



Website Link



AM Solar Inc. 3555 Marcola Rd. Springfield, OR 97477 541.726.1091 www.amsolar.com

99-CMPGLD Explorer Camper Kit





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Here is a list of some of the tools that might be needed for your installation. If you feel this list is too ambiguous or potentially intimidating, now would be a great time to schedule your installation work with the professionals at AM Solar.

- Sturdy Ladder
- Hammer Crimper
- Heat Gun
- Wire Crimper
- Wire stripper
- Cable Cutter
- Multimeter
- Screwdriver
- Smartphone
- Drill
- Box knife
- 91% Isopropyl Alcohol
- Cleaning rags
- Crescent wrench
- · Safety glasses























	QTY	AM Solar PN	Description			
U	2	SOLAR-ZS100	Solar Panel Z100			
N.	2	91M-35MZ	Mount Set - 35mm Zamp			
ARG	1	30s-VT-MPP-20A	SunRunner Victron MPPT 20A			
£	2	93C-ZCBNR	Zamp Plug & Strain relief for C-Box			
AR	1	20-ROOF	Roof Combiner Box			
OL	1	SEAL-SLVL	Dicor Self Leveling Sealant			
S	1	SEAL-SKF	Sikaflex 221			
	1	MONITOR-VTBMV-S	Victron Battery Monitor BMV-712 Smart			
Ň	1	TEMP-VTBMV	Victron Temperature sensor for BMV-700 series			
BA	2	BATTAGM-06-220AH	AGM-GPL-4CT 6V 220Ah			
Ϋ́	4	LUG-4/0-RING-3/8	4/0 Lug-3/8" Ring			
Ē	3	93H-B3/4	Heat Shrink Black 1.5" x 3/4"			
BA	1	93H-R3/4	Heat Shrink Red 1.5" x 3/4"			
	2	CABLE-4/0-1-BLK	Cable-4/0			
	1	INV-VT-1200	Victron VE. Direct 12/1200-120V Inverter			
	1	MONITOR-VTVT	VE.Direct Bluetooth Smart dongle			
	4	FSTSCW-1034Z	Screw-#10x3/4" PHP SMS Z			
	4	FSWASH-FLT-1/2	Flat Washer 1/2" OD- #10 ID Z			
	2	LUG-2GA-RING-3/8	2 ga. Lug-3/8" Ring			
5	2	HS-RED-HD-1/2	Heat Shrink 1/2" Red			
5	5	CABLE-2GA-2-GRY	Duplex-2/2			
ō	1	95F-CLST-150A	150A Class T Fuse & Holder			
¥	1	FUSE-CLST-150A	Spare 150 Amp Fuse			
	1	WIRETIE-05	Wire Tie 5-7/8"			
	1	FSTSCW-1034SS	Screw-#10x3/4" PHP SMS SS			
	1	93T-POS-2GA	2ga Brkr Pos Term Kit			
	1	93T-NEG-2GA	2ga Negative Terminal Kit			
	1	93S-MINI	Switch-Mini On/Off w/Screws			







NOTICE:

The "greyed out" battery bank items are not included, but you will be interacting with them.



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normal. Scan here for assistance. 5

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Battery Bank and Monitor





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Inverter

Rev.20190716



99-CMPGLD Explorer Camper Kit

Programming: The Battery Monitor

Programming Your BMV-712 Smart Battery Monitor for AGM Batteries

Programming on the BMV-712 Battery Monitor in the Victron Connect App:

- 1. Download "VictronConnect" from the Google Play Store (picture 1).
- Turn on your Phone's Bluetooth, and get as close as possible to your Victron 2. Component(s).
- Open the Victron Connect app, and after it takes a moment to scan it will 3. recognize your BMV-712.

NOTE: If your device is not shown, it is probably signal interference. Try closing the app and moving to a different location before re-entering the app in a location that can pick up the BMV's signal.

- Select the BMV-712 on the Device List (picture 2). 4.
- Press the gear icon in the top right corner (picture 3). 5.
- Enter "Battery" and change the values to match the colored box at the top rig 6. (screen shown on picture 4):
- 7. Changing Battery Capacity: Enter the number of Ah of your entire battery bank
- Charged Voltage: 14.1 8.
- 9. Tail Current: 2%
- 10. Peukert Exponent: 1.12
- 11. Charge Efficiency Factor: 97%
- 12. Go back to Settings, enter "Misc"
- 13. Enter "Relay"
- 14. Change Low SOC relay to 50/50
- 15. Aux Input: Select "Temperature"
- 16. Temperature Unit: Select "Fahrenheit"
- 17. Exit from settings, you have completed programming.

NOTE: Only one phone can be connected to each device at a time. Be sure to completely disconnect and close the app to log out.

NOTE: To change the PIN code from the app, go back to the device list page in the app. Click on the three circles to the right of your device, and select "Reset PIN code".

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VictronConnect

Victron Energy BV E Everyone

385 1

Get live status info and configure Victron products via bluetooth or USB

READ MORE

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Program Settings for AGM Batteries

Battery Capacity: Enter the total battery capacity in Amp Hours. Charged Voltage: 14.1

- Tail Current: 2%
- Peukert Exponent: 1.12
- Charge Efficiency Factor: 97%
- Aux Input: "Temperature"
- Temperature Unit: "Celsius" or "Fahrenheit"

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=	Device list	٩	÷		Solar		÷	Battery setti
11 11	SmartLithium BL HQ1713ZQ2IX 129/90AF				н	STORY	Batter	a canacite
-	SmartLithium H01713GZ8DF		10			0W	Charc	ed voltage
2	129/300An		Solar				Tail cu	urrent
11. 6	SmartLithium HQ171621BW6 12V/200Ah	1	<u>.</u>			0.01V	Charg	ed detection time
	AM Solar V4		0			0.0A	Peuke	ert exponent
	BMV-712 Sinan		Botto				Charg	e efficiency factor
	AM Solar V4 MPPT 30 MPPT 100/30	*	10			12.29V	Currer	nt threshold
	Robert Dill Solar		۵			-0.1A	Time-	to-go averaging perio
						Off	Synch	ronize SOC to 100%
	SmartSolar HQ1814N7U8V MPPT 150/70	Ē	Locd				Zero d	current calibration
	(2				On		

··· 46 8 10 44 10 15 JI 6 2 16 PM

400Ah

14.17

2.00%

3m

1.10

973

0.104

3.00

settings

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Programming / Commissioning Your System - The Charge Controller

Charge Control Settings for AGM Batteries:

- 1. Download the "VictronConnect" App to your phone.
- 2. Open the App.
- 3. You'll see a selection for your SmartSolar MPPT Charger, select it.
- Type 000000 to login for the first time.
 NOTE: To change the PIN code, go back one step to the main screen. Click on the 3 buttons to the right of the controller image, and select "Reset PIN Code".
- 5. Click on the gear in the top right corner.
- 6. Click on "Battery".
- Click on the settings and adjust them acccordingly to match below:
 Battery voltage: 12V
 - Max charge current: 20A (In this example)
 - Use default charge settings: OFF
 - Charger: ON
 - Absorption voltage: 14.40 V
 - Absorption Time Limit: 02:00
 - Float voltage: 13.30 V
 - Equalization voltage: 15.20 V
 - Auto Equalization: DISABLE (OFF)
 - Temperature Compensation: ON
 - Temperature Compensation: -20.00

Absorption Voltage	14.40V
Absorption Time limit	2:00
Float Voltage	13.30V
Equalization Voltage	15.20V
Auto Equalization	OFF
Temperature Compensation	ON
Temperature Compensation	-20.00mV/°C

