

30255 Tomas, Rancho Santa Margarita, CA 92688

## **Clearing Codes and Restarting BMS Guide**

Please follow the following steps to Connect, Clear Codes and Reset the BMS unit.

- 1. Save attached file on the email to your computer (desktop)
- 2. Install Java using this link: https://www.java.com/en/download/manual.jsp
- 3. Highly recommended to use a Windows PC, but also available for Mac users
  - a. We have 2 versions of our pack, please select the correct version
    - i. Version 1 with Orion Jr BMS

https://www.orionbms.com/downloads/orionbms jr utility stable.zip

ii. Version 2 with Orion Jr BMS 2

https://www.orionbms.com/downloads/orionjr2\_utility\_stable.zip

- 4. Use the supplied USB to Serial adaptor to connect to the BMS Diagnostic port to the PC.
  - a. If needed you can get the USB adapter driver here:

https://www.cablecreation.com/uploads/PL2303-Chipset-%E6%94%B9.pdf

5. Open the utility and locate the File menu at the top left.

Profile Setup Wizard	Connect To BMS				
		Receive Current Pron		Send Profile Changes 10	
Relav Settinos Charge Limits General Settings Cell Settings	Discharge Limits Fault Soc Settings CANBUS Set	ettings ettings	$\sim$		
			<b>Orio</b>	nir	
General Settings Multi Purnose Inputs / Out	nute				
Multi Purpose Inputs / Out	puts				
Current Sensor Selected	[500A, 50mV] (750A, 75mV) Shi	unt 🗸			
Current Sensor Calibration [%]	0.0				
Pack Amp Hours [Ah]	200.00 🖨				
Current Sensor Polarity Inverted 🛛 👔					
NOTE: Charging current should show up as neg	gative (-)				
Profile Password (Locking)	0 🏚 🗌 En	abled	COST .		
Select Active Thermistors	√#1 √#2 /#3		and the second second	and the second s	
NOTE: Thermistor #3 requires Rev-C ha	rdware			11.1.1	
			COK COL		
nable Low Voltage BMS Power-down	Power-Down At:	0.000 📮			
			and the second	20/	
Help	)		194		

6. A pop up window will appear, check if an adapter is found.



- 7. If found, click connect, otherwise refresh and try again.
- 8. When connecting, another pop up will appear, it will prompt you to load the BMS profile. You may agree to this and accept the warning window.
- 9. Once connected and the profile loaded, locate the help menu at the top left.

8	Orion BN	IS Jr Contro	ol Ap	pplication					
File	Data Log	iging Expa	nsic	on Modules	Help				
Bat	tery Profile	3rd Party D	ata	Diagnostic Tro	ouble Codes	Live Text	Data	Live Gra	oh & C
	ų s	🔰 Profile Se	tup ۱	Wizard		Connect To	BMS		
	General	settings	Cha	arge Limits Cell Settings	SOC Set	e Limits tings	CAN	ault Setti BUS Setti	ngs ngs

10. Click on "Help" and click on "Take Data Snapshot"

Orio	on BMS Jr Cont	r <mark>ol A</mark>	pplication			
File Dat	a Logging Exp	ansi	on Modules	Help		
Battery F	rofile 3rd Party	Data	Diagnostic Tr		View Help	D
					Take Data Snapshot	
					Profile Setup Wizard	
	🖏 Profile S	etup	Wizard		Allow Beta Utility Releases	
R	elav Settinas eneral Settings	Ch	arge Limits Cell Settings		Check for Updates About	

- 11. Another window will appear; this window will prompt you to save the data in a file location.
- 12. Select your Desktop for the location to save the data, do not rename the data file name.



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🛓 Save Data	adump As		×
Save in:	📃 Desktop	<ul> <li></li></ul>	<b></b>
Recent Items	ConeDrive OneDrive Voltronix This PC Libraries	Shop	
Desktop	260 AH 4 Bathroom Datashee	8v Enclosure Shutter Bug 1 ts 5	
This PC	🔒 Northeas 🔒 Polaris	Texas Solar - Shortcut	
Network	File name: Files of type:	datadump_2018-07-10-10-21-18.zip BMS Data Dump ~	Save Cancel

## 13. Next go to "Diagnostic Trouble Codes" tab and open.

Orion BMS Jr Control Application			- C	$\times$
File Data Logging Expansion Modules Help				
Battery Profile 3rd Party Data Diagnostic Trouble Codes	Live Text Data Live Graph & Data Logging Live Cell Data Live	e CANBUS Traffic Histogram	& Events	
Diagnostic Trouble C P0A80 : (A)(S)(F) P0A7A : (A)(S)(F) P0A00 : (A)(S)(F) P0A00 : (A)(S)(F) P0A00 : (A)(S)(F) ==>	Additional Information Select a code to the left for details.	Active Cell Faults Cell Faults ⊕ Weak Cells ⊕ Open Cells ⊕ Low Cells		
Code Symbol Legend: (H) = Historical (Past Occurrence) (S) = Stored (A) = Active (F) = Freeze Frame Data Available	Export Additional Information (CSV) NOTE: DTC code definitions are set in the battery profile und "Communications Settings" tab. Since these are customizab universal or global mapping for them.	Help / DTC Explanations der the le, there is no		
	Clear All Codes			
Status: Connected BMS Firmware: 2.0.8 BMS Serial#: L	4666503 Maximum Cells: 16 Loaded Cells: 4 **Trouble Cod	es Detected: 5		

- 14. If you have a **Trouble Code** please continue, otherwise skip to step 16.
- 15. At the bottom of the window click on the "Clear All Codes" and select Yes on the pop up warning window.



	302	255 Tomas, Rancho Santa Margarita, CA 92688	3	
PUACU : (A)(S)(F) P0A03 : (A)(S)(F)			⊞ Lo	w Cells
P0A0D : (A)(S)(I	ng Store	d Codes	×	
?	Are yo	u sure you want to clear all set diagnostic trouble co	des?	
	Clearin	ng codes also clears all stored diagnostic information	n which	
	could	prevent a service technician from identifying a proble	em.	
		Yes No		
Code Symbol Legend:		Export Additional Information (CSV)	Help /	DTC Explanations
(H) = Historical (Past Occu (S) = Stored (A) = Active (F) = Freeze Frame Data	urrence) Available	<b>NOTE:</b> DTC code definitions are set in the battery profile u "Communications Settings" tab. Since these are customize universal or global mapping for them.	under the able, there	e is no
		Clear All Codes		

- 16. At this time the errors should erase from the unit and no errors should stay persistent.
  - a. If an error stays on, the error will be observable on the Unit with a red light or on software in **Red Bold** towards the bottom of the application. Please contact a Voltronix Tech rep for further help.
- 17. After clearing the trouble codes locate the File menu (top left of the window) and select "Restart BMs Unit.

Disconnect from BMS		des Live	Text Dat	a Live Graph & Data Logging Live Cell Data Live CANBUS Tr	raffic Histogram & Events		
Restart BMS Unit Zero Current Sensor		ible C	1	Additional Information	Active Coll Faulte		
Reset Historical / Collected Dat Save Profile To Disk Load Profile From Disk New Profile Import Partial Profile	a Alt+N	JDIE C		Select a code to the left for details.	Cell Faults		
Send Profile Changes To BMS Receive Current Profile From BM	1S		==>				
Exit	Ctrl+Q						
Co	le Symbol Le	aend:		Export Additional Information (CSV)	Help / DTC Explanations		
(H) (S) (A) (F)	= Historical = Stored = Active = Freeze Fr	(Past Occu ame Data	irrence) Available	NOTE: DTC code definitions are set in the battery profile un "Communications Settings" tab. Since these are customiza universal or global mapping for them.	nder the ble, there is no		
				Clear All Codes			

18. A pop up window will appear and select "OK". At this time the BMS unit with restart and you should hear an audible click from the master relay.

	30255 Tomas, Rancho Santa Margarita, CA	92688
Diagnostic Trouble C POA80 : (H) POAFA : (H) POAC0 : (H) POA03 : (H) POA0D : (H)	Additional Information Select a code to the left for details.	Active Cell Faults Cell Faults Weak Cells Open Cells Low Cells
	Confirm Action	×
-	This will restart the BMS. Battery profile setti Continue?	ings will not be lost.
	This will restart the BMS. Battery profile setti Continue? OK Cancel	ings will not be lost.
	This will restart the BMS. Battery profile setti Continue? OK Cancel	ings will not be lost.

- 19. You should now be done clearing codes and restarting the BMS unit. You will notice that the SOC display will reset to 50%. This SOC will re-calibrate over time and you may ignore this.
- 20. Locate your files and email your files to a Voltronix Tech.