

Introduction

Thank you for purchasing the Digi Smart Energy AMR+ Kit. The purpose of this kit is to demonstrate how a meter with an Itron ERT radio can be linked with ZigBee Smart Energy devices to give customers the benefits of the smart grid: convenience, savings, and control.

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

[Include network diagram showing all the components: X2e, ERT meter, ERT/SE bridge, 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

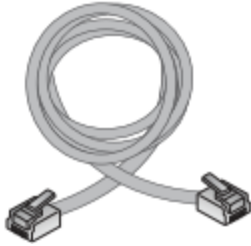
ConnectPort X2e Coordinator
for Smart Energy



SafePlug



Ethernet Cable



Power Supply (x2)



ERT/Smart Energy Bridge



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 Coordinator for Smart Energy
 - Serial Number: _____
 - Install Code: _____

Model: ConnectPort X2e SE
 Part Number: 50X2E-Z1C-001-01
 Serial Number: 00409D **50E9BB**
 EUI64: 0013 A200 526B 1410
 Install Code: ABCD 1234 ABCD 1234

NOTE: The Serial Number is also the Ethernet MAC address

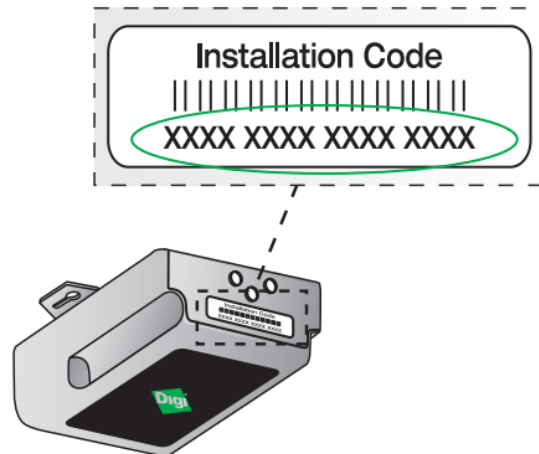
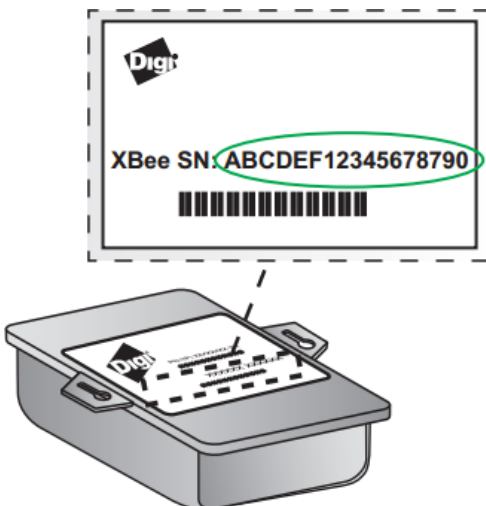


- SafePlug
 - MAC Address/Serial Number: _____
 - Installation Code: _____

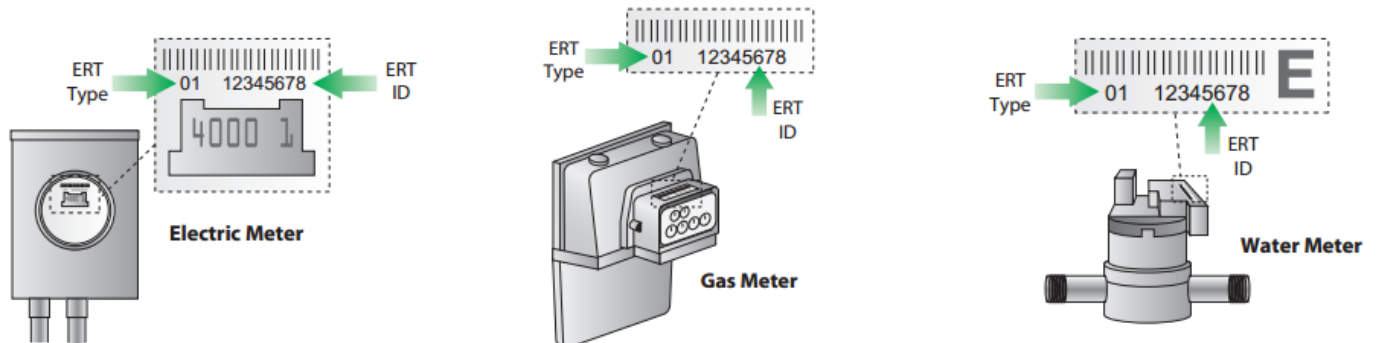
---Picture of SafePlug that shows where the Installation Code is and MAC Address---

ERT/Smart Energy Bridge Serial Number:
Code:

ERT/Smart Energy Bridge Installation

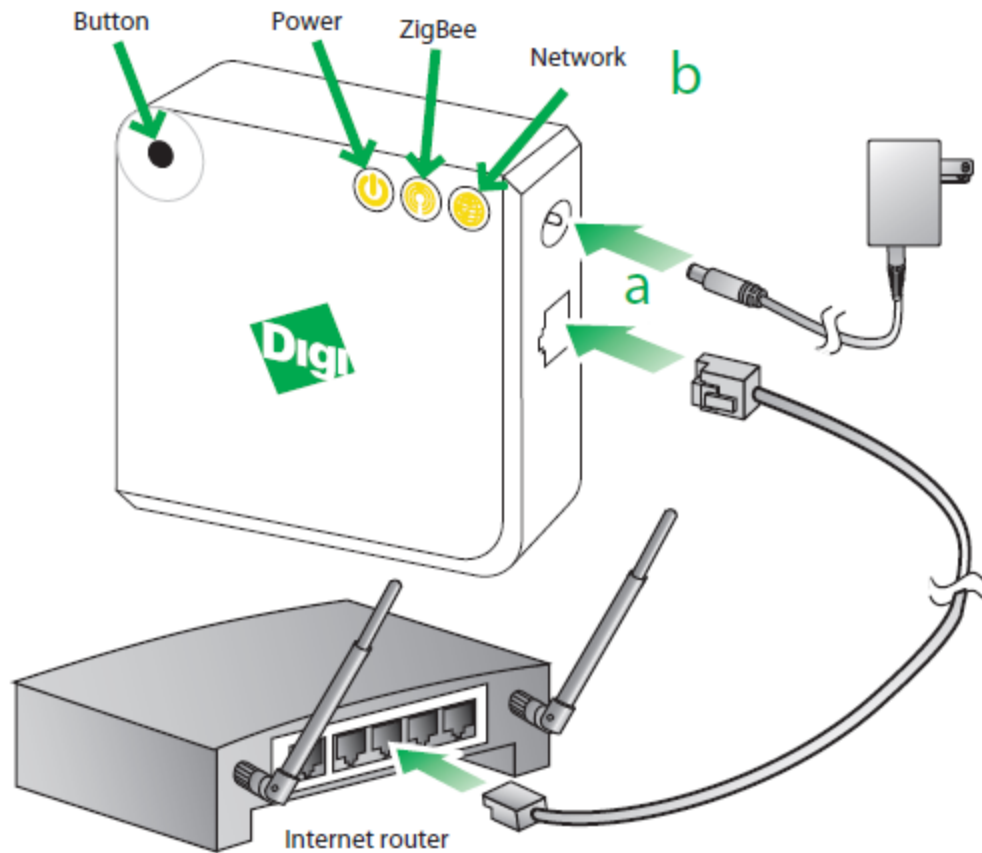


ERT type and ERT ID: _____



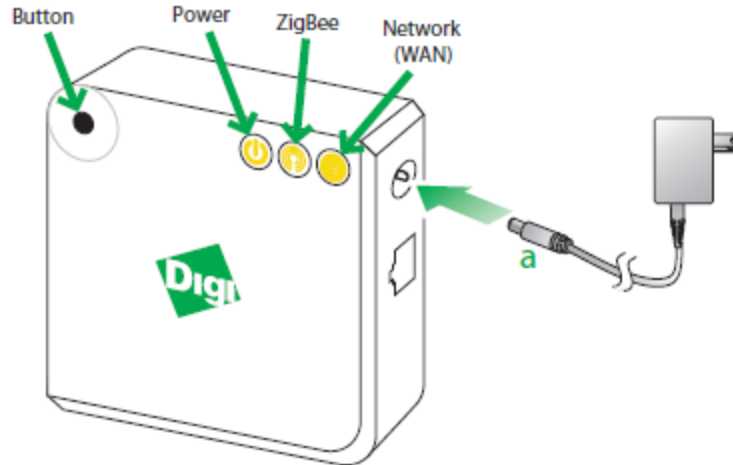
Hardware Set-Up

1. Connect power supply to the ConnectPort X2e then plug the power supply into outlet.
2. **Ethernet Setup:**
 - a. Connect the Ethernet cable to an open port on your router. Most routers have open Ethernet ports on the back of the device.
 - b. Connect the other end of the Ethernet cable to the Ethernet port on the ConnectPort X2e for Smart Energy gateway. This will connect the ConnectPort X2e to the internet.
 - c. Verify that the LEDs on Ethernet port of ConnectPort X2e are blinking. This shows that the ConnectPort X2e is connected to the internet.



3. **Wireless Setup:**

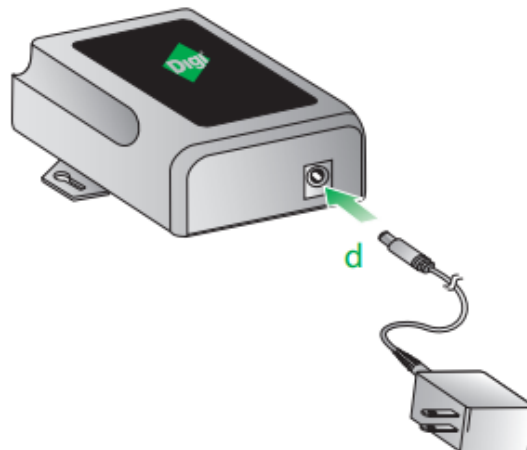
- a. *Note: If the ConnectPort X2e has already been configured to connect to an access point, it will need to be set back to factory defaults to use the following procedure. See the troubleshooting section below to return the gateway back to its initial state.*
- b. Enable Access Point mode on your device by pressing the button.
- c. 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 xxxxxxxxxx is the serial number of the gateway.
- d. Go to your web browser, and enter the URL of the gateway:
<http://192.168.100.1>
- e. Navigate to **Configuration > Wireless Wizard**. Follow the steps in the wizard to configure your device.



4. Plug in the SafePlug

---Picture of how to plug in the 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 you previously recorded. You can also use the "Find My Gateway" feature to have Smartlee find your Gateway on the network.

Find My Gateway

or

Enter Your Gateway ID :

Time Zone:

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

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MAC Addr: 00409D 000000

SN: (S) W00000000

Adding Your ERT Bridge and ERT Meter

1. You will be automatically taken to a page to add a device (in this case, your ERT Meter)
2. Select your ERT/Smart Energy Bridge from the list (specified by the MAC address you previously recorded).

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	

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3. On the Select Wireless Devices page, enter the install code previously recorded.

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	

4. You will be taken to a page to connect your ERT meter. Find the ERT ID, ERT Type, and Meter Type on your ERT device and enter them into the appropriate fields. (optional: delete this screen shot?)

Identify Meter

Enter the following information located on your meter. See picture to the right for an example of where to find this information.

Meter Type: *

ERT Type: *

ERT ID: *

Device Name: *

* = Required Information

5. Fill out the information about your ERT device and click “Next”. (optional: delete this screenshot?)

Meter Format

Choose the unit of measure and multiplier for the meter. These settings configure Smartlee to display your meter readings correctly. Your provider should supply you with the proper settings or accept the default values below.

Unit of Measure: *

Multiplier: *

Digits left of decimal point: *

Digits right of decimal point: *

Adding Your SafePlug

1. Navigate to the homepage of www.livesmartlee.com. Click on the “My Devices” button on the bottom left corner of the screen.
2. Click on the “Add” button at the bottom left corner of this page to start the process of adding a new device.
3. Select your device from the list.

Total devices found: 4		Gateway ID	00409D 45EBB4	
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	

4. Get the install code off of your SafePlug and put it in the “Install Code” field and click next.

Devices to install: 1		Gateway ID	00409D 45EBB4	
Select	Device	Install Code	State	Notes
<input checked="" type="checkbox"/>	00:13:A2:00:40:6B:93:69	<input type="text"/>	Discovered	

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. You should also be able to select your ERT device and read data from it. 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.

[ADD SCREENSHOT IMAGE HERE]

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

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

Network

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

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

ERT/Smart Energy Bridge:

ERT	LED Status Update	Next Step
OFF	No ERT meter configured	Go through the steps to add an ERT meter on Smartlee (however, it doesn't exist right now)
ON	All ERT meters successfully read in the last 30 minutes	No further action required
Fast Blink (2x second period)	At least one ERT meter has not been read in the last 30 minutes.	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.
Slow Blink (once every 2)	Initial 30 minute setup blink, at least one meter	Wait one minute. If after one minute the LED is not solid, follow

seconds)	has not been read	“Next step” for “Fast Blink” above.
Association		
OFF	Not functioning correctly	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.
ON	OK, however, online installation is not complete	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
Blink	OK	No further action required
Power		
OFF	No power	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.
ON	OK	No further action required

SafePlug:

Outlet/Receptacle Status Indicators

Outlet Status	Receptacle Status	Description	Next Step
Off	Off	No power	Check circuit breaker/fuse

Flashing Green	Off	Power quality fault, or outlet is recovering from a power failure/fault.	If this lasts longer than 30 seconds you may be experiencing failure in your building's electrical system
Flashing Green	Flashing Red	Power quality fault, or outlet is recovering from a power failure/fault AND an overload has been detected at the affected receptacle.	Remove the encoded plug, or remove the non-encoded plug and use 1622 Reset Fault key to clear the fault.
Green	Off	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).	Use a 1623 Power Key or send a remote "on" command.
Green	Green	Power is OK, receptacle is on.	No action required
Green	Flashing Green	Power is OK, encoded plug inserted, receptacle is off due to a demand response event or Zigbee "off" command.	Remove and reinsert the plug or send a Zigbee "on" command to turn power back on.
Green	Flashing Red	An overload has been detected at the affected receptacle.	Remove the encoded plug, or remove the non-encoded plug and use 1622 Reset Fault key, to clear the fault. Have the load device inspected for faults and repaired or replaced.
Green	Red	SafePlug encoding error or invalid key.	Replace the plug encoding tag. Use only the valid keys.
Green	Double Flash	Identify Mode activated	Normal receptacle operation. Identify mode terminates

	Red/Green		automatically after the interval expires.
Off	Both Flashing Red	Self-test Failure	Replace the SafePlug.

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

Zigbee Status Indicator

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

[ADD CONTACT INFO IMAGE]