

UPDATER POLINI MANUAL

Firmware update for E-P3+, E-P3+ and E-P3+ EVO motors

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1. CONNECT THE MOTOR TO THE PC



Using a Torx 20 key remove the plastic cover



Remove the aluminum cap using an Allen key CH6



Switch the e-bike battery ON

Connect a micro USB cable to the motor (be careful to the direction when you insert it) and the USB to a PC with Windows 10 version installed (or higher)

For all the operative systems: check that on 1.8 Java or higher is installed: if not download and install Java from: <u>www.java.com</u> Download the updated version of the Polini Updater program: Run the program Polini Updater with Java.

2. FIRMWARE UPDATE (MOTOR, DISPLAY, BLUETOOTH)

Note: the Polini updater system recognize the motor version and proposes automatically the updates for this model.

Note: if Java is not installed on the computer, the file could be opened automatically, i.e. with Winzip or Winrar by showing files that cannot be used. Be sure to install Java correctly and that the file has been opened with Java. In case open the file by clicking with the key on the right and select "open with" and "Java".

ATTENTION: the PC must be connected to internet to execute the updates.

CAUTION: to avoid sudden switching off during the update of the firmware, verify to have enough battery charge or connect the laptop to the charger.

- CAUTION: do not disconnect the USB cable during the firmware uploading.
 - Switch the bike ON
 - Open the "Polini updater" program



• The program shows the version of the firmware installed on the e-bike and those available on-line; to update press the "update ebike" button placed on the bottom left. Once the update has been completed, disconnect the USB cable, switch the bike OFF and then switch it ON. If some alerts messages will appear on the display, cancel them through the diagnostic area on the display menu

3. MOTOR FIRMWARE RECOVERY

ATTENTION: this procedure must be executed <u>exclusively if the display does not switch ON because of</u> malfunctions or in the case the firmware update has been interrupted before its finishing.

ATTENTION: the PC must be connected to internet to run the updates.

CAUTION: to avoid sudden switching off during the updating of the firmware, verify to have enough battery charge or connect the laptop to the charger.

CAUTION: do not disconnect the USB cable during the firmware uploading.

- Connect the USB cable to the motor and to the PC. Check the battery is OFF.
- Open the "Polini updater" program.

File Recovery Help	Polini Updater FV	V_TEST_1 [5.99.18]	СОМ14	×	1- Select RECOVERY mode.
Udpate step:					
	eBike	Online	Status		
Display					
Motor	MRC2- BIOS				
BLE Core					
BLE App					
Ebike Update					

- At the top left of the "Options" menu select "MOTOR RECOVERY MODE"
- Press the key "YES" to confirm

🏓 File Recovery Help 🛛 Polini Up	dater FW_TEST_1 [5.99.18]	_	\times	
Welcome to Polini EP3 firmware updater		COM14	3	
Udpate step:				2- Press to
Update status		×		start RECOVERY
RECC Use Recovery Mode fr	unction only if a firmware update atter ke does not turn on anymore.	npt has not been		
This procedure could Are you sure to uploa	reset some parameters to the factory v d the recovery firmware?	ralue.		
	Yes	No		
Ebike Update				

- When the process is completed, disconnect the USB cable and start the bike again.
- If the motor/display do not switch ON, contact the Polini service on the web site at ebike@polini.com

4. RECOVERY FIRMWARE DISPLAY

ATTENTION: this procedure must be executed <u>exclusively if the display firmware update has been</u> interrupted before its finishing and, consequently the display does not switch ON

ATTENTION: You need an *internet connection* to *update* your device.

CAUTION: to avoid sadden switches off during the firmware update, if you use check the battery charge status or connect the lap top to the charger.

CAUTION: do not disconnect the USB cable during the firmware upload.

- The Display firmware Recovery must be done when the ebike is ON
- Connect the cable to the engine and to the PC. Open the "Polini Updater" program

🖗 File Recovery H	elp Polini Updater FV	V_TEST_1 [5.99.18]	- ×	
Welcome Display Re Motor Rec Udpate st Ble Recov	rovery Mode overy Mode ery Mode		COM14 😂	1- Select the motor DISPLAY RECOVERY mode
	eBike	Online	Status	
Display	02.01.33	02.01.33	 ✓ 	
Motor	4.64	04.80.14	<u>↓</u>	
BLE Core	1.00.00.00	28.11.8.0	Ţ	
BLE App	1.00.00	1.02.01	⊥	
Chiles Lindete				
Ebike Opdate				

- On the top left of the "RECOVERY" menu select "DISPLAY RECOVERY" mode.
- For the TFT EVO display select the production date indicated in the serial number printed in the back. (I.e. serial no. 202102= 02/2021)
- Confirm it pressing the key "YES" and wait till the procedure is over.

File Recovery Help Polini Updater FW_TEST_1 [5.99.33] Welcome to Polini EP3 firmware updater Udpate step:	- ×	2- Seelcet the display model. For the TFT EVO model it is requietd to select the production date.
Image: Wight of the status Im	X empt has more.	3- Press YES to start the Display RECOVERY

- When the procedure is over, disconnect the USB cable and switch the bike ON.
- If the motor/display does not start, contact the Polini service on the web site or at ebike@polini.com

5. RECOVERY FIRMWARE BLUETOOTH

CAUTION: this procedure must be executed ONLY if the update of the firmware of the display has been interrupted before its conclusion and, consequently, the bluetooth does not switch on.

ATTENTION: the PC needs an *internet connection* to *update* your device.

CAUTION: to avoid an unexpected switching off during the firmware update, check the battery charge status or connect the lap top to the charger.

CAUTION: do not disconnect the USB cable during the update.

- The recovery of the firmware of the display must be processed when the bike is ON
- Connect the USB cable to the motor and PC. Open the "Polini Updater" program

🤌 File	Recovery	Help Polini Updater F	W_TEST_1 [5.99.18]	- ×	1- Select the Bluetooth
Welcome	Display Motor (Recovery Mode r lecovery Mode		COM14 🗿	RECOVERY mode
Udpate st	Ble Rec	overy Mode			
		eBike	Online	Status	
C	Display	02.01.33	02.01.33	✓	
r	Motor	4.64	04.80.14	⊥	
BL	E Core	1.00.00.00	28.11.8.0	⊥	
ВІ	LE App	1.00.00	1.02.01	⊥	
Ebił	ke Update				

- On the top left of the "RECOVERY" menu select "BLUETOOTH RECOVERY" mode
- Confirm the recovery by pressing "YES" and wait till the procedure is over.

File Recovery H Welcome to Polini EP3 f Udpate step:	elp Polini Updater FV irmware updater 	V_TEST_1 [5.99.18]	COM14	×	2- Press to start the Bluetooth RECOVERY
Update st	atus Use Recovery Mode function completed and the ble does r Are you sure to upload the re	only if a firmware update at tot work anymore. covery firmware?	ttempt has not been		
BLE Core BLE App	1.00.00	28.11.8.0	No No		
Ebike Update					

- When the procedure is over, disconnect the USB cable and switch the bike ON.
- If the motor/display does not start, contact the Polini service on the web site or at ebike@polini.com

6. REPLACE THE DISPLAY COMFORT E-P3 WITH A TFT EVO DISPLAY (COLOR)





Get the following parts:

- TFT EVO display item 955.830.053
- Display support: ROAD: 955.830.017

MTB: 955.830.016 Ø31,8 – 955.830.027 Ø35 CENTRAL: 955.830.046 Ø31,8

- Control panel: ROAD: 955.830.037 MTB: 955.830.036 MTB 4 pulsanti: 955.830.021
- Motor display cables: item 955.830.023







- Replace the motor connection cable with the new one (item 955.830.023), connecting it to the motor wiring
- Connect the new display (item 955.830.045) to the black cable (item 955.830.023) combining the arrows printed on them. Connect the switch controller cable (ROAD: 955.830.037 o MTB: 955.830.036 o MTB 4- button 955.830.021) to the display to the light blue socket combining the arrows printed on them.
- **ATTENTION**: the display firmware for this application is the FW 3.01.05 OR LETR. If the firmware is different from the one indicated the n. 33 alert sign will appear and the bike functions will be deactivated. In this case update the display firmware through the Polini updater program.
- Run the update of the motor firmware to a version equal or superior than fw 2.77 (or equal or superior than fw 4.66 depending on the version installed on the motor) as indicated in chapter 1. Once the update has been run, disconnect the USB cable, switch the e-bike OFF and then switch it ON
- Connect the motor to the PC through the USB cable, open the Polini updater and select from the menu "OPTIONS" the Item "UPGRADE THE TFT DISPLAY"

🖗 File Recovery Op	otions Help Po	ini Updater FW_TEST_1 [6.00.00]	- ×	×	
Welcome to Polini EP	Upgrade to TFT Display		COM14 😏		
Udpate step:	- '				
			_		
	eBike	Online	Status		Dross to rup the displi
					update
Motor	4.65.02	04.65.02	\checkmark		
Ebike Update					

- To start the display updat press "OK"
- When the porcess is over, disconnect the USB cable, switch the bike OFF, switch the bike ON and cancel the errors on the display.

7. HOW TO CHANGE THE 500WH E-P3 BATTERY WITH THE 500WH E-P3+EVO ONE

CAUTION: to use the last generation Evo battery it is mandatory to update the firmware, and consequently it will not be possible to use the old battery anymore (955.830.001)

ATTENTION: Polini E-P3 systems with ergonomic display (photo A) with the Bottle Battery installed will show 5 notches ONLY for the battery charge. The sum of the total capacity is 750Wh with batteries charged.

- Buy The 500Wh battery kit (item 955.830.030/A) that includes the adaptor to charge the battery and the battery-motor connecting cable
- Change the motor-battery connecting cable with the new cable (A), being careful the pins (1-2) are properly connected between the display cable and the motor.



- Connect the 500wh EVO battery, switch it on and connect the motor to the PC through the micro USB.
- Start the Polini Updater and update it to the last firmware available. From the menu, "Options", select "Change the 500Wh EVO battery".

File Recovery Welcome to Polini EP Udpate step:	Options Help Upgrade to TFT Display Switch to battery 500W	Polini Updater [6.05.02]	COM31	×
	eBike	Online	Status	
Motor	2.82	02.80	~	
Ebike Update				

• Once the procedure is over, disconnect the USB micro cable from the PC, siwtch OFF and ON the e-bike and cancel all the errors present on the display.

7.1 HOW TO RECHARGE THE E-P3+ EVO BATTERY

To recharge the E-P3+ EVO battery, take the charger, connect the Y socket (included in the 955.830.030/A) to the charger thus adapting the cable to the new charging socket.



Y socket

7.2 HOW TO ADAPT THE BATTERY COVER

ATTENTION: It could be required to modify the hole with the recharger connector on ebikes with battery cover or to remove the cover to recharge the battery. To install the bottle battery, it is mandatory to modify the hole or to remove the cover because the connection point is the same. (see "Bottle battery manual")

