MONTA APPLICATION CONFIGURATION GUIDE





ULTRACHARGE 160

Intelligent ultra-rapid EV charging station





Amendments

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Rolec Services Ltd, Ralph +44 (0) 1205 724754	is Lane, Boston, Lincolnshire PE20 1QU. United	d Kingdom.	

enquiries@rolecserv.co.uk

Product Support

Updates to this manual will be made available on the Rolec website at https://www.rolecserv.com/downloads-ev-charging

Check the document date, and the Version and \mathbf{R} evision number shown at the end of the Document Code (V01-R0, V01-R2, V02-R0, etc).







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IMPORTANT:

This document is primarily intended for the following engineers:

- Technical Support Engineer
- Maintenance Engineer
- Engineering installation team



Safety

This manual is specifically applicable to the **UltraCharge 160 DC Charger** and is provided as a guide to the configuration of the connection to the **Monta application** used to remotely monitor and control the charger.



IMPORTANT: Engineers must read and understand the content of this manual.

Rolec Services Ltd cannot accept any responsibility for improper actions.

- The information provided in this manual must ONLY be used with the model(s) listed on page 1 of this manual.
- The information provided in this manual must NOT be used with any other product.
- The content of this manual may be updated by the manufacturer as required.
- Do NOT use the equipment or application for anything other than its intended purpose.
- Do NOT modify the equipment or application unless specifically instructed to do so by the manufacturer.
- Do NOT attempt to repair the equipment or application unless specifically instructed to do so by the manufacturer.
- To maintain electrical safety, the body enclosure of the product (access covers) must be secured in their correct location using the supplied fasteners and the seal must be sufficient to maintain the IP rating of the enclosure.
- Damage to the product may render it unsafe. The product must be electrically isolated and NOT used until appropriate remedial action has been performed.

Safety Advice Within this Manual

Rolec manuals use a system of warnings, cautions and notes.

- WARNINGS concern the safety of installers/end user and will be given before the detail/instructions in the manual.
- **CAUTIONS** concern the potential for damage to the equipment and will be given before the detail/instructions in the manual.
- **NOTES** are given to provide additional information and/or to highlight information of importance. They will be given either before or after the detail/instructions as appropriate and may use different wording (such as IMPORTANT) where emphasis is required.

Warnings, Cautions and Notes may be repeated several times as appropriate and may be preceded by a hazard symbol where appropriate.



Configure UltraCharge 160 for Monta



WARNING: The enclosure will be open during parts of this procedure.

Make sure exposed electrical components are guarded against accidental contact.

Requirements

To connect the UltraCharge 160 to the Monta application you will need the following items.

- 1x SIM Card (supplied with this manual)
- 2x Monta QR Code labels (supplied with this manual)
- Laptop PC and web browser and a network cable connection port
- Network cable 2m long or more
- A short length of stiff wire such as a paper clip
- Smartphone with a working camera and QR Code reader
- Monta App downloaded to the smartphone.
- 1. Make sure the physical installation of the charge point is complete and that you are satisfied that power can be safely applied.
- 2. Apply power to the charge point then move all the circuit breakers to the ON position.

When power is applied, the alarm will activate while the door is open and certain functions of the charge point will be inhibited.

If the alarm is distracting, the alarm switch (located at the top left-hand side of the charge point) may be temporarily overridden by holding the switch closed with a cable tie or something similar.

Make sure to remove the override before closing the door.

 Take a photograph (or make a note) of the charge point Service Number shown on a QR code label on the inside of the door.

Service Number Label -



Figure 1 Router Location





- Make sure you have the SIM Card. -It should have been packaged with this manual and the Monta QR code label/sticker.
- 5. Take a photograph (or make a note) of the SIM card number.

Alternatively, keep the SIM card surround safe after the SIM card has been removed.

This number will be needed when configuring the connection to Monta.



Figure 2 SIM Card

IMPORTANT:

- 6. Call Rolec (**01205 724754**) to activate the SIM and to provide the serial/service number(s) and QR Code ID required to create the back office for the customer.
- 7. Locate the charge point Router on the inside of the main door.



Router

- Figure 3 Router Location
- Use a short stiff wire or similar tool to press the yellow, SIM card release button, located on the lower edge of the Router.

Remove the SIM card holder from the Router.

- 9. Place the SIM card into the holder and make sure it is held securely.
- 10. Insert the SIM card and holder back into its slot in the Router.

It should click into place and be held in the Router.



Figure 4 SIM Card Release Button



Figure 5 SIM Card in Holder





- 11. Connect the network cable to the Router
- 12. Connect the other end of the network cable to the laptop PC.

Network Cable



Figure 6 Network Cable Connected

#Seriallink

Industrial 4G Router

SLK-R4008-EU

13. Open the Web browser on the PC and enter the Default IP Address of the Router into the search bar.

The address and password are shown on the Router label – They may not be the same as those shown here.

In this example the IP Address is:

192,168,2,1

The Password is: admin (all lower case).

MAC:1C:59:74:50:13:52 Wireless SSID: SLK-Routers Wireless password: slk100200 Input voltage: DC12-28V SN: _____ R08E40E227290041 IMEI:860147052711155 Web:www.serialink.net

Default IP: 192.168.2.1 Password: admin

Figure 7 Router Label

- 14. When the address and password are entered correctly the laptop will connect to the Router.
- 15. On the laptop, navigate to the required Router settings screen using the path shown opposite.
- 16. On the screen that is displayed, locate the field labelled APN then enter the text 'em'.

Do not enter any other text or make other changes.



Network Settings > 4G Modem

Mobile Network

Figure 8 Laptop Screen

- 17. Tap the red SAVE & APPLY button shown at the bottom of the screen.
- 18. When the save is complete the screen (and the laptop) can be closed.

Enable 🔽

APN



19. Remove the network cable from the laptop and the Router.

NOTE: If the door alarm has been silenced with an override device, make sure to remove the device NOW. The alarm should now start to 'sound' again.

- 20. Close and secure the charge point door.
- 21. On the charge point's main screen, tap the area showing the date and time.

The date and time may not be correct at this point but will update automatically when a good signal connection is established.

The screen will change to show a Login screen.

22. Enter the password 080808

Then tap OK.

The screen will change to show configuration options.



Figure 9 Default Screen



Figure 10 Password Screen

23. Tap the **Setting** button.



Figure 11 Configuration Options



24. Tap the **MCU** button.



Figure 12 Setting Options

25. Make sure the fields on the screen are filled in as detailed below. Some may already be pre-filled but pay particular attention to the bold characters below:



IP Address: 255 255 255 0 Subnet Mask: Figure 13 MCU Settings 192.168.2.1 Gateway Address: MAC Address: This is unique to the charger and should not be changed from what is shown. Server IP Address 115.159.107.59 Server domain name: Wss://ocpp.monta.app/enter the characters shown on the charge point service number label from the photo captured at step 3. Port Number: 443 Turn off Domain name Connection: Network Type: Wired SIM ICCID: If not automatically entered by the system, enter the diaits shown on the SIM card from the photo captured at step 4. Platform authentication: 0 Secret key: This field should be blank – remove any digits that may be shown.

NOTE: If you will not be connecting to Monta or you are moving away from Monta, you will need to enter details supplied by the chosen App provider.





- 26. When all fields are correctly completed, tap the **Back** button shown at the bottom of the screen until you return to the Default screen.
- 27. Remove electrical power from the charge point and allow around 30 seconds to pass before re-applying power.
- When the charge point has fully restarted, check the status of the signal bars.





Figure 14 Good Signal and Connected to Monta Figure 15 Bad Signal and not Connected to Monta

29. If the connection to Monta is bad, the reason must be investigated.

- Make sure all settings, serial numbers, etc. have been entered as described in this guide.
- Make sure the site location has a 4G signal that is strong and consistent.

Configure Charger Output Power

Flexible Configuration

All units can be configured to a lower output to meet site power limitations. When power output is reduced, the unit's dynamic power sharing will automatically adjust accordingly.

For example: A 120kW model could be configured to 100kW which could provide 100kW to one connector or 2x50kW to 2 connectors when 2 vehicles are charging at the same time.

 Open the left-hand door of the charge point and, as a physical check, count the number of power modules installed.

Each module can provide 20kW so in the example shown here, 8 modules will provide a total of 160kW.

2. Close and secure the door when the count is complete.



Figure 16 Example of 8 Installed Modules

- 3. As previously described, navigate through the screens...
 - tap the time/date area
 - enter the password of **080808**
 - tap the Setting button
- 4. Now tap the **CCU** button.

RUL

Er



Figure 17 Setting Options

- 5. Tap the **Control** button.
- 6. Make sure the **Number of modules** field is the same as the modules that have been counted.

	Project 0 typo	factor.	
Control	Module 14	Number of 8 modules	
	System 0	Modula	
	Charging 1	Reserved 0	
	Total number 2	Note reduction (0	
	Fixednumber 1 ofmockles	Mater Q	

Figure 18 Configure Control

7. Tap the **Protection** button.

Note the letter (**Connector number**) shown above the **Control** button. This indicates the connector to which the settings will be applied.

 Set the figure in the Maximum power field to the maximum power (kW) that could be delivered by the charge point through this '1' connector. Advances of the set of

Figure 19 Configure Protection

If, for example, a 120kW charge point is to be downrated to 100kW, 100 should be entered into the Maximum power field.

 Tap the letter (or number) shown above the Control button and select the other connector. Check or amend the Maximum power figure as just described.

A	Ţ
B	Ē

NOTE: Connector 1 or A is on the left. Connector 2 or B is on the right.

NOTE: If only one connector is to be used, set connector 'B' to OkW.

IMPOTANT: The maximum power settings must not exceed the power output of the charge point.



Set Power Limits

The section of the guide describes a common scenario where the power supply available to the charge point does not currently meet the potential charging output.

For example, if the charge point is capable of charging at 160kW but the power available to the charge point is only 68kW and you want to provide equal power to charge 2 vehicles at the same time, the charge point must be downrated so that it can provide 2x 34kW.

- 1. As previously described, navigate through the screens...
 - tap the time/date area
 - enter the password of **080808**
- 2. Now tap the **Debug** button.



Figure 20 Configuration Options

3. Tap the **Previous** button.

	System fan:	Time modify:	
	Demand current:	Debug variable 2:	
	Demand voltage:	Debug variable 1:	
Shutdown	Charging power:	Voltage	
	Module voltage:	SOC capacity:	
Starting up	System status:	Charging time:	
	Load type:	Output current:	
	Operating mode:	Output voltage:	

Figure 21 Debug Screen 1

- 4. Enter **399** into the field, **Debug** address 5.
- 5. Tap the **Back** button to get back to the **Password entry** screen.

NOTE: To switch this function OFF, go back into the screen and enter 399 again.

Debug address 1:	
Debug address 2:	
Debug address 3:	
Debug arithmet &	
Debug address 5:	

Figure 22 Debug Screen 2



IMPORTANT: The next steps must be performed even if the required power settings have already been applied in a previous process.

- On the Password screen, enter 080808 then select the Setting button followed by the CCU button.
- 7. Tap the Protection button.
- 8. Enter a Maximum power of **68** for connector **A**.
- 9. Tap the **Connector No.** button to select connector **B**.
- 10. Enter a Maximum power of **68** for connector **B**.



Figure 23 Configure Protection

With the settings above correctly applied, this 160kW charger should now only supply a maximum of 68kW with an even distribution of 34kW to each connector if 2 vehicles are on charge at the same time.

Installers should amend the kW figures applied to meet the needs of the specific installation.

Link the Monta QR Codes

- 1. Make sure you have downloaded the Monta smartphone application.
- 2. Make sure you have the Monta QR code label/stickers they should have been packaged with this manual and the SIM Card.

The labels are marked A or B to correspond to the A/B marked on the charge point above the connectors.

- 3. Open and sign-in to the Monta App.
- 4. Locate the charger in the App. You should see a serial number-A and a serial number-B that corresponds to the 2 connectors on the charge point.
- 5. Select the first connector to be linked then open the charge point settings and select **Monta sticker**.



Figure 24 Select Monta Sticker

6. Click on **Pair a sticker** and select a method of pairing.

Select the method, which is compatible with your phone and scan the sticker to pair it to the charge point.

7. See your sticker in the Monta app.

You will see a green banner that the sticker was successfully paired.

 Attach the Monta QR code label to the charge point over the existing A/B label (as appropriate) that sits above the connector.



9. Repeat the steps above for the second connector.

NOTE: If the wrong connector has been linked, there is the option to remove the link.

This is the end of the process.

- Make sure the charge point cabinet is closed and secure and is in a safe condition to be handed over to the customer.
- Make sure the customer is fully informed of the work that has been done.





Figure 25 Pair a Sticker





Figure 26 Successfully Paired



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The latest version of this publication can be downloaded at https://www.rolecserv.com/downloads-ev-charging

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t: 01205 724754 e: enquiries@rolecserv.co.uk









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IT CONTAINS INSTRUCTIONS AND ITEMS THAT WILL BE NEEDED TO CONFIGURE THE EQUIPMENT FOR USE