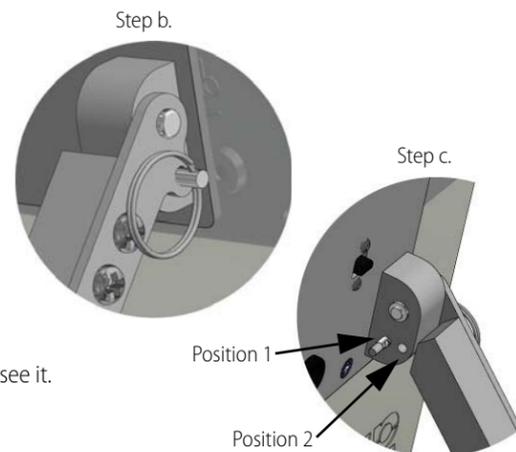
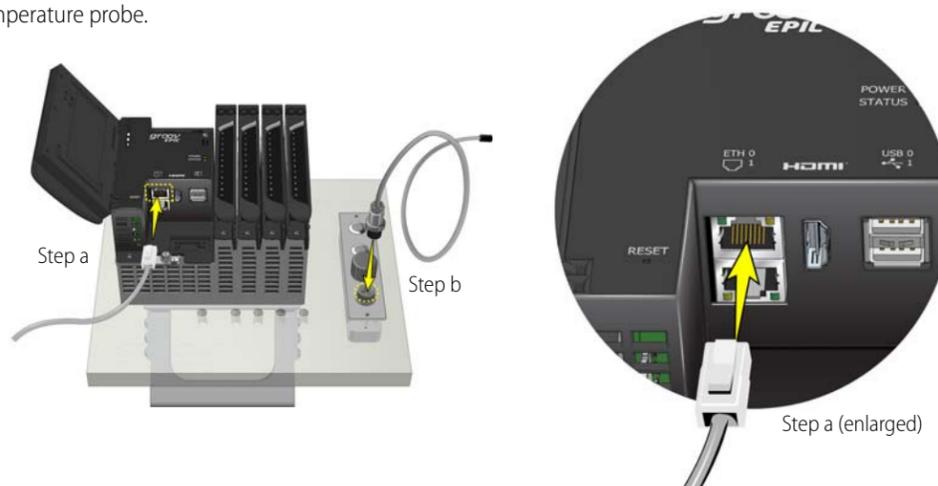


ASSEMBLING THE LEARNING CENTER

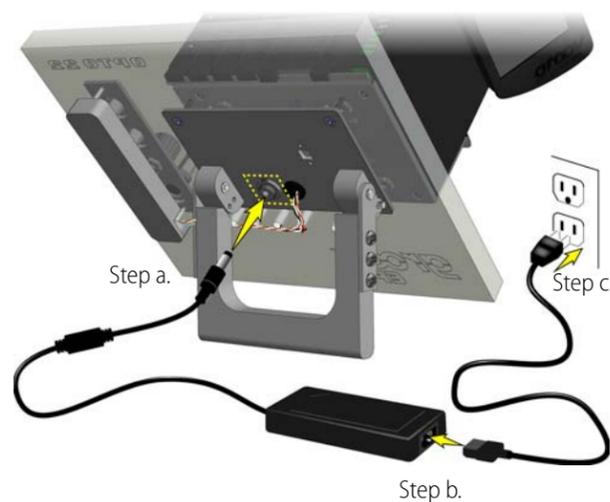
1. Let's start by adjusting the handle/kickstand in the back.
 - a. After you remove the Learning Center from the box, place it on a stable surface, upside down, with the top edge of the unit and the acrylic stand sitting on the surface. **Do not** place the Learning Center with the touchscreen laying flat on the surface. You may damage the touchscreen.
 - b. With the back of the unit facing you, locate the pin on one side of the handle, near the acrylic surface. Hook your finger into the ring and pull out the pin.
 - c. Adjust the handle to align the holes to the desired position, then insert the pin.
 - Position 1: Orients the Learning Center so that it's easier to see while sitting at your desk.
 - Position 2: Orients the Learning Center so that it's easier for an audience to see it.



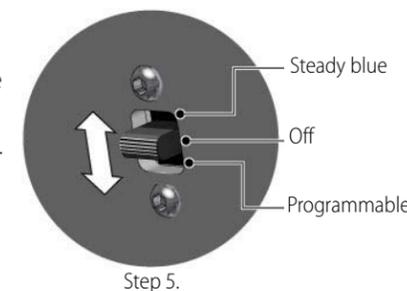
2. Grab the Learning Center with both hands and turn it right-side up, so that the bottom edge of the acrylic stand and the kickstand sit on the surface.
3. Connect an Ethernet cable and the temperature probe.
 - a. Lift the touchscreen. Connect an Ethernet cable (that's connected to your network) to the ETH0 network interface, which is the top interface of the two interfaces located on the underside of the groov EPIC processor.
 - b. Connect the temperature probe to the temperature probe connector on the acrylic stand.



4. Turn the Learning Center around so you can see the back.
 - a. Connect the DC connector end of the power cord to the DC socket.
 - b. Connect the power cord to the adapter.
 - c. Connect the power adapter to the outlet of 110 to 240 VAC power.



5. You can illuminate the Learning Center with three different light settings:
 - To provide a steady blue illumination, set the switch to the top position.
 - To turn off the light, set the switch to the middle position.
 - To be able to program the illumination, set the switch to the bottom position.
6. Turn the Learning Center around so you can see the front. Turn on the processor and close the touchscreen.



INITIALIZING THE LEARNING CENTER

1. When the touchscreen displays the Welcome! screen, make a note of the value in the Hostname or Eth0 IP Address box.

Example	Values for your Learning Center
	Hostname: _____ Eth0 IP Address: _____

2. Open a web browser on your computer and type in the following as the URL, entering the Hostname (or Eth0 IP address) from the previous step in place of <hostname>: `https://<hostname>`
 For example: `https://opto-03-fa-bf` **or** `https://xxx.xxx.x.xxx`, where `xxx.xxx.x.xxx` is the IP address shown in the Eth0 IP Address field.
3. If your browser displays a warning about security, you can accept the warning and proceed to connecting to the processor.
4. Click Let's get started!
5. In the Create an Account screen, type in the username and password that follows strong security recommendations. This username and password is the first administrator level user for your Learning Center. **Remember it!** groov EPIC does not provide a way to recover a lost password or username. Click Create Account.
6. We recommend that you check that the version of groov EPIC processor firmware running on the Learning Center is the latest version. Click Configure Device > Info and Help > About.
7. Write down the Restore Version: _____
8. Open the black envelope and pull out the GRV-EPIC-PR1 Activation Certificate. Follow the instructions on the certificate to activate your groov EPIC processor. When you reach the profile page for your groov EPIC processor, under the Latest Releases section, note the version number for the groov EPIC Field Update. Compare this version number with the Restore Version number you noted in step 7 above:
 - If the version number for the groov EPIC Field Update is the same as or lower than the Restore Version number, then you have the latest firmware installed on your processor! You can skip the rest of this step.
 - If the version number for the groov EPIC Field Update is higher than the Restore Version number, you'll need to download and install the newer version of the firmware that's on the website. Follow the instructions in "Updating Firmware on a groov EPIC Unit" in the [groov EPIC User's Guide \(form 2267\)](#). You can skip step 5 (creating a backup of your unit) and step 6 (deactivating the Ignition Edge license).

Your groov EPIC Learning Center is now up and running!

To learn how to program and manage your groov EPIC Learning Center, see our online training by visiting training.opto22.com, selecting groov EPIC Training Series, and enjoy exploring your Learning Center! If you are interested classroom training, you can learn more by visiting our website (www.opto22.com) and looking up GROOV-TRAINING-PF.

INSTALLING CONTROL PROGRAMMING SOFTWARE

If you want to create and run CODESYS applications:

1. Go to the CODESYS Store website (store.codesys.com) and download the CODESYS Development System, Version 3.5.13.1 or higher.
2. Install CODESYS Development System, following the instructions on the screen for a typical installation.
3. Go to the Opto 22 website (www.opto22.com) and enter "CODESYS" in the search box. Select [Opto 22 Library Package for CODESYS Development System](#) from the list of suggested search terms.
4. On the Opto 22 Library Package for CODESYS Development System page, click Download and save the file on your computer. The file that you download ends in .package .
5. Follow the instructions in the [groov EPIC User's Guide](#) (form 2267) to add your groov EPIC processor to the CODESYS Development System.

If you want to create and run a PAC Control strategy:

1. Go to the Opto 22 website (www.opto22.com) and enter "PAC Project Basic" in the search box. Select [PAC Project Basic](#) from the list of suggested search terms.
2. On the PAC Project Basic page, click Download and save the file on your computer. The file that you download ends in .exe .
3. Double-click the *.exe file that you downloaded and follow the instructions on screen for a typical installation.
4. Follow the instructions in the [PAC Control User's Guide](#) (form 1701) to add your groov EPIC processor as a control engine to your PAC Control program.

DOWNLOADING PROJECT FILES

The online training modules will take you through the creation of several projects. If you are interested in reviewing completed project files, you can download them from the Opto 22 website:

1. Go to the Opto 22 website (www.opto22.com) and enter "EPIC Learning Center" in the search box. Select groov EPIC Learning Center Package from the list of suggested search terms.
2. On the groov EPIC Learning Center Package page, click Download and save the file on your computer.
3. Navigate to the folder where you stored the file and uncompress it.
4. Follow the instructions in the Learning Center Package Installation Technical Note (form 2315) to install these files on to your Learning Center.

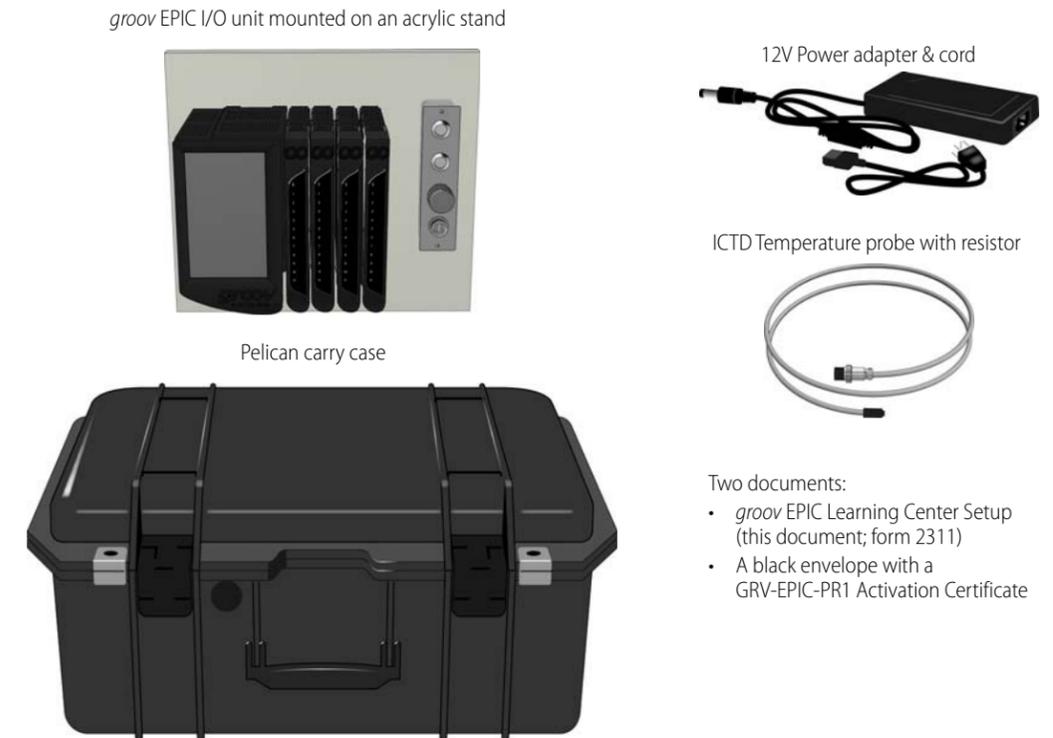
As you go through the online training and review the projects, the following table can help you understand how the load panel is mapped to the modules.

I/O Mapping		
Digital Inputs (GRV-IACDCTL-24)	Digital Outputs (GRV-ODCI-12)	Analog Input (GRV-IICTD-12)
Ch 0: Top pushbutton, latching	Ch 0: Blue LED ring around bottom pushbutton	Ch 0: ICTD
Ch 1: Bottom pushbutton, momentary	Ch 1: Sonalert Alarm	
Ch 6: Light rain status (from DO Ch 3)	Ch 2: Resistor in ICTD probe	Analog Input (GRV-IV-24)
Ch 8: Light rain status (from DO Ch 4)	Ch 3: Light rain	Ch 0: Potentiometer
Ch 10: Light rain status (from DO Ch 5)	Ch 4: Light rain	
Ch 12: Light rain status (from DO Ch 6)	Ch 5: Light rain	
	Ch 6: Light rain	
	Ch 7: Backlight, Red	
	Ch 8: Backlight, Green	
	Ch 9: Backlight, Blue	
	Ch 10: Python Output, software driven	
	Ch 11: Node-RED output, software driven	



WELCOME!

Before you begin, check that you received all the following items in your package:



The following hardware is mounted on the acrylic stand:

- GRV-EPIC-PR1 (groov EPIC processor)
- GRV-EPIC-PSPT (pass-thru power adapter)
- GRV-EPIC-CHS4 (4-module mounting chassis)
- Load Panel: 1 Multi-color LED strip backlight (red, blue, and green); 2 illuminated pushbuttons; 1 potentiometer; 1 temperature probe connector; 1 Sonalert alarm
- Module 0, GRV-IACDCTL-24
- Module 1, GRV-ODCI-12
- Module 2, GRV-IICTD-12
- Module 3, GRV-IV-24

You'll also need the following:

- An Ethernet cable.
- 110 to 240 VAC power.
- A username and password that follows strong security recommendations.
- A network to connect the Learning Center and a computer or mobile device that can connect to the same network as the Learning Center.

Note: To preserve the clean look of the acrylic stand, remove any fingerprint stains with a plastic cleaner (for example, Plexus® plastic cleaner), not a glass cleaner.

How do I purchase Premium Factory Training?

You can use your EPIC Learning Center at Opto 22's premium factory training classes held at company headquarters in Temecula, California. If you would like to attend groov EPIC Premium Factory Training, each seat cost \$995. After you purchase training, you will receive an activation key with instructions to register for a class.

