

Dongle Kit for BMID III-B (BatteryRx[™]) User Guide ProCore[™] Edge





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A NOTE ABOUT CUSTOMER SUPPORT

Please write down the unit serial number in the Owner's Record below to ensure superior service, and have it available when contacting PosiCharge Customer Service. The serial number can be found on the nameplate rating label on the left side of the unit.

Owner's Record
Model: ProCore™ Edge
Serial Number (SN):
Purchase date:
Output power:

Customer Support:

service@posicharge.com 1-866-767-4242

Parts: orders@posicharge.com

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Parts and Software Applications Needed for this Procedure:

Parts & Applications	Part Number	Notes
Kit Dongle BMID III-B USB CBL	5912660	Includes: • BMID III-B Dongle • Programming Cable • Instructions
PC with Windows Operating System		
BatteryRx Version 5.000 or later		



Connecting the Dongle:

- 1. Connect the cable to the port of the dongle box, then connect the USB cable end to the PC.
- 2. Open the BatteryRx application (Version 5.000 or later) on the PC.
- 3. When the application opens, select the **Wireless** box on the upper left corner of the screen.

NOTE: Several other messages may appear temporarily before the screen below opens for you.

4. Next, select the refresh icon to scan the PC for existing COM ports, then select the COM Port **Connect** button.

onfiguration	Charge Log	Fault Log	Battery History	Daily Performance	Log Ale	ert Log Alert	Settings	Firmware Load	Zero Current Cal	Current Ga	ain Cal Volt Cal	Advanced
Virele	55	COM Port	COM16	~ Cor	nect		a				 ✓ Connect 	z
Serial Nu	mber			SIM Card	Number				Current SW	Version		
	Log	of		Start C	urr Limit	0 A	/100Ah	-	Targe	et V limit	2250 mV/cell	÷
Configuration	date			S	OC Limit	100 % 🖨			Temp	Foldback	0.0 A/°C/100A	h 🖨
Version configu	when red			EQ Start D)ay/Time	¢ 0	÷ 0	÷	Inter	al Resist	0 mOhm.	/Cl/Ah 🜲
Vehi	cle ID			EQ End D)ay/Time	÷ 0	÷ 0	÷	Para	sitic Curr	0 mA	-
Bat	tery ID			Max Ah	Btw EQ	2500	∿h ≑		Key C	n Detect		÷
Battery	Туре			Hax days	Btw EQ	6 D	ays 🜲		Kev	On Logic		1
Num O	f Cells 6		÷	Tì	me zone		\sim	🗹 Auto adjus	t for DST	On Curr	500 mA	L.
Battery Ca	pacity 100	Ah	÷	Daily Call tim	e (24 hr):	1 🌲 22	-		Run Cu	r Thrshld	1000 mA	÷
Read Activ	ve Config	Write To B	atteryRx V	Write Config to file	Lo	oad Config					SOC	
Read	1#1	Prev	,	Next	Sa	ave Config					Pack ((positin	Current ve = charging)
BatteryRx C	lock]				Pack	Voltage
PC C	lock Friday, 2	21 January 2	022 09:59:37	Se	et Battery	Rx Clock					Mid-pa	ack Voltage

5. Once connected, the button will change to "Disconnect," and several messages will appear in the Info box below. Wait until you see "Select Wireless BMID and Connect" in the info box at the bottom, then go to Step 6.

BMID III U	tility									-	- 0	>
onfiguration	Charge Lo	g Fault Log	Battery History	Daily Performance	e Log Ale	ert Log Alert Settings	Firmware Load	Zero Current Cal	Current Ga	ain Cal Volt C	al Advanced	1
✓ Wirele:	SS	COM Port	COM16	i v Dis	connect	Q				 ✓ Conn 	lect	
Serial Nu	mber			SIM Ca	rd Number	000000000000000000000000000000000000000	0000	Current SW V	/ersion	1.003		
	Log 4	of 4		Start	Curr Limit	25 A/100Ah	-	Target	Vlimit	2440 mV/cell	÷.	
Configuration	date 01	/01/00@00:0	5		SOC Limit	100 % ≑		Temp F	oldback	1.5 A/°C/100)Ah ≑	
Version configu	when 00	00.00.00		EQ Star	Day/Time	Sun 🗘 0 🌲 0	-	Interna	al Resist	120 mOh	m/Cl/Ah 🚖	
Vehic	cle ID			EQ End	Day/Time	Sun 🜩 23 🌩 4	5 🜩	Paras	itic Curr	250 n	nA 🖨	
Batt	ery ID			Max	Ah Btw EQ	2500 Ah 🚖		Key On	Detect	Curr Sense	L.	
Battery	Type 1 E	kide Tubular Floo	ded	🖨 🛛 Max da	ys Btw EQ	6 Days 🚖		Key O	n Logic	Not Applicable		
Num Of	f Cells 24		-		Time zone	Pacific Standard $ \smallsetminus $	Auto adjust	for DST Key	On Curr	1000 m	A 🖨	
Battery Cap	pacity 10	00 Ah	-	Daily Call t	ime (24 hr):	0 🜲 15 🌲		Run Curr	Thrshld	3000 m	A 😂	
Read Activ	ve Config	Write To B	BatteryRx	Write Config to file	L	oad Config				SOC	:	
Read	1 #1	Pre	v	Next	Si	ave Config				Pac (pos	k Current itive = charging	g)
BatteryRx Cl	lock									Pac	k Voltage	
PC CI	lock Friday	, 21 January 2	2022 10:09:11		Set Battery	Rx Clock				Mid	pack Voltage	
Info	Select	Wireless BMIE) and connect.							Version 5.0	00	

6. The fields shown below will not be filled in, so you will need to know the assigned name of the BMID or the serial number printed on the side of the BMID.

Once you confirm the assigned name or serial number, select that specific BMID from the drop-down menu las shown below.

If the BMID you want is not listed, select the **Scan** button to re-scan for nearby BMID devices. Then select the **Connect** button.

R BMID III Utility		Scar	n Button					Device List (BM	ID Name
Configuration Charge	e Log Fault Log	Battery History	Daily Performance	Log A	t Log Alert Settings	Firmware Load	Zero Current Cal Curre	or Serial Numbe	er)
✓ Wireless	COM Port	C COM16	Disco	nnect		9579E023Ep, -3 9579E023Ep, -3	9, "WBMID042" 8, "452100042"	Connect	
Serial Number			SIM Card	Number	000000000000000000000000000000000000000	0000	Current SW Version	1.003	
Log	4 of 4		Start C	urr Limit	25 A/100Ah	-	Target V limit	t 2440 mV/cell ≑	
Configuration date	01/01/00@00:0	5	S	OC Limit	100 % 🖨		Temp Foldbac	ck 1.5 A/°C/100Ah 🐳	
configured Vehicle ID	00.00.00.00		EQ Start D EQ End D	ay/Time ay/Time	Sun 🗘 0 🐳 0 Sun 💠 23 💠 4	5 \$	Internal Resi	ist 120 mOhm/Cl/Ah 🖨	
Battery ID			Max Ah	Btw EQ	2500 Ah 🖨		Parasitic Cu Key On Dete	ur 250 mA 🜩	
Battery Type	1 Exide Tubular Floo	ded	Max days	Btw EQ	6 Days 🚖		Key On Log	jic Not Applicable ≑	
Num Of Cells	24	-	Tir	ne zone	Pacific Standard $ \smallsetminus $	Auto adjus	t for DST Key On Cu	um 1000 mA 🜲	
Battery Capacity	1000 Ah	÷	Daily Call time	e (24 hr):	0 🖨 15 🖨		Run Curr Thrsh	ld 3000 mA 🖨	
Read Active Conf	ig Write To B	BatteryRx V	/rite Config to file	Lo	ad Config			SOC	
Read #1	Pre	v	Next	Sa	ve Config			Pack Current (positive = charging)	
BatteryRx Clock								Pack Voltage	
PC Clock	riday, 21 January 2	2022 10:12:03	Se	t BatteryF	Rx Clock			Mid-pack Voltage	
Info Se	lect Wireless BMIE) and connect.						Version 5.000	

7. When the BMID is successfully connected, the Connect button will change to "Disconnect," and the configuration data will be retrieved from the BMID and be added to the data fields.

	unity																	-	
onfiguration	Charge	Log	Fault Log	Battery H	istory	Daily Per	formance	e Log Ale	rt Log	Alert Settings	Firmw	are Load	Zero Cu	rrent Cal	Current (Gain Cal	Volt Cal	Advanced	ł
V Wirele	SS		COM Port	0	OM16	4	Dise	connect		Q CC	F9579E	023Ep, -39,	. "WBMII	D042"		~	Disconnec	ct	
Serial Nu	mber	S/N: \$	OC02452	100042			SIM Car	d Number	00000	000000000000000000000000000000000000000	00000		Cur	rent SW	Version	1.003			
	Log	4	of 4				Start	Curr Limit	25	A/100Ah	-			Targe	t V limit	2440 m	V/cell		
Configuration	date	01/01	/00@00:05	5				SOC Limit	100 %	÷ ≑				Temp	Foldback	1.5 A/	°C/100Ah		
Version configu	when	00.00.	00.00				EQ Start	Day/Time	Sun	\$0 \$) 🖨			Intern	al Resist	120	mOhm/(Cl/Ah ≑	
Vehic	cle ID	WBMI	D042				EQ End	Day/Time	Sun	÷ 23 ÷ 4	15 🚔			Para	sitic Curr	250	mA	÷	
Batt	ery ID	WBMI	D042				Max A	Ah Btw EQ	2500	Ah 🌲				Key O	n Detect	Curr Ser	ise	.	
Battery	Туре	1 Exide	Fubular Floor	led		-	Max day	ys Btw EQ	6	Days 🌲				Key	On Logic	Not App	licable	÷	
Num O	f Cells	24		÷			1	Time zone	Pacific	: Standard $ \sim $		Auto adjust	for DST	Kev	On Curr	1000	mA	¢.	
Battery Ca	pacity	1000	Ah	*		Da	aily Call ti	me (24 hr):	0 🜲	15 🜲				Run Cur	r Thrshld	3000	mA	÷	
Read Activ	ve Config	,	Write To B	atteryRx	w	rite Confi	g to file	Lo	ad Conf	ìg					Г	100%	SOC		
Read	#1		Prev	1		Next	t	Sa	ive Conf	ìg						6.4 A	Pack Ci (positive	urrent e = chargin	g)
BatteryRx C	lock Tu	e (1/10/2000	19:57	68°F	/ 20°C B	att	69°F / 2	I°C Shur	nt						24.199 V	Pack V	oltage	
PC C	lock Fri	day, 21	January 2	022 10:14	:48			Set Battery	Rx Clock	c .							Mid-pac	ck Voltage	
Infa														_		Varri	ion 5 000		

8. Select the Firmware Load tab.

Rx BMID III U	Itility									-		×
Configuration	Charge Log	Fault Log	Battery History	Daily Performant	ce Log Alert	Log Alert Setting	Firmware Load	Zero Current Cal	Current Gain Cal	Volt Cal	Advanced	
		Pc 1	ort = COM16 1. Select File To L 2. Load Firmware	oad	Status mware Load P	rogress					\land	
Info									Vers	ion 5.000		

- 9. Next, click on **Select file to load**.
- 10. Select the bin file for the firmware the file path will appear in the Info box.

Rx BMID	III Utilit	y.									-		×
Configurat	ion Ch	arge Log	Fault Log	Battery History	Daily Performance Lo	Alert Log	Alert Settings	Firmware Load	Zero Current Cal	Current Gain Cal	Volt Cal	Advanced	
			Pc 1 2	ort = COM16 1. Select File To L 2. Load Firmware	oad	e Load Prog	235					~	
	Info	File select	ted: C:\Use	rs\virzir\Documei	nts\Software\IPC\BMI	_III-B_Wirel	ess\Main_App\I	BMID Project \obj`	Bmid3.bin	Vers	ion 5.000		

11. Select Load Firmware, and wait for "Firmware load complete" in the Info box.

Rx BMID III U	Itility									_	- Nindow
Rx BMID III L	Itility Charge Log	Fault Log Po	Battery History ort = COM16 1. Select File To L 2. Load Firmware	Daily Performance Log Status oad Starting Next pa Starting Next pa Starting Next pa Starting	Alert Log transmit ckage transmit ckage transmit ckage transmit ckage	Alert Settings	Firmware Load	Zero Current Cal	Current Gain Cal	— Volt Cal	Advanced
				Next pa Starting Version CRC = 2 Length : Cmd> D	ckage 1 transmit E0 : 1.003 BMID 10588 = 51432 Load Progre	DT EDT ed. D III-B app code	e! Compiled: 1/12	/2022	-		*
Info	Firmware	load comple	ste.						Vers	ion 5.000	

12. Wait another 10 or more seconds for the BMID application to begin running automatically – the BMID connection should still be active.

Rx BMID III Utility	×
Configuration Charge Log Fault Log Battery History Daily Performance Log	g Alert Log Alert Settings Firmware Load Zero Current Cal Current Gain Cal Volt Cal Advanced
Port = COM16 1. Select File To Load 2. Load Firmware CCC = Length Cmd> Interns Execut Run ap Version CCC = Length Cmd> Interns Execut Run ap Version Cmd> Interns Execut Run ap Version Cmd> Interns Execut	s ag transmit sackage ng transmit EOT EOT ed. nr: 1.003 BMID III-B app code! Compiled: 1/12/2022 20588 n = 51432 UP!!!! Timeout, Loading app al Flash Image passed CRC ting existing image pplication at 0x10100 sn: 1.003 BMID III-B app code! Compiled: 1/12/2022 v re Load Progress
Info Firmware load complete.	Version 5.000

13. Select the **Configuration** tab and confirm the software version matches what was just loaded. The installation process for the dongle is now complete.

o	
Rx BMID III Utility	– 🗆 🗙
Configuration Charge Log Fault Log Battery History Daily Performance Log Alert Log Alert Settings Firmware Load Zero Current Cal Current	t Gain Cal Volt Cal Advanced
Wireless COM Port COM16 Disconnect Q CCF9579E023Ep, -39, "WBMID042"	Disconnect
Serial Number S/N: SOC02452100042 SIM Card Number 000000000000000000000000000000000000	1.003
Log 4 of 4 Start Curr Limit 25 A/100Ah 🖨 Target V limit	2440 mV/cell ≑
Configuration date 01/01/00@00:05 SOC Limit 100 %	1.5 A/℃/100Ah 🚔
Version when configured 00.00.00 EQ Start Day/Time Sun 00 00 Internal Resist	120 mOhm/Cl/Ah 🜲
Vehicle ID WBMID042 EQ End Day/Time Sun 🐨 23 🗣 45 🐨 Parasitic Curr	250 mA ≑
Battery ID WBMID042 Max Ah Btw EQ 2500 Ah 🖨 Key On Detect	Curr Sense
Battery Type 1 Exide Tubular Flooded 🗢 Max days Btw EQ 6 Days 🗢 Key On Logic	Not Applicable
Num Of Cells 24 🔹 Time zone Pacific Standard V 🗹 Auto adjust for DST Key On Curr	1000 mA ≑
Battery Capacity 1000 Ah 🖨 Daily Call time (24 hr): 0 🖨 15 🖨 Run Curr Thrshid	3000 mA 🖨
Read Active Config Write To BatteryRx Write Config to file Load Config	100% SOC
Read #1 Prev Next Save Config	6.5 A Pack Current (positive = charging)
BatteryRx Clock Tue 01/10/2000 20:11 69'F / 21'C Batt 69'F / 21'C Shunt	24.195 V Pack Voltage
PC Clock Friday, 21 January 2022 10:28:43 Set BatteryRx Clock	Mid-pack Voltage
Info	Version 5.000
ò	

Summary of Battery Rx Utility Features

1 3	234 IIII	5 I	6 7 I I	8 I	9 I	10 I	11 	12 I
Rx B D III Utility	e Log Fault Log Battery H	istory Daily Performance Log	Alert Log Alert Set	ings Firmware Load	Zero Current Cal C	urrent Gain Cal	Volt Cal	Advanced
V Wireless	COM Port 💽 C	OM16 V Disconne	ect Q	CCF9579E023Ep3	9, "WBMID042"	~	Disconnect	t
Serial Number	S/N: SOC02452100042	SIM Card Nur	mber 00000000000	0000000	Current SW Ver	sion 1.003	}	
Log	4 of 4	Start Curr L	⊔mit 25 A/100	An 📮	Target V	limit 2440	mV/cell 🖨	
Configuration date Version when	01/01/00@00:05	500		▲ ○ ▲	Temp Fold	lback 1.5 /	√°C/100Ah	÷
configured	00.00.00.00	EQ Start Day/		 ✓ ✓ ▲ 45 ▲ 	Internal F	Resist 120	mOhm/Cl	/Ah 🜲
Venicie ID	WBMID042	EQ End Day/		• • •	Parasitio	: Curr 250	mA	
Battery ID	WBMID042	Max Ah Btv	w EQ 2500 Ah		Key On D	etect Curr S	ense	
Battery Type	1 Exide Tubular Flooded	Max days Btw	v EQ 6 Days	÷ _	Key On	Logic Not Ap	oplicable	
Num Of Cells	24 ≑	Time z	zone Pacific Standar	d 🗸 🗹 Auto adjus	t for DST Key On	1000 Curr	mA	
Battery Capacity	1000 Ah ≑	Daily Call time (2	4 hr): 0 🌲 15 🖨		Run Curr Th	nrshid 3000	mA	
Read Active Conf	ig Write To BatteryRx	Write Config to file	Load Config			100	% SOC	
Read #1	Prev	Next	Save Config		[6.5	A Pack Cu (positive	rrent = charging)
BatteryRx Clock T PC Clock Fi	ue 01/10/2000 20:11 riday, 21 January 2022 10:28	69°F / 21°C Batt 69°I	F / 21°C Shunt atteryRx Clock			24.195	V Pack Vo Mid-pack	ltage K Voltage
Info Bi	MID-III Configuration re	ad completed				Ver	rsion 5.000	

Battery Utility Interface

Battery Rx Utility tool has features that program, collect information and load firmware to the unit.

- 1. Configuration Set the Rx parameters
- 2. Charge Logs Download and view the Charge Logs
- 3. Fault Logs Download and view charger Fault Logs
- 4. Battery History Download and view the History Logs
- 5. Daily Performance Logs Download and view the Daily Logs
- 6. Alert Logs Download and view the BatteryRx Alert Logs
- 7. Alert Settings Set the Rx Alerts thresholds
- 8. Firmware Load Load new Firmware
- 9. Set zero current calibration
- 10. Calibrate current sensor
- 11. Calibrate pack and mid-pack voltage sensors
- 12. Advanced features
 - a. BatteryRx Cloning
 - b. BatteryRx Clear logs
 - c. Generate BRAT data file

Rx Configuration Programming Instructions Using the Utility

On the Configuration Tab, set the following parameters:

Rx BMID III U	tility								- 🗆 X
Configuration	Charge Log	Fault Log	Battery Histo	ry Daily Performance	e Log 🛛 Ale	rt Log Alert Settings	Firmware Load	Zero Current Cal Current	Gain Cal Volt Cal Advanced
✓ Wirele	SS	COM Port	O COM	16 V Dise	connect	Q CCF	9579E023Ep, -39), "WBMID042"	Disconnect
Serial Nu	mber S/N	I: SOC024521	00042	SIM Car	d Number	000000000000000000000000000000000000000	0000	Current SW Version	1.003
	Log 4	of 4		Start	Curr Limit	25 A/100Ah	-	Target V limit	2440 mV/cell 🜩
Configuration	date 01/	01/00@00:05			SOC Limit	100 % 🖨		Temp Foldback	1.5 A/°C/100Ah ≑
Version configu	when 00.0	00.00.00		EQ Start	Day/Time	Sun 🗘 0 🌩 0		Internal Resist	120 mOhm/Cl/Ah 🚖
Vehi	cle ID WB	MID042		EQ End	Day/Time	Sun 🖵 23 📮 4	5 🖶	Parasitic Curr	250 mA ≑
Batt	tery ID WE	MID042		Max A	Ah Btw EQ	2500 Ah 🖨		Key On Detect	Curr Sense
Battery	Type 1 Ex	ide Tubular Flood	ed	Max day	ys Btw EQ	6 Days 🚔		Key On Logic	Not Applicable
Num O	f Cells 24	ŀ	•	1	Time zone	Pacific Standard $ \smallsetminus $	🗹 Auto adjust	for DST Key On Curr	1000 mA ≑
Battery Ca	pacity 100	0 Ah	▲	Daily Call ti	me (24 hr) :	0 🜲 15 🜲		Run Curr Thrshld	3000 mA ≑
Read Activ	ve Config	Write To Ba	atteryRx	Write Config to file Next	Lo	ad Config we Config			100% SOC 6.5 A Pack Current (positive = charging)
BatteryRx C	lock Tue	01/10/2000	20:11 6	9°F / 21°C Batt	69°F / 21	°C Shunt			24.195 V Pack Voltage
PC C	lock Friday	21 January 20)22 10:28:43		Set Battery	Rx Clock			Mid-pack Voltage
Info	BMID	-III Configui	ation read	completed					Version 5.000

BMID III Programming Utility

See the next page for the parameters.

ITEM	What to Enter			
1. Vehicle ID:	Enter an 8-Character (Alphanumeric) Vehicle ID #.			
2. Battery ID:	Enter an 8-Character (Alphanumeric) Battery ID #.			
3. Battery Type:	Choose the battery type (2500 charger has 3 optional battery types).			
4. Battery Number of Cells:	Enter the number of cells of the battery.			
5. Battery Capacity:	Enter the battery capacity.			
6. Start Current Limit:	Recommend leaving default value (40A/100Ahs).			
7. SOC Limit:	Recommend leaving default value (100%).			
8. EQ Start Day/Time:	Enter the Equalization Start Day and Time.			
9. EQ End Day/Time:	Enter the Equalization End Day and Time.			
10. Max Ah Btw EQ:	Enter dash lines (-) at EQ Start Day to activate this option.			
11. Max days Btw EQ:	Enter dash lines (-) at EQ Start Day to activate this option.			
12. Time Zone:	Choose the Time Zone.			
13. Daily Call Time (24 hr):	Set the Call Time (Recommended 00:15).			
14. Target V Limit:	Leave as default (3000 mv/cell).			
15. Temperature Foldback:	Recommend leaving default value (1.5 A/C/100Ahs).			
16. Internal Resist:	Leave as default (120 mOhm).			
17. Parasitic Current:	Leave as default (250 mA).			
18. Key on Detect:	Leave as default (Curr Sense).			
19. Key on Logic:	Leave as default (Not Applicable).			
20. Key On Curr:	Leave as default (500 mA).			
21. Run Curr Thrshld:	Leave as default (2000 mA).			
22. Set Clock:	Click "Set Clock" - Syncs the Rx Unit time to the PC Clock.			
23. Select Write to BatteryRx to store the new configuration.				

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