Manuals+ — User Manuals Simplified.

powerflex Power Flex Kiosk Installation Guide

PowerFlex™ Kiosh

Site Installation and Commissioning Guide

Contents

Power Flex Kiosk

PowerFlex™ Kiosk Site Installation and Commissioning Guide
Copyright © 2024 PowerFlex Systems, LLC. All Rights Reserved.
Revision 1.1.0

PRODUCT SPECIFICATIONS
All specifications and descriptions contained in this document are verified to be accurate at the time of printing. However, because continuous improvement is a goal at PowerFlex, we reserve the right to make product modifications at any time. To communicate any inaccuracies or omissions in this manual, send an e-mail to: **site-support@powerflex.com**.

SAFETY CONCERNS
This guide contains important instructions for the PowerFlex™ Kiosk that must be followed during installation and maintenance. Special symbols are used throughout the guide:

	Warning: Indicates a hazardous situation that could result in injury or death.
	Risk of electric shock: Indicates components or a procedure that risks electric shock or injury.
	Caution: Indicates a hazardous situation that could result in minor injury equipment damage.
Note	**Note:** A best practice alert, tip, or technique that results in successful results.

The unauthorized use of any trademark displayed in this document or on the product is strictly prohibited.

PowerFlex is a trademark of PowerFlex Systems, LLC. Nayax is a registered trademark of Nayax [Israel] Ltd. HID is a registered trademark of HID Global Corporation. OLEA and Olea Kiosks are registered trademarks of Olea Kiosks Inc. Glorystar is a registered trademark of Glory Star Group [Hong Kong] Ltd. Intel is a registered trademark of Intel Corporation. Microsoft is a registered trademark of Corporation. Storm, AudioNav are trademarks of Keymat Technology [England] Ltd. TECA is a registered trademark of ThermoElectric Cooling America Corporation.

All other trademarks contained in this document are the property of their respective owners, and any use does not imply sponsorship or endorsement of their products or services by PowerFlex Systems, LLC.

Getting technical assistance

For assistance with PowerFlex kiosk installation and commissioning, please contact PowerFlex support at site-support@powerflex.com, or 833-4-PWRFLX, during the hours of 9 am to 5 pm (PST).

Getting Started

An overview of PowerFlex Kiosk

This commissioning guide outlines the step-by-step process for successfully setting up and commissioning the PowerFlex™ Kiosk on site. It includes software configuration, hardware setup, and operational testing to ensure the kiosk is fully functional and ready for public use. While specific details may vary depending on the site, these procedures should ensure a smooth installation and launch.

The PowerFlex Kiosk is a sophisticated electric vehicle supply equipment (EVSE) that enables owners of publicly available charging stations to offer additional payment methods in compliance with California regulations. The kiosk enclosure you'll install looks like this:
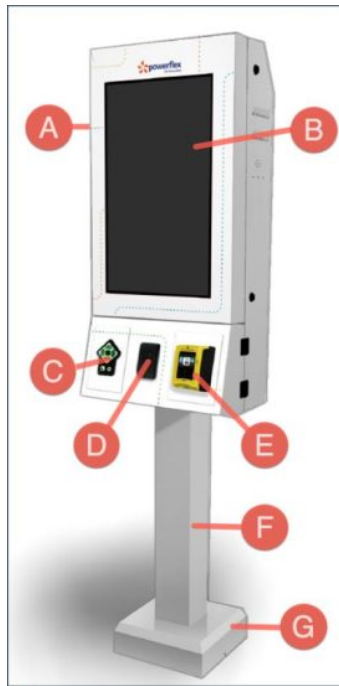
A. Kiosk enclosure (with two secure opening doors to two panels)
B. Display
C. Audio navigation pad
D. HID® RFID reader
E. Nayax® payment device
F. Pedestal (optional)
G. Pedestal base plate (optional)

Key features include:

- Large touch screen for ease of interaction and navigation
- User-friendly interface to guide users through a charging transaction
- 24/7 support
- Accessible design following ADA guidelines
- Rugged and durable construction, rated for indoor and outdoor installation
- Remote management for easy kiosk administration

The kiosk provides several convenient ways to start a charging session:

- Authenticate with RFID
- Pay with a credit card, no prior registration needed
- Charge session to an existing account with an app
- Touch activation when no payment is required

How to use this guide
To complete the installation of a Nexus Sense enclosure, you'll need to follow these steps (although some activities may be performed in parallel or in a slightly different order):
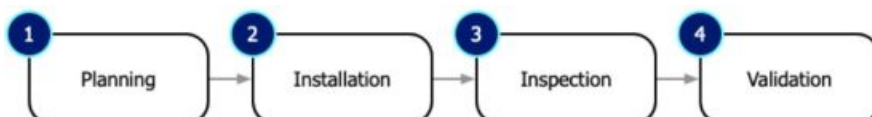
To complete the installation and commissioning of a kiosk, you'll need to follow these steps (although some

activities may be performed in parallel or in a slightly different order):

1. Planning: Download the FastField Forms (FFF) app, review the documentation, and prepare for onsite installation.
2. Installation: Mount the kiosk and connect wiring as required at your site.
3. Inspection: Record site information in the app and start the commissioning process.
4. Validation: Energize the kiosk and make sure that everything is up and running.

More help in this guide:

- Troubleshooting and FAQ
- Checklist of things to do during installation
- Technical specifications

More help in other documents:

- Nexus Core Installation Guide — Besides instructions on how to set up Nexus Core, it includes information about the FastField Forms (FFF) app.

To ensure quality work, each step should be verified before proceeding to the next step.

Setting up PowerFlex Kiosk

Step 1: Planning

To plan for PowerFlex Kiosk installation and commissioning, you will:

- Review kiosk documentation
- Download and become familiar with the FFF app
- Identify the site for the installation
- Identify tools necessary for on-site installation
- Examine and unbox the kiosk

For most installations, getting a kiosk installed and energized should only take an hour or so and can be performed by one technician. However, the timeframe to complete an installation can vary due to elements outside of your control (ex: energization may require an electrical inspection and establishing connectivity).

Review the kiosk documentation
Carefully read the kiosk's user manuals and any additional materials provided by PowerFlex already mentioned in How to use this guide. Familiarize yourself with the specific components, safety protocols, and troubleshooting procedures. The specifications of the kiosk are summarized in the Appendix.

Using the FastField Forms app to record site installation information

PowerFlex Forms is a custom implementation of the FastField Forms (FFF) mobile app. The FFF app provides a convenient way for an installer to collect site information and photographs of the installation. This benefits both PowerFlex support and installers with a historical record for each installation. The FFF app is also used to update site installation notes in the future.

The importance of the FFF app
Filling out the FastField Forms app is a requirement for a successful installation. The app makes it easy to capture equipment serial numbers, descriptions, locations, and photographs that are needed by PowerFlex support. This is critical for all the Nexus enclosures installed on a PowerFlex site.
The FFF mobile app can be downloaded onto a Google or Apple phone (or tablet). More information on how to get started with the app can be found under the heading "Step 1: Planning" in the Nexus Core Installation Guide.

Select and prepare the site for installation
Choose a location with adequate space, power access, and network connectivity. Ensure the chosen location complies with local building codes and accessibility regulations. Prepare the site by ensuring a clean, level surface and proper cable management for power and network connections.
Refer to Appendix B to make sure that the kiosk dimensions conform to the available space at the installation site. Parking spots should be labeled according to the drawings and site definition documents provided. The labeled identifier (name, number, or some combination) used for the parking spot must be exactly the same as the one you enter in the FFF app (Step 3: Inspection).

What you'll need
You'll need these tools to install the kiosk on site:

- Imperial socket (or wrench) set
- 4 x 1/2″ x 5″ drop-in concrete anchor bolts, washers, and locknuts
- Scissors (or wire cutters)
- Phillips head screwdriver
- 3-fork crimp connectors (if using THNN wire)
- RJ45 (Cat6) end terminal connector
- Credit card for electric vehicle (EV) charging tests
- An EV for testing

⚠️ **IMPORTANT:** The installer should have a J1772-compliant EV (or Tesla with adapter) and a credit card for testing.

Inspecting and unpacking the box
The kiosk comes pre-assembled and pre-configured from PowerFlex. The kiosk comes in a heavy-duty cardboard box on top of a wooden skid.

PowerFlex has partnered with OLEA® to provide the complete kiosk product

Make sure the kiosk box is on flat ground or surface before opening. To unbox the shipping container:

1. Use scissors or wire cutters to cut straps. Remove the straps from the box and pallet. Carefully lift the cardboard cover from the pallet.
2. On the right of the kiosk enclosure, use scissors (or wire cutters) to cut the plastic tie to remove the keys.
3. Use the Phillips screwdriver to remove the four screws holding the base covers. (The base covers and screws will be used in unboxing step 6 below.)
4. Unscrew and remove the four wing nuts, four flat washers, and four split washers at the bottom of the unit. Push the four bolts downward until they drop to the floor.
5. Position the kiosk to be installed on location (Step 2: Installation) and reinstall the base covers using the original four screws (#3 above).

⚠️ The kiosk is no longer fastened to the pallet and is susceptible to tipping.

Your unit has been preconfigured for pedestal installation at your site. Verify that the labels on the kiosk match what you are expecting to install.

If you feel that there is a problem with the kiosk after unpacking, contact PowerFlex support (or your PowerFlex representative) immediately: e-mail: **site-support@powerflex.com**, phone: 833-4-PWRFLX

Before proceeding to the next step …

- The kiosk has been unboxed and installed at the on-site location.
- For additional unboxing information, refer to Appendix D: Kiosk Unpacking Instructions.

Step 2: Installation
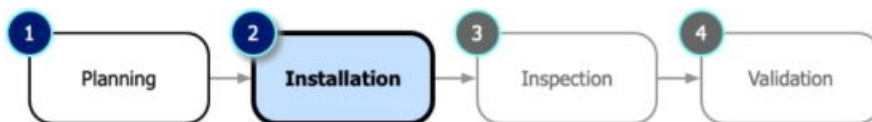

To install the kiosk, you will perform the following:

- Mount the kiosk
- Open up the kiosk
- Connect power and data cabling to the kiosk

Mount the kiosk
Use the 1/2″ x 5″ drop-in bolts, washers, and locknuts to securely attach the kiosk to a concrete surface.
Refer to Appendix B for kiosk mounting information. Do not mount the kiosk directly on asphalt.

Opening the kiosk
The kiosk comes with keys to open up both panel doors of the kiosk. The upper panel contains the kiosk's PC, power distribution, and HVAC systems, while the lower panel houses where the power and data conduit feed in. Open the front of the upper panel to examine that all of the key components are intact:
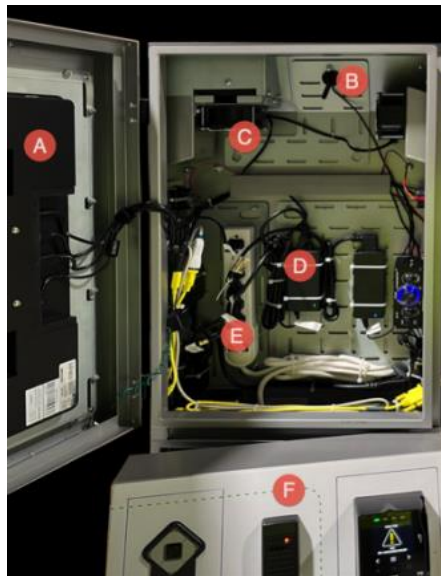
A. Kiosk PC
B. HVAC system
C. Nayax antenna
D. Power source
E. Power strip
F. Left to right (lower panel): audio navigation pad, HID RFID reader, and
Nayax payment reader; power connections are inside the panel (not shown)

Now open the lower panel 90° (L) and 180° (R) to ensure a proper clearance of 13.75″ and 16.5″, respectively:

Connecting power and data cables to the kiosk

⚠️ Always rely on a licensed electrician to connect electrical power to the kiosk. Although wiring can run above ground in conduits through the pedestal base, PowerFlex recommends that underground wiring (brought up through the pedestal) is preferred.
Before continuing, make sure that power has not been turned on (breaker should be off) to the kiosk.

Connect the power strip in the upper panel to one of the power outlets in the lower panel (white cable below). Route the 120V power and Cat6 data cables up through the base and pedestal support post:

120VAC •••••••••
Cat6 ••••••••••
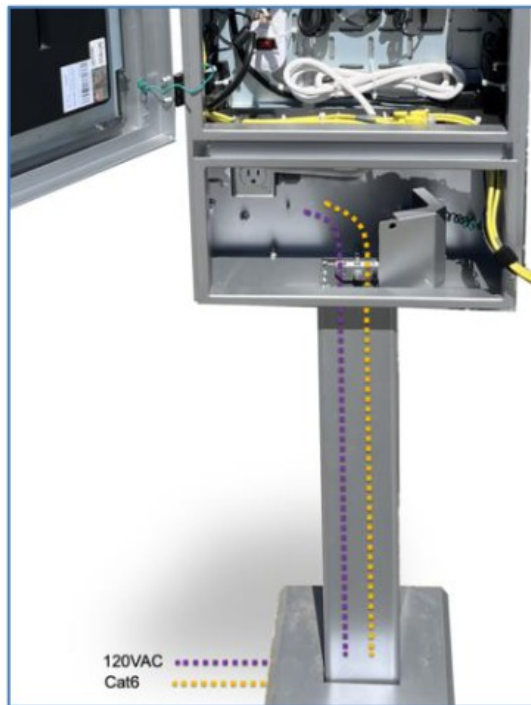
The power cables (three wires shown) should be connected to the power box as shown in the picture below:

Connect a Cat6 cable between the Ethernet port from the kiosk PC to Nexus Core:
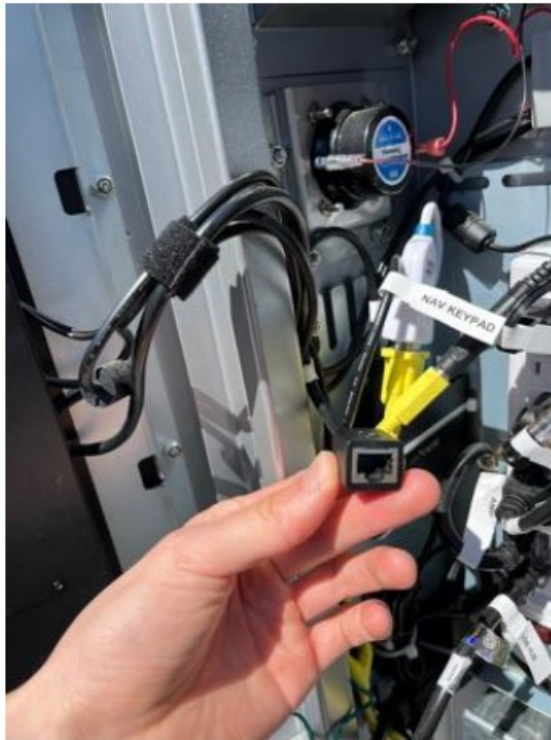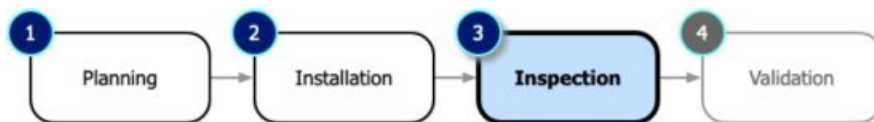
To learn more about the networking used, refer to Appendix C.

Before proceeding to the next step …

- Make sure power and data cables are securely connected in the kiosk.

Step 3: Inspection

To perform a kiosk inspection, you will need to use the FFF app to do the following:

- Learn how to use the app
- Record the kiosk information in the app
- Submit the site inspection form to PowerFlex support

Using the FFF app

The FastField Forms (FFF) mobile app has been customized for PowerFlex installers to gather important installation information and photographs before performing the final validation step. Log in (L) to your account, tap Forms (M), and select the Site Inspection Form (R). To start, tap the Start Form button:
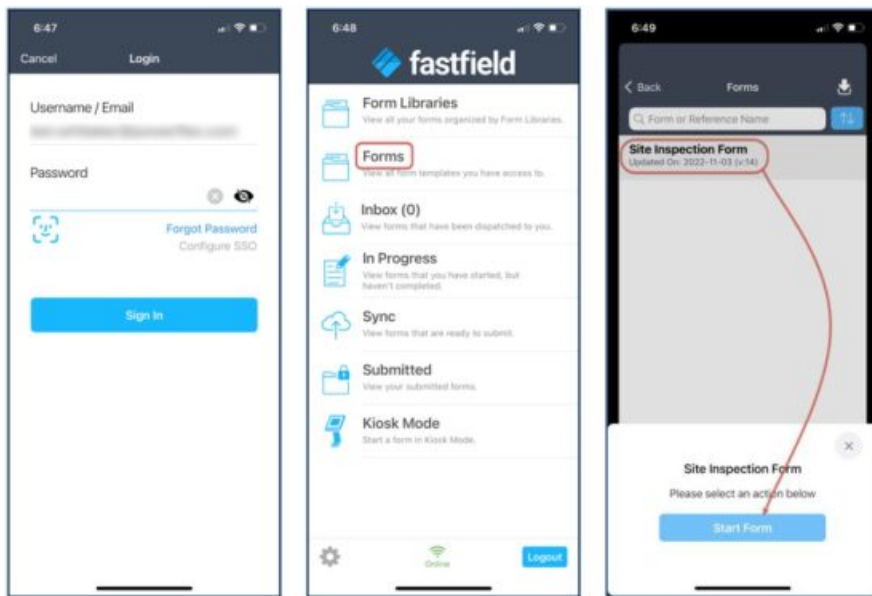
The first page of the site inspection form contains general information (L). If the form contains more information than can fit on a single screen, flick the screen up to see more (R):
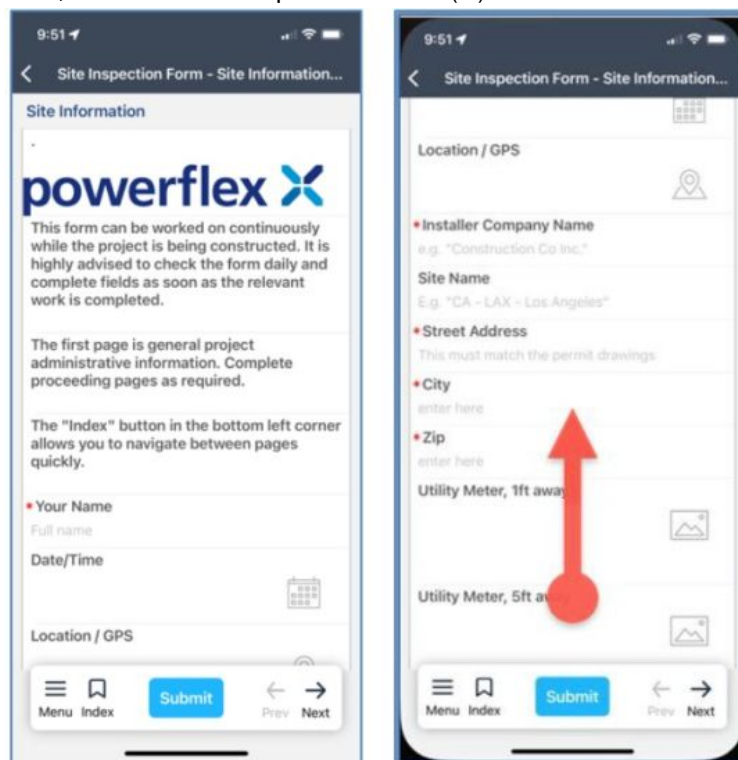
Learning how to use the app …

More comprehensive instructions on how to use the FFF app is described in "Step 3: Inspection" of the Nexus Core Installation Guide.

Record your kiosk information in the app

Take a picture and record the information of the PowerFlex kiosk ID located on the outside of the kiosk enclosure (L). A duplicate copy is also located on the inside of the bottom panel of the kiosk (R).

Besides the unit model and serial numbers, the label includes the following information you'll need to record in the app:

- ACN and ACC
- Kiosk number
- Phone number to get technical support from PowerFlex

Submit the site inspection form
Once Nexus Sense information has been collected in the site inspection form, tap the Submit button at the bottom of the app's screen. If there are errors or missing elements, the app will display a warning message.

Before proceeding to the next step …

Verify the following:

- The kiosk information has been entered into the app and successfully submitted.

Step 4: Validation
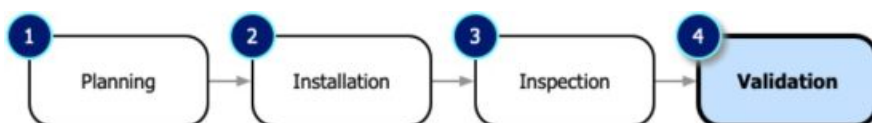
To perform a kiosk validation, you will:

- Apply power to the kiosk

- Confirm end-to-end operation
- Securely lock the kiosk front door panels

⚠️ Always follow safety guidelines and manufacturer's instructions during installation and validation. Before leaving the site, ensure all connections are secure and that the kiosk is functioning as expected.

Apply power to the kiosk
Apply power (turn on the breaker) to the kiosk, and in a few short minutes, the kiosk display should "come alive." If the kiosk does not appear to be operational, press the power button on the PC in the inside door of the larger, top panel. The display should boot up within a minute or two.

Close the doors to both kiosk panels and lock with the key.
If you feel that there is a problem with the kiosk, contact PowerFlex support (or your PowerFlex representative): e-mail: **site-support@powerflex.com**, phone: 833-4-PWRFLX

Confirm end-to-end operation
As the final test, an end-to-end charge and payment verification should be performed to mimic what an actual user will do. Perform the following six tasks on at least two different charging stations:

1. Plug in a vehicle to the EVcharger.

2. On the kiosk's touch screen, tap start charging.
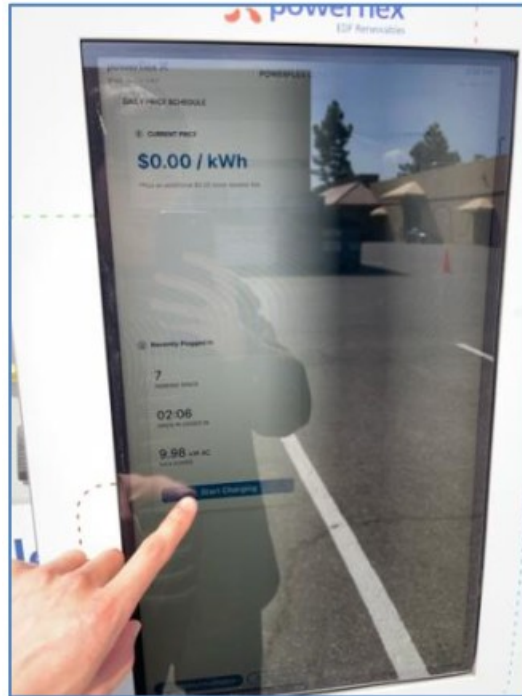
3. Follow payment prompts and swipe the payment card (first of several screens shown).
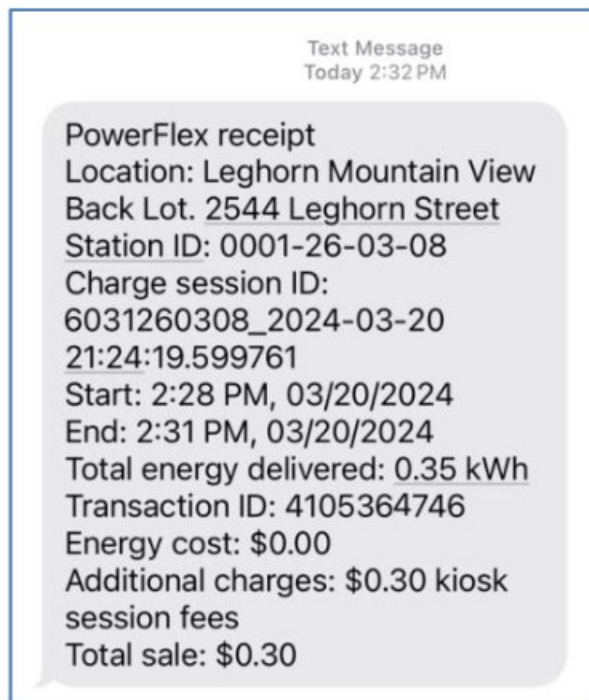

4. Enter the test user's email or phone number credentials and start charging.

5. Confirm that charging is being supplied to the vehicle on the kiosk's Active sessions screen.

6. Unplug vehicle, confirm that the proper payment receipt is delivered to email or phone.

Text Message
Today 2:32 PM

PowerFlex receipt
Location: Leghorn Mountain View
Back Lot. 2544 Leghorn Street
Station ID: 0001-26-03-08
Charge session ID:
6031260308_2024-03-20
21:24:19.599761
Start: 2:28 PM, 03/20/2024
End: 2:31 PM, 03/20/2024
Total energy delivered: 0.35 kWh
Transaction ID: 4105364746
Energy cost: $0.00
Additional charges: $0.30 kiosk
session fees
Total sale: $0.30

Securing the kiosk
Ensure that the kiosk doors are closed and locked. Keep the keys for the kiosk inside the Nexus Core enclosure.

Before proceeding to the next step …
Verify the following:

- Ensure that power has been applied and the kiosk is operational.
- Verify that at least EV has been charged and proper payment recorded.

Site Inspection and Commissioning Checklist

☐	Task
☐	Step 1: Planning
☐	▪ Select and prepare the site for kiosk installation
☐	▪ Identify and gather the tools required to install the kiosk
☐	▪ Inspect, unpack, and verify the kiosk
☐	Step 2: Installation
☐	▪ Mount the kiosk to concrete surface
☐	▪ Use the supplied keys to open the kiosk panels to inspect the key components
☐	▪ Connect power and data cables to the kiosk
☐	Step 3: Inspection
☐	▪ Record the kiosk information in the app
☐	▪ Submit the site inspection form to PowerFlex support
☐	Step 4: Validation
☐	▪ Apply power to the kiosk
☐	▪ Confirm end-to-end operation
☐	▪ Secure the kiosk and store the keys in the Nexus Core enclosure

Appendix A: Technical Specifications

Enclosure

Manufacturer	Olea Kiosks®
Color	White (powder coat)
Graphics	Vinyl (front only)
Kiosk dimensions	29″ H x 16.72″ W x 13.58″ D (736.6 x 424.7 x 344.9 mm)
Mount	Pedestal
Mounted height	60″ (1525.0 mm)
Material	16-gauge steel
Pedestal base	10.19″ x 10.19″ (258.3 x 258.3 mm)
Weight	100 lbs (45.4 kg)
Power	120VAC, 10A

Kiosk PC

Model	Glorystar® Magnetar – all-in-one display PC
Processor	Intel® Celeron J6412
Operating system	Microsoft® Windows 10 IoT Enterprise
Storage	256GB SSD
Memory	8GB RAM
Ports	USB x 4; Line-Out; Min-in; HDMI; Display Port; Ethernet (RJ45) x 2; RS232 x 6 (inside PCBA); GPIO x 8 (inside PCBA)

Display

Size and type	21.5″ display panel, outdoor IP65-rated
Resolution	1000 nits,1080p
Orientation	Portrait

Payment and interactive components

RFID scanner	HID – Proxpoint Plus
Credit card reader	Nayax VPOS
ADA navigation device	Storm AudioNav™ 6-key keypad
Speakers	Vidsonix 2″ Full-Range; Metal Grill – AKG Tech AK-170 Amp

Cooling

Cooling unit	TECA® AHP-250 Series Thermoelectric AC Compact

Appendix B: Kiosk Dimensions Diagram
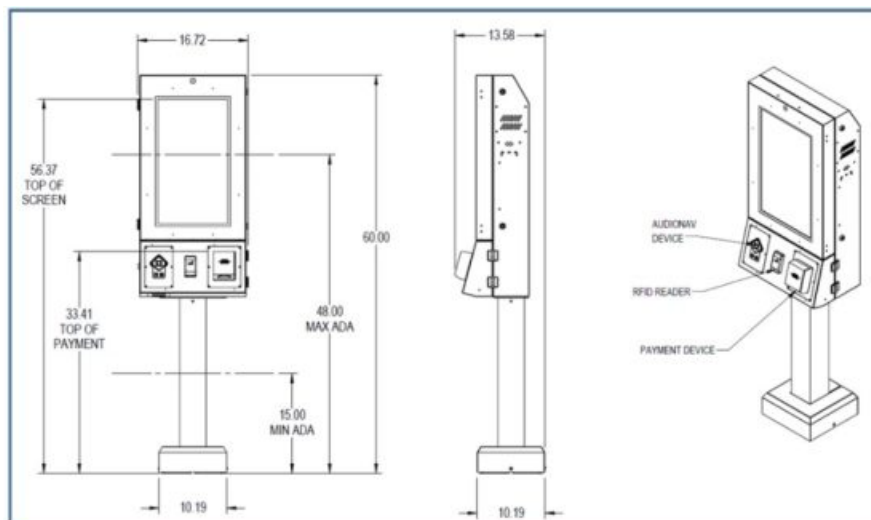
Kiosk enclosure (in inches)
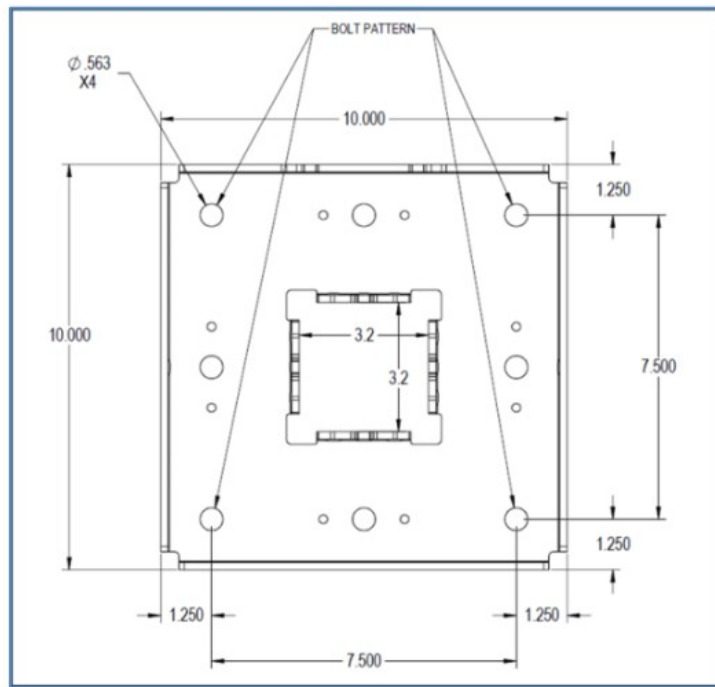
Kiosk base (in inches)

⚠️ The kiosk SHOULD NOT be installed on asphalt or any other unstable surface. If required, a concrete base will need to be poured prior to mounting the kiosk's pedestal.

Appendix C: Networking Diagram

This represents a network diagram showing a connection between the kiosk and Nexus Core:
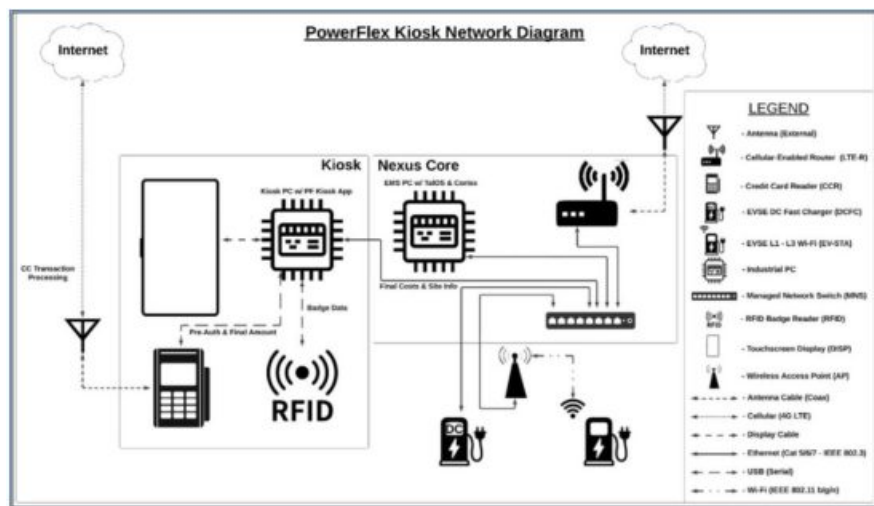
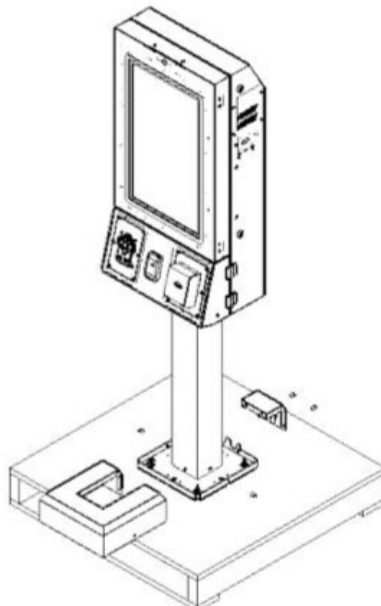## Appendix D: Kiosk Unpacking Instructions

STEP 1: Cut straps and remove cover. Tear tray off of pallet and lift upwards remove.
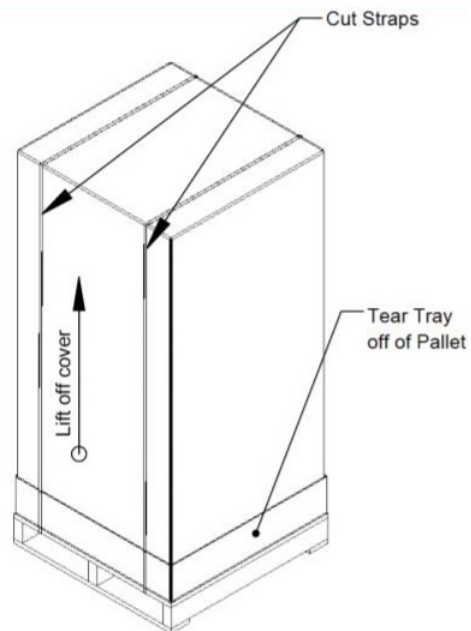
STEP 2: Cut plastic tie and remove keys from kiosk.
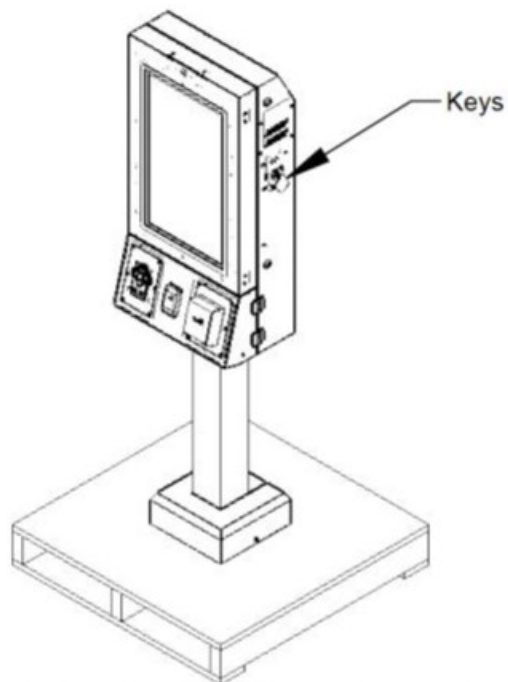
STEP 3: Use Phillips screw driver to remove (4) screws holding base covers. Keep the base covers in a safe place. They will be re-installed at the very end of the kiosk installation process.

STEP 4: Unscrew and remove the (4) wing nuts, (4) flat washers and (4) split washers at the bottom of the unit.

Push the (4) bolts down until they fall with the (2) shipping brackets to the floor.
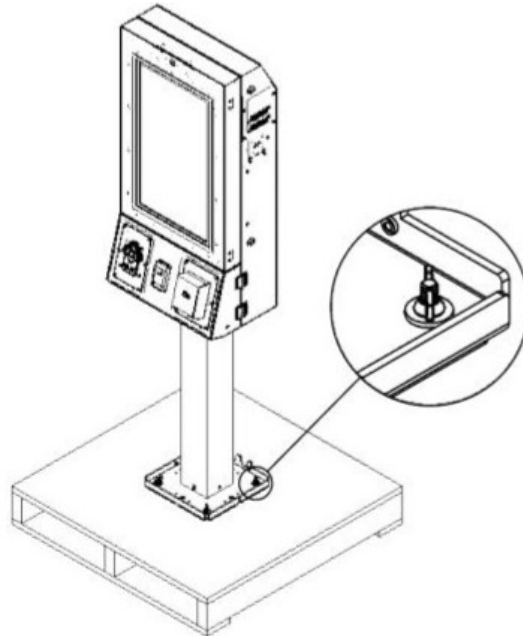
STEP 5: Put the wing nuts, bolts, washers and shipping brackets away.
WARNING: The kiosk is now unrestrained, and susceptible to tipping over. Make sure to keep hold of it at all times between this point and on-site installation onto floor anchors.
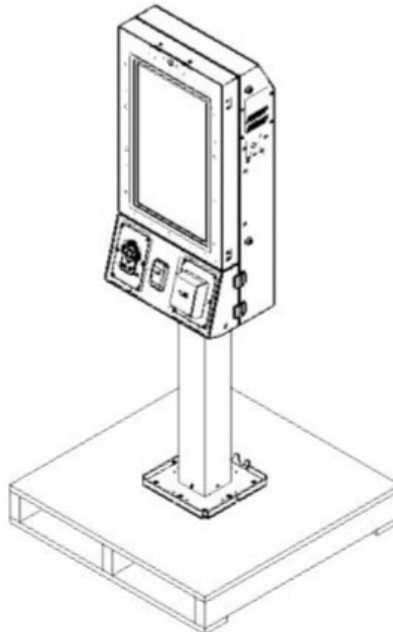
STEP 6: Once the kiosk has been properly fastened to floor anchors, the base covers that were removed on STEP 3 can be re-installed.

Index

Documents / Resources

powerflex Power Flex Kiosk [pdf] Installation Guide
Power Flex Kiosk, Flex Kiosk, Kiosk

References

- **User Manual**