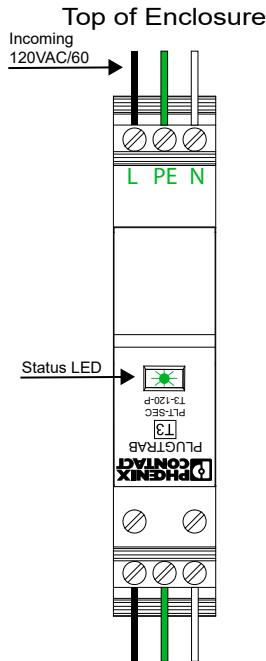## 1 Connect Power

First, make sure the Load Center breakers are off and your circuits are *not* energized. You don't want any power to the AE (Adapt Energy) Panel until all connections are made.

Top of Enclosure

Incoming 120VAC/60

L PE N

Status LED

PLUGTRAB
PLT-SEC
T3-120-P
T3
PHOENIX CONTACT

*Connect high voltage cable to the PLUGTRAB. (Located in the upper left of the panel)

Use proper terminal connections for L-PE-N. Ensure the PLUGTRAB fuse is fully seated. The LED Status light will show green when power is applied. (But don't power it up yet.)

Full Power requirements can be found in our specifications document.

2 Connect Grid Loss Relay

The Grid Loss Relay Modules must be connected to both phases of the main power.
There are 2 options for connection:

Method 1: Breakers
Use 2 dedicated breakers, in your load center, that are NOT backed up by the Sonnen ecoLinx Batterie. Each breaker must be on different phases. Loop the neutrals from one breaker to the other, then connect one neutral to A1 on the first Relay Module. Use the supplied neutral jumper to connect both Relay Modules. Connect the hot from one breaker to A2 on one of the Relay Modules and the other breaker to the same on the other Relay Module.
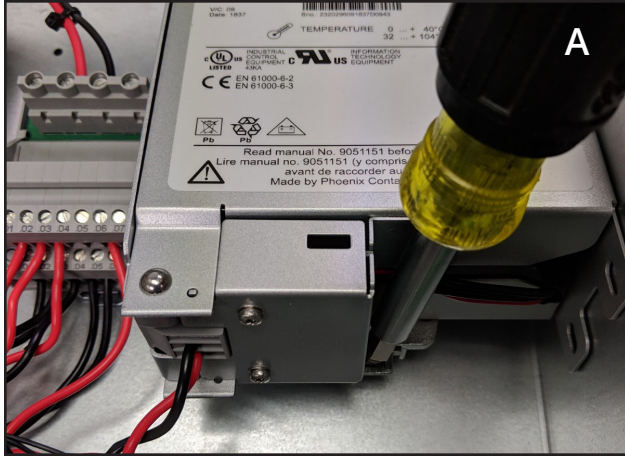
Method 2: Mains Splice
If unprotected breakers are not available, you can splice directly into the mains using a T-Tap, junction box, or other splicing method. The only requirement is that the splice must be upstream of any power back up system so that the Relay Module can detect power loss in the event of a grid outage. Follow the connection directions in Method 1 with the phases connecting to each of the Relay Modulesv.

Relay Modules

Top of Enclosure

Hot   Hot
Neutral Jumper
Neutral

PHOENIX CONTACT   PHOENIX CONTACT
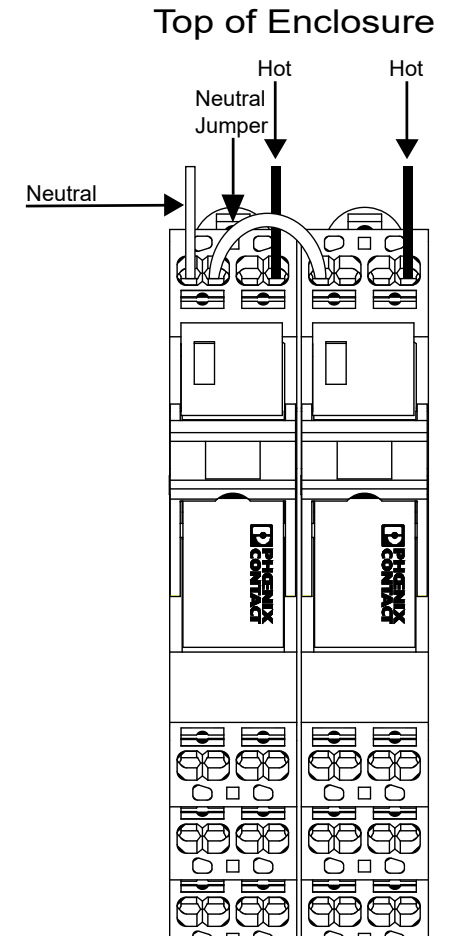
*High Voltage electrical work should only be performed by a licensed electrician. Adhere to all national and local regulations when performing electrical work.

p|d PanTech Design
1.817.898.0339 (US)
adapt@pantechdesign.com
www.pantechdesign.com
Document Version 200728
Copyright © 2019 PanTech Design, LLC. All rights reserved.
1

3 Install the Battery Fuse

Use a flat-head screwdriver, or equivalent, to release the DIN-RAIL latch on the UPS battery.
(Located in the upper right of the panel)

Open the UPS battery case by pinching the catch and releasing the hinged front panel cover. Remove the small baggy holding the 15AMP fuse and set it aside for the next step.
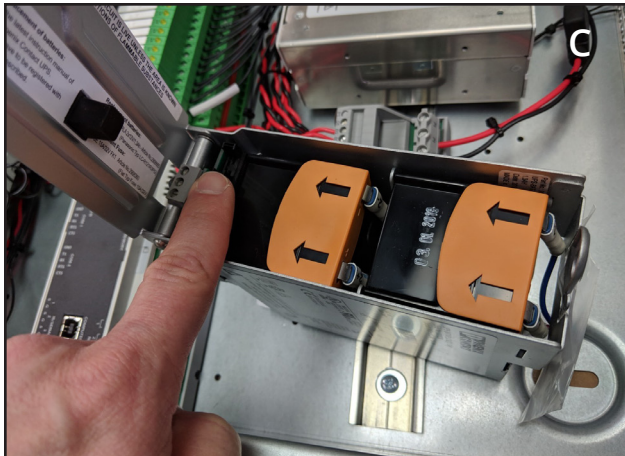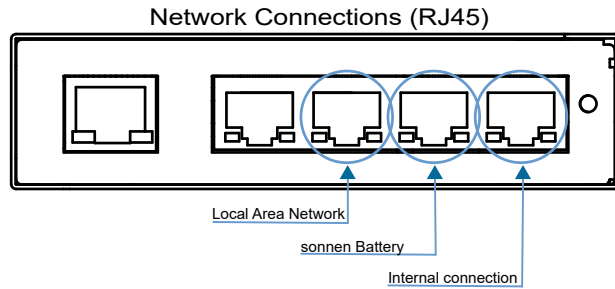
Once the UPS battery case is open, locate the fuse holder, towards the bottom left of the battery enclosure, and insert the fuse.

Close the case and re-mount the UPS battery on the DIN-RAIL.

4 Connect the Network

Network Connections (RJ45)

Local Area Network
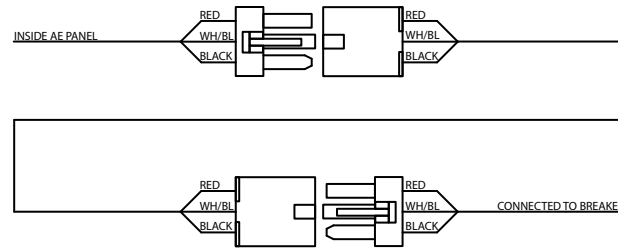sonnen Battery
Internal connection

Locate the ethernet switch that is mounted under the DIN-RAIL (lower right of the panel).

Connect an ethernet cable from the Sonnen ecoLinx Batterie to port 2 on the switch.

Connect an ethernet cable from port 3 on the switch to the Local Area Network.

5 Connect the Breakers

INSIDE AE PANEL · RED · WH/BL · BLACK · RED · WH/BL · BLACK

RED · WH/BL · BLACK · RED · WH/BL · BLACK · CONNECTED TO BREAKER

Make sure all the Load Center breakers are off.

Connect the female to female Molex breaker cables to the male connectors inside the panel. Take care to match cable number.

Connect the other end of the breaker cables to the controlled breakers in the Load Center. Match the cable number to the corresponding breaker.

6 Power Up the Panel

If white is showing, breaker is off
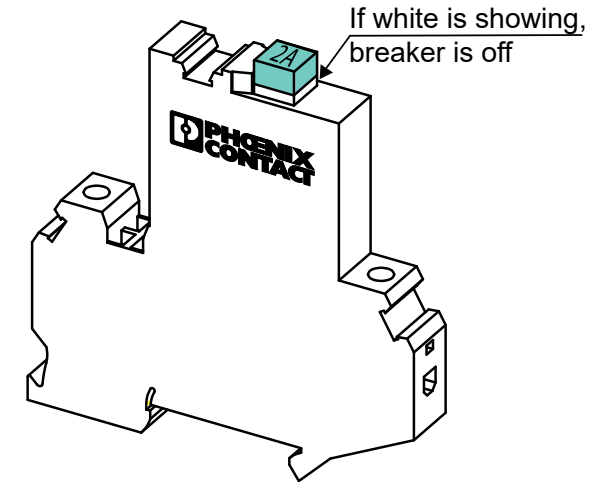
After all your connections have been made, locate this breaker switch in the AE Panel and make sure the breaker button is depressed. Tip: If the white ring is showing on the button, the button is not fully depressed.

Congratulations! You're ready to power up your Adapt Energy Panel!

Go to the main Load Center and turn on the breaker for the Adapt Energy Panel, controlled breakers, and non-controlled breakers.

Make sure no one else on the premises is doing any electrical work and all loads are ready to be energized. Verify with the licensed electrical contractor if you are unsure.

PanTech Design

1.817.898.0339 (US)
adapt@pantechdesign.com

www.pantechdesign.com

Document Version 200728
Copyright © 2019 PanTech Design, LLC. All rights reserved.

3

7 Setup the Network

Connect your PC to the Local Area Network.

Open the browser* and go to this address:
https://find-my.sonnen-batterie.com
Record the ecoLinx IP address for later.

Open the browser* and go to this address:
https://myadaptenergy.com
Record the Adapt Energy Panel IP address.

Set DHCP reservations for both the ecoLinx and the Adapt processor in the network router. Connecting to and configuring the router varies by manufacturer. Please refer to the router manufacturer for directions.

For your browser, we recommend using Google Chrome in InCognito Mode.

You will also need to set up Port Forwarding in the router. The External Ports shown here are our recommendations, but you can use any available ports. The Internal Ports are fixed and cannot be changed. All forwarding should direct the port traffic to the IP address of the Adapt processor (DIN-AP3) and include both TCP and UDP protocols. **The External Ports must match the ports assigned in the "Address 2" section of the App Setup section (pg. 6) on the user's mobile device.**

Port Forwarding Table

App Name	External Port	Internal Port	Protocol
SSH	2022	22	TCP/UDP
Crestron App	8001	80	TCP/UDP
Flash	843	843	TCP/UDP
CIP	41794	41794	TCP/UDP
CTP	41795	41795	TCP/UDP

8 Enter System Info

[Setup]

Once you've reached the Adapt Energy Dashboard, **PRESS AND HOLD** the **Setup** button, for several seconds, to access the installer configuration area. If this is the first time you've set up the Adapt Energy Panel, you will see the installer contact page first.

installer contact info...

This information is displayed on the customer's app and will be used to contact for support and upgrades to the system.

company: PanTech Design LLC
contact: Troy Morgan   phone: 817.688.4480
email: tmorgan@pantechdesign.com
address: 1701 W Northwest Hwy
Suite 220
city: Grapevine   state: TX   zip: 76051
install notes:

[Save]

A

On the first page, fill out all your contact information then click the Next arrow.

site info...

name: Morgan Residence
address: 1234 Somewhere Street

city: NRH   state: TX   zip: 76182
time zone: *010 Central Standard Time ((UTC-06:00) Central Time (US & Canada))

latitude: 32.8823577
longitude: -97.2113605

B

[Save]

Fill out the Site Info. Once complete, press the "save" button and wait until the latitude and longitude populate before moving onto the next step.

battery info...

● Online

name: sonnen battery
IP address: 192.168.1.145

[Save & Connect]

☑ Use wired grid loss detection

Navigate to https://find-my.sonnen-batterie.com/ to see your battery's current IP address

C

Give the battery a name and enter the IP address of the ecoLinx Batterie. Click the check box for "Wired grid loss" if you are using wired grid loss detection as explained on page 1.

PanTech Design
1.817.898.0339 (US)
adapt@pantechdesign.com
www.pantechdesign.com
Document Version 200728
Copyright © 2019 PanTech Design, LLC. All rights reserved.
4

9 Set up Energy Monitoring

energy monitoring...

Curb username: tmorgan@pantechdesign.com — Logout & Clear

Curb password: ******** — Save & Login

Logged In

1. Select Current Transformer

East AC Condenser	1871 W
East Furnace Blower	382 W
West AC Condenser	0 W
Internet & Other Devices	150 W
Cooktop Venthood and Microwave	0 W
Utility Fridge	0 W
West Furnace Blower	0 W
Garage GFI and Freezer	0 W

2. Select Attached Breaker

Solar AC Array #1	2248 W	ON	OFF	Solar AC Array #2 2212 W	ON OFF
Solar AC Array #3	1501 W	ON	OFF	Solar AC Array #4 1125 W	ON OFF
East A/C Condenser	1871 W	ON	OFF	East Furnace and Fan 382 W	ON OFF
West Furnace and Fan	0 W	ON	OFF	West A/C Condenser 0 W	ON OFF
Internet and Other Devices	150 W	ON	OFF	Garage (GFI) 0 W	ON OFF
Cooktop Vent and Microwave	0 W	ON	OFF	Hot Water Circulation Pump 26 W	ON OFF
Pool Pump		ON	OFF	EV Charger	ON OFF
Hot Water Heater #1		ON	OFF	Hot Water Heater #2	ON OFF

Enter the CURB account information and press "Save & Login." After the current transfomer (CT) list populates, assign a CT to a breaker by pressing a CT button and then pressing the corresponding breaker button. Both buttons will turn blue, once complete. It is possible to assign up to 2 CT's to a single breaker, so you can monitor both phases of a double pole breaker. If you make a change to the system in the CURB app, like changing a CT name or type, you will need to repeat this setup. Press the *Logout & Clear* button then enter the CURB credentials again and repeat the CT assignment process.

Events are profiles that are initiated by an external trigger like grid loss or a weather alert. When an event occurs, the user is presented with a choice of 3 profiles, which are configured in the user settings and can override some of the values set in Events. Lock breakers that you do not want to be overridden.

10 Configure Power Events

breaker info...

1) Solar AC Array #1 — This solar array can generate up to 3,840 watts of power.	2) Solar AC Array #2 — This solar array can generate up to 3,840 watts of power
3) Solar AC Array #3 — This solar array can generate up to 2,240 watts of power	4) Solar AC Array #4 — This solar array can generate up to 2,240 watts of power
5) East A/C Condenser — Relay 5 on expander 146	6) East Furnace and Fan — Relay 6 on expander 146
7) West Furnace and Fan — Relay 7 on expander 146	8) West A/C Condenser — Relay 8 on expander 146
9) Internet and Other Devices — Relay 1 on expander 147	10) Garage (GFI) — Relay 2 on expander 147
11) Cooktop Vent and Microwave — Relay 3 on expander 147	12) Hot Water Circulation Pump — Relay 4 on expander 147
13) Pool Pump — Relay 5 on expander 147	14) EV Charger — Relay 6 on expander 147
15) Hot Water Heater #1 — Relay 7 on expander 147	16) Hot Water Heater #2 — Relay 8 on expander 147

Choose a breaker to edit its info.

A

Click on each breaker to give it a name and brief description. End users will see the breaker name, so make it clear, concise, and easy to understand.

power events...

Grid Loss
[Occurs When Grid Power Is Lost]

Grid Restore
[Occurs When Grid Power Is Restored]

Severe Weather Detected [Occurs When Severe Weather Is Detected]	Time Of Use Start [Occurs When Charge Time Starts]
Severe Weather Ended [Occurs When Severe Weather Event Ends]	Time Of Use End [Occurs When Charge Time Ends]

Choose an event to edit its automated actions.

B

Select a Power Event to configure actions.

Grid Loss — Occurs When Grid Power Is Lost

	Delay			
Solar Array #1 — Include in event / Lock Controls during event	0 Seconds	− +	ON	OFF
Solar Array #2 — Include in event / Lock Controls during event	0 Seconds	− +	ON	OFF
Solar Array #3 — Include in event / Lock Controls during event	0 Seconds	− +	ON	OFF
Solar Array #4 — Include in event / Lock Controls during event	0 Seconds	− +	ON	OFF
East AC Condensor — Include in event / Lock Controls during event	30 Seconds	− +	ON	OFF
East Furnace and Fan — Include in event / Lock Controls during event	15 Seconds	− +	ON	OFF
West Furnace and Fan — Include in event / Lock Controls during event	0	− +	ON	OFF

C

Set HVAC Temperature — ✓   Set Battery Backup Reserve — ✓   100%

❄ Cool ∨ 77° ∧

🔥 Heat ∨ 65° ∧   □ Restore Previous

- Click *Include in Event* to create an action for that breaker.
- Select *Lock Controls During Event* to exclude breaker from user access during the event.
- Select *On* or *Off* to set the breaker state during the event.
- Set a *Delay* time to delay the breaker action. Note: If you set the breaker to *On* and set a delay, the breaker will turn off when the event is triggered, then turn on after the delay expires.
- Select *Set HVAC Temperature* to change setpoints when the event is triggered.
- Select *Set Backup Reserve* to change the reserve level when the event is triggered.
- Select *Restore Previous Level* to revert reserve level to the previous value. *Hint: Only use this for 'Restore' or 'End' events.*
- Click save when you are done and proceed to the next Event.

After all events are configured, click the check mark to complete and exit the Installer Settings section.

PanTech Design
1.817.898.0339 (US)
adapt@pantechdesign.com
www.pantechdesign.com
Document Version 200728
Copyright © 2019 PanTech Design, LLC. All rights reserved.
5

11 Configure User Settings

A

Enter the phone number(s) that will receive text notifications. Click *Save and Test* to send a test message to all numbers listed.

B

Check the box next to a weather type to include it in the user(s) text alerts. The user will receive a text alert when that type of alert is detected. Select *Auto Protect* to protect the home automatically.

C

D

A note on *Auto-Protect*: Any weather type selected will send a text message to the phone number listed in *Text Notifications*. When a text is sent, the user will have a few options, in their app, regarding how they want to respond to the alert. If the user does not respond, but wants the system to protect the home regardless, select *Auto Protect* for the appropriate weather type.

Finally, configure the Power Profiles by selecting and editing each one.

Click *Include in Event* to create an action for that breaker. Leave it unchecked if you don't want it affected.

Select whether you want the breaker *On* or *Off* during this event.

Set a *Delay* time to delay the breaker action after this event is triggered.

Select *Set Backup Reserve* to change the reserve level during this event. Set reserve slider to desired level.

Click save when you are done and proceed to the next Event.

Congratulations!
You have completed the hardware and software setup. Now it's time to help your customer set up the app on their mobile devices.

PanTech Design
1.817.898.0339 (US)
adapt@pantechdesign.com
www.pantechdesign.com
Document Version 200728
Copyright © 2019 PanTech Design, LLC. All rights reserved.
6

START GUIDE

1 Download the App

Go to the Apple App Store, on your mobile device, and search for the Crestron App. Click "*Get*" to download the app.
After the app has downloaded, locate the app on your Home screen then touch to open.

Crestron

2 Add a System

Press the plus sign in the bottom right corner of the screen.

3 Create the Connection

Address 1

Friendly Name/Location: Enter a name like "Home" or "[City Name] Home" (Example: "Dallas Home").

Use Local Project: Select the OFF position

Host name or IP Address: Use the local IP address of the Adapt Processor (DIN-AP3)

HTTP Port: Set to port 80

IP ID: Enter one of the following IP IDs:
03, 04, 05, or 06 for phones; 07 or 08 for tablets.
Each app user requires a unique ID.
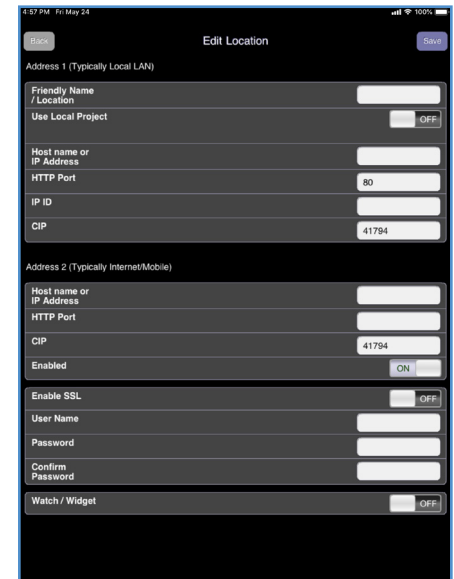
CIP: Use the default port number 41794.

Address 2

Host name or IP Address: Enter the external, static IP address of your network or the URL provided by your DDNS service. If you have neither, contact us and we can help you set up a DDNS domain.

HTTP Port: This needs to be configured to match the port forwarding in your router. We DO NOT recommended forwarding port 80 through your router/firewall. Please see our recommendations in the Start Guide regarding forwarding.

CIP: Use the default port number 41794, assuming this is configured for forwarding in your router configuration.
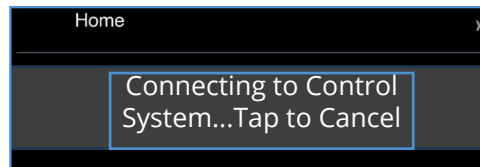
Enabled: Select ON position.

Press "*Save*" when you are done.

4 Connect to the System

Select the system that you just created.
You'll see a connecting screen for a few seconds, then the Adapt dashboard.

Home

Home

Connecting to Control System...Tap to Cancel

Congratulations!
Your system is ready to go!
And we are all one step closer to a better world and a brighter future.