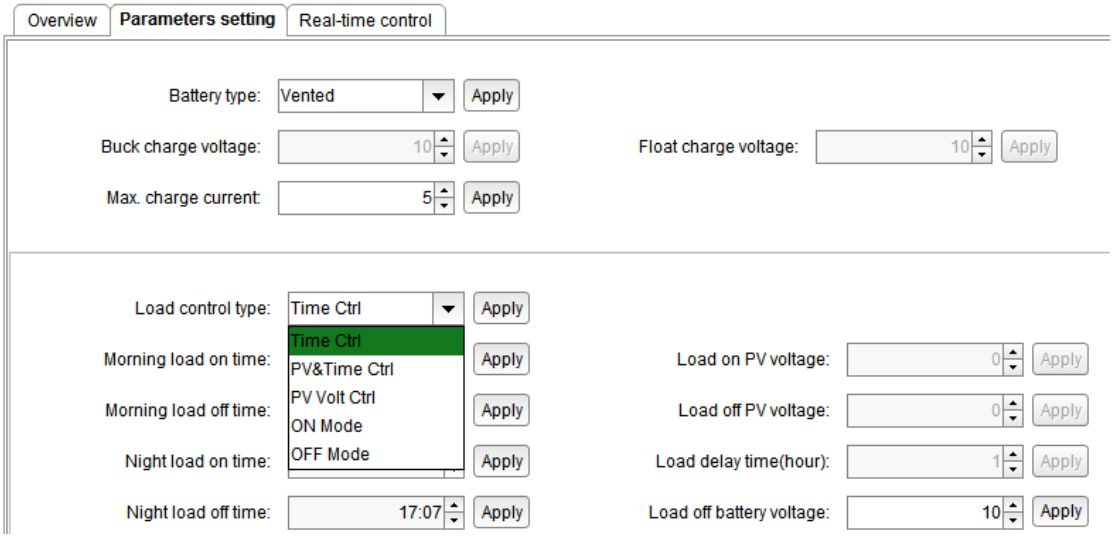
 Overview: Access main interface as follows:




Com Setting (Com）：Setting up the connection between software and PC




Setting:　battery type set and load control set interface



 Data：MPPT working status

 Event Log ： MPPT working status per day

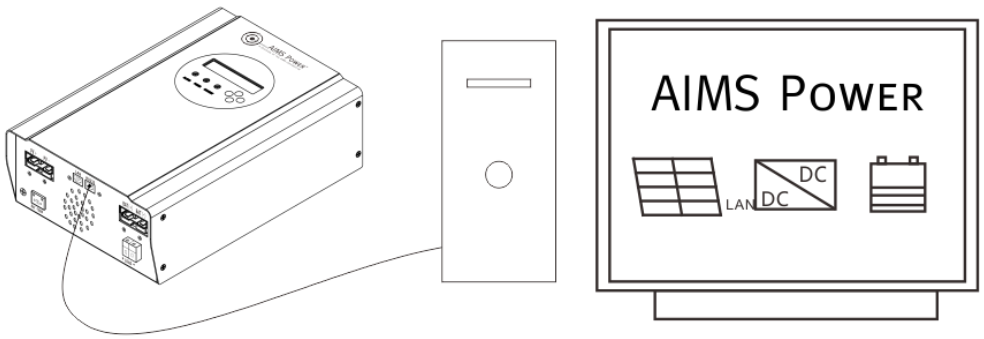
 Login ： Some parameters set need administrator’s password.

8.2 Connecting of MPPT and software.

Could connect trough RS 232 (COM) or (TCP/IP)

8.2.1 Connect through RS232 (COM)

1）if PC has RS232 connector, check the following picture



Step 1: Please install software. For details please check install steps.

Step 2: Once software is installed and controller is connected properly, allow controller to turn to on state (connected controller to battery will automatically start)

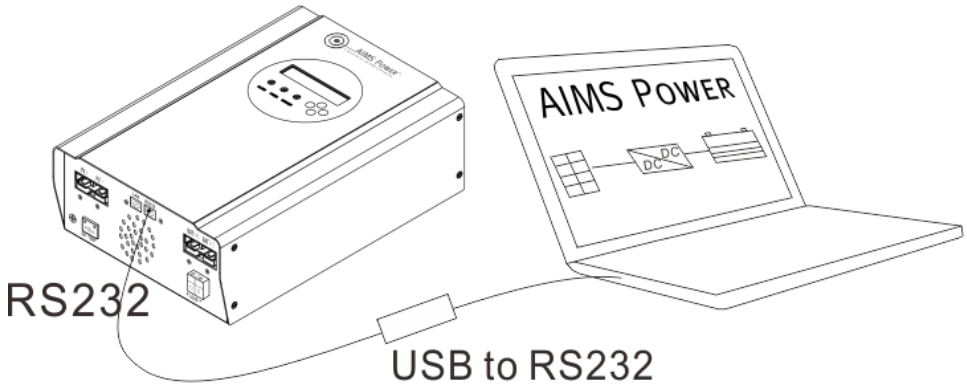
Step 3: Connected PC and controller with RS232 and PC will notice the communication, at this time the PC will chose COM1:

Step 4: Open the software as administrator (WIN 7 of 8), then press  to choose COM communication and enter. It will automatically connect:

Step 5: The software is now ready to be used.

2) NO RS232 port?

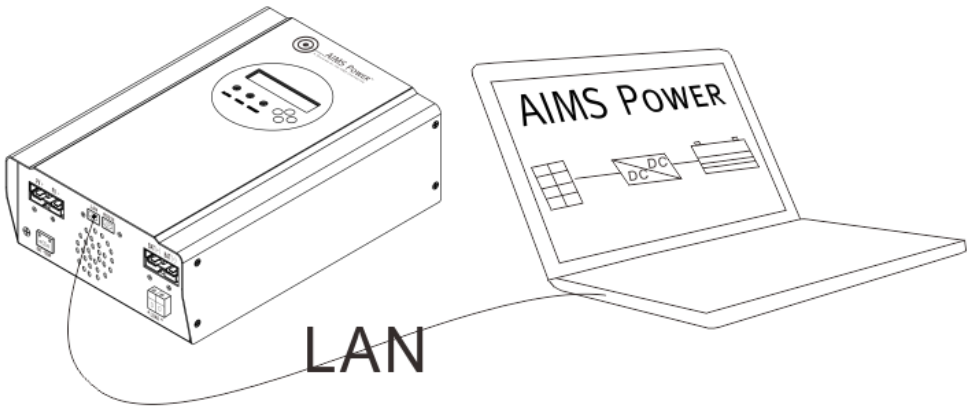
If you do not have an RS232 port, then you need to prepare a USB to RS232 connector such as below:



Step 1: Please install USB to RS232 driver software and make sure it's communicating. The other steps are the same as above.

8.2.2 Connect through LAN (TCP/IP)

1) Connect through RJ45, like the following picture



Step 1: Install software as described above

Step 2: Install and ensure controller is properly wired. Allow it to turn on. This happens automatically when battery is properly connected.

Step 3: Connect PC and controller using RJ45.

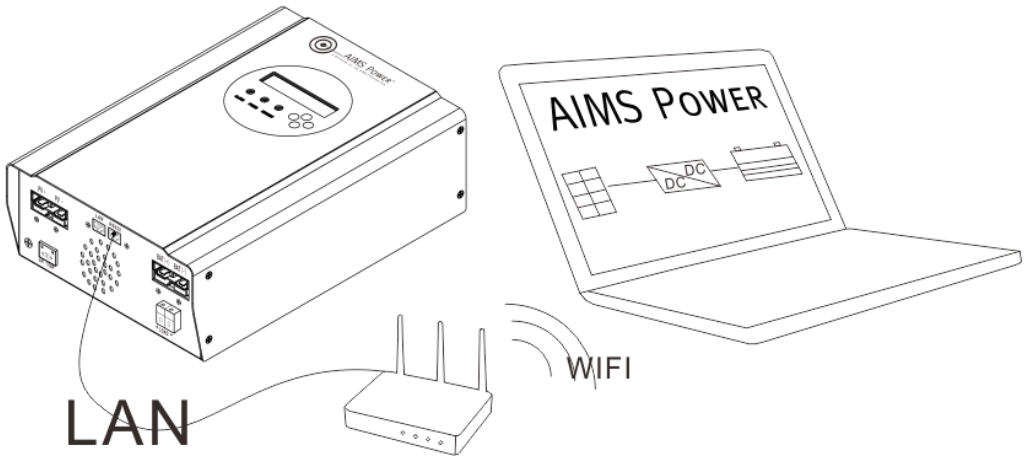
Step 4:

First method: Based on PC GATED ADDRESS and IP ADDRESS set the controller's PC GATED ADDRESS and IP ADDRESS. But please note the last number of IP address must be different. Ex: PC's PC GATED ADDRESS is 192.168.1.1, IP ADDRESS is 192.168.1.10, then the controller GATED ADDRESS is 192.168.1.1, IP ADDRESS is 192.168.1.8: Make sure controller and PC are in the same LAN.

Second method: Based on PC GATED ADDRESS and IP ADDRESS set the controller's PC GATED ADDRESS and IP ADDRESS. But please note the last number of IP address should be kept different. Ex: Controller's GATED ADDRESS is 192.168.1.1, IP ADDRESS is 192.168.1.10, then the PC's GATED ADDRESS is 192.168.1.1, IP ADDRESS is 192.168.1.8: Make sure controller and PC are in the same LAN.

Step 5: Open the software as the administrator (WIN 7 or 8). Then press  to choose TCP/IP communication and fill IP address and port number, enter; It will automatic connect in 10s: If they do not connect, make sure controller and PC in the same LAN and restart controller .

1 ）



Connect through router as shown below;

Step 1: Install software as described above

Step 2: Install and ensure proper controller connection. Once battery bank is connected the unit will automatically turn on.

Step 3: Connect controller and router through RJ45. Then add PC into LAN.

Step 4: Set controller and PC's GATE ADDRESS based on router's GATE ADDRESS. Keep them in the same LAN. Ex: router's GATE ADDRESS is 192.168.1.1, then controller and PC's GATE ADDRESS should be 192.168.1.1.

Step 5: IP ADDRESS setting
Set the controller and PC's IP address based on GATE ADDRESS. To set IP ADDRESS, the last number should be different. Ex: IP's GATE ADRESS is 192.168.1.1, PC's IP ADDRESS should be 192.168.1.10, the controller's IP ADDRESS should be 192.168.1.5.

Step 6: Open software as the administrator (WIN 7 or 8), then press  to choose TCP/IP communication and fill IP address and port number, enter; It will automatically connect in 10s. If they do not connect, make sure controller and PC are in the same LAN and restart controller.

8.2.3 Software usage

When the software has been successfully connected the following may be changed and/or monitored;
If you have special parameter changes required you may need to call AIMS Power to do so:

Step 1：Contact us to receive password

Step 2：Login 

Step 3：Change parameters

9、Parameters

Model: SCC60MPPT		**60A**
Charge Mode	Maximum Power Point Tracking	
Method	3 stages: fast charge(MPPT),constant voltage, floating charge	
System Type	DC12V/24V/48V	Automatic recognition
System Voltage	12V system	DC9V~DC15V
	24V system	DC18V~DC30V
	48Vsystem	DC36V~DC60V
Soft Start Time	12V/24V/48Vsystem	≤10S
Dynamic Response Recovery Time	12V/24V/48Vsystem	500us
Conversion Efficiency	12V/24V/48Vsystem	≥96.5%,≤99%
PV Modules Utilization Rate	12V/24V/48Vsystem	≥99%
Input Characteristics		
MPPT Working Voltage and Range	12V system	DC18V~DC150V
	24V system	DC34~DC150V
	48V system	DC65~DC150V
Low Voltage Input Protection Point	12V system	DC16V
	24V system	DC30V
	48V system	DC60V
Low Voltage Input Recovery Point	12V system	DC22V
	24V system	DC34V
	48V system	DC65V
Max DC Voltage	12V/24V/48V system	DC160V
Input Overvoltage Protection Point	12V/24V/48V system	DC150
Input Overvoltage Recovery Point	12V/24V/48V system	DC145V
Max. PV Power	12V system	900W
	24V system	1700W
	48V system	3400W
Output Characteristics		
Selectable Battery Types (Default type is GEL battery)	12V/24V/48Vsystem	Sealed lead acid, vented, Gel, NiCd battery (Other types of the batteries also can be defined)
Constant Voltage	12V/24V/48V	Please check the charge voltage according to the battery

	system	type
Floating Charge Voltage	12V/24V/48V system	
Over Charge Protection Voltage	12V system	14.6V
	24V system	29.2V
	48V system	58.4V
Rated Output Current	12V/24V/48V system	60A
Current-limiting Protection	12V/24V/48V system	66A
Rate charge current	12V/24V/48V System	60A
Temperature Factor	12V/24V/48V system	±0.02%/℃
Temperature Compensation	12V/24V/48V system	14.2V-(The highest temperature-25℃)*0.3
Output Ripples(peak)	12V/24V/48V system	200mV
Output Voltage Stability Precision	12V/24V/48V system	≤±1.5%
Charge voltage Peak-Peak Ripple	12V/24V/48V System	200mV
Charger voltage accuracy	12V/24V/48V System	≤±1.5%
Discharge characteristic		
Setting Control	Controller or LAN	
Max discharge current	12V/24V/48V System	40A
Discharge protection	12V/24V/48V System	fuse 30A*2
Double-time control	12V/24V/48V System	On in morning ,off in morning / On in night ,off in night
ON / OFF mode	12V/24V/48V System	ON / OFF
PV voltage control	12V/24V/48V System	PV voltage on，PV voltage off
PV voltage / time delay control	12V/24V/48V System	PV voltage on，time delay off
Discharge voltage protection	12V/24V/48V System	Output off when it under setting voltage; Factory set is 10.5 .(Note : set based on 1 battery)
Communication Features		
RS232 Communication	12V/24V/48V System	Choose COM communication

LAN Communication	12V/24V/48V System	Set IP and Gate address for controller and software; Then choose TCP communication
Protection		
Input Low Voltage Protection		Check the input characteristics
Input Overvoltage Protection		Check the input characteristics
Input Polarity Reversal Protection		yes
Output Overvoltage Protection		Check the output characteristics
Output Polarity Reversal Protection		yes
Short-circuit Protection		Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit
Temperature Protection		95℃
Temperature protection		Above 85℃,decrease the output power, decrease 3A per degree.
Other Parameters		
Noise		≤40dB
Thermal methods		Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan runs slowly or stops; when controller stops working, fan also stops running
Components		World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105℃
Smell		No peculiar smell or toxic substances
Environment Protection		Meet the 2002/95/EC, no cadmium hydride and fluoride
Physical		
Measurement DxWxH (mm)		270*185*90
N.G(kg)		3
G.N(kg)		3.6
Color		Black
Safety		CE, RoHS, PSE,FCC
EMC		EN61000
Type of Mechanical Protection		IP21
Environment		
Humidity		0~90%RH (no condense)
Altitude		0~3000m or about 10,000ft
Operating Temperature		-20℃~ +40℃
Storage Temperature		-40℃~ +75℃
Atmospheric Pressure		70~106kPa

10. Maintenance and Cleaning

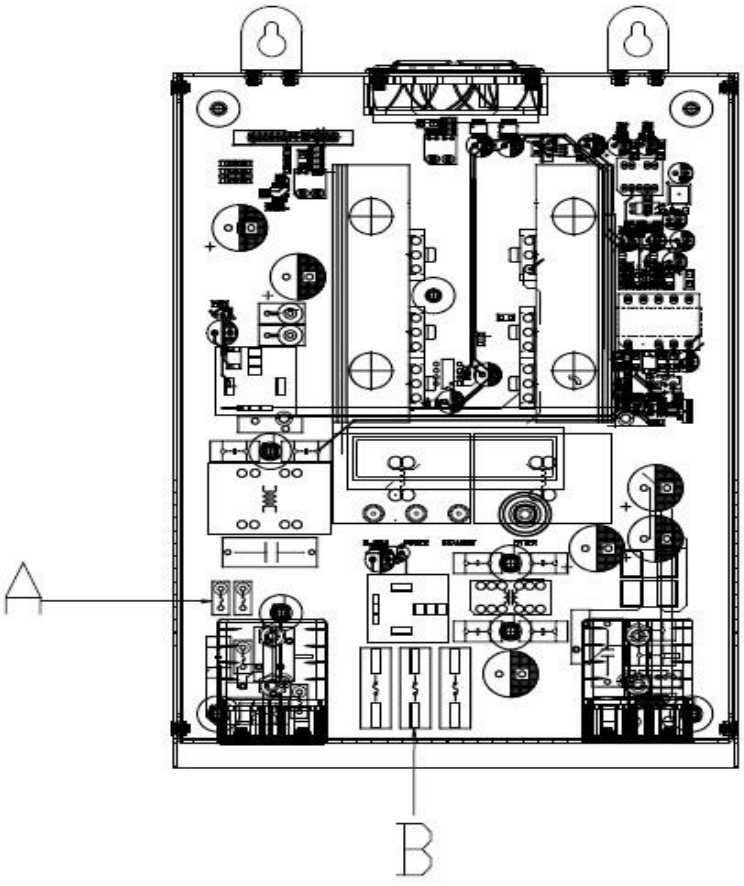
10.1 Replacing the Thermal Fuses

Using incorrect thermal fuses may irreparably damage the solar charge controller.

• Only use the thermal fuses included in the scope of delivery

1. Open the solar charge controller as described in section "Opening the solar charge controller"
2. Remove the broken thermal fuses from the sockets (A and B).
3. Insert new thermal fuses (included in the scope of delivery).
4. Close the solar charge controller as described in section "Closing the solar charge controller".
5. Remember always connect the batteries before the solar panels or you will permanently damage the controller.

Note: To clean simply wipe the outside with a lightly dampened cloth. If unit has been opened use an air spray such as a keyboard cleaner to blow out the internal dust that may accumulate inside the controller.



Location of Thermal Fuses

10.2 Cleaning the Cooling Fan

Clean the Fan air vents and internal cooling fan regularly by using a dry or slightly damp cloth to wipe.
Attention:
• Liquid detergent or corrosive solvent cleaning is forbidden.
• Liquid is not allowed in the device.
• clear the air vent passage.
•Carefully remove dirt with a suitable soft brush if deemed necessary.

11. Storage and waste disposal.

10.1 Store the charge controller in a dry place with ambient temperatures between -40 °C and +75 °C.
10.2 Disposal
Dispose of the solar charge controller at the end of its service life in accordance with the disposal regulations for electronic waste at the installation site at that time.

12. Warranty and Repair

12.1 Repair

When the controller mal-functions, please check the following questions and contact our customer service representative if you need assistance.
11.1.1 Controller failure mode：
Please check the fault tips in the failure mode, and then proceed to the appropriate troubleshooting;
11.1.2 When the controller does not start properly:
1. Check to ensure polarity between panels and controller are correct
2. Check Battery Connection
3. Check Battery
4. Check circuit breaker
5. Check internal fuse
If the problem persists, please contact customer service.
Please provide the following information：Equipment information: Model, Order No., serial-number (Stickers on the rear plate); Detailed description of the problem
(Type of system, occasionally/frequent problems, indicator light, data display, and so on).

12.2 Warranty

AIMS Power® PRODUCT WARRANTY POLICY
AIMS Power® will either repair, replace, or refund at its option, defective AIMS Power® branded

products according to the specified warranty periods below:

- **All AIMS Power® branded products**—1 year warranty unless noted differently on product. Warranty is void if product has been altered, scratched, damaged or tampered with in any way.

TO RETURN MERCHANDISE:

OBTAIN A RMA #

1. All returns must have a RMA number for processing.
2. Packages without a RMA number on the outside of the package will not be accepted.

RETURN PACKAGING – Repack the product in its original packaging, along with all manuals and related materials. Place the packaged product in a protective outer box. The RMA number must be clearly marked on the outside box / package. **Please Note: We must receive all original products in order to process your return or exchange. AIMS Power® is not responsible for products that are damaged due to poor packaging or lost shipments. Remember to keep your Tracking Number.**

RETURN SHIPPING CHARGES – The customer is responsible for shipping charges on returned products; AIMS® will send replacements via Ground freight at no charge. We recommend shipping via ground.

RETURN SHIPPING METHOD – AIMS Power® strongly recommends you fully insure your return shipment in case it is lost or damaged in transit. We also recommend you use a carrier that can provide you with proof of delivery for your protection. Remember to keep your Tracking Number.

PRODUCT DAMAGED IN TRANSIT – If your product arrived DAMAGED in transit, it is best to REFUSE it back to the carrier attempting delivery. Please inform AIMS Power® of the refusal. If you accept the package, make sure it is noted on the carrier's delivery record in order for AIMS Power® to file a damage claim. Save the merchandise and the original box and packing it arrived in; notify AIMS Power® immediately to arrange for a carrier inspection and pick up of the damaged merchandise.

RETURNED PRODUCT CONDITION:

LIKE NEW CONDITION – All returned products must be returned 100% complete, including all of its components, all original boxes and packing materials, manuals, blank warranty cards and other accessories provided by the manufacturer.

INCOMPLETE, SCRATCHED or DAMAGED CONDITION – AIMSPower® reserves the right to refuse crediting the customer's account and the product will be returned to the customer.

DEFECTIVE PRODUCT – After 30 days, defective product may be returned for repair or exchange only, at AIMS®'s option.

Upon receipt of an RMA number, ship returns to the following address:

AIMSPower®
Attn: Returns Dept.

9736 South Virginia Street, Suite A
Reno, NV 89511
(775)359-6703

Any legal action to enforce any of the terms of this or any other agreement shall be governed by the laws of the State of Nevada and may be instituted in state or federal court.

12.3 Guarantee Card

User name:..... Country:.....
Address: .....
Telephone Number:..... Pose Code:.....
Email:.....
Date of Purchase:..... Vendor:.....
Date of Installation:..... Installer:.....
Installer Contact Information:.....
Solar Charge Controller Serial Number:.....
Battery Voltage: ..... PV Voltage:.....
PV Module Type and Manufacturer:.....
Array Wattage:..... Notes:.....