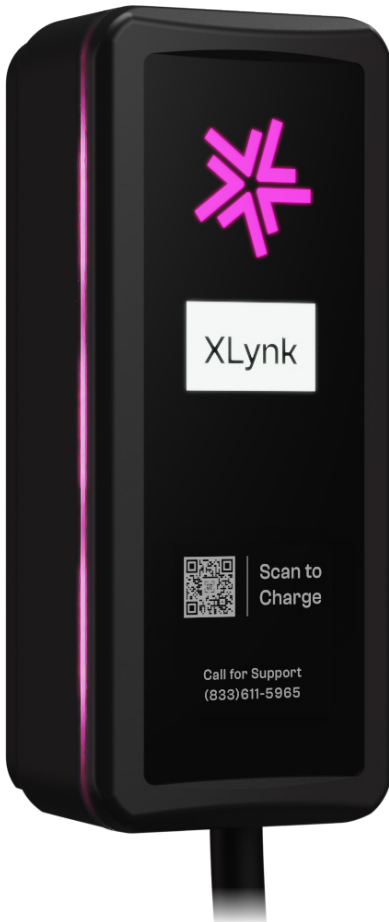


XLynk™ EV Charging Station

INSTALLATION MANUAL



XLynk™

SAE J1772
Level 2 48A
Modular EVSE



Scan to
Charge

Call for Support
(833) 611-5965



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1. SAFETY INSTRUCTIONS

1.1 - Read this First



IMPORTANT !

READ THIS ENTIRE DOCUMENT BEFORE INSTALLING OR USING THE CHARGER. FAILURE TO DO SO OR TO FOLLOW ANY OF THE INSTRUCTIONS AND WARNINGS IN THIS DOCUMENT CAN RESULT IN FIRE, ELECTRICAL SHOCK, SERIOUS INJURY OR DEATH.

THE XLYNK CHARGING STATION MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN, AND IN ACCORDANCE WITH LOCAL ELECTRICAL CODES AND ORDINANCES.



INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRICAL SHOCK



RISK OF ELECTROCUTION

Disconnect the input power before installing the charging station. Not doing so can result in electrocution. There are no user repairable parts and any unit with suspected damage should be returned to the factory.

Before installing the charging station, make sure you have read all instructions in this manual and fully understand its contents.

The charging station must be installed by a licensed electrician in accordance with the provisions of local electrical and building codes and must comply with national electrical codes and standards.

Do not use this product if there is any damage to the unit.

Do not attempt to repair this product. There are no user serviceable parts inside. Refer servicing to qualified service personnel.

This equipment has arcing and sparking parts that should not be exposed to flammable vapors. This equipment should be located at least 18 inches above the floor.

Copper wiring must be used to provide electrical service to this product.

This product has an automatic reset feature. If the XLink is connected to a vehicle and a ground fault occurs, charging may resume automatically after a delay period.



Do not use this product if there is any damage to the charging cable or connector.

1.2 - FCC Compliance

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the manufacturer in writing may void the user's authority to operate the equipment and the warranty of the product.

This equipment complies with FCC radiation exposure limits and should be installed and operated with a minimum distance of at least 20 cm between the equipment and a person's body.



2. PRE-INSTALLATION SITE PLANNING

2.1 – General Guidelines

This chapter describes best practices for preparing a site prior to installing the XLink Level 2 charging station.

Lynkwell recommends XLink for fleet and commercial applications where high reliability and ease of use are important considerations. The XLink is designed to be mounted with pedestal and/or pedestal/retractor solutions, or to be mounted directly to a wall.

Prior to installation, one of the first steps in the deployment of EV charging stations is to perform a site evaluation and develop a site plan. The site plan should prescribe the number of stations being installed, electrical service availability, electrical panel capacity, and any other site-specific requirement.

In most installations, a connection to the Internet is required. This is accomplished using Gateway stations with a cellular network card installed or using an External Wi-Fi network (see section 4.3.4). When using a Gateway station with a cellular card, ensure that signal levels are sufficient to support a reliable connection.

2.2 – Ensure Proper Site Layout

Important NOTE: Do not install charging stations in areas restricted for emergency access.

A typical installation where charger stations are mounted in pairs at parking spaces is shown in **Figure 2-1**. Up to a total of 9 Non-Gateway stations (Wi-Fi only) may be connected to one Gateway (cellular and Wi-Fi communication) station. To ensure the best possible communication unit-to-unit, we recommend placing Non-Gateway units no more than 50ft away from the Gateway unit. For a 10-station installation, you should place the gateway unit in the middle of the group, as shown in **Figure 2-1**. This minimizes the required communication distance, reducing chances for communication drops between devices.



NOTE: Large vehicles or any object that breaks the line of site between the units can reduce the connection quality.

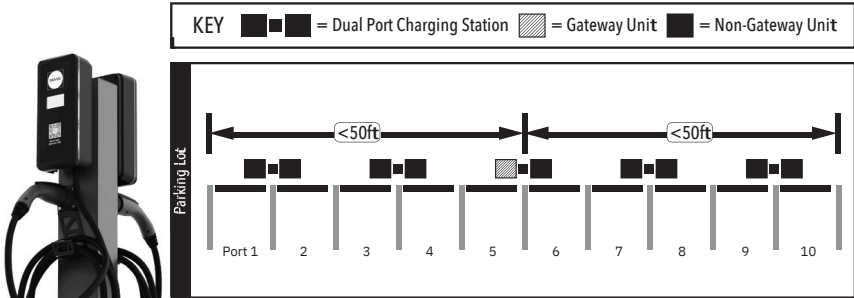


Figure 2-1 Example Site Layout

2.3 - Electrical Service

Prior to beginning the installation procedures outlined in the next chapter, ensure that installations have electric service available with circuit breakers rated to support the XLink maximum charging current (see section 3.7).

Electrical service should be installed by a licensed contractor or licensed electrician in accordance with all applicable local, state, and national electrical codes and standards.



CAUTION

This is a single-phase device. Do not connect all three phases of a three-phase feed.

Only center-tapped systems should be used. The Neutral at the service panel must be connected to Earth Ground. If no ground is provided by the electrical service, a grounding stake must be driven into the ground nearby according to local electrical code requirements. The grounding stake must be connected to the ground bar in the main breaker panel and Neutral must be connected to Ground at that point.

The following three diagrams illustrate the three most common electrical service wiring connection systems found in North America.



Figure 2-2 illustrates a 240V split-phase system.

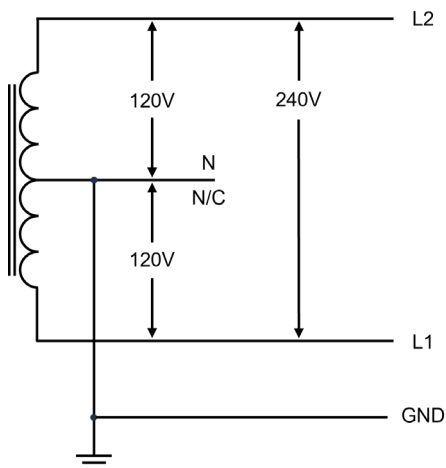


Figure 2-2 240V Split Phase

Figure 2-3 illustrates a Wye-connected secondary installation. Use any two of the legs to provide 208V to the charger. For example, L1 & L2, or L1 & L3, or L2 & L3. The two phases used must each measure 120V ground. The unused leg should not be used.

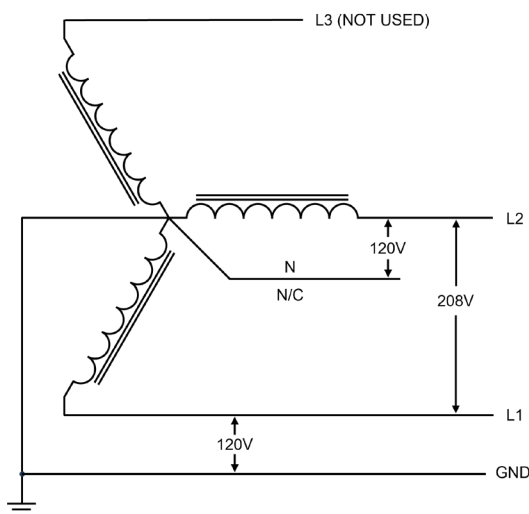


Figure 2-3 208V Wye-connected



Figure 2-4 illustrates a delta-connected installation. One leg must be center-tapped and only the two phases on either side of that center tap can be used. The two phases used must each measure 120V to ground. The unused leg should not be used.

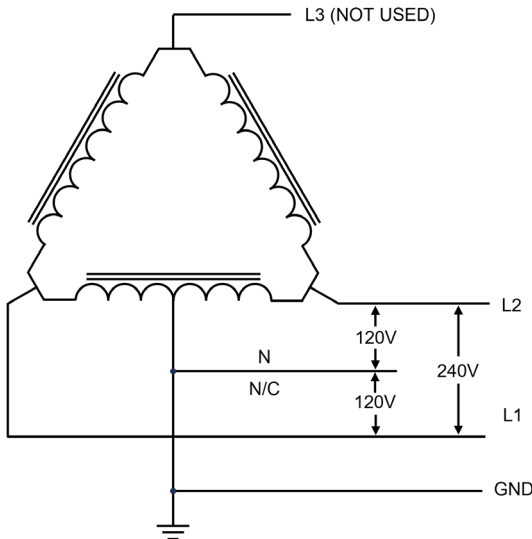


Figure 2-4 208V Delta-connected

Note: The XLink will not allow a vehicle to charge if it does not detect the presence of an earth ground wire connected to the Neutral on the transformer secondary.



3. INSTALLATION

3.1 - Parts & Tools Required for Installation

Table 3-1 can be used to ensure a smooth installation. The first five items are included in the shipping carton; the next five items are commonly available tools. The remaining items are installation dependent; it is highly recommended that on a first time installation at a site, that all of the items listed in Table 3-1 are available.

Table 3-1 Tools & Parts Required for Installation

Tool/Part	QTY	Size/ Description	Other Remarks
Mounting Bracket*	1		For wall or pedestal mounting
Connector Holster*	1		For holding the connector
Torx Screws*	4	10-24, 1"	For mounting XLynk to mounting bracket
Cable Hook*	1		For charging cable
Wood Screws*	4		If applicable. See NOTE.
Phillips Screwdriver	1	#2	For front cover
Torx Screwdriver	1	T25	For mounting XLynk to mounting bracket
Hex Driver	1	7/64"	For captive screw
Hex Driver	1	5/32"	Wire input terminal
Wire Stripper/ Cutter			
Chase Nipple Kit			Optional. See NOTE.
Duct Sealant			Optional. See section 3.6 step 7

*Included in Shipping Carton



NOTE: The wood screws are only needed if wall mounting XLynk on wood.

NOTE: A kit that includes a chase nipple, O-rings, and lock nuts is included with a Lynkwell pedestal. While not strictly required for installations without a Lynkwell pedestal, the kit simplifies installation and provides a means for obtaining better sealing and protection against moisture ingress. See section 3.6 for more information.

3.2 - Unpack XLynk™ from Its Shipping Carton

Step 1: Open the shipping carton without a blade and remove the contents.

Step 2: Verify that all the components shown in **Figure 3-1** are included.

NOTE: The Hardware Pack and Connector Holster are included together in a small box found in the carton.

Step 3: Carefully inspect for transportation damage. Do not attempt to install a charger with any signs of damage.

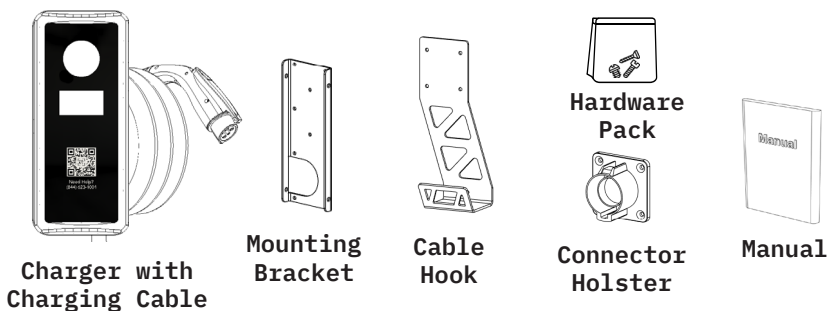


Figure 3-1 Shipping Carton Contents



3.3 - Remove Front Cover and EZ-Swap Faceplate™

Sections 3.4 through 3.6 describe mounting the XLink and connecting it to electrical service. The front cover and faceplate should be removed prior to those steps.

Step 1: Loosen the captive screw at the bottom of the front cover with the Hex Driver 7/64" and remove the cover as shown in Figure 3-2.

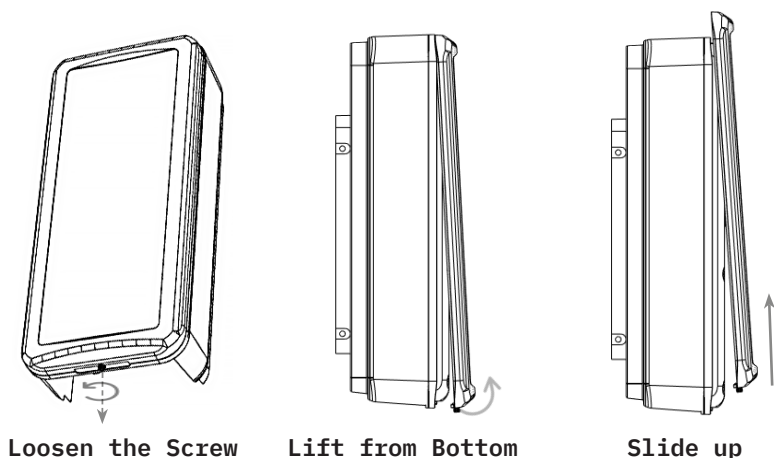


Figure 3-2 Removing the Front Cover

Step 2: Remove the 8 screws on the EZ-Swap Faceplate with a Phillips Screwdriver #2 and retain for later use, as shown in Figure 3-3.

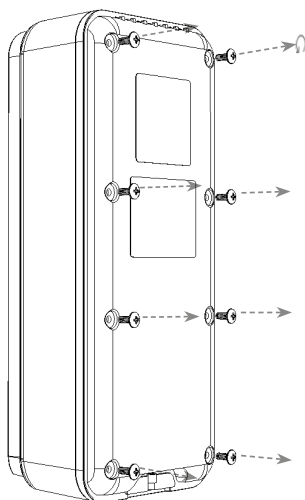


Figure 3-3 Remove 8 Screws

Step 3: Carefully remove the faceplate and disconnect the wiring harness that connects the faceplate to the printed circuit board attached to the rear charger enclosure as shown in Figure 3-4.

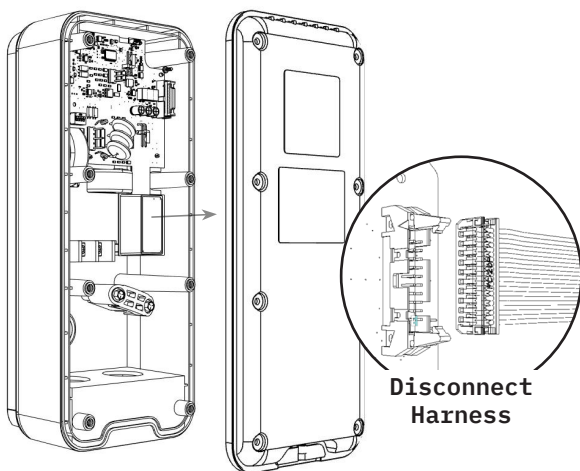


Figure 3-4 Removing the Faceplate



3.4 - Attach the Mounting Bracket to the Wall/ Pedestal

This section describes installing an XLink to a Lynkwell pedestal, although, the steps also apply to pedestals from other manufacturers or when mounting to a wall.

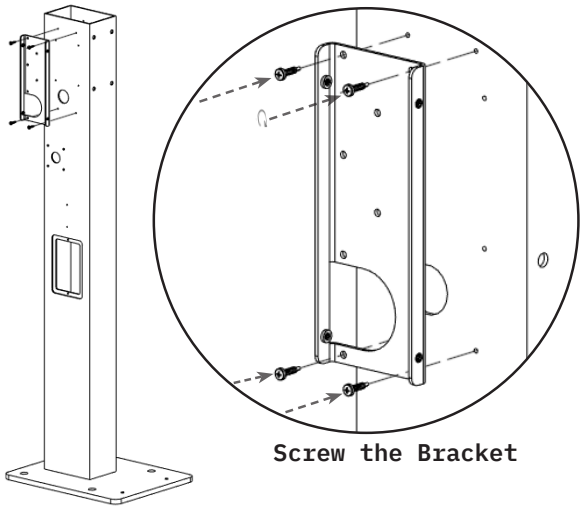
Step 1: Before beginning the steps outlined in this section, ensure that electrical service is available as described in section 2.3.

Step 2: Depending on how the electrical service enters the XLink, the wiring will be routed through either the bottom entry hole or the back entry hole (see **Figure 3-10**). If using the back entry hole, route the electrical service wires through the semi-circular opening at the bottom of the mounting bracket before attaching the bracket.

Step 3: Attach the mounting bracket to the pedestal or wall using at least 4 screws (not contained in the XLink package) as shown in **Figure 3-5** and **Figure 3-6**.

Note: the mounting bracket has ten screw holes to provide flexibility; not all mounting holes will be used. The installer should use at least four screws in locations to ensure a secure and level mount.

Step 4: Optional. If mounting XLink to a Lynkwell pedestal, install the holster and cable hook according to the instructions provided with the pedestal.



Attach the Bracket to the Pedestal

Figure 3-5 Securing the Mounting Bracket to a Pedestal

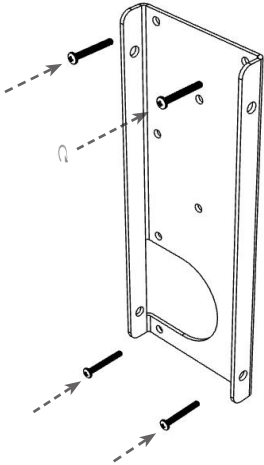


Figure 3-6 Securing the Mounting Bracket to a Wall

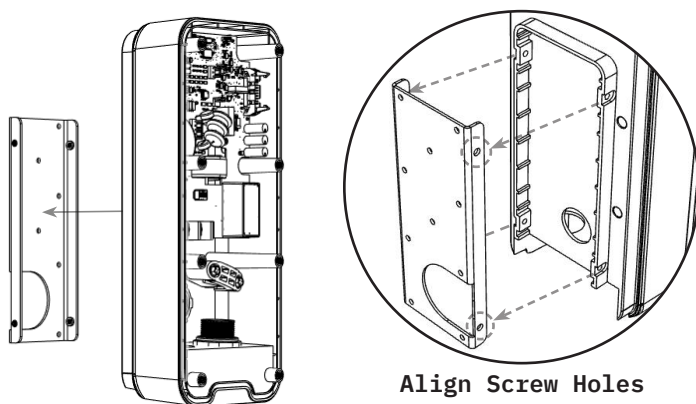


3.5 - Mount XLink™ to the Wall/Pedestal

Step 1: Depending on whether the charger is mounted to a pedestal or to a wall, choose the corresponding 1” knockout in the rear of the XLink housing to pass the wires through and close the other hole with the included knockout plug (installed in rear entry hole when shipped from the factory).

Step 2: If the electrical service wires will enter the XLink through the rear entry hole and there is no rear access, like when mounting to a wall, guide the wires through the entry hole before attaching XLink to the wall. When there is rear electrical access after the XLink is mounted, like when mounting to a pedestal, the electric service wires are routed into the enclosure after XLink is mounted (see section 3.6).

Step 3: Slide the XLink housing onto the mounting bracket such that the bracket is confined within the back slot of the charger. Ensure that the holes on the mounting bracket align to the XLink. See Figure 3-7.



Position XLink on the Bracket

Figure 3-7 Mounting XLink onto the Wall/Pedestal



Step 4: Attach the charger housing to the mounting bracket using the four 10-24, 1” Torx screws (included in the hardware pack). Tighten the screws to 30 in-lbs. using the Torx Screwdriver T25. See Figure 3-8.

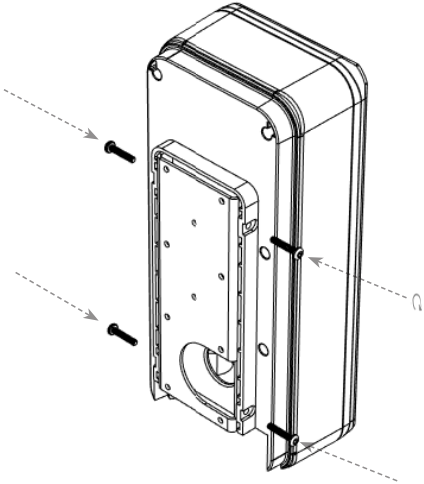


Figure 3-8 Tighten 4 Screws

Screw	Torque (in-lbs)	Tools
Torx Screw	30	Torx Screwdriver T25



3.6 - Connect Wiring

Step 1: If mounting to a Lynkwell pedestal with rear entry, guide the electrical wires through the lock nut, O-ring, and chase nipple (see **Figure 3-9**). Then insert the chase nipple assembly into the charger enclosure and attach using the second O-ring and lock nut.

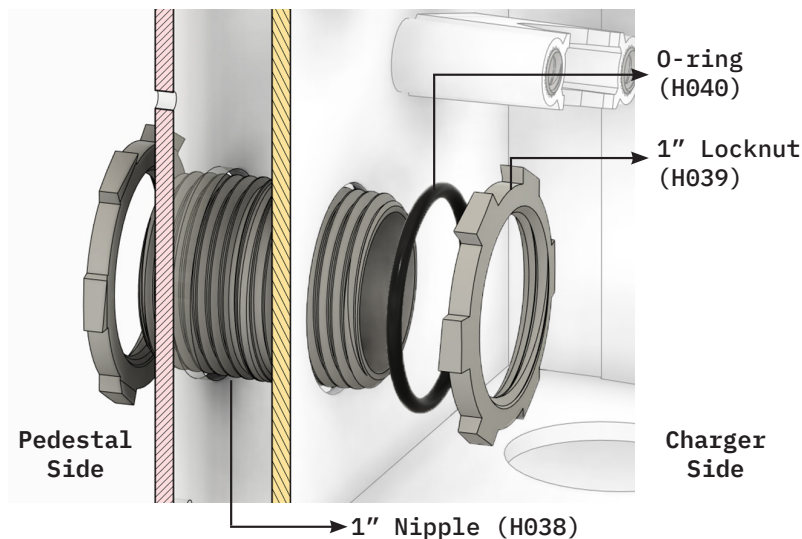


Figure 3-9 Rear Entry Connection to Pedestal Using Chase Nipple

Step 2: Unscrew the wire binding screw provided with the charger input lug connectors until the wire hole is completely unobstructed by the screw, refer to **Figure 3-10**.

Step 3: Strip the wire insulation to ensure good contact will be made with the input lug connectors when tightened.

Step 4: Insert the wire into the input terminal and tighten the wire binding screw to 40 in-lbs., maintaining the required torque for 5 seconds.

Screw	Torque (in-lbs)	Tools
Input Lugs	40	Hex Driver 5/32



Step 5: Inspect the secured wires, L1, GND, and L2, and ensure they are in the correct locations. The connected wiring will look like **Figure 3-10** example A for rear service entry or **Figure 3-10** example B for bottom service entry.

Example A for rear service entry

Example B for bottom service entry

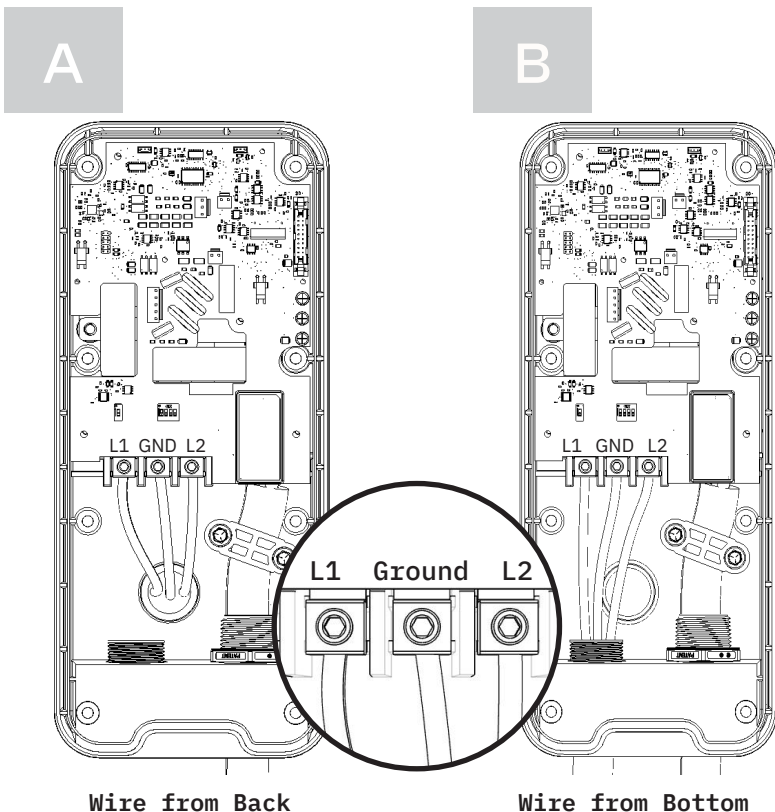


Figure 3-10 Connecting Wires

Step 7: Optional. When mounting the XLink outdoors with rear service entry, it is recommended to seal the opening by filling the chase nipple with duct sealant. Be sure to use the type of sealant that is sold as a putty.



3.7 - Set Current Limit DIP Switches

It is recommended that the charger be installed with a 60A circuit breaker to ensure the fastest charging is available. However, the charger also supports installation with lower rated circuit breakers and branch circuit wiring. Note that installation with a lower rated circuit breaker will limit the maximum charging rate allowed with the charger.

Note: For any installation, the installer **MUST** verify the current limit DIP switches are set according to **Table 3-2**. See **Figure 3-11** for the location of the DIP switch.

Table 3-2 (1/2)

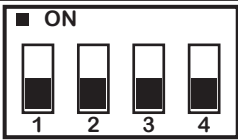
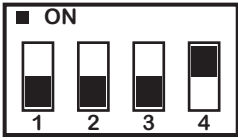
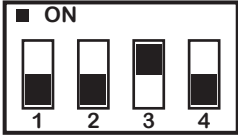
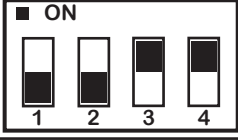
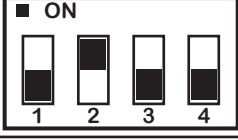

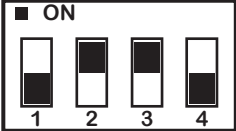
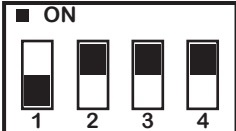


Breaker Size	Charging Rate	DIP Switch Settings
N/A	0	
15A	12A	
20A	16A	
25A	20A	
30A	24A	
35A	28A	



Table 3-2 (2/2)

Breaker Size	Charging Rate	DIP Switch Settings
40A	32A	
45A	36A	
50A	40A	
60A	48A	
All other DIP switch settings will default to 60A Breaker and 48A Charging Rate.		

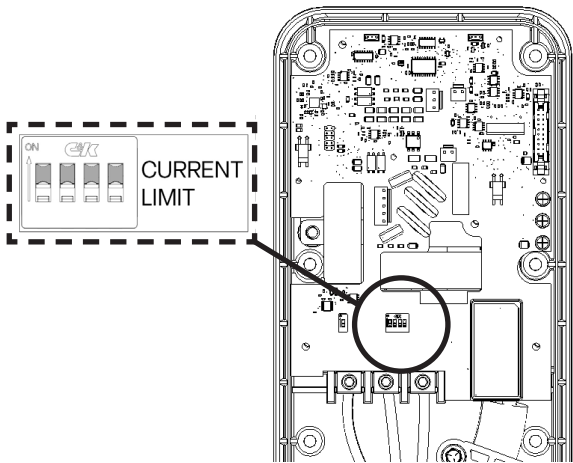


Figure 3-11 Location of Current Limit DIP Switch



3.8 - Provision XLynk™

The XLynk has been designed to limit the number of steps you need to take to provision (configure) a new unit. It has already been pre-configured to function in the “commercial” operating mode and connect to a Lynkwell Charging Station Management System (CSMS) to provide a seamless experience in connecting to the Lynkwell charging network.

It is also possible to configure XLynk to the “standalone” operating mode to allow charging without authentication by a CSMS. See section 4 for more details on additional configuration options.



The remainder of this section describes the procedure to ensure the Gateway unit is connected to the CSMS and to connect each Non-Gateway unit to the Gateway to ensure their connection to the CSMS.

Note: all Gateway units have been pre-configured as “Gateway” and all Non-Gateway units have been pre-configured as “Non-Gateway”.

Steps 1 through 7 below can be skipped for the Gateway unit.

Step 1: To access the configuration dashboard, follow steps 1 through 4 as described in section 4.2. This will bring you to the default page of the dashboard – Communications.

Step 2: Click “Edit” located in the Network Settings section of the page.

Step 3: Enter the serial number for the Gateway unit in the “Gateway Serial Number” field.

Step 4: Click “Save Changes”.

Step 5: Log out of the dashboard.

Step 6: Move the Setup Switch to the down position (“off”), which will re-boot the unit.

Step 7: Repeat steps 1 through 6 above for all Non-Gateway units.

Step 8: Once all Non-Gateway units have been provisioned, remove power from all the chargers (at the breaker panel) before proceeding to the next section.



3.9 - Secure the Front Panels and Power up

Step 1: Re-connect the wiring harness that connects the EZ-Swap Faceplate to the printed circuit board attached to the rear charger enclosure as shown in **Figure 3-14**.

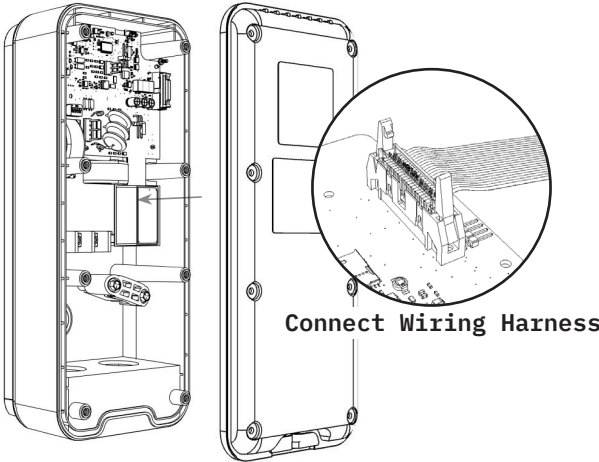


Figure 3-14 Securing the EZ-Swap Faceplate

Step 2: Remove the protective plastic from the display screen.

Step 3: Carefully put the faceplate back on and tighten the 8 screws that were removed in a previous step (section 3.3 – step 2), as shown in **Figure 3-15**.

Screw	Torque (in-lbs)	Tools
Phillips Truss Screw	30	Phillips Screwdriver#2

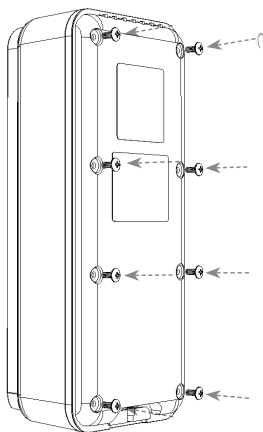


Figure 3-15 Put the EZ-Swap Faceplate On

Step 4: Apply power to the unit by switching the breaker to the on position. After an approximately two-minute initialization and boot-up, the screen should display ‘Available’, and the maximum configured charging current will also display.

Step 5: Slide the transparent front cover on and tighten the captive screw with Hex Driver 7/64” as shown in **Figure 3-16**. Hand tighten until snug. **DO NOT** over tighten!

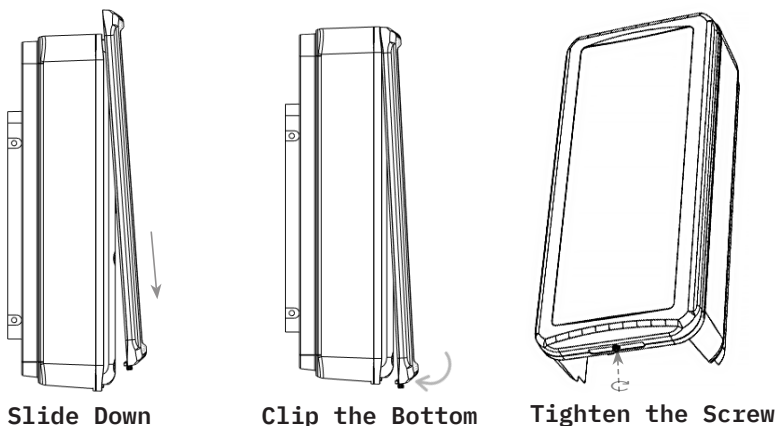


Figure 3-16 Securing the Front Cover

Step 6: Peel the protective film off the front cover to reveal the logo.



4. CONFIGURATION DASHBOARD

4.1 - Overview

The XLynk includes an on-board configuration dashboard. Once the unit is powered, you can access this dashboard via your laptop or other web-enabled device.

The XLynk has been designed to limit the number of steps you need to take to configure and connect to the back-end network. However, there may be situations where direct configuration and customization is required.

Functions supported on the dashboard include:

- Configuring Non-Gateway to Gateway communications
- Configuring back-end network access via an external Wi-Fi device (e.g. a company intranet or router)
- Configuring a charger to operate as a standalone charger without a connection to a CSMS
- Customizing device-specific parameters
- Updating device firmware

The remainder of this chapter describes the above in greater detail.



4.2 - Accessing the Configuration Dashboard

Step 1: With the EZ-Swap Faceplate removed, make sure the “Setup Mode” DIP switch is in the up position (“On”) as shown in **Figure 4-1** below, and power the charger. If the charger is already powered, the charger will automatically reboot when the DIP switch is changed.

NOTE: The dashboard will take up to 2 minutes before it is ready to be used.

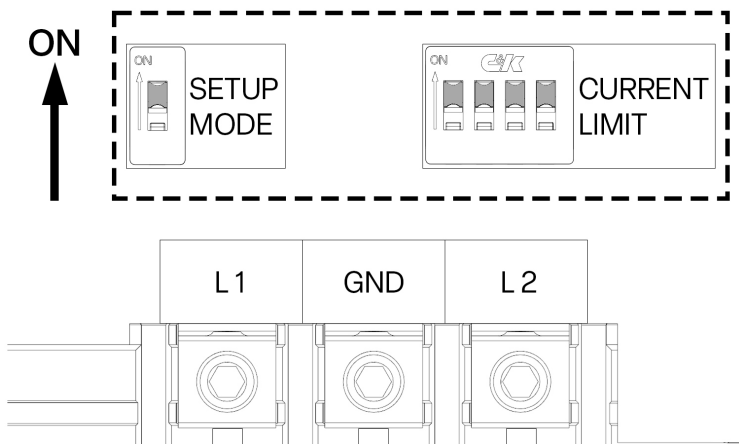


Figure 4-1 Set DIP Switch to Setup Mode

Step 2: Search for the charging station’s local Wi-Fi network on your laptop (or other Wi-Fi enabled device). The network name of the charger is based on the unit’s serial number followed by Config (ex: LW101-12X34-YZ-12345 Config). Be sure to include the space as shown.

The default network password is: ‘GAS_Station!’



Step 3: Once connected to the charging station's local network, type the appropriate IP address into the search bar of your browser. The IP address will be displayed on the charger front screen, but if the screen is not easily accessible, use the following list:

- Non-Gateway: 192.168.3.1 (default for Non-Gateway units)
- Gateway: 192.168.1.1 (default for Gateway units)
- External Wi-Fi : 192.168.5.7

Step 4: Log in with the dashboard credentials (see **Figure 4-2**):

- Username: 'admin'
- Password: 'EVM1_Admin!'

This will take you to the Communications page of the configuration dashboard (see **Figure 4-3**).

The screenshot shows the Lynkwell login interface. At the top center is the Lynkwell logo, which consists of a pink starburst icon followed by the word 'Lynkwell' in a bold, black, sans-serif font. Below the logo is a white rectangular login form with a thin grey border. Inside the form, there are two input fields. The first is labeled 'Username' in a small, grey font, and the second is labeled 'Password' in the same font. The 'Password' field has a small grey eye icon to its right, indicating a toggle for visibility. Below these fields is a solid red button with the text 'Sign In' in white, centered on the button.

Figure 4-2 Log in Page

Step 5: Perform all necessary configuration steps as described in the subsequent sections of this manual.



Step 6: After all configuration settings are saved, the Setup Switch must be switched to the down position (“off”), which will reboot the internal systems, and all settings that were changed will be enabled.

NOTE: No changes will be implemented unless the unit is taken out of Setup Mode and automatically rebooted.



4.3 - Communication Settings

4.3.1 - Overview

This section describes the step-by-step procedure to configure XLink communications. Functions supported on the Communications page include:

- Configuring the CSMS URL
- Configuring the Network Mode (Non-Gateway, Gateway, or External Wi-Fi)
- Configuring the Gateway serial number (applicable for Non-Gateway units only)
- Customized device-specific parameters
- Updating device firmware



Communication

Device Settings

Firmware Management

Model: XLynk

Type: Gateway

Serial: LW101-12X34-YZ-12345

FB Serial: 123-123-1234

Firmware: 1.10

OCPP: 1.6J

Connector: 1-J1772

Max Amps: 48 AC

Click

Network Settings

Central System URL
wss://ocpp.staging.lynkwell

Network Mode
External Wi-Fi

Serial Number of Gateway
LYNK00012

Edit

Wi-Fi Settings (for External Wi-Fi)

Wi-Fi Network SSID

Wi-Fi Signal Strength
-423

Security Protocol
WPA-PSK

Wi-Fi Network Name

Wi-Fi Network Password

Edit

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Reset to Default ↶

Log Out ↶

Figure 4-3 Communications Page

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4.3.2 - Connecting a Gateway Unit to the CSMS Using the Onboard Cell Modem

Typically, Gateway charging stations will come pre-configured with the Lynkwell CSMS URL and will automatically connect to the Lynkwell back-end system once they are powered and have a network connection. The URL is visible from the first page of the configuration dashboard. If the CSMS URL is not setup on the Gateway unit, or is incorrect, take the following steps to Update the CSMS URL.

- Click **“Edit”** in the Network Settings section of the page
- Update Central System URL with the correct information
- Click **“Save Changes”** or update

NOTE: Saving changes does not initiate the connection with the CSMS. Connection requires switching the Setup Mode DIP switch down (“off”), which will result in the unit re-booting.

Next, confirm the Gateway network settings are correct by looking at what is selected under Network Mode. A Gateway unit must be in **“Gateway”** mode when connecting using the internal cellular modem.

To change the settings:

- Click **“Edit”** in the Network Settings section of the page
- Select **“Gateway”** under the Network Mode field
- Click **“Save Changes”**



Gateway Network Settings

Central System URL

wss://ocpp.staging.lynkwell

- ✓ Gateway
- Non-Gateway
- External Wi-Fi

Save Changes

Cancel

Figure 4-4 Gateway Network Settings

Once you are done making your configuration changes:

- Confirm all of your changes have been saved
- Log out of the dashboard
- Move the Setup Switch to the down position (“off”), which will re-boot the unit

To ensure the device has been properly connected, we recommend reaching out to our technical support team to confirm. Also, if you are having issues getting the device to connect, we recommend that you contact our technical support team at **(833) 611-5965** between the hours of **7AM-7PM Eastern Time**.



4.3.3 - Connecting a Non-Gateway Unit to the CSMS via the Gateway Unit

Once the Gateway device is connected following the steps from the previous section, you should now configure each Non-Gateway unit to connect to the Gateway. To configuration each Non-Gateway as **Figure 4-5** shown, use the steps previously described to access the dashboard, then take the following actions:

Non-Gateway Network Settings

Central System URL:

Gateway Serial Number:

Network Mode: ☒ Non-Gateway External Wi-Fi

Figure 4-5 Non-Gateway Network Settings

1. Click **“Edit”** in the Network Settings section of the page
2. Enter the serial number for the Gateway unit in the **“Gateway Serial Number”** field on each Non-Gateway unit
3. If needed update the Network Mode to be **“Non-Gateway”**
4. Click **“Save Changes”**
5. Confirm all of your changes are completed
6. Log out of the dashboard
7. Move the Setup Switch to the down position (**“off”**), which will re-boot the unit
8. Call our technical support team at **(833) 611-5965** to confirm that each Non-Gateway unit has successfully connected to the CSMS



4.3.4 - Connect Gateway or Non-Gateway Unit to CSMS Using External Wi-Fi

Both Gateway and Non-Gateway units can be connected to the CSMS via an external Wi-Fi network. For installations where each device will communicate over an external Wi-Fi device, you will need to (1) change the Network Mode to “External Wi-Fi”, and (2) configure the Wi-Fi network, on each device.

To connect to an external Wi-Fi, as shown in **Figure 4-6**:

1. First click “**Edit**” in the Network Settings section on each Gateway and Non-Gateway charger
2. Change Network Mode to “**External Wi-Fi**”
3. Click “**Save Changes**”
4. Next Click “**Edit**” on the Wi-Fi Settings card
5. Click the “**Scan Wi-Fi**” button
6. Select the proper network from the Wi-Fi Network Name drop-down
7. Select appropriate security protocol based on the Wi-Fi network you are trying to connect to
8. Input Wi-Fi network password
9. Click “**Save Changes**”
10. Confirm all of your changes are completed
11. Log out of the dashboard
12. Move the Setup Switch to the down position (“off”), which will re-boot the unit, and all settings that were changed will be enabled
13. Call our technical support team at **(833) 611-5965** to confirm that each Non-Gateway unit has connected to the CSMS



Wi-Fi Settings (for External Wifi)


Wi-Fi Network SSID	Wi-Fi Signal Strength	Wi-fi Network Name
LynkwellNetwork	-53	Lynkwell Engineering ▾
Security Protocol	Wi-Fi Network Password	
None ▾	***** 	
<div>Save Changes</div> <div>Scan Wi-Fi</div> <div>Cancel</div>		

Figure 4-6 Wi-Fi Settings for External Wi-Fi



4.4 - Device Settings

4.4.1 - Overview

In addition to the network and communication settings described in the previous section, additional device settings are available. Typically, these settings do not need to be updated, but are described below for completeness.





The following sections provide a brief summary of each parameter shown in **Figure 4-7**:

Charging Station ID – is the ID given to each XLink unit by the administrator of the CSMS.

Stand Alone Mode – The XLink is shipped from the factory with this mode disabled. For chargers that are not connected to a CSMS, this parameter should be enabled so that a charge is automatically authorized when the vehicle is plugged in. No additional authorization to start the charge is required.

Firmware Amperage Soft Limit – This value can be used to set a current limit LESS THAN the limit set using the current limit DIP switch settings (see section 3.7). If this parameter is set higher than the current limit DIP switch setting, it will be ignored.

OCPP Heartbeat Interval – This value, in seconds, is the rate at which the on-board OCPP server will transmit a “heartbeat” to the CSMS, confirming that the device is online and operating.

NTP Server – The NTP server provides the time source for each charging station. XLink supports 8 public NTP servers from the following list: 0.openwrt.pool.ntp.org, 1.openwrt.pool.ntp.org, time.google.com, time.cloudflare.com, time.apple.com, time.nist.gov, pool.ntp.org, 0.amazon.pool.ntp.org, 1.amazon.pool.ntp.org.

A minimum of one and a maximum of eight can be entered into the text box as a comma separated list, as shown above.



4.4.2 - Appearance Settings

Logo LED Color – Hex color code value of the of the Logo backlight.

LED Brightness – Value between 0 to 100 that sets the brightness of the Logo backlight.

Short Code – A four-character code that acts as a device serial number for use by drivers engaging with the XLink. It can also be used by installers or field technicians to identify the unit with technical support. Note, this code typically matches the label attached to the side of the charger, visible to drivers as they approach the unit.

Custom Message – A custom message can also be configured. Without specific reason, this field should not be changed.

4.5 - Firmware Management

In the event a local firmware update is required, navigate to the Firmware Management page. Have the firmware .bin firmware file on your computer. Select the file, and when you are ready press the **Flash** button. The charging station will do a reboot automatically. After this you will need to go through the steps to access the Wi-Fi network and get access to the dashboard to configure. See the **Figure 4-8**.



Communication

Device Settings

Firmware Management

Model: XLynk

Type: Gateway

Serial: EVM000246

Firmware: 1.12

OCPP: 1.6J

Connector: 1-J1772

Max Amps: 48 AC

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Reset to Default ↶

Log Out |→

Update Firmware

Please select a new firmware file

Only .bin files will be allowed.

Choose File

No file chosen

Flash

WARNING: Do not power off the unit or close this browser while the unit is flashing

Click

Figure 4-8 Firmware Management



5. KEY PRODUCT SPECIFICATIONS

5.1 - General Specifications

Table 5-1 General Specifications (1/3)

Electrical	
Voltage and Wiring	240V AC split-phase: L1, L2, and safety ground
	208V AC 3 Phase Wye: Any 2 phases, and safety ground
	240V AC 3 phase Delta: The two phases on either side of the center tap, and safety ground. These two phases MUST measure 120V AC to ground. DO NOT use the third leg.
	(208V ‘stinger’)
Wiring Type	Hard-wired
Circuit Breaker	Maximum 60A rated
Operating Current	Maximum 48A, adjustable down to 12A
Frequency	60Hz
Energy Meter Accuracy	Utility grade meter < $\pm 1\%$
Connector & Cable	
Connector Type	J1772, Type 1
Cable Length	Approx. 18ft or 25ft



Table 5-1 General Specifications (2/3)

Networking & Communications	
Built-in Wi-Fi on LW101-AC48-N & LW101-AC48-G	2.4GHz 802.11 b/g/n
Built-in Cellular on LW101-AC48-G	LTE CAT.M1
Local Network Device Grouping	Connect up to nine (9) Non-Gateway units to one (1) Gateway
CSMS Communication Protocol	OCPP 1.6 J
Environment	
Enclosure Rating	NEMA 3R
Operating Temperature	-22°F to 122°F (-30°C to 50°C)
Storage Temperature	-22°F to 140°F (-30°C to 60°C)
Humidity	95% RH Non-Condensing
Display & Indicators	
Display Size	2.7 in (W) x 1.5 in (H)
Display Resolution	128-pixel x 64-pixel
Fault Codes & LED Indicators	Refer to table in the manual
Device Mounting	
Mounting Type	Wall mount or Pedestal mount
Bracket Dimensions	3.41 in (W) x 8.75 in (H) x 0.67 in (D)
Device Dimensions	6.1in (W) x 14.11in (H) x 4.53in (D)



Table 5-1 General Specifications (3/3)

Standards & Compliance	
Safety Certifications	UL 50E / UL 991 / UL 1998 / UL 2231 / UL 2594
FCC Certification	Part 15 and 15.247 (Wi-Fi)

5.2 - FCC Compliance Information

Contains FCC ID: XMR201910BG95M3 (cellular module)

Contains FCC ID: 2AD56HLK-7688A (Wi-Fi module)

5.3 - LED Status Indicators

Table 5-2 LED Status Indicators

Description	Charger State
Green (steady)	Available
Green (pulsing)	Preparing to charge, Waiting to Authorize
Blue (pulsing)	Charging
Yellow (pulsing)	Boot-up, Configuration Mode and Firmware Updating
Red (steady)	Fault condition See section 6 for a description of fault codes



6. TROUBLESHOOTING

6.1 - Troubleshooting

In situations where a fault occurs, the LEDs will turn a steady RED and the display will show a fault code. Refer to **Table 6-1** below for instructions on how to resolve the issue.

Table 6-1 XLink Fault Codes (1/2)

Fault Code	Meaning	Instructions
2	Ground Fault	Ensure the charging cable is undamaged and dry. If this code persists longer than one hour, power cycle the EVSE. If the problem still persists, call support for assistance.
4	Missing AC Input	Contact a qualified electrician to check the input AC voltage and connection. See also section 2-3.
5	Ground Missing	Contact a qualified electrician to check the input ground connection. See also section 2-3.
7	Stuck Relay Error	Power cycle the EVSE. If the problem persists, turn off power to the EVSE and call support.
9	EV Error	Unplug the cable from the vehicle and then re-plug. If the problem persists, for drivers, try using a different EVSE; for station owners ensure connector is undamaged; if problem still persists, call support for assistance.
10	Ventilation Required	XLink does not support the charging mode required by the vehicle.
11	GFI Self-test Failure	Power cycle the EVSE. If the problem persists, call support.



Table 6-1 XLynk Fault Codes (2/2)

Fault Code	Meaning	Instructions
12	Communication Error	Power cycle the EVSE. If the problem persists, call support.
50 or higher	Internal Errors	Please call support for assistance if you see a fault code numbered 50 or higher.

6.2 - Other Potential Issues

Table 6-2 Other Potential Issues

Issue	Instructions
Unit doesn't turn on lights or screen	Check input AC voltage and connection
Car plugged in but EVSE stuck on "Available"	Unplug the cable from the vehicle and then replug. If the problem persists, try using a different EVSE.
Stuck on "Initializing"	Ensure DIP switches are properly configured, then Power Cycle.
Unit indicates an IP address on the display screen	The unit is in Setup Mode. Please see section 4.2 and return the unit to normal operating mode.



7. CUSTOMER SERVICE

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Schenectady, NY 12308

Support Contact

help@lynkwell.com
(833) 611-5965

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sales@lynkwell.com
(518) 691-3119



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