

Introduction

Thank you for purchasing a Digi Smart Energy Developer Kit. The purpose of this kit is to teach developers about Digi's ZigBee Smart Energy Framework and iDigi development tools and make it easy for a developer to use those tools to create custom smart energy applications.

When you are finished with this guide, your setup will look like this:

[Include network diagram showing all the components: X2e, AP, SafePlug, and Smartlee app on a phone]

You will refer to two documents as you use this kit:

Quick Start Guide (this document): Guides you through the initial kit setup.

Getting Started Guide: A longer document available online that teaches you more about the underlying technology. The Getting Started Guide also includes an in-depth troubleshooting section.

Refer to [URL TBD] for more in-depth information about software development and commercialization with this technology.

Verify Contents

ConnectPort X2e for Smart Energy

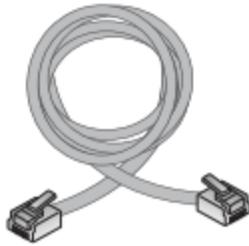


Ethernet Cable

SafePlug



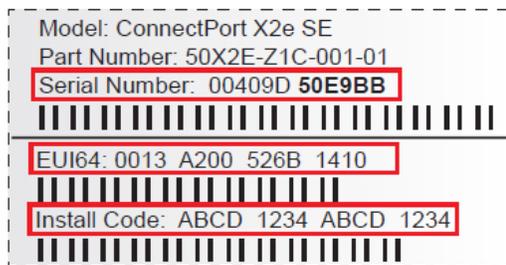
Power Supply



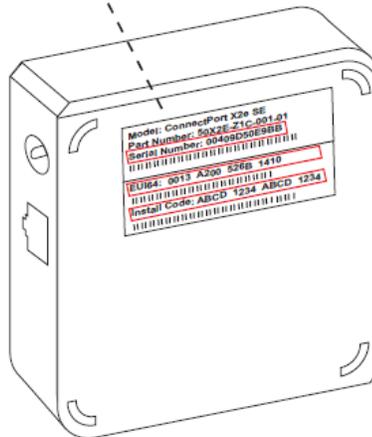
Preparation for the Online Installation Process

Before you move onto the next steps, it would be beneficial to record the following information, which can be found on the devices:

- **ConnectPort X2e (on back of device)**
 - **Serial Number:** _____
 - **Install Code:** _____



NOTE: The Serial Number is also the Ethernet MAC address



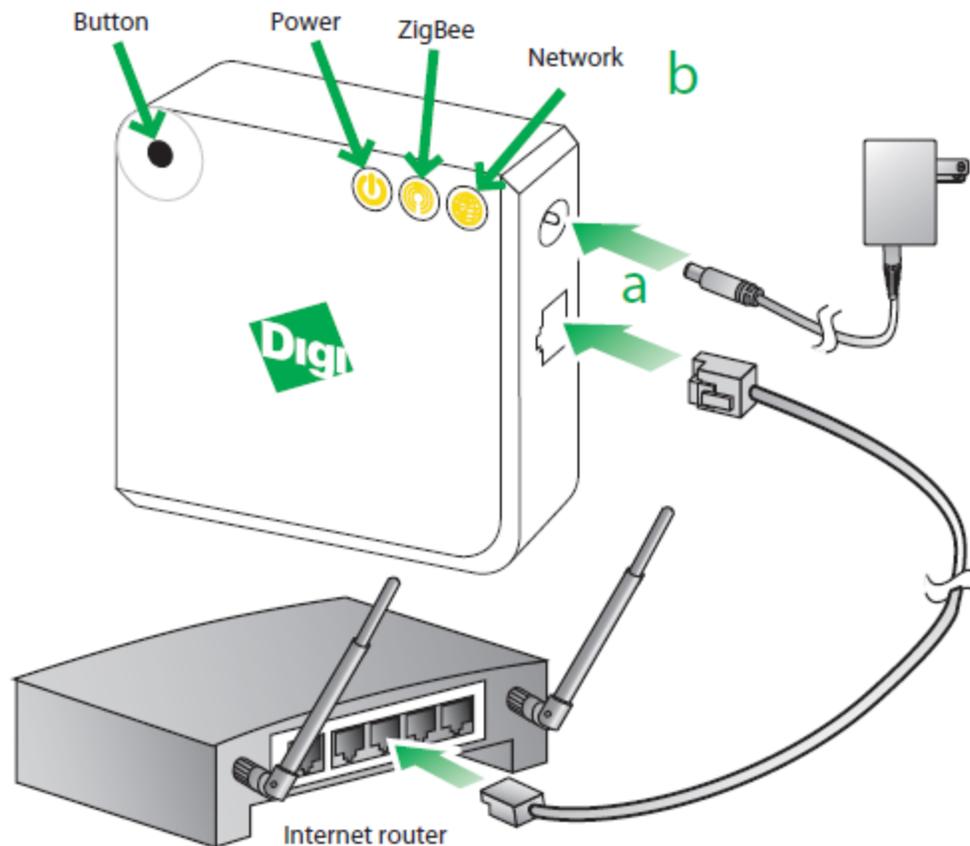
- **SafePlug**
 - **MAC Address/Serial Number:** _____
 - **Installation Code:** _____

---Picture of SafePlug that shows where the Installation Code is---

Hardware Set-Up

1. Ethernet Setup:

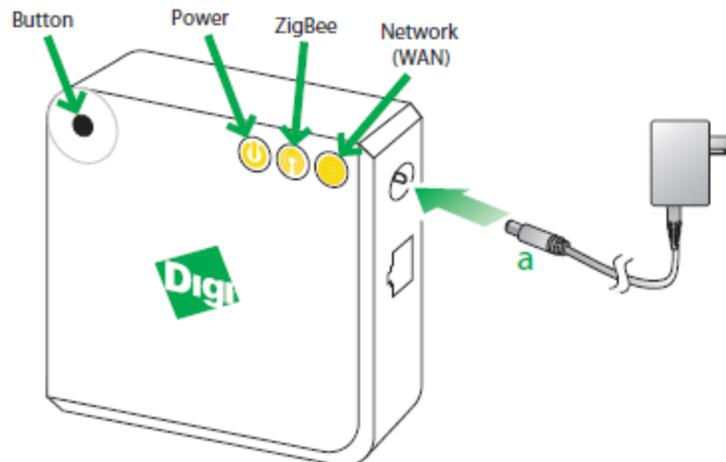
- a. Connect the Ethernet cable
- b. Connect the power supply
- c. Startup Sequence - After plugging in the device the Power and Network LEDs will gradually turn solid green.



3. Wireless Setup:

- a. Connect the power supply
- b. Startup Sequence - After connecting the power supply, the Power LED will be solid green, the ZigBee LED will be blinking green, and the network LED (WAN) will be blinking orange.
- c. Note: If the ConnectPort X2e has already been configured to connect to an access point, it will need to be set back to factory defaults to use the following procedure. See the troubleshooting section below to return the gateway back to its initial state.

- d. *Enable Access Point mode on your device by pressing the button.*
- e. *Configure the Wi-Fi interface of your computer to connect to ConnectPort X2e gateway's access point. The name (SSID) of the access point will be `cpx2e-se-xxxxxxxx`, where `xxxxxxxx` is the serial number of the gateway.*
- f. *Go to your web browser, and enter the URL of the gateway:
`http://192.168.100.1`*
- g. *Navigate to **Configuration > Wireless Wizard**. Follow the steps in the wizard to configure your device.*
- h. *Once your configuration is complete, your device will connect to your home access point and attempt to connect to Smartlee. You can track its progress by observing the network LED behavior. Once the connection to your access point and gateway is connected to Smartlee, all the LED's will be solid green.*



4. *Plug in the SafePlug*

---Picture of SafePlug---

5. *Look at the SafePlug and find the LED. If the LED is green, then the SafePlug is working and you are ready to move on. If it's flashing amber, then there is a problem with the SafePlug. Go to troubleshooting for more information.*

Connecting to Smartlee

Adding Your Gateway

1. Go to www.livesmartlee.com and create an account.
2. On the Discover Gateway page, enter the MAC address that you previously

recorded.

Find My Gateway

or

Enter Your Gateway ID :

Time Zone:

(GMT -6:00) Central Standard Time (America/Chicago)

Previous Next

MAC Addr: 00409D 000000 Gateway ID

SN: (S) W00000000

You can also use the “Find My Gateway” feature to have Smartlee find your Gateway on your network.

Adding Your SafePlug

1. You will be automatically taken to the page to add your SafePlug.
2. Select your device from the list (find your device based on the MAC address you recorded earlier).

Total devices found: 4 Gateway ID

Select	Device	State	Notes
	00:24:46:00:00:06:71:1C	Inactive	
	00:13:A2:00:40:5C:0F:F9	Active	
	00:13:A2:00:40:6B:8E:95	Inactive	
<input type="checkbox"/>	00:13:A2:00:40:6B:93:69	Discovered	

Previous Next

5. Get the install code you previously recorded and put it in the “Install Code” field and click next.

Devices to install: 1 Gateway ID

Select	Device	Install Code	State	Notes
<input checked="" type="checkbox"/>	00:13:A2:00:40:6B:93:69	<input type="text"/>	Discovered	

Previous Next

6. Once you have completed these steps, you should be able to log into the Smartlee app on your smartphone. You can get the Smartlee app for free at the iTunes store or through Google Play [optional you can delete the screenshot below]



Testing Your Network

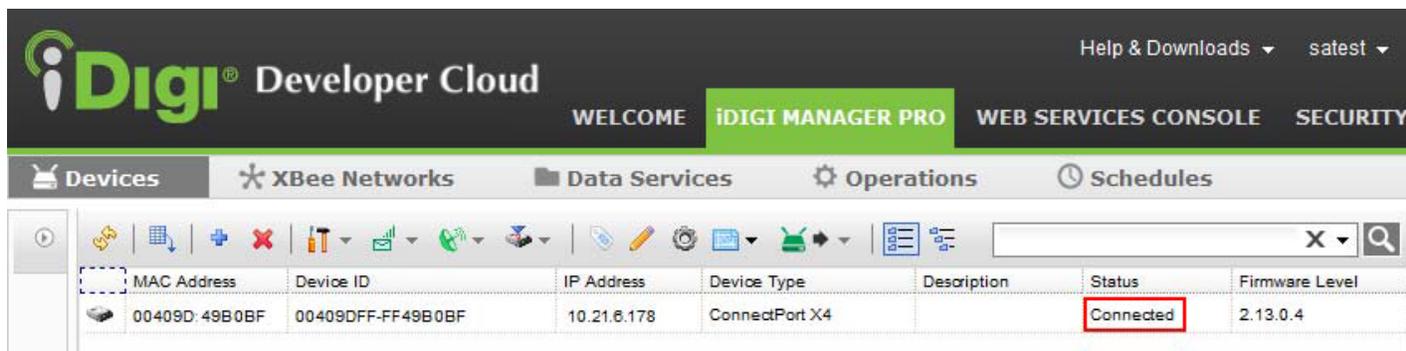
If you have a smartphone, go to the iTunes store or Google Play to download the Smartlee app. Once you have installed it, log into your account on your phone. You should be able to select your SafePlug and turn it on and off. If this works, then you have successfully created your network!

Troubleshooting

The Smartlee website does not recognize my gateway

Ensure that the ConnectPort X2e Coordinator is plugged in and connected, see steps below.

Ensure that the gateway is connected to your iDigi account.



I can't see my SafePlug in my Smartlee account

Ensure that the SafePlug is not out of range of gateway.
 SafePlug may be paired with another device. Unpair the SafePlug through the Smartlee interface or by swiping the correct magnetic key over the SafePlug.

Installation for iPhone/Android application is failing

Please refer to your manufacturer's website for help.

I can't control my SafePlug with my Smartlee account

Check to see if the status LEDs are operating properly on your Devices:

ConnectPort X2e:

Power

Status	Description	Next Step
Off	No power	Unplug the ConnectPort X2 and plug it back in to an outlet. If LED is not blinking call Digi technical support.
Solid green	Device is powered	No further action required

ZigBee

<i>Status</i>	<i>Description</i>	<i>Next Step</i>
<i>Off</i>	<i>Radio disabled</i>	
<i>Blinking green (slow)</i>	<i>Searching of other ZigBee devices on the network</i>	
<i>Blinking green (fast)</i>	<i>Establishing a Smart Energy network</i>	
<i>Solid green</i>	<i>Connected to a Smart Energy network</i>	

Network

<i>Status</i>	<i>Description</i>	<i>Next Step</i>
<i>Off</i>	<i>Powered OFF</i>	
<i>Blinking yellow (slow)</i>	<i>Powered ON, no Ethernet/WIFI link</i>	
<i>Blinking yellow (fast)</i>	<i>Ethernet/WIFI link, no IP address</i>	
<i>Solid yellow</i>	<i>IP address assigned</i>	
<i>Blinking green (slow)</i>	<i>Attempting a connection to the iDigi server</i>	
<i>Blinking green (fast)</i>	<i>iDigi server found, authenticating</i>	
<i>Solid green</i>	<i>Connected to iDigi server</i>	

Note: The button on the ConnectPort X2e is intended for advanced configuration or as directed in the online setup.

ERT/Smart Energy Bridge:

<i>ERT</i>	<i>LED Status Update</i>	<i>Next Step</i>
<i>OFF</i>	<i>No ERT meter configured</i>	<i>Go through the steps to add an ERT meter on Smartlee (however, it</i>

		<i>doesn't exist right now)</i>
<i>ON</i>	<i>All ERT meters successfully read in the last 30 minutes</i>	<i>No further action required</i>
<i>Fast Blink (2x second period)</i>	<i>At least one ERT meter has not been read in the last 30 minutes.</i>	<i>1. Verify that the ERT Smart Energy bridge is close enough to the meter. 2. If blinking persists, call Digi Technology support or look at the support website and support forum.</i>
<i>Slow Blink (once every 2 seconds)</i>	<i>Initial 30 minute setup blink, at least one meter has not been read</i>	<i>Wait one minute. If after one minute the LED is not solid, follow "Next step" for "Fast Blink" above.</i>
<i>Association</i>		
<i>OFF</i>	<i>Not functioning correctly</i>	<i>1. Verify that the power supply is connected to the device and outlet. 2. If still not operating, call Digi Technology support or look at the support website and support forum.</i>
<i>ON</i>	<i>OK, however, online installation is not complete</i>	<i>Go through the steps to add an ERT meter on Smartlee (however, it doesn't exist right now). If you ERT meter shows up on your device list, delete it and re-add it</i>
<i>Blink</i>	<i>OK</i>	<i>No further action required</i>
<i>Power</i>		
<i>OFF</i>	<i>No power</i>	<i>1. Verify that the power supply is connected to the device and outlet. 2. If still not operating, call Digi Technology support or look at the support website and support forum.</i>
<i>ON</i>	<i>OK</i>	<i>No further action required</i>

SafePlug:

Outlet/Receptacle Status Indicators

<i>Outlet Status</i>	<i>Receptacle Status</i>	<i>Description</i>	<i>Next Step</i>
<i>Off</i>	<i>Off</i>	<i>No power</i>	<i>Check circuit breaker/fuse</i>
<i>Flashing Green</i>	<i>Off</i>	<i>Power quality fault, or outlet is recovering from a power failure/fault.</i>	<i>If this lasts longer than 30 seconds you may be experiencing failure in your building's electrical system</i>
<i>Flashing Green</i>	<i>Flashing Red</i>	<i>Power quality fault, or outlet is recovering from a power failure/fault AND an overload has been detected at the affected receptacle.</i>	<i>Remove the encoded plug, or remove the non-encoded plug and use 1622 Reset Fault key to clear the fault.</i>
<i>Green</i>	<i>Off</i>	<i>Power is OK, receptacle is "normally off", or a demand response event is active, or Zigbee "off" command was sent (encoded plug is not inserted).</i>	<i>Use a 1623 Power Key or send a remote "on" command.</i>
<i>Green</i>	<i>Green</i>	<i>Power is OK, receptacle is on.</i>	<i>No action required</i>
<i>Green</i>	<i>Flashing Green</i>	<i>Power is OK, encoded plug inserted, receptacle is off due to a demand response event or Zigbee "off" command.</i>	<i>Remove and reinsert the plug or send a Zigbee "on" command to turn power back on.</i>
<i>Green</i>	<i>Flashing Red</i>	<i>An overload has been detected at the affected receptacle.</i>	<i>Remove the encoded plug, or remove the non-encoded plug</i>

			<i>and use 1622 Reset Fault key, to clear the fault. Have the load device inspected for faults and repaired or replaced.</i>
<i>Green</i>	<i>Red</i>	<i>SafePlug encoding error or invalid key.</i>	<i>Replace the plug encoding tag. Use only the valid keys.</i>
<i>Green</i>	<i>Double Flash Red/Green</i>	<i>Identify Mode activated</i>	<i>Normal receptacle operation. Identify mode terminates automatically after the interval expires.</i>
<i>Off</i>	<i>Both Flashing Red</i>	<i>Self-test Failure</i>	<i>Replace the SafePlug.</i>

(Note: this table was copied from SafePlug Model 1202 Electrical Outlet Installation Code Guide (option 9915) last page.)

Zigbee Status Indicator

<i>Zigbee Status</i>	<i>Meaning</i>
<i>Off</i>	<i>Outlet has not been previously joined to a Zigbee network and is scanning for a network to join.</i>
<i>1 flash/ 2sec. Amber</i>	<i>Outlet has been previously joined to a network and is attempting to rejoin.</i>
<i>Amber</i>	<i>Outlet is currently joined to a network.</i>
<i>2 flash/ sec. Amber</i>	<i>Outlet has been previously joined to a network and attempted rejoin failed. Outlet continues to try to rejoin.</i>

<https://docs.google.com/drawings/image?id=sFeZUJoZftctN9jvFSrsuag&w=460&h=327>

Need more help?

Visit:
support.digi.com

Forums :
forums.digi.com/support/forum/index

Or call:
US: 877-912-3444
Worldwide: +1 952-912-3456