



#### STEP 1:

Included with the HUB is a form titled "Pulse Hub Network" Setup." Find this form. (Notice the back of the form includes information useful to your IT department.)

#### **STEP 2:**

The first field on the form is "HUB MAC Address," which is labeled on the side of the HUB. There are two MAC addresses, one for Ethernet and one for Wi-Fi.

Graco recommends connecting the HUB via Ethernet, so write the "ETH MAC" address on the Network Setup form.

# **STEP 3:**

The next section states "TO BE FILLED OUT BY END USER." This information is obtained from the IT department of the installation site.

Ask your IT department if they can "bind" an IP address to the MAC address of the HUB.

- If yes, then ask them to do so.
- If yes, also ask them to assign a DNS name to the HUB as well.
- If no, then it will be necessary to use a Static IP address for the HUB.

# Pulse® Hub Network Setup

The HUB is a networked device that is part of the Graco Pulse fluid management system. The device will operate on your LAN and generate a webpage for end-users to interact with Pulse. As other devices, like PCs on your network, need to be able to reliably find and display this hosted page, the HUB should be given a non-changing IP address. If the option exists, adding the device to your local DNS would also make it more intuitive to find the Pulse system webpage through a browser. The form below assists with setup of Pulse by allowing you to specify how you would like to set up the HUB on your LAN:

TO BE FILLED OUT BY INSTALLER		
HUB MAC Address		
TO BE FILLED OUT BY END USER		
SELECT ONE BELOW		
DHCP with reserved IP	Static IP assignment	
IP address	Netmask	
	IP address	
	Gateway	
	DNS	
HIGHLY RECOMMENDED		
If you intend on configuring local DNS to assist with finding the Pulse web page, please fill out the following:		
Local DNC url		

# Pulse® Hub Email Setup

Pulse Software utilizes emails for system notifications and automated reporting. To enable this function an outgoing, smtp mail server must be set up in the software for sending emails.

TO BE FILLED OUT BY END USER		
Outgoing (SMTP) Mail Server	Mail Server Authentication	
SMTP Server	TLS (typically port 587)	
SMTP Port	SSL (typically port 465)	
	Authentication	
	Username	
	Password —	



#### **STEP 4:**

Ask your IT department to assign a domain name to the HUB.

Graco **highly recommends** giving the HUB a domain name. Without a name, all users of the Pulse software will need to remember the numerical IP address to access the HUB.

### **STEP 5:**

To enable email notifications from the HUB, your IT department must also provide the information for the fields at the bottom of the form.

- The SMTP Server address is unique to every site.
- The SMTP Port is normally 25, but your IT department might use a different port number.

Once this form is completed, you're ready to install the HUB onto the local network.

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### STEP 6:

Mount the hub securely to a wall or other location selected by the end user. It should be mounted near the location used to refill roll-around dispense pumps.

## **STEP 7:**

Connect the Remote Antenna (RA) to the hub using the USB cable provided.

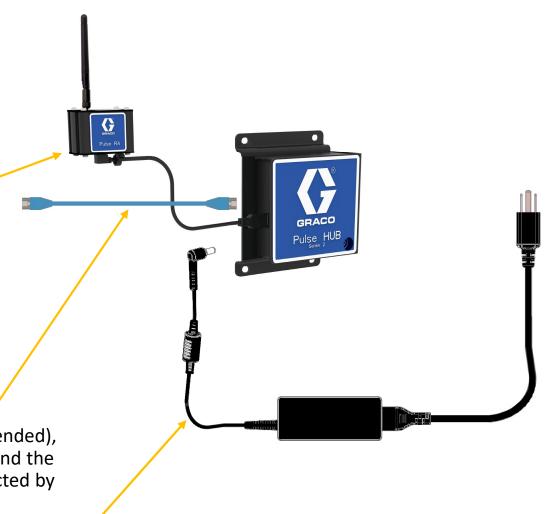
• If your IT department provided a Static IP address, skip to step 13 now.

# **STEP 8:**

To connect to your local network by DHCP (recommended), connect one end of the Ethernet cable to the HUB, and the other end to the Ethernet port in your network selected by your IT department.

### STEP 9:

Connect the power cable to the HUB and plug it in to a power receptacle.





### **STEP 10:**

The HUB may require up to 10 minutes to start up before you can access it. Please wait 10 minutes, then proceed to step 11.

#### **STEP 11:**

Open a web browser. In the Navigation box, type the Reserved IP Address that your IT department wrote on the Pulse Hub Network Setup form, then press Enter.

Common examples of web browsers include

- Chrome
- Edge
- Safari
- Firefox

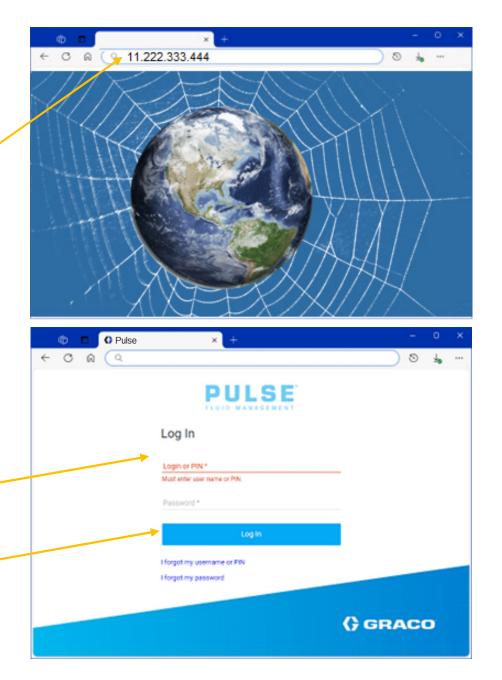
### **STEP 12:**

If the IP address has been entered correctly, the Pulse Log In screen will show on your device.

- For the Login, type "admin"
- The password is "pulse"

After the Login and password are entered, click the "Log In" button to continue.

When using DHCP, the installation is this simple, so you can now skip to step 30.



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To use a **Static IP** address on the HUB, you must first connect to the HUB via its Wi-Fi hotspot.

### **STEP 13:**

Check the HUB for an Ethernet cable. If an Ethernet cable is connected to the HUB, disconnect the cable from the HUB before proceeding.

#### **STEP 14:**

Connect the power cable to the HUB and plug it in to a power receptacle.

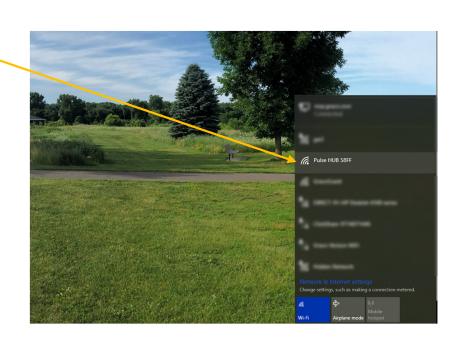
# **STEP 15:**

Use your computer to connect to the HUB via Wi-Fi. It will be listed as an available network named "Pulse Hub" followed by some numbers and letters.

- You must connect within 5 minutes of powering the HUB
- If you miss this 5-minute window, simply unplug the HUB and start over with Step 13.

# **STEP 16:**

The HUB may require up to 10 minutes to start up before you can access it. Please wait 10 minutes, then proceed to step 17.







#### **STEP 17:**

Open a web browser and type "http://10.0.0.1" in the Navigation box, then press Enter.

Common examples of web browsers include

- Chrome
- Edge
- Safari
- Firefox

### **STEP 18:**

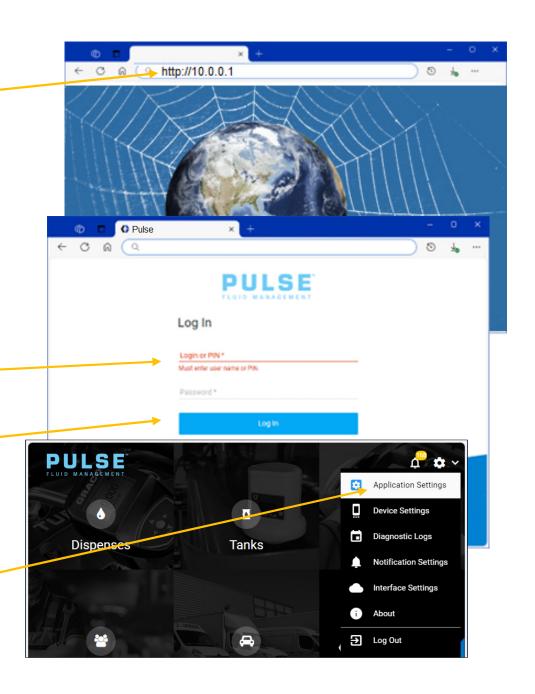
The Pulse Log In screen will show on your browser.

- For the Login, type "admin"
- The password is "pulse"

After the Login and password are entered, click the "Log In" button below them to continue.

# **STEP 19:**

From the Home screen, click the Settings icon in the upper right corner, then click on "Application Settings."





### **STEP 20:**

Click on the "Network Settings" tab.

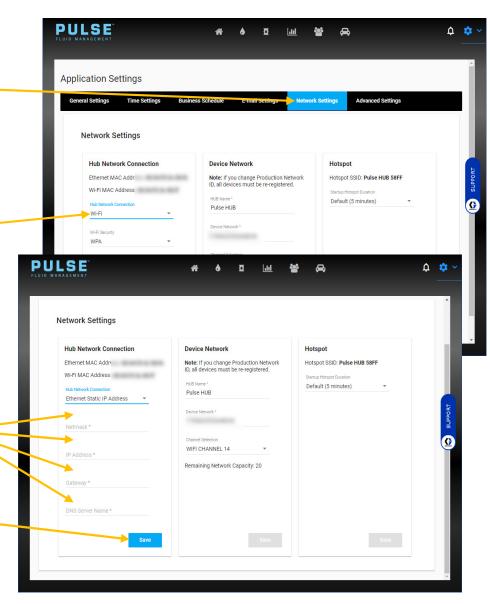
### **STEP 21:**

Under "Hub Network Connection" click on "Wi-Fi" then choose "Ethernet Static IP Address" from the menu that pops up.

## **STEP 22:**

Refer to the Pulse Hub Network Setup sheet and enter the information into each of the four fields.

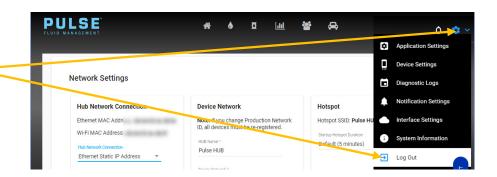
Be sure to click the "Save" button when completed.





### **STEP 23:**

Click the Settings icon in the upper right corner, then click on "Log Out."



### **STEP 24:**

Unplug the HUB's power cable from the power receptacle.

### **STEP 25:**

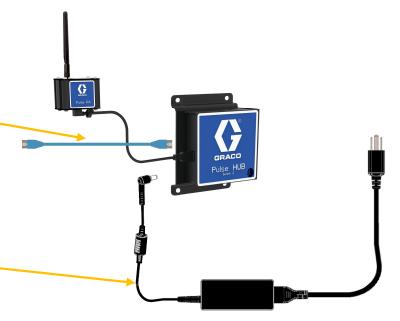
Connect one end of the Ethernet cable to the HUB, and the other end to the Ethernet port in your network selected by your IT department.

Reconnect the power cable to the power receptacle.

# **STEP 26:**

**STEP 27:** 

The HUB may require up to 10 minutes to start up before you can access it. Please wait 10 minutes, then proceed to step 28.





#### **STEP 28:**

Open a web browser. In the Navigation box, type the Static IP Address that your IT department wrote on the Pulse Hub Network Setup form, then press Enter.

Common examples of web browsers include

- Chrome
- Edge
- Safari
- Firefox

### **STEP 29:**

If the IP address has been entered correctly, the Pulse Log In screen will show on your device.

- For the Login, type "admin"
- The password is "pulse"

After the Login and password are entered, click the "Log In" button to continue.







#### **STEP 30:**

Click on the "Email Settings" tab.

#### **STEP 31:**

Enter the values from the form into the fields on this page.

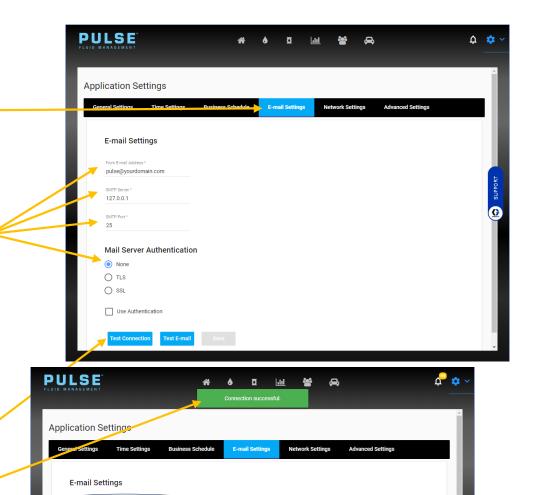
- Some versions of the form do not include an email address, so you may need to request this from your IT department separately.
- You may also create any email address that you will recognize when receiving emails from Pulse.

# **STEP 32:**

Click on the button labeled "Test Connection."

 If the information is correct, a green box will appear at the top of the screen stating, "Connection successful."

Click on "Save" before exiting this page.



Use Authentication



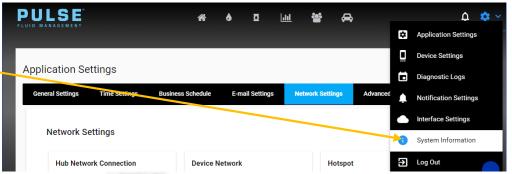
### **STEP 33:**

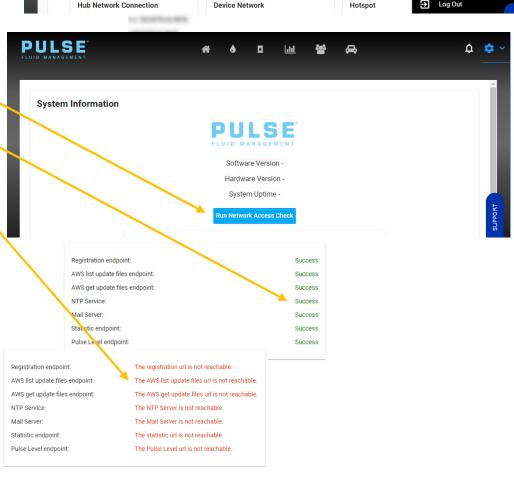
Click the Settings icon in the upper right corner, then click on "System Information."

### **STEP 34:**

Click on the button labeled "Run Network Access Check."

- For each connection that is good, the word "Success" will appear to the right.
- Any failed connections will be shown as "not reachable."
- If a specific feature is needed for your operation, then work with your IT department to gain access.
- Some common causes of failures are
  - Firewalls
  - Ports being blocked/closed
  - Typographical errors during this setup process
  - Inaccurate system time





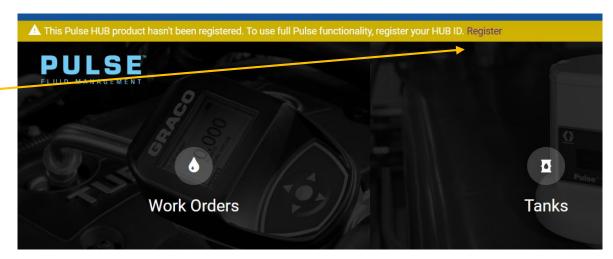


#### **STEP 35:**

After a new HUB is configured, it will show a prompt on the top of its web page, with a link labeled "Register."

Click the link and enter the end user's information.

 Be sure the end user's information is entered, not the distributor doing the install.



#### **Done**

Now you can proceed to configuring your fluids and tanks, registering your dispense meters, entering User and Asset information and programming NFC tags. Please review this Pulse Asset training guide for lessons on each of these topics: <a href="https://docs.gracopulse.com/asset">https://docs.gracopulse.com/asset</a>

If you have an older HUB which needs a software update, please refer the guide at this link: <a href="https://support-articles.s3.amazonaws.com/Pulse+Software+Update.pdf">https://support-articles.s3.amazonaws.com/Pulse+Software+Update.pdf</a>

