groov®

Quick Start
for GROOV-AR1

Watch the *groov* Quick Start video
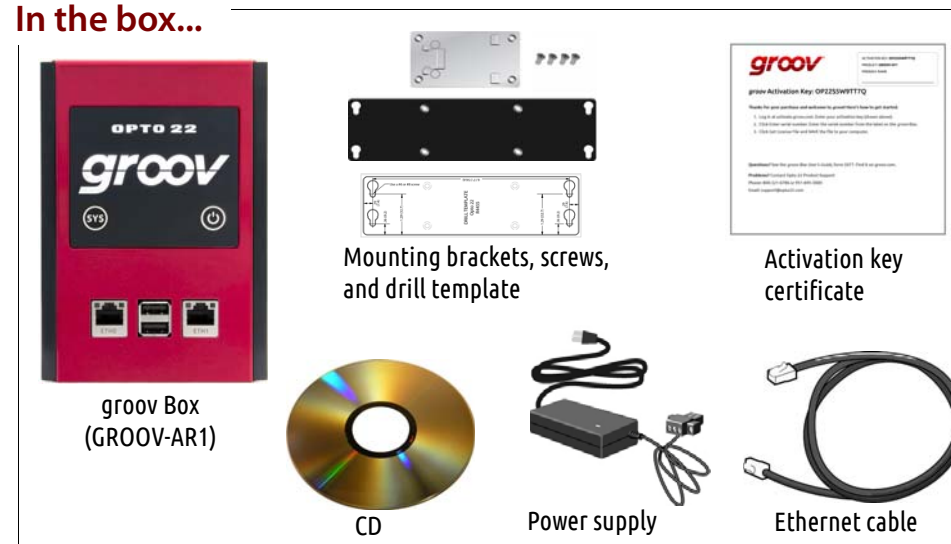http://op22.co/groov-quick-start

Open ➡

1 Unpack the *groov* Box

You need:
- A computer with a web browser on the same network you'll use for the *groov* Box. We recommend Chrome, Firefox, or Internet Explorer 10 or newer. The network should have DHCP and DNS.
- One of the following on the same network as your computer: a Modbus/TCP-compatible PLC, sensor, meter, or other device; an OPC UA-compatible server communicating with your automation system or equipment; or an Opto 22 SNAP PAC controller running a PAC Control strategy (firmware R9.2a or newer)

In the box...

groov Box
(GROOV-AR1)

Mounting brackets, screws, and drill template

Activation key certificate

CD

Power supply

Ethernet cable

2 Get started

To set up the *groov* Box, you'll use the *groov* Box components shown below.

When deciding where to place the *groov* Box, make sure there is room around the front, top, and sides of the *groov* Box to allow air to flow freely around the device. You need to be able to see the information on the bottom.

You'll need the activation key for step 6 when you activate your *groov* Box, so make sure to put your activation key certificate in a safe place.

SYS LED

On/Off button and Power LED

ETH0

Power terminal

3 Connect to the network

Connect ETH0 to your computer's network.

If you have a separate control network, see form 2104, the *groov* Box User's Guide, on the CD.

For detailed information on setting up your network and communications over the Internet, see form 2161, the *Guide to Networking groov*.

LNK ACT light

ETH0

4 Connect the power supply

Plug the small connector on the power supply into the power terminal on the bottom of the *groov* Box, and tighten the screws. Plug the other end into a standard 120 or 240 VAC outlet.

5 Turn on the *groov* Box

Firmly press the On/Off button until the SYS LED lights up (in about one second), then release. Take a look at the LNK ACT light for ETH0; if the cable is properly connected, the LNK ACT light should be on or blinking. (See the illustration in step 3.)
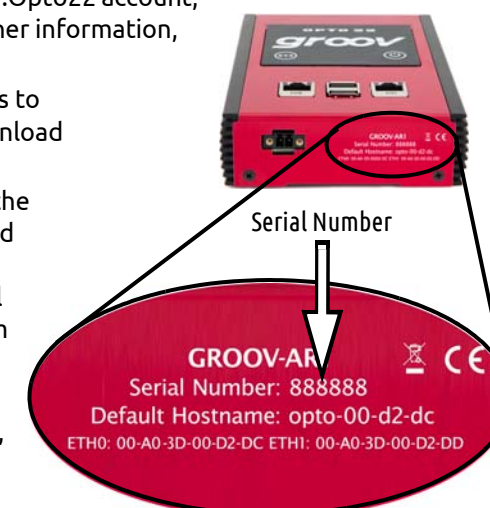
6 Activate the *groov* Box and get the license file

a. Open a web browser and go to activate.groov.com.

b. Log in using your email address and your My.Opto22 password.

   You may have set up your free My.Opto22 account when you purchased your *groov* Box. If you don't have a My.Opto22 account, enter your email address and other information, and the account will be created.

c. Follow the on-screen instructions to activate your *groov* Box and download the license file.

   The activation key is printed on the activation key certificate included with the *groov* Box. When asked to enter the serial number, you'll find it on the label on the bottom of the device.

d. After activating the *groov* Box and downloading the license file, return to this Quick Start and continue with step 7.

Serial Number

GROOV-AR
Serial Number: 888888
Default Hostname: opto-00-d2-dc
ETH0: 00-A0-3D-00-D2-DC   ETH1: 00-A0-3D-00-D2-DD

Form 2103-160308—March 2016

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7 Open *groov*

a. Make sure the SYS LED has stopped blinking.

b. In your browser, enter https:// and your *groov* Box's hostname as the URL. For example, if the hostname is opto-00-d2-dc, you type `https://opto-00-d2-dc`

c. Accept the security warning.

NOTE: If the security warning does not appear, your network configuration is probably unique. Please see the groov Box User's Guide.

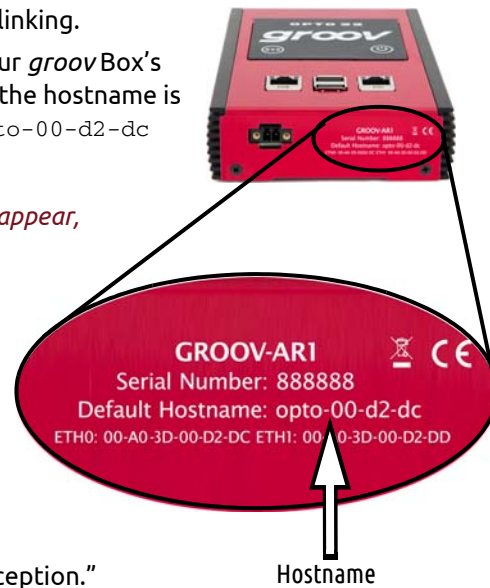**For Chrome**: Click "Proceed anyway."

For Firefox:
– Expand "I Understand the Risks."
– Click Add Exception to open the Add Security Exception dialog box.
– Select "Permanently store this exception."
– Click Confirm Security Exception.

For Internet Explorer: Click "Continue to this website (not recommended)."

The **Welcome to *groov*** window opens in your web browser.

d. Click Next.

GROOV-AR1
Serial Number: 888888
Default Hostname: opto-00-d2-dc
ETH0: 00-A0-3D-00-D2-DC ETH1: 00-A0-3D-00-D2-DD

Hostname

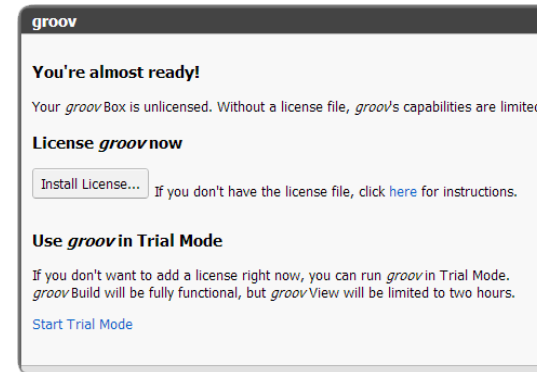## 8 Create a *groov* Admin account and install your license

Follow the on-screen instructions to create a username and password for *groov* Admin. The Admin account is for administrative tasks such as changing or editing the network connections and updating the *groov* Box.

CAUTION: *Write down your Username and Password, and keep them in a safe place. You will need this information each time you log in. If you lose your login information, you will have to reset the groov Box to factory defaults, which will erase your project. There is no password recovery option.*

Make sure to install your license file. Without an installed license, *groov* will only work for two hours.

a. When prompted, click Install License.

b. Browse to the license file, then click Open.

Your license is now installed.

groov

You're almost ready!
Your *groov* Box is unlicensed. Without a license file, *groov*'s capabilities are limited.

License *groov* now
[Install License...] If you don't have the license file, click here for instructions.

Use *groov* in Trial Mode
If you don't want to add a license right now, you can run *groov* in Trial Mode. *groov* Build will be fully functional, but *groov* View will be limited to two hours.

Start Trial Mode

9 Create a *groov* Build account

A Build account lets you create and edit a project in *groov* Build.

a. When prompted, enter a new username and password. Enter the password again to confirm.

b. Click Create *groov* Build Account.

c. Click Go to *groov* Build. *groov* Build opens in your browser.

If you have any trouble opening *groov*, see Troubleshooting in form 2027, the *groov* User's Guide.

Welcome to
groov®
mobile made simple.™

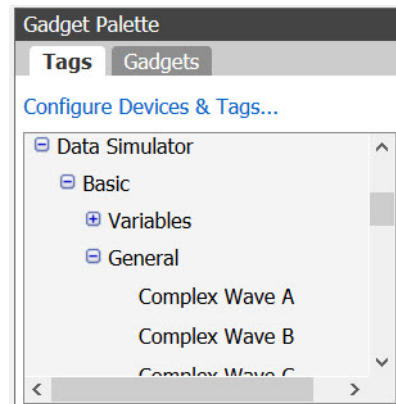That's it! You're finished with initial setup and ready to create your *groov* project.

Go to *groov* Build!

10 Get a tag database

You can add a tag database from an Opto 22 controller, an OPC UA-compatible server, or a Modbus/TCP slave device. For more information, see form 2027, the *groov* User's Guide.
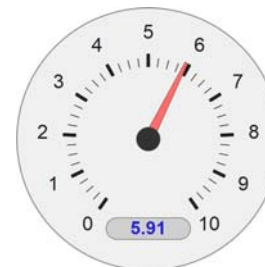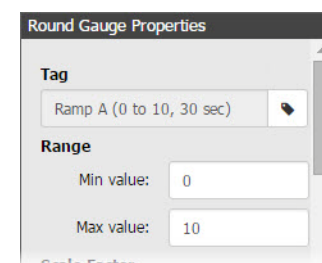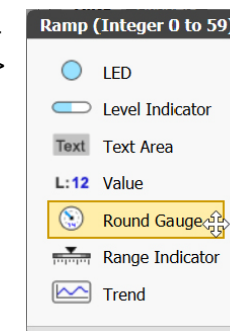
For this demonstration we'll use tags from *groov's* built-in Data Simulator.

a. In Build, choose Configure > Devices and Tags.

b. Click Add New Device and choose Data Simulator.

c. Close the Configure Devices and Tags dialog box and notice that the Data Simulator tags are available in the Gadget Palette.

Add New Device ▼
Opto 22 Controller
OPC UA Server
Modbus Device
Data Simulator

Gadget Palette
Tags | Gadgets
Configure Devices & Tags...
⊟ Data Simulator
  ⊟ Basic
    ⊕ Variables
    ⊟ General
      Complex Wave A
      Complex Wave B
      Complex Wave C

11 Build your operator interface

a. On the left side under Pages, click Add Page.

b. Type a new name for the page, then click OK.

c. With the Tags tab selected in the Gadget Palette (lower-right corner), expand the list of tags for Data Simulator > Basic > General.

d. Choose Ramp A (0 to 10, 30 sec).

e. Double-click Round Gauge in the pop-up menu.

f. Select the Gauge. In Gauge Properties (upper right), enter 0 as the Min Value and 10 as the Max Value.

Round Gauge Properties
Tag
Ramp A (0 to 10, 30 sec)
Range
  Min value: 0
  Max value: 10
Scale Factor

Ramp (Integer 0 to 59)
🔵 LED
▭ Level Indicator
Text | Text Area
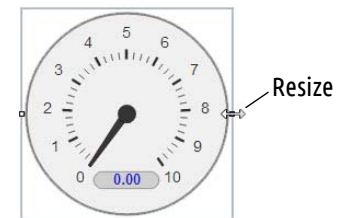L:12 | Value
🕐 Round Gauge
📊 Range Indicator
📈 Trend

g. Select File > Save All Changes and Switch to *groov* View.

You should now see the Round Gauge running in View. The needle shows the tag's current value.

12 Adjust the handheld layout

a. Click the gear symbol in the upper-right corner of View, and select Switch to *groov* Build.

b. Click the Handheld tab, and then resize the gadget.

c. Switch back to the Desktop & Tablet layout and notice that the gadget maintains its original size in that view.

Resize

View your project on a mobile device:

a. Make sure the mobile device is on the same network as your *groov* Box.

b. Open a browser on the mobile device and enter https:// and your *groov* Box's hostname as the URL, just as you did on your computer in step 7.

c. Accept the security warning.

You'll see the work you just created on your smartphone or tablet. Now you're *groovin'*!

Back up your project: As you work on your project, make sure to back up frequently in *groov* Build. For more information, see the *groov* User's Guide.

To get updates at any time: Go to manage.groov.com. For update instructions, see the *groov* Box User's Guide on the *groov* Box CD.