

Instruction Manual

Blink IQ 200 – Level 2 AC EVSE



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Charge on.

blink[®]

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1. IMPORTANT SAFETY INSTRUCTIONS

Before installing or using the **Blink Network, LLC** (Blink) electric vehicle supply equipment (EVSE), read all these instructions, paying particular attention to any **WARNING** and **CAUTION** markings in this document and on the Blink Product. You should also review any instructions included with your electric vehicle (EV) as they pertain to vehicle charging.

The following symbols and associated instructions are used throughout this document and relate to action necessary to avoid hazards.

Safety Instructions

Legend



WARNING

Used when there is a risk of personal injury



WARNING: RISK OF ELECTRIC SHOCK

Used when there is a risk of electric shock



WARNING: RISK OF FIRE

Used when there is a risk of fire



CAUTION

Used when there is a risk of damage to the equipment

- This product should be installed only by a qualified approved technician.
- Blink is not responsible for physical injury, damage to property or equipment caused by the installation of this device.
- A device employing pressure terminal connectors for field wiring connections shall be provided with instructions specifying a range of values or a nominal value of tightening torque to be applied to the clamping screws of the terminal connectors.
- Make sure that the materials used and the installation procedures follow local building codes and safety standards.
- The information provided in this manual in no way exempts the user of responsibility to follow all applicable codes or safety standards.
- Review this manual carefully and consult with a licensed contractor, licensed electrician, or trained installation expert to make sure of compliance with local building codes and safety standards.

Repair and Maintenance Clause

- Only a licensed contractor, licensed electrician, or trained installation expert is allowed to repair or maintain this device. It is forbidden for a general user to repair or maintain this device.
- Any repair or maintenance **MUST** be performed after removing power from this device.

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FCC Rules and Industry Canada License-Exempt RSS Standard(s)

- This device complies with Part 15 of the FCC Rules. Changes or modifications are not expressly approved by the manufacturer could void the user's authority to operate the equipment.
- English: This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- French: Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



WARNING: RISK OF ELECTRIC SHOCK

Basic precautions should always be followed when using electrical products, including the following:

- Read all the instructions before using this product.
- This device should be supervised when used around children.
- Do not put fingers into the EV connector.
- Do not use this product if the flexible power cord or EV cable is frayed, has broken insulation, or any other signs of damage.
- Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.



WARNING: RISK OF ELECTRIC SHOCK

Improper connection of the equipment grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded.



WARNING: RISK OF ELECTRIC SHOCK

- Do not touch live electrical parts.
- Incorrect connections may cause electric shock.



WARNING

This equipment is intended only for charging vehicles that do not require ventilation during charging. Please refer to your vehicle's owner's manual to determine ventilation requirements.



WARNING

Do not use extender cables to increase the length of the charging cable. The maximum length is limited to 25 feet by the National Fire Protection Agency.

General Conventions

The use of the word **Note:** indicates additional information that is relevant to the current process or procedure.

SAVE THESE INSTRUCTIONS

Charge on.

2. INTRODUCTION

This Instruction Manual describes how to properly install the Blink IQ 200 – Level 2 AC EVSE (Blink Product). Contact the Blink Support Center at 1-888-998-BLINK (2546) for troubleshooting assistance and additional technical questions.

Unauthorized modification of the Blink Product voids the manufacturer's warranty.

The Blink Product specified in this document is design for the North American market to charge plug-in electric vehicles (PEVs), plug-in hybrid electric vehicles (PHEVs), and battery electric vehicles (BEVs). It provides Level 2 AC charging that shortens the charging time for typical EVs, when compared to a Level 1 AC EVSE.

3. PRODUCT OVERVIEW

BLINK IQ 200 PRODUCTS			
MODEL NAME	ADVANCED CHARGING STATION	SMART CHARGING STATION	KIOSK
MODEL NUMBER	IQ W 2-80 U-M1-R2-N-25	IQ W 2-80 U-W 1-N1-N-25	IQ W 2-00 U-M1-R2-N-00
PART NUMBER	01-0207	01-0205	01-0208
PRODUCT VIEW			

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4. PRODUCT SPECIFICATIONS

BLINK IQ 200 PRODUCTS			
POWER SPECIFICATIONS	ADVANCED CHARGING STATION	SMART CHARGING STATION	KIOSK
Input/ Output Power (Max.)	19.2kW Max.		19.2W Max. Input Only
Input/ Output Power (Standby)	<10W Standby		<10W Standby
Input/ Output Power	2.9, 3.8, 5.8, 7.7, 9.6, 15.4, 17.3, 19.2kW		19.2W Max. Input Only
Input/ Output Amperage	Software Selectable: 12A, 16A, 24A, 32A, 40A, 64A, 72A, 80A		0.08A Continuous Input Only
Circuit Breaker Options	15A, 20A, 30A, 40A, 50A, 80A, 90A, 100A		15A or 20A
Input/ Output Voltage	208VAC/ 240VAC		120/ 208/ 240VAC Input
Input / Output Voltage Range	180VAC to 264VAC		90 to 132VAC, 180 to 264VAC Input
Input / Output Frequency	60Hz		
Input Wiring Type	Hardwired		
Input Wiring Scheme	L1, L2, GND		L1, N, GND or L1, L2, GND
Cold-Load Pickup	Randomized delay between 120 and 720 sec. before charge resumes after a power failure.		Not Applicable
Power Measurement Accuracy	Embedded meter with a ±1% accuracy at the nominal input.		Not Applicable
Surge Protection	Up to 6kV at 3,000A		
FUNCTIONAL SPECIFICATIONS			
Charge Connector Type	SAE J1772		Not Applicable
Charge Cable Length	25ft.		Not Applicable
Demand Response	Yes ²		Not Applicable
Status Indicator	LED and Audio		Audio
User Interface	UIB, 7" Color 800x480 w/ Touch Panel	None ¹	UIB, 7" Color 800x480 w/ Touch Panel
Access Control	Contactless Reader: RFID Cards: ISO/ IEC 14443A/ B, ISO/ IEC 15693, MIFARE Plus, HID iCLASS, NEMA Smart Credit Cards ² : Visa, Master Card, Discover, American Express NFC ² : ISO 18092, Apple Pay, Google Pay	None ¹	Contactless Reader: RFID Cards: ISO/ IEC 14443A/ B, ISO/ IEC 15693, MIFARE Plus, HID iCLASS, NEMA Smart Credit Cards ² : Visa, Master Card, Discover, American Express NFC ² : ISO 18092, Apple Pay, Google Pay
NETWORK SPECIFICATIONS			
Local Area Network (LAN)	2.4GHz Wi-Fi (802.11 b/ g/ n)		
Wide Area Network (WAN)	Cellular (3G GSM, 3G CDMA)	None	Cellular (3G GSM, 3G CDMA)
Network Interface	Blink OCPP, OCPP v1.6J		
Mounting Type	Pedestal or Wall Mount		
SAFETY & COMPLIANCE SPECIFICATIONS			
Ground Fault Detection	CCID20, 20mA per UL 2231, Automatic Reset Feature and Manual Reset Feature		Not Applicable
Ground Monitor	Ground Monitor per UL 2231		Not Applicable
Safety Compliance	UL and cUL, NEC Article 625, RoHS, Norma Oficial Mexicana (NOM)		
Protection	Over-Voltage (OVP), Under-Voltage (UVP), Over-Current (OCP), Over-Temperature (OTP), and Short-Circuit Protection		
EMC Compliance	FCC Part 15 Class B, Industry Canada (IC), PTCRB		
ADA Compliance	Yes		
ENERGY STAR Certified	Yes		Not Applicable
OPERATIONAL SPECIFICATIONS			
Enclosure Rating	NEMA Type 3R Indoor/ Outdoor		
Operating Temperature	-30°C to +50°C (-22°F to +122°F)		
Storage Temperature	-40°C to +80°C (-40°F to +176°F)		
Operating Humidity	0 to 95% Relative Humidity, Non-Condensing		
Charger Dimensions	19.5" H x 10.5" W x 8.5" D		
Package Dimensions	25.3lbs (11.5kg)	24.2lbs (11kg)	8.8lbs (4kg)
Charger Weight (Unpackaged)	25.3lbs (11.5kg)	24.2lbs (11kg)	8.8lbs (4kg)
Charger Weight (Packaged)	31lbs (14kg)	30lbs (13.6kg)	10lbs (4.5kg)

Blink reserves the right to alter product offerings and specs at any time without notice and is not responsible for typographical or graphical errors that may appear in this document.

¹If applicable, an adjacent Kiosk can provide access control for up to 20 secondary Smart Charging Stations.

²May not be included in the initial product offering.

5. PRE-INSTALLATION INSTRUCTIONS

5.1. Safety and Grounding

5.1.1. Safety Check



CAUTION: DISCONNECT ELECTRICAL POWER PRIOR TO INSTALLING THE BLINK CHARGING STATION. FAILURE TO DO SO MAY CAUSE PHYSICAL INJURY OR DAMAGE TO THE ELECTRICAL SYSTEM AND BLINK PRODUCT.

The Blink Product should be installed only by a licensed contractor, and/or a licensed electrician in accordance with all applicable state, local and national electrical codes and standards.

Before installing the Blink Product, review this manual carefully and consult with a licensed contractor, licensed electrician and trained installation expert to ensure compliance with local building practices, climate conditions, safety standards, and state and local codes.

Use appropriate protection when connecting to the main power distribution cable. Use tools as outlined in the "Tools Required for Installation" section.

5.1.2. Grounding Instructions

This product must be connected to a grounded, metal, permanent wiring system; and an equipment grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the product.

Charge on.

5.2. Conduit & Breaker Size Guide

All Specifications are Per Charging Station or Port					
Max. Output (Charging) Current	Typical Circuit Breaker (CB) ³	Typical Wire Specs ³	Typical Conduit Size ³	Blink IQ 200 Enclosure Input Conduit Size	Notes / Assumptions
12A <i>See Note Below</i>	15A	Two #12AWG Wires (Line) One #12AWG Wire (Ground)	1/2"	1"	≤150ft. One-Way Distance ≤2% Voltage Drop
16A <i>See Note Below</i>	20A	Two #10AWG Wires (Line) One #12AWG Wire (Ground)	3/4"	1"	≤150ft. One-Way Distance ≤2% Voltage Drop
24A <i>See Note Below</i>	30A	Two #8AWG Wires (Line) One #10AWG Wire (Ground)	3/4"	1"	≤150ft. One-Way Distance ≤2% Voltage Drop
32A <i>See Note Below</i>	40A	Two #8AWG Wires (Line) One #10AWG Wire (Ground)	3/4"	1"	≤150ft. One-Way Distance ≤2% Voltage Drop
40A <i>See Note Below</i>	50A	Two #6AWG Wires (Line) One #8AWG Wire (Ground)	3/4"	1"	≤150ft. One-Way Distance ≤2% Voltage Drop
64A <i>See Note Below</i>	80A	Two #4AWG Wires (Line) One #8AWG Wire (Ground)	1"	1"	≤150ft. One-Way Distance ≤2% Voltage Drop
72A <i>See Note Below</i>	90A	Two #3AWG Wires (Line) One #8AWG Wire (Ground)	1"	1"	≤150ft. One-Way Distance ≤2% Voltage Drop
80A <i>Default Setting</i>	100A	Two #2AWG Wires (Line) One #8AWG Wire (Ground)	1"	1"	≤150ft. One-Way Distance ≤2% Voltage Drop

³Consult with a licensed contractor, licensed electrician, or trained installation expert to ensure compliance with local building codes and safety standards.

Table 1 – Conduit and Breaker Size Guide

CAUTION **WARNING: RISK OF FIRE**

All charging products are preconfigured to allow a Max. Output (Charging) Current of 80A. To operate the product at a reduced current, the **Max Amperage FW Setting** **MUST** be configured using the unit's Web Portal (See Instructions in **Section 7.2 Changing the Maximum Output (Charging) Current of a Charging Station**).

CAUTION **WARNING: RISK OF FIRE**

To reduce the risk of the fire, connect only to a circuit provided with (CB - Table 1) amperes maximum branch circuit overcurrent protection in accordance with the National Electrical Code, ANSI/NFPA 70, and the Canadian Electrical Code, Part I, C22.2.

5.3. Mounting Options

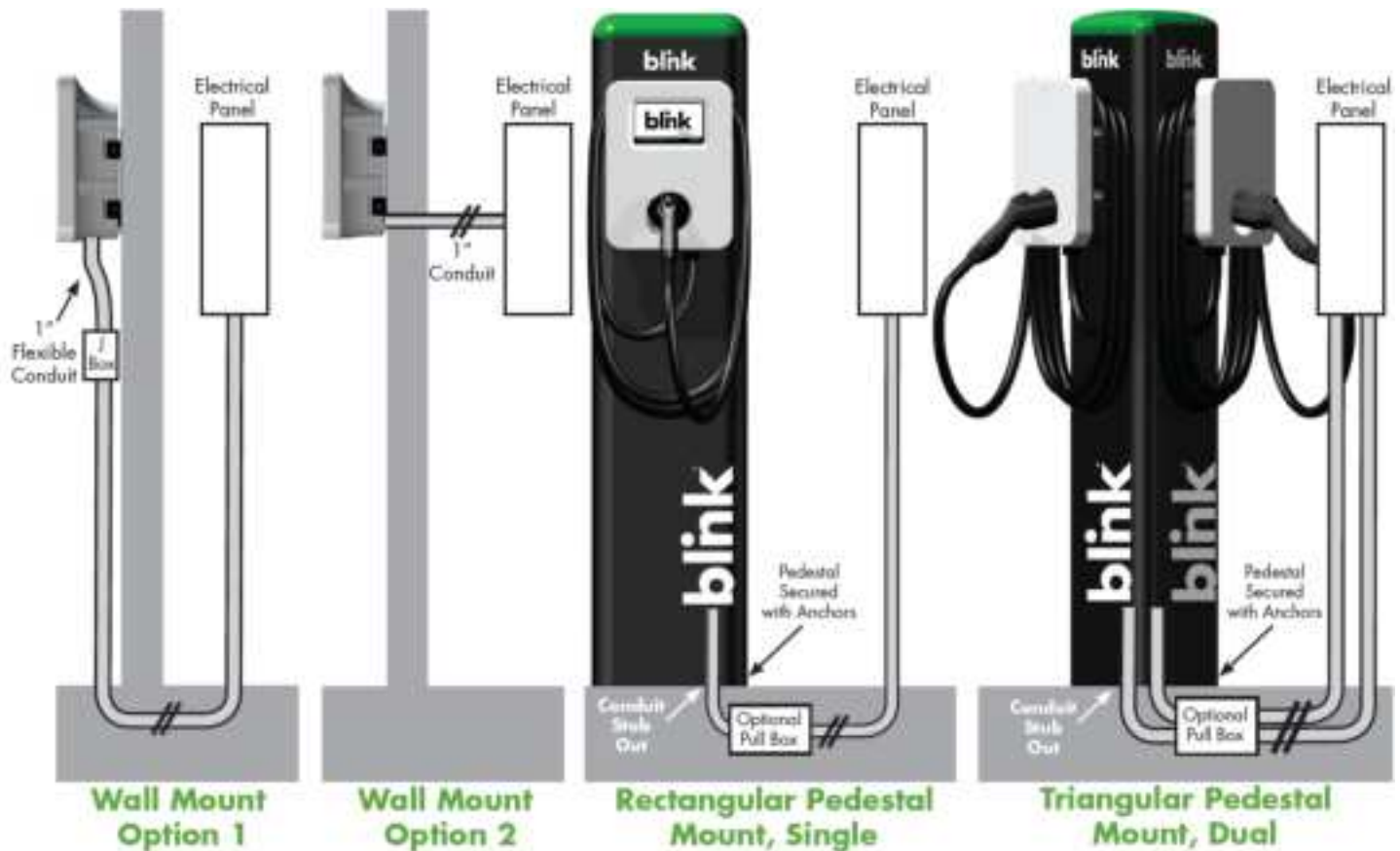


Figure 1 – Mounting Options

5.4. Product Placement Tips

5.4.1. Kiosk and Smart Unit Placement

- Kiosk units should be installed within 150 ft. (line-of-sight) of the farthest Smart unit.
- Walls, pillars, and barriers may affect the ability for a Smart unit to communicate with a Kiosk unit.
- Kiosk can provide access control for up to 20 secondary Smart Charging Stations.

5.4.2. Advanced and Kiosk Unit Placement

- Advanced and Kiosk units which will be utilizing cellular connections to communicate with a Central System must be installed in an area that has adequate cellular coverage.
- Enclosed and/ or underground structures, such as parking garages may not support adequate cellular coverage. In these cases, cellular repeater / amplifier systems should be considered.

Charge on.

6. INSTALLATION INSTRUCTIONS

6.1. Tools Required for Installation

Tool	Applicable Models	Supplier Name	Supplier Part #
Security Torx T20 L-Driver	All Product Models	Blink	Included in Product Box
Security Torx T20 Driver	All Product Models	Commercially Available	Commercially Available
Wire Cutters	All Product Models	Commercially Available	Commercially Available
Wire Strippers	All Product Models	Commercially Available	Commercially Available
Channellock Pliers	All Product Models	Commercially Available	Commercially Available
Torque Wrench	All Product Models	Commercially Available	Commercially Available
Drill	All Product Models	Commercially Available	Commercially Available
Drill Bits	All Product Models	Commercially Available	Commercially Available
Slotted Screwdriver	All Product Models	Commercially Available	Commercially Available
P2 Phillips Screwdriver	Kiosk Model	Commercially Available	Commercially Available
P3 Phillips Screwdriver	Advanced & Smart Models	Commercially Available	Commercially Available
Crimpers, 12-14 AWG	Kiosk Model	Commercially Available	Commercially Available
Crimpers, 8-4/ 0 AWG	Advanced & Smart Models	Greenlee	K09-2GL

Table 2 – Tools Required for Installation

6.2. Parts Required for Installation

Part	QTY	Applicable Models	Supplier
Product	1	All Product Models	Blink, Included in Product Box
Mounting Bracket	1	All Product Models	Blink, Included in Product Box
Mounting Bolts To Secure the EVSE to the Mounting Bracket	4	All Product Models	Blink, Included in Product Box
Ring Terminal, 2 AWG, Power Terminals	2	Advanced & Smart Models	Blink, Included in Product Box
Ring Terminal, 8 AWG, Power Terminals	2	Advanced & Smart Models	Blink, Included in Product Box
Ring Terminal, 8 AWG, Ground Terminal	1	Advanced & Smart Models	Blink, Included in Product Box
Ring Terminal Insulators, Vinyl End Caps	5	Advanced & Smart Models	Blink, Included in Product Box
Wire, Copper	As Needed	Commercially Available	Commercially Available
Mounting Screws, Wood, 5/16" Wall Mount Only	2	Commercially Available	Commercially Available
Mounting Anchors, Masonry, 5/16" Wall Mount Only	4	Commercially Available	Commercially Available
Conduit Fitting, 1" Wall Mount Only	1	Commercially Available	Commercially Available
Conduit, 1" Wall Mount Only	As Needed	Commercially Available	Commercially Available

Table 3 – Parts Required for Installation

6.3. Installation Procedure

6.3.1. Open the Blink Product box and locate the mounting bracket.

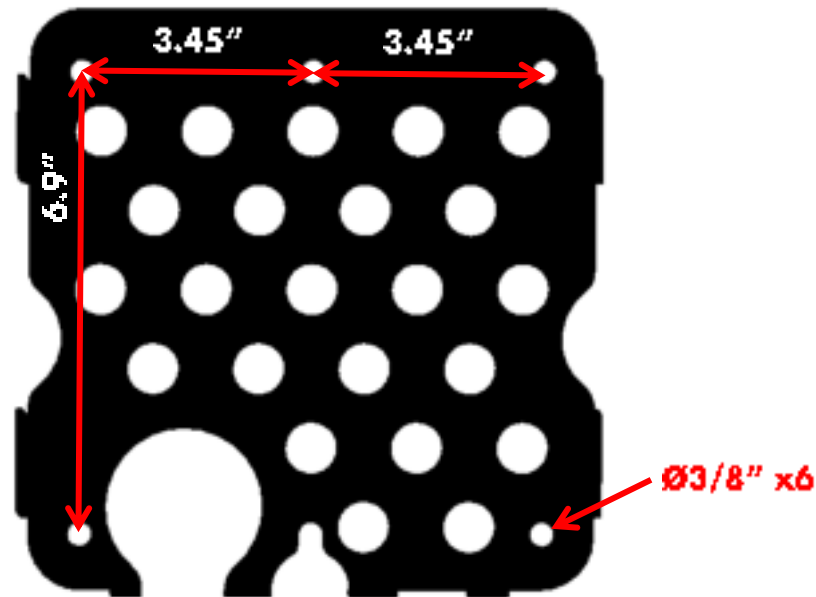


Figure 2 – Mounting Bracket

6.3.2. Drill holes in the wall or mounting surface for the mounting bolts.

Note: A recommended mounting height is 40 inches (1016 mm) from finish grade to the bottom of the mounting bracket.

Note: Follow applicable accessibility requirements for the mounting position. This equipment should be located at least 18 inches (460 mm) above the floor.

6.3.3. Secure the mounting bracket to the wall or mounting surface with appropriate fasteners as follows:

- For metal construction, use 5/16" screws or bolts.
- For wood construction, use 5/16" lag bolts.
- For masonry walls, use 5/16" expansion anchors.

- 6.3.4. Remove the top cover from the Blink Product using a Security T20 driver to loosen the 7 screws.

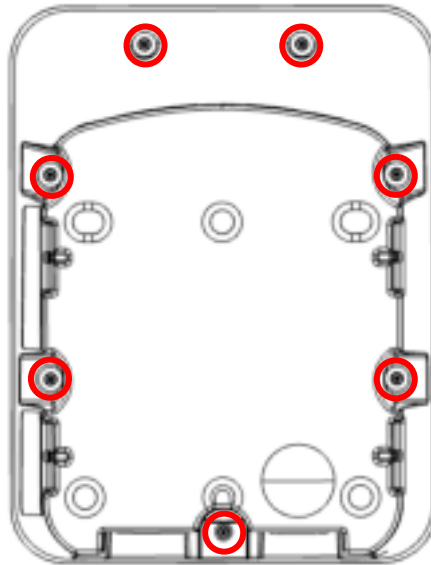


Figure 3 – Top Cover Screws

- 6.3.5. Remove the appropriate 1" hole cover (**A** or **B**) based on the desired conduit entry point.

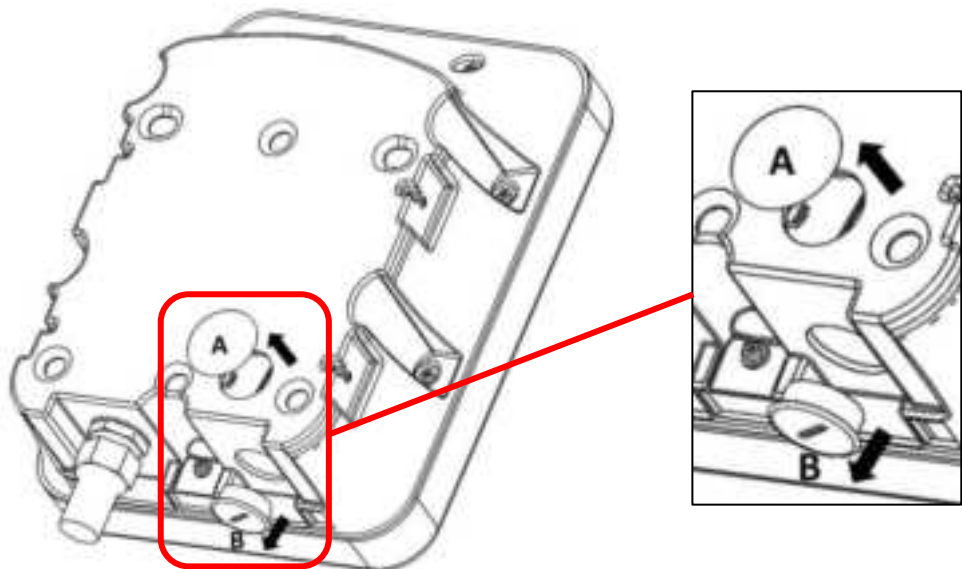


Figure 4 – 1" Hole Cover Removal

- 6.3.6. Attach the 1" conduit (with wire) to the enclosure using the appropriate 1" conduit fitting.

Note: Choose the appropriate conduit and wire based on **Table 1 – Conduit and Breaker Size Guide** and in accordance with all applicable state, local, and national electrical codes and standards. Use conductor type other than RHH, RHW and RHW-2.

- 6.3.7. Attach the product to the mounting bracket using the 4 included mounting bolts and a Security T20 Driver using a torque force of 13 Inch-Pounds (1.5 Newton Meters).

 CAUTION

Do not overtighten the mounting bolts as damage may occur.

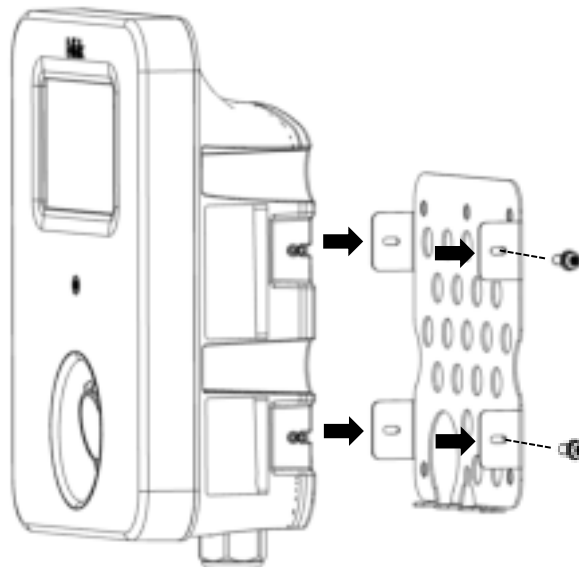


Figure 5 – Product Installation

- 6.3.8. Using the appropriate wire stripping tool and crimping tool specified in **Table 2 – Tools Required for Installation**, crimp the included ring terminals to the wires.

Tip: The recommended wire strip length is 5/8".

 CAUTION **WARNING: RISK OF FIRE**

Failure to use the proper crimping tool could result in a fire and/ or damage to the equipment. Proper crimping tools and crimping methods **MUST** be used. Blink Product installers may be held liable for the improper installation of a unit, which includes the use of improper crimping tools and methods.

- 6.3.9. Slide the included Vinyl End Caps over the crimped ring terminals.

6.3.10. Remove the clear plastic cover from the terminal block.

6.3.11. Attach the crimped ring terminals to the terminal block inside the Blink Product.

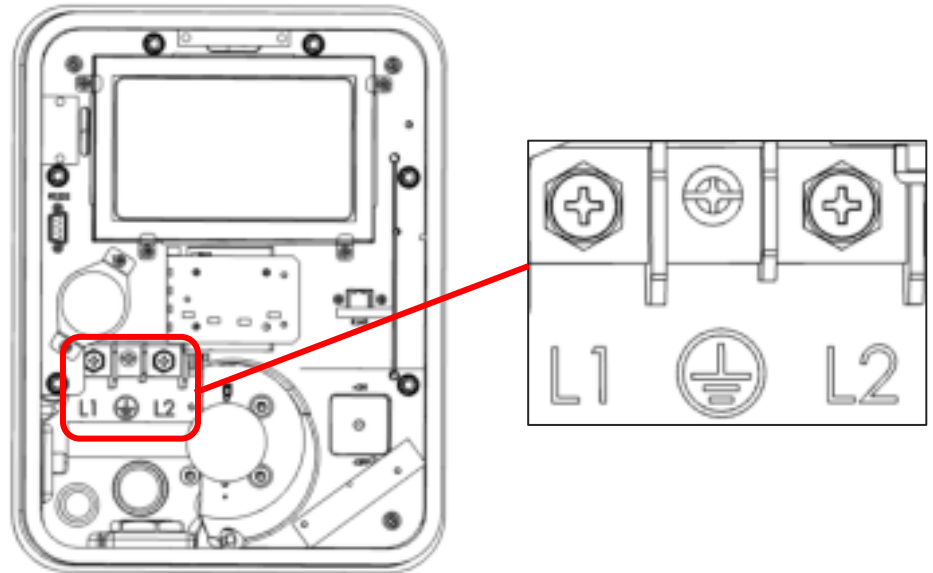


Figure 6 – Terminal Block

6.3.12. Ensure that the terminal block bolts are tightened using the following torque specifications:

Advanced and Smart Models

- L1 and L2: 70 Inch-Pounds (8 Newton-Meters)
- Ground: 26 Inch-Pounds (3 Newton-Meters)

Kiosk Model

- L1 and L2: 7 Inch-Pounds (0.8 Newton Meters)
- Ground: 7 Inch-Pounds (0.8 Newton Meters)

CAUTION **WARNING: RISK OF FIRE**

Failure to use the proper torque specs could result in a fire and/or damage to the equipment. Proper torque tools and methods must be used. Blink Product installers may be held liable for the improper installation of a unit, which includes the use of improper torque tools and methods.

6.3.13. Re-attach the clear plastic cover to the terminal block.

- 6.3.14. Turn the power switch from the "OFF" position to the "ON" position.

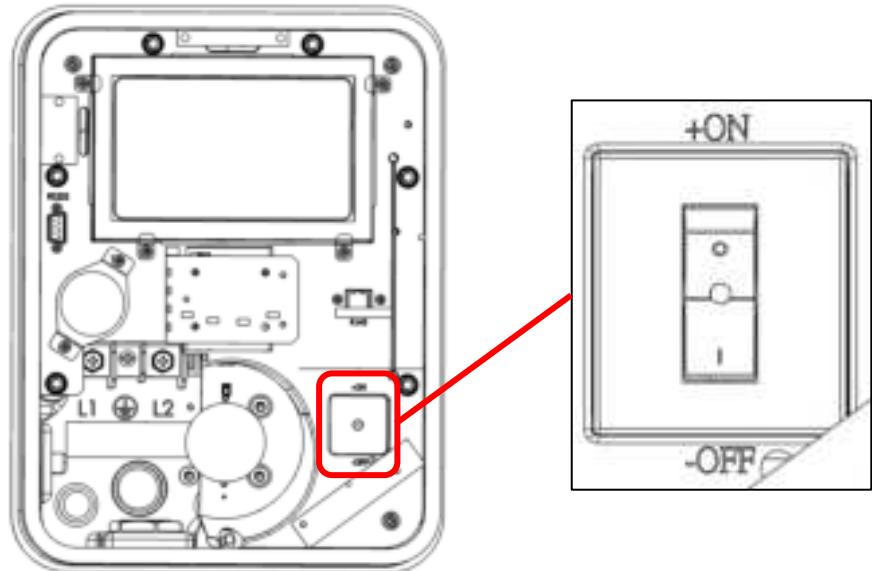


Figure 7 – Power Switch

- 6.3.15. Re-attach the top cover to the Blink Product using a Security T20 Driver and a torque force of 13 Inch-Pounds (1.5 Newton Meters).



CAUTION

Do not overtighten the mounting bolts as damage may occur.

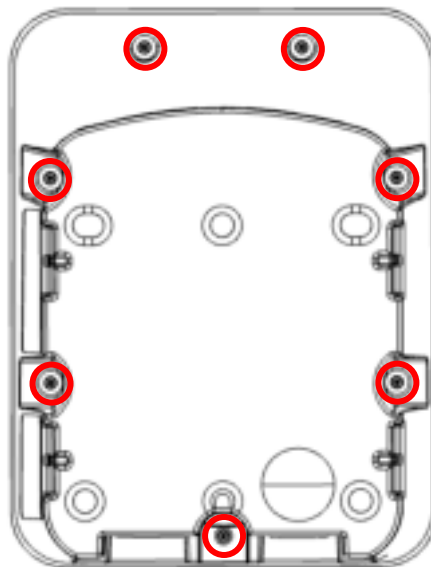


Figure 8 – Top Cover Screws

6.3.16. Apply power to the Blink Product.

6.3.17. If applicable, coil the charge cable around the Blink Product and attach the charging connector to the holster.



Figure 9 – Advanced, Smart, and Kiosk Units

7. SETUP INSTRUCTIONS

7.1. Web Portal Access

- 7.1.1. Contact the Blink Network Support Center at **1-888-998-BLINK (2546)** to obtain the **Wi-Fi password** AND the **Web Portal password**.
- 7.1.2. Using a computer, a tablet, or a smartphone that supports Wi-Fi, browse for available networks.
- 7.1.3. Connect to the Blink Product's Wi-Fi network by selecting the SSID (Wi-Fi Network Name) which corresponds with unit's serial number (displayed on the left side of the unit).

TIP: The format of the Wi-Fi Network name will be Blink-SerialNumber

Example: Blink-L1-0207-1638-123456

- 7.1.4. Enter the Wi-Fi password and connect to the Wi-Fi network.
- 7.1.5. Open a web browser (such as Google Chrome, Mozilla Firefox, Safari, etc.) and navigate to the following IP address: 10.10.0.1

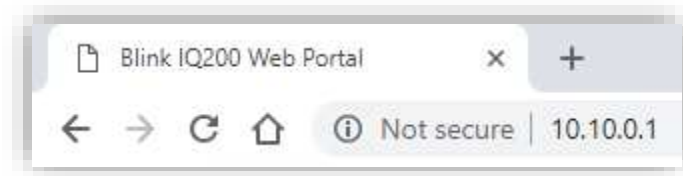


Figure 10 – Web Portal: IP Address

- 7.1.6. In the **User Name** field, enter **admin**.
- 7.1.7. In the **Password** field, enter the password that you received from the Blink Network Support Center.

Charge on.

7.2. Changing the Maximum Output (Charging) Current of a Charging Station

IMPORTANT: The maximum output (charging) current of the Blink Product must only be adjusted by authorized personnel. The maximum output (charging) current must not be adjusted after the Blink Product is commissioned.

If a circuit breaker is upgraded at a later time, the Blink Product must be re-commissioned and the maximum output (charging) current must be adjusted at that time by authorized personnel.

7.2.1. On the **Configuration** page of the unit, select the **Station Settings** tab.



Figure 11 – Station Settings

7.2.2. On the **Station Settings** tab, enter the Maximum Charging Current in the **Max Amperage FW Setting** field. The amperage value should be a number that is in the following range: **12.0** to **80.0**.

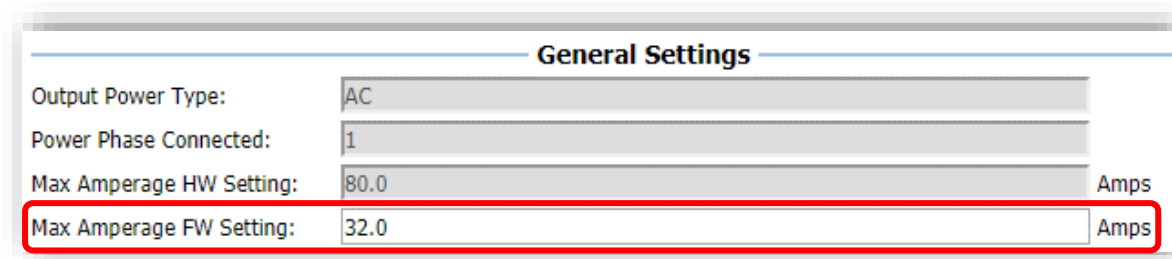


Figure 12 – Maximum Charging Current (Max Amperage FW Setting)

Circuit Breaker Size	15A	20A	30A	40A	50A	80A	90A	100A
Max Amperage FW Setting	12.0	16.0	24.0	32.0	40.0	64.0	72.0	80.0

Table 4 – Maximum Charging Current (Max Amperage FW Setting)

Charge on.

7.3. Connecting a Smart Unit to a Kiosk (Smart Units Only)

7.3.1. On the **Configuration** page of the Smart Unit, select the **Communication Settings** tab.

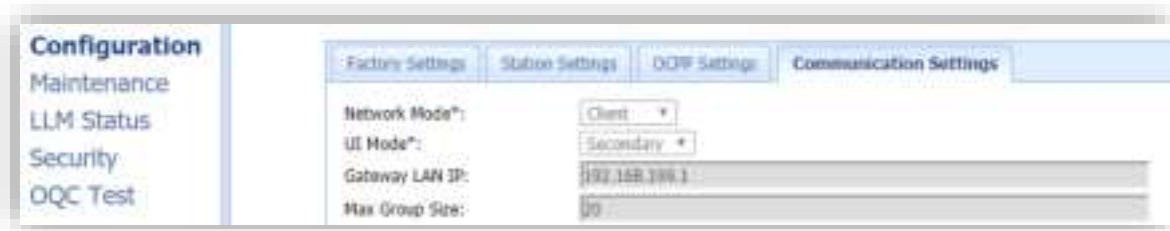


Figure 13 – Smart Unit Communication Settings Tab

7.3.2. On the **Communication Settings** tab, enter the Serial Number of the Kiosk in the **Gateway Serial Number** field. The Serial Number of the Kiosk can be found on the product label on the left side of the unit.

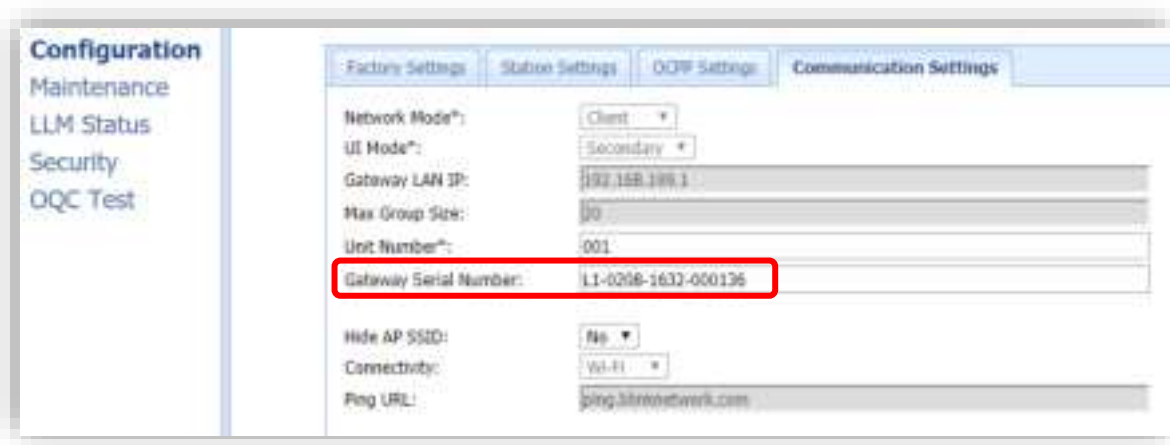


Figure 14 – Smart Unit – Gateway Serial Number

7.3.3. Select the **Apply** button at the bottom of the page.

Repeat steps 7.1.2 through 7.3.3 for each Smart unit that needs to be connected to the Kiosk.

8. OPERATING INSTRUCTIONS

8.1. Starting a Charge Session

- 8.1.1. Release the charging connector from the holster and connect it to the EV.
- 8.1.2. Touch the Main Screen to begin the authorization process.



Figure 15 – Main Screen

- 8.1.3. **Kiosk Only:** Enter the Unit # of the charging station then touch **ENTER**.
The Unit # of a charging station is located on a label on the right side of the unit.

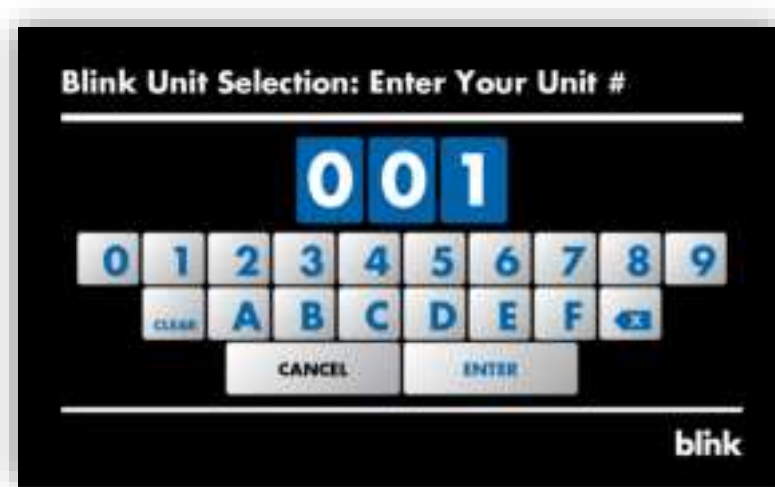


Figure 16 – Blink Unit Selection Screen

Charge on.

- 8.1.4. Initiate a charge session using one of the following authorization methods:
- RFID Card
 - Remote Start Command (Using a Mobile App)
 - Blink Code (If Applicable)
 - Smart Credit Card / Apple Pay / Google Pay (May not be included in the initial product offering)
- 8.1.5. The Authorizing screen will appear while the unit communicates with the Central System.



Figure 17 – Authorizing Screen

- 8.1.6. Once the Charge Confirmation screen appears, select the **Charge** button. If a selection is not made within 20 seconds, the unit will automatically advance to the next screen.

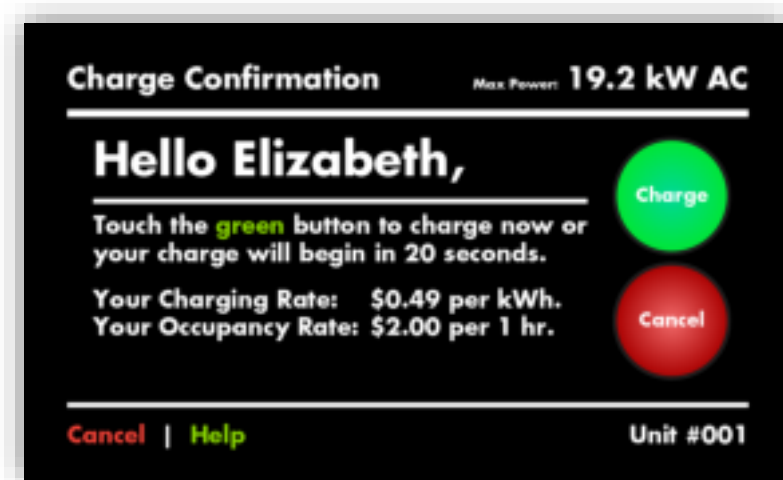


Figure 18 – Charge Confirmation Screen

Charge on.

8.1.7. While the EV is being charged, the Charging screen will be displayed.



Figure 19 – Charging Screen

8.1.8. While the EV is connected but not being charged, the Occupying screen will be displayed.



Figure 20 – Occupying Screen

Charge on.

8.2. Stopping a Charge Session

- 8.2.1. Disconnect the charging connector from the EV at any time to stop the charge session.
- 8.2.2. Once the session has been stopped, the Cost Summary screen will appear (if applicable).

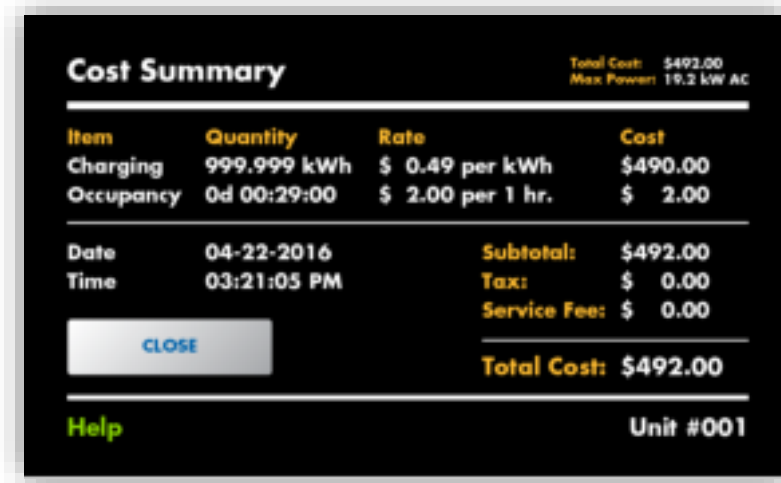


Figure 21 – Cost Summary Screen

- 8.2.3. Touch the **CLOSE** button or wait until the screen times out. The Session Ended screen will appear.

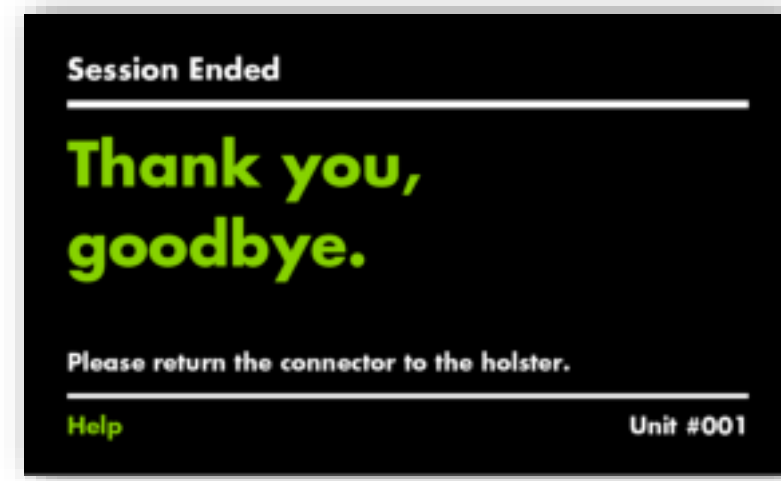


Figure 22 – Session Ended Screen

- 8.2.4. Next, the Main Screen will appear.

Charge on.

8.3. Status Indicator

Status Indicator	Description	Definition
	Not Illuminated	Power is OFF
	Flashing Yellow	Device is Not Ready (i.e. Booting, Upgrading Firmware, etc.)
	Steady Yellow	Device is Unavailable (i.e. Out of Service)
	Steady Green	Device is Available
	Flashing Green (Fast)	Device is Authorized and Ready to Charge
	Flashing Green (Slow)	Device is in State B (Vehicle is Occupying)
	Flashing Blue (Slow)	Device is in State C (Vehicle is Charging)
	Steady Red	Power On Self-Test Fault
	Flashing Red (Slow)	Warning / Fault

Table 5 – Status Indicator

Charge on.

9. CONFIGURATION

9.1. Factory Settings

9.1.1. Initially, the **Factory Settings** tab will appear, which reflects the items which have been configured at the factory.

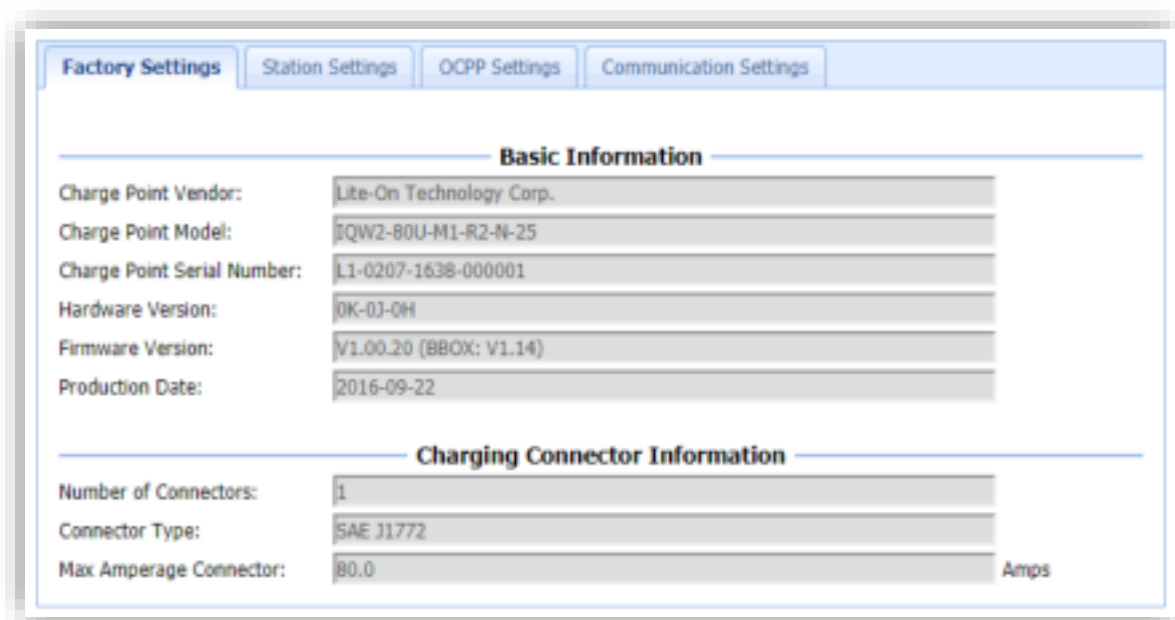


Figure 23 – Web Portal: Factory Settings

9.1.2. The following table provides an overview of each item.

Configuration Item	Description
Charge Point Vendor	The name of the Blink Product Vendor.
Charge Point Model	The Model Number of the Blink Product.
Charge Point Serial Number	The unique Serial Number of the Blink Product.
Hardware Version	The Hardware Version of the Blink Product.
Firmware Version	The Firmware Version of the Blink Product.
Production Date	The Production Date of the Blink Product.
Number of Connectors	The number of connectors associated with the Blink Product.
Connector Type	The type of charge connector.
Max. Amperage Connector	The maximum current output for the Blink Product.

Charge on.

9.2. Station Settings

Configuration Item	Description
Default Hours of Operation Settings	
Default Hours of Operation Settings	The default Hours of Operation. Settings sent from the Central System will supersede these default settings.
Warning Settings	
Temperature Low	The value in Celsius at which the charger will send a low temperature warning.
Temperature High	The value in Celsius at which the charger will send a high temperature warning.
Voltage Low	The value at which the charger will send a low voltage warning.
Voltage High	The value at which the charger will send a high voltage warning.
General Settings	
Output Power Type	The output power type of the Blink Product.
Power Phase Connected	The power phase configuration of the Blink Product.
Max Amperage HW Setting	The maximum current output for the Blink Product.
Max Amperage FW Setting	The configurable (and de-ratable) maximum current for the Blink Product.
PWM Amperage	The amperage used by the PWM interface connected to the EV.
Real Amperage	The real-time measured amperage.
Cold Load Pickup Max Delay	The maximum delay (in seconds) before a charging session is resumed after power is reapplied after a power outage. The value is configurable between 120 and 720 seconds.
EV Connect Timeout	The interval (in seconds) after a successful authorization that a user has to attach the charge connector to their EV before the charge session is cancelled.
Plug and Charge ID	If the value is present, the Blink Product needs to support plug and charge scenario by using the specific identifier. If the value is absent, authorization for each session is required.
Offline Authorize	Specifies whether users can initiate a charge session using the contactless reader (i.e. RFID Card) while a unit is offline.
Authorize Timeout	The interval (in seconds) that the Blink Product will attempt to connect to the Central System before an offline session is authorized OR cancelled (depending on the Offline Authorize setting).
Reservation Supported	This setting is reserved for future use.
Resume Charge After Reboot	Indicates if the Blink Product will resume the charge session after a power cycle. If the setting is On, the charge session will resume according to UL regulations. If the setting is Off, the charge session will not resume after a power cycle.
Dim Option	The interval (in minutes) of touch screen inactivity before the LCD reduces its brightness based on the Dim Intensity setting. If touch screen activity is detected, the LCD will display using its maximum brightness setting.
Dim Intensity	The percentage of the maximum LCD brightness which will apply if the Dim Option is enabled. If 0% is selected, the display will be turned off after the Dim Option time interval.
Odometer Screen	Indicates if the Odometer Screen will be displayed to users during the authorization process. This setting primarily applies to fleet applications.
Time Zone	The local time zone of the Blink Product.
Default Price Settings	
Default Pricing Settings	The default Price Settings. Settings sent from the Central System will supersede these default settings.

Charge on.

GPS Information	
Latitude	The latitude of the Blink Product.
Longitude	The longitude of the Blink Product.

9.3. OCPP Settings

Configuration Item	Description
Remote Service Settings	
Remote Service Type	Specifies the protocol that the Blink Product will use to communicate with a Central System.
Service Settings	
Charge Point ID	The identity of the charger as known by the Central System. This setting is typically the Charge Point Serial Number.
Protocol Name	The protocol that the Blink Product will use to communicate with a Central System.
Central System URL	The URL of the Central System.
Basic Auth ID	The ID for Basic authentication regarding HTTPS (SSL/ TLS) connections.
Basic Auth Password	The password for Basic authentication regarding HTTPS (SSL/ TLS) connections.
FTP Server Username	The ID that the Blink Product will use to connect to an FTP server which contains firmware packages and ad loops.
FTP Server Password	The password that the Blink Product will use to connect to an FTP server which contains firmware packages and ad loops.
Message Transport Layer	Indicates whether WS (WebSocket protocol over http) or WSS (WebSocket protocol over https) is used.
WebSocket Ping Interval	The interval (in seconds) between WebSocket pings.
Boot Notification Interval	The interval (in seconds) between bootNotification retries.
Boot Notification Retries	The maximum number of bootNotification retries. A setting of -1 indicates an infinite number of retries.
Heartbeat Interval	The interval (in seconds) between Heartbeats.
PDU Timeout	The interval (in seconds) before a Protocol Data Unit (PDU) is timed out.
Reset Retries	The maximum number of reset retries.
Download Firmware Interval	The interval (in seconds) before a downloadFirmware action is timed out.
Download Firmware Retries	The maximum number of downloadFirmware attempts.
Upload Diagnostic Interval	The interval (in seconds) before an uploadDiagnostics action is timed out.
Upload Diagnostic Retries	The maximum number of uploadDiagnostics attempts.
Download AD Interval	The interval (in seconds) before a downloadAd action is timed out.
Download AD Retries	The maximum number of downloadAd attempts.
Meter Sampling Type	Indicates whether meter events are sent after every Meter Value Sample Interval based on the charge session start time (Periodic), after every Meter Value Sample Interval based on the clock (Clock). If Both is selected, meter events will be sent to the Central System in a Periodic and Clock-aligned manner.
Meter Value Sample Interval	The interval (in seconds) between meter events.
Clock Aligned Data Interval	The interval (in seconds) between meter events which are clock-aligned.

Charge on.

OCPP1.6 Settings	
OCPP1.6 Settings	Settings based on the OCPP1.6 specification.

9.4. Communication Settings

Configuration Item	Description
Network Mode	The network mode that the Blink Product will use to communicate with a Central System. Direct The Blink Product will communicate directly with a Central System. Gateway The Blink Product will act as a Gateway for other units. Client The Blink Product will communicate through a Gateway unit.
UI Mode	The User Interface (UI) mode that the Blink Product will use. Primary The Blink Product will act as a controller unit for multiple Secondary units. The Gateway Network Mode is required for this UI Mode. Secondary The Blink Product will be controlled by a Primary unit. The Client Network Mode is required for this UI Mode. Standalone The Blink Product will operate in a standalone manner.
Gateway LAN IP	The IP Address of the Gateway unit.
Max Group Size	The maximum number of Client / Secondary units which can be connected to a Gateway / Primary unit.
Unit Number	The Unit Number which is used to activate charge sessions using a mobile app or a Gateway / Primary unit.
Gateway Serial Number	The Serial Number of the Gateway / Primary unit which needs to be set for each Client / Secondary unit.
Hide AP SSID	Indicates whether the Blink Product broadcasts its Wi-Fi SSID (Network Name).
Connectivity	Indicates the network connectivity method of the Blink Product.
Ping URL	The URL that the Blink Product uses to determine if it is online and connected to a Central System.
Active Device Settings	
Active Device	The active device that is currently being used for network communications.
Active IP Address	The IP Address of the active device.
Active Netmask	The Netmask of the active device.
Active Gateway	The Gateway of the active device.
Active Primary DNS	The Primary DNS of the active device.
Active Secondary DNS	The Secondary DNS of the active device.
Ethernet Settings	
Link Mode	Indicates a DHCP or Static IP configuration.
IP Address	The IP address of the Ethernet adapter.
Netmask	The Netmask of the Ethernet adapter.
Default Gateway	The Default Gateway of the Ethernet adapter.
Primary DNS	The Primary DNS of the Ethernet adapter.
Secondary DNS	The Secondary DNS of the Ethernet adapter.
Ethernet MAC Address	The MAC address of the Ethernet adapter.

Charge on.

Wi-Fi Settings	
Security	Indicates the type of security which is used for the Wi-Fi connection.
EAP	Mandatory for the following security methods: IEEE8021X
User Name	Mandatory for the following security methods: WPA_ENTERPRISE, WPA2_ENTERPRISE, WPA2_ENTERPRISE_SHA256, IEEE8021X
Password	SSID Password to access a Wi-Fi network.
Wi-Fi MAC Address	The MAC address of the Wi-Fi adapter.
Wi-Fi Signal Strength	The signal strength (dBm) of the Wi-Fi adapter.
Cellular Settings	
Cellular Mode	Indicates the cellular technology which is used.
MNC	The Mobile Network Code of cellular service provider.
ICCID	The ICCID of the modem's SIM card.
IMSI	The IMSI of the modem's SIM card.
IMEI	The IMEI code for UMTS mobile system. e.g. 356938035643809.
MEID	The MEID code for CDMA mobile system. e.g. A0123456789012.
UMTS APN	The APN name to access a UMTS mobile network (e.g. AT&T or T-Mobile).
UMTS APN User	The APN user name to access a UMTS mobile network.
UMTS APN Password	The APN password to access a UMTS mobile network.
UMTS Dial Number	The dial-in number to access a UMTS mobile network.
CDMA Carrier	The CDMA carrier (e.g. Sprint or Verizon)
CDMA Dial Number	The dial-in number to access a CDMA mobile network.
Primary DNS	The Primary DNS of the cellular modem.
Secondary DNS	The Secondary DNS of the cellular modem.
Cellular Signal Strength	The signal strength (dBm) of the cellular modem.
Local Load Management LLM Settings	
Local Load Management	Indicates if the Local Load Management functionality is Enabled or Disabled.
Charging Policy	Indicates the applicable policy which is applied for local load management Uniform Distribution The maximum amperage is divided by the total number of Client / Secondary units which will use the same charging current. FIFS First In First Served
Group ID	The identity of the LLM Group. A Client / Secondary unit with a different Group ID will be rejected when it attempts to connect to a Gateway / Primary unit.
Group Position	The physical position order of the unit in the LLM Group.
Group Size	The number of units in the LLM Group. This setting is only used for Gateway / Primary units.
Max Amperage Grid Connection	The maximum amperage that is available to the LLM Group.
Fallback Current	The fallback current that is used when a Client / Secondary unit is unable to communicate with a Gateway / Primary unit. The Gateway / Primary unit will overwrite the fallback current for a Client / Secondary unit with its own value when the Client / Secondary unit is connected to the Gateway / Primary unit.

Charge on.

9.5. Maintenance Settings

9.5.1. The **Maintenance** settings can be accessed by selecting the **Maintenance** link on the left pane.

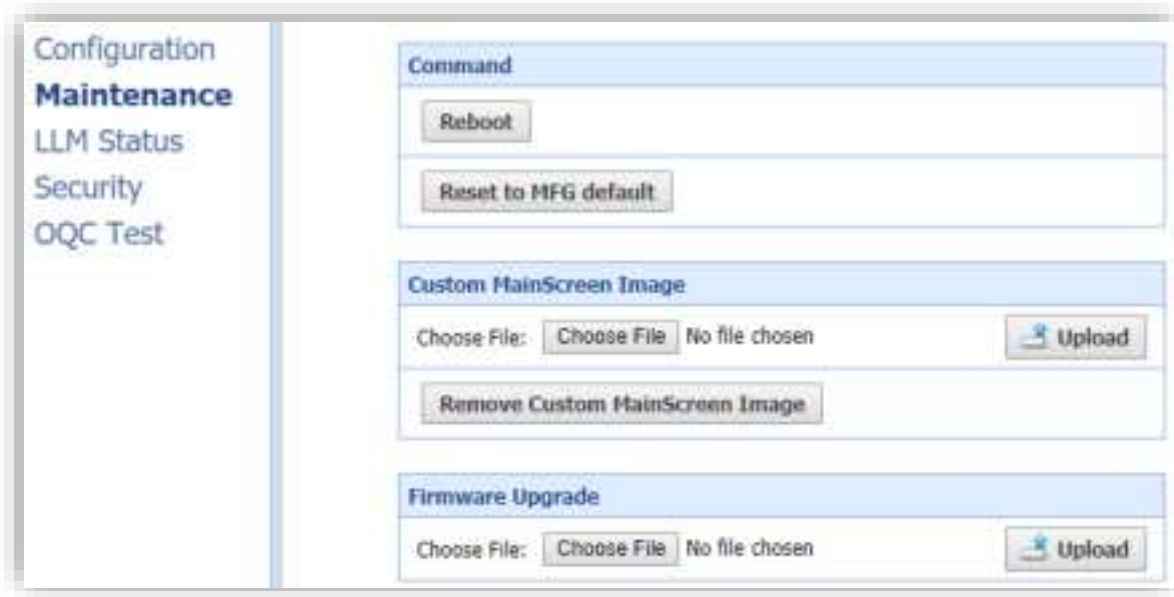


Figure 24 – Web Portal: Maintenance

9.5.2. Soft Reboot

To “soft” reboot a unit select the **Reboot** button.

9.5.3. Reset Factory Defaults

To reset a unit's Factory Defaults, select the **Reset to MFG Defaults** button.

9.5.4. Change Static Image on Main Screen

To change the static image which is displayed on a unit's main screen:

- Select the **Choose File** button.
- Navigate to an image which is 800px X 410px.
- Select the **Upload** button.

9.5.5. Revert Static Image on Main Screen

To revert the static image which is displayed on a unit's main screen to the default image, select the **Remove Custom MainScreen Image** button.

9.5.6. Manual Firmware Upgrade

To manually upgrade the firmware of a unit:

- Select the **Choose File** button.
- Navigate to a firmware file package (tar.gz file).
- Select the **Upload** button.
- The firmware upgrade process will take several minutes. DO NOT close the window until the firmware upgrade process has been successfully completed.

Charge on.

9.6. Local Load Management Status (LLM Status)

The local load management status of a unit can be accessed by selecting the **LLM Status** link on the left pane.

Figure 25 – Web Portal: LLM Status

9.7. Security Settings

The security settings of a unit can be accessed by selecting the **Security** link on the left pane.

Figure 26 – Web Portal: Security Settings

9.8. OQC Test Functionality

The OQC Test functions are reserved for testing purposes only and must not be used for any other purpose.

Charge on.

10. TROUBLESHOOTING

10.1. Troubleshooting Table

Situation	Screen Displayed	Action
Out of Service: Station Disabled		<ol style="list-style-type: none"> 1. The unit has been disabled and is out of service. 2. Call 1-888-998-BLINK (2546) for assistance.
Out of Service: Internal Maintenance		<ol style="list-style-type: none"> 1. The unit is performing internal maintenance (i.e. software update). 2. Wait until the unit has completed its internal maintenance and is available.
Station Unavailable Screen		<ol style="list-style-type: none"> 1. The unit is outside the configured hours of operation. 2. Touch the Hours of Operation link on the screen to review the configured hours of operation. 3. Re-configure the default hours of operation using the web portal. 4. Call 1-888-998-BLINK (2546) for assistance.
Station Availability Notification		<ol style="list-style-type: none"> 1. In this case, the unit will become unavailable in the timeframe described. 2. Touch CONTINUE to initiate a charge session which will be terminated after the timeframe described or touch CANCEL to return to the main screen.
Unable to Read Payment Card		<ol style="list-style-type: none"> 1. The contactless reader was unable to read the payment card. 2. Swipe the payment card again.

Charge on.

Payment Card Declined	 The screen displays 'Payment Card Declined' with a reference code '3001'. It features a yellow warning icon and the Blink logo. The message states: 'There appears to be an issue with your card or account.' It provides assistance by saying 'For assistance please call 888-998-BLINK (2546)'. At the bottom, there are 'Cancel' and 'Help' buttons, and 'Unit #001' is shown.	<ol style="list-style-type: none"> 1. There is an issue with the card or account (See Table 7 Reference Codes). 2. Call 1-888-998-BLINK (2546) for assistance.
Blink Code is not Valid	 The screen displays 'Blink Code Access' with a reference code '3001'. It shows a message: 'We could not validate the Blink Code "123456"'. It asks the user to 'Please check that you entered your code correctly.' and provides assistance: 'For assistance, please call 1-888-998-BLINK (2546)'. There are 'CLOSE' and 'RETRY' buttons. At the bottom, there is a 'Help' button and 'Unit #001'.	<ol style="list-style-type: none"> 1. There is an issue with the card or account. (See Table 7 Reference Codes). 2. Call 1-888-998-BLINK (2546) for assistance.
Blink Code Access is Unavailable	 The screen displays 'Blink Code Access'. It shows a message: 'We're sorry. Blink Code Access is unavailable at this time.' It provides assistance: 'For assistance, please call 1-888-998-BLINK (2546)'. There is a 'CLOSE' button. At the bottom, there is a 'Help' button and 'Unit #001'.	<ol style="list-style-type: none"> 1. The unit is offline and unable to authorize Blink Codes using a Central System. 2. Call 1-888-998-BLINK (2546) for assistance.
Kiosk Only: The Selected Blink Unit is Invalid	 The screen displays 'Blink Unit Selection'. It shows a message: 'Blink Unit # "999" is an invalid Unit #.' It asks the user to 'Please reconfirm your Unit #.' and provides assistance: 'For assistance, please call 1-888-998-BLINK (2546)'. There are 'CLOSE' and 'RETRY' buttons. The Blink logo is at the bottom right.	<ol style="list-style-type: none"> 1. Re-confirm the Unit # and retry. 2. Call 1-888-998-BLINK (2546) for assistance.
Kiosk Only: The Selected Blink Unit is Currently Unavailable	 The screen displays 'Blink Unit Selection'. It shows a message: 'Blink Unit # "999" is currently unavailable.' It asks the user to 'Please try a different charging station.' and provides assistance: 'For assistance, please call 1-888-998-BLINK (2546)'. There are 'CLOSE' and 'RETRY' buttons. The Blink logo is at the bottom right.	<ol style="list-style-type: none"> 1. Re-confirm the Unit # and retry. 2. Try a different unit. 3. Call 1-888-998-BLINK (2546) for assistance.

Charge on.

Fault with Automatic Reset		<ol style="list-style-type: none"> 1. A fault occurred (See Table 6 Error Codes). 2. Record the Error Code. 3. Wait 15 minutes for the system to recover from the fault or touch the RESET button to manually reset the system. 4. Call 1-888-998-BLINK (2546) for assistance.
Fault with Manual Reset		<ol style="list-style-type: none"> 1. A fault occurred (See Table 6 Error Codes). 2. Record the Error Code. 3. Touch the RESET button to manually reset the system. 4. Call 1-888-998-BLINK (2546) for assistance.
Fault with No Reset		<ol style="list-style-type: none"> 1. A fault occurred. 2. Record the Error Code. 3. Wait for the system to recover from the fault. 4. Call 1-888-998-BLINK (2546) for assistance.

10.2. Automatic Restart Functionality

When a charge session is interrupted due to a temporary error condition, the Blink Product will automatically restart the charge session when the temporary error condition is resolved. The status indicator light will remain flashing RED until the error condition is resolved.

- Temporary error conditions include: Over Current, Over Voltage, Under Voltage, Over Temperature.
- For Over Current (OC) conditions: The charge session will be stopped while the OC condition occurs. After recovery from OC condition for 30 seconds, the Blink Product will automatically restart the charge session (for 3 times).
- When a charge session stopped by the Charge Circuit Interrupting Device (CCID), the Blink Product will attempt to restart the charge session after 15 minutes (for 3 times).

10.3. Power Outage Recovery

When power is reapplied after a power outage, the Blink Product will restart the charge session automatically (if the **Resume Charge After Reboot** setting is **On**) with a delay ranging from 120 to 720 seconds. The randomized delay is introduced to avoid impacting the utility grid if multiple charging stations are in the same area and attempt to resume their charge sessions simultaneously.

10.4. Error Codes

Error Code	Error Name	Error Description
1000	NoError	No error to report.
1001	GroundFailure	Ground fault circuit interrupter has been activated. Same as CCID protection.
1002	MissingGroundFailure	Failure of missing ground of AC inputs.
1003	PowerSwitchFailure	Failure to control power switch.
1004	PowerMeterFailure	Failure to read power meter.
1005	ReaderFailure	Failure with ID tag reader.
1006	DisplayFailure	Failure with LCD display or touch panel.
1007	CellularModemFailure	Failure with cellular modem.
1008	WiFiModuleFailure	Failure with Wi-Fi module.
1009	ResetFailure	Unable to perform a reset.
1010	HighTemperature	Temperature inside charge point is too high.
1011	LowTemperature	Temperature inside charge point is too low
1012	OverVoltage	Voltage has increased higher than an acceptable level.
1013	UnderVoltage	Voltage has dropped below an acceptable level.
1014	ControlPilotFailure	Failure with control pilot circuit
1015	ClockFailure	Failure with internal clock.
1016	SelfTestFailure	Failure with self-tests.
1017	WeakSignal	Wireless communication device reports a weak signal.
1018	OtherError	Other type of error.
2001	LowTemperatureWarning	Low temperature warning.
2002	HighTemperatureWarning	High temperature warning.
2003	OverVoltageWarning	Over voltage warning.
2004	UnderVoltageWarning	Under voltage warning.
2005	OverCurrentWarning	Over current warning.

Table 6 – Error Codes

10.5. Reference Codes

Error Code	Error Name	Error Description
3000	Accepted	Identifier is allowed for charging.
3001	Blocked	Identifier has been blocked. Not allowed for charging.
3002	ConcurrentTx	Identifier is already involved in another transaction.
3003	Expired	Identifier has expired. Not allowed for charging.
3004	Invalid	Identifier is unknown, including suspended account, invalid RFID, or inactive RFID. Not allowed for charging.
3005	NoCredit	The identifier is recognized and associated to a user with a membership. However, the balance of this account or credit card has exceeded
3006	CreditAuthFailed	Failed to authorize user's payment credit, especially for smart credit cards, Apple Pay, and Google Pay.

Table 7 – Reference Codes

11. GENERAL CARE

The exterior of the Charger is designed to be waterproof and dust proof. To ensure proper maintenance of the charger, follow these guidelines:

- Despite the water resistance of the enclosure, DO NOT direct streams of water at the unit. Clean the unit with a soft, damp cloth.
- Make sure the charging connector is returned to the holster after a charge session to avoid damage.
- Ensure the power cable is properly stored on the unit after a charge session to avoid damage.
- If the power cable or the charging plug is damaged contact the Blink Network Support Center.



Contact your lighting representative at info@epartslighting.com
P: 754.702.2709