

GENERATOR SET NETWORK SETUP GUIDE

Technical support for setup and troubleshooting of the hardware used for in-home network access to the generator set is available through the selling Cummins Onan dealer/distributor.

The owner may be required to contact their ISP and/or e-mail provider for technical support of the e-mail notification feature set up and troubleshooting..

Due to variations in network equipment, network configurations and ISP's, the owner is responsible for acquiring the needed support/service from a qualified network specialist to properly and securely set up the owner's network for remote monitoring of the generator set.

Cummins Onan does not provide technical support for setup and troubleshooting of the owner's network and e-mail service.

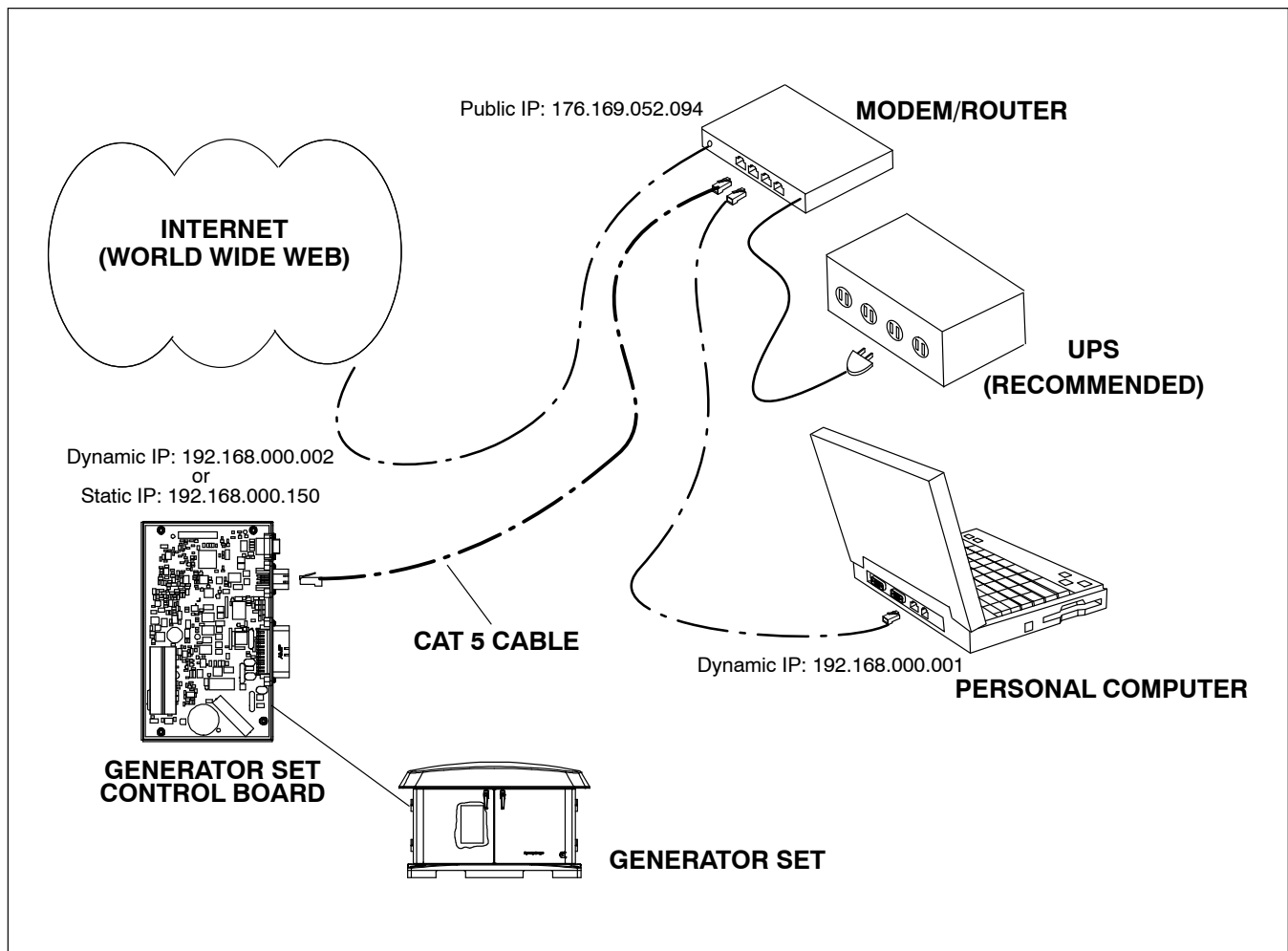


FIGURE 1. CONNECTIONS

SETTING UP IN-HOME COMPUTER ACCESS TO THE GENERATOR SET

1. Connect a Cat 5 cable from the generator set control board to a modem/router that has enough ports to connect the generator set to a computer.

Note: The router will assign an IP address to the generator set control.

2. Write down the IP Address shown on the Network Setup screen on the generator set's in-home Operator Panel.

IP Address: _____



Figure 2. GENERATOR SET HOME PAGE

Note: Leave DHCP on.

3. Type the IP address in the address bar of the web browser of a computer established on the same in-home network as the generator set. The computer's web browser will display the generator set's web page.
4. Enter the user name and password. The default username and password are:
Username: admin
Password: cummins
5. Change the password to desired user password and click on save.

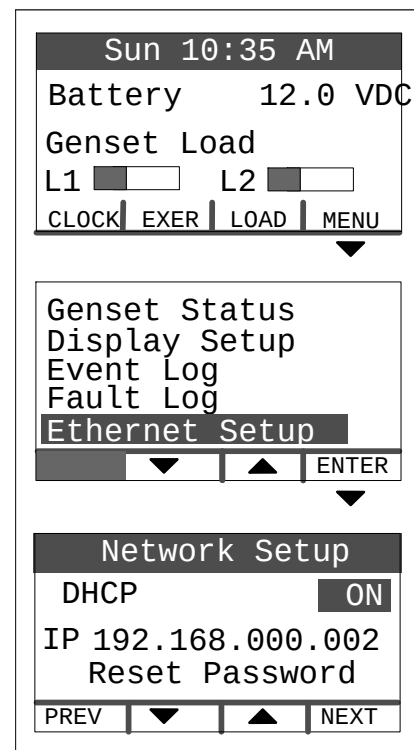


Figure 3. NETWORK SETUP SCREEN
IN-HOME OPERATOR PANEL

NETWORK SETUP SCREEN

NETWORK SETUP (PAGE 1)

EMAIL SETUP SCREEN (PAGE 2)

E-MAIL ADDRESSES (PAGE 3)

FIGURE 4. SETUP SCREENS

SETTING UP E-MAIL ALERTS FROM THE GENERATOR SET.

1. Set up in-home computer access to the generator set. See Setting up In-Home Computer Access to the Generator Set.

For the following steps, refer to Figure 4.

2. Click **Network Setup** on the home page.
3. Click **Click here to start Network Setup**.
4. Click **Next** to continue to the E-mail Setup screen.
5. Select the level alerts you would like to receive.
6. Enter your **e-mail Server Name, User Name, and Password**. Typically, it will be necessary to contact the customer's e-mail service provider.
E-mail: _____
Server Name: _____
User Name: _____
Password: _____
7. Continue to the Destination E-mail Addresses screen.
8. Enter up to 3 different e-mail addresses to receive generator set alerts.
Address 1: _____
Address 2: _____
Address 3: _____
9. Press Done.

Note: The web page will eventually time out if a new IP address was entered in Step 7 while setting up Internet access.

SETTING UP INTERNET ACCESS TO THE GENERATOR SET

1. Set up in-home computer access to the generator set. See Setting up In-Home Computer Access to the Generator Set.

For the following steps, refer to Figure 4.

2. Click **Network Setup** on the home page.
3. Click **Click here to start Network Setup**.
4. Click **Off** to turn off the generator set DHCP.
5. In the **IP** number fields enter a unique in-home network address for the generator set by changing the last field of **IP** number to a number between 001 and 256 that is not in use by another device on the same network.

6. The **Subnet Mask**, **Static DNS #1** and **#2**, and **Gateway** numbers establish the connections between the modem/router and generator set and do not need to be changed.
7. Press **Next** on the subsequent screens to get to page 3 of the set up screens and continue by setting up the e-mail alerts.
8. Press **Done** to complete set up and save the settings.

Note: The web page will eventually time out unless the new IP address is entered.

9. Enter new **IP** address created in STEP 5 into the address bar.
10. Port forwarding:
 - a.) Access your modem / router user manual
 - b.) Determine how to gain access to your router's setup screen.
 - c.) Locate the port forwarding section of your routers setup menu.
 - d.) Configure port 80 to be forwarded to **IP** address created in STEP 5.

Note: A UPS (Uninterruptible Power Supply) connected to your router is recommended to ensure that your generator set is able to e-mail and be remotely accessed at all times.

Note: To maintain connections to all devices connected to the modem/router, do not turn off modem/router DHCP.

11. To access the generator set's web page on any computer or wireless device not connected to the same modem/router as the generator set, type in the customer's public IP address.
12. To access the generator set's web page on any computer or wireless device connected to the same modem/router as the generator set, type in the unique in-home network address of the generator set. Enter the username and password.

HELP HOTLINE

1-800-888-6626 (Option1)
Available Monday-Friday

1. If you can't remember your password, reset it to "cummins" by selecting REset Password on the Network Setup screen on the in-home Operator Panel and pressing the up or down arrow.
2. The customer's public IP address must be a static IP address. If the customer's public IP address is not static, the customer must either obtain a static IP address from their service provider or set up a domain name that manages the dynamic IP address.

FREQUENTLY ASKED QUESTIONS

Question: Do I need another router?

Answer: Yes, a router or switch is required to allow for the connection of more than one device (computer, generator set, etc.) with each other and the Internet. Typically, your Internet modem also serves as a router. If you have an available ethernet connection on your router-enabled modem, you may not need to add an additional router.

Question: Do I need another modem?

Answer: A modem is required if you want to utilize the e-mail and remote Internet access features of the generator set. If you already have an Internet connection, you have a modem. Only one modem is required.

Question: What is an IP address?

Answer: An IP address, or Internet Protocol address, is a unique address that devices such as a computer or your home generator set use to communicate with each other, both on your in-home network (LAN network) or with the World Wide Web.

Question: What is the difference between Static and Dynamic IP addresses?

Answer: On your in-home network, the router (with DHCP enabled) will assign a dynamic IP address to all devices (computer, home generator set, etc.) connected to the router. As devices are added and removed

from the router, the devices are automatically updated with new IP addresses. This means that your computer and generator set IP addresses will not always be the same unless static IP addresses are assigned. A static IP address is a unique address that is permanently assigned to a device. On the World Wide Web, your typical ISP (Internet Service Provider) assigns a dynamic IP address to your Internet connection. This is the IP address you type into your Internet browser to access your generator set from the World Wide Web. A static IP address is required for you to establish a constant address you can always access from the World Wide Web. Contact your ISP to set up a static IP address for your Internet connection.

Question: What is DHCP?

Answer: DHCP, or Dynamic Host Configuration Protocol, automatically assigns IP addresses, subnet masks and gateways to devices, allowing them to communicate with each other. Your router and generator set are equipped with DHCP. Default is for DHCP to be on.

Question: What is a UPS device and why is it recommended?

Answer: A UPS (Un-interruptible Power Supply) device is battery backup to keep devices such as computers and modems powered during short-term power outages. We recommended that the modem/router be powered through a UPS device to ensure that your generators et is able to send e-mails and be remotely accessed at all times. For example, if your generator set shuts down during a utility power outage, the generator set can still send you an e-mail letting you know that the power has failed and that the generator set shut down.

Question: When do I need to use a Static IP address?

Answer: Static IP addresses are required if you plan to access your generator set remotely via the Internet.

Question: I used the IP addresses shown in this guide, and was not able to access the generator set. Why didn't it work?

Answer: The IP addresses shown in this guide are only examples and are not likely to be the ones that will work on your network setup.

Question: The IP addresses consists of four numbers ranging from 0–255, which are always separated by dots; 179.168.052.094, for example. Are leading zeros necessary?

Answer: No, the IP address, 192.168.0.1, for example, is equivalent to 192.168.000.001. The address can be entered either way.

Question: How do I get my IP number, Subnet Mask and Gateway?

Answer: On a PC,

1. Disable the PC's wireless function.
2. Establish an Ethernet connection between the computer and generator set via a common modem.
3. On a computer, click **Start<Run**
4. On the Run menu that appears, type "**cmd**" and click **OK**.
5. Type "**ipconfig**" on the DOS window that appears.

Question: Why do I need two IP addresses to access my generator set?

Answer: You can access your generator set from two networks, you in-home or local network and from the World Wide Web, thus requiring two addresses. Your local IP address is different from your World Wide Web IP address. From your in-home network you use the generator set's Static IP address. From the World Wide Web you first need to access your modem, which is accomplished by typing in the Static IP address of your Internet connection. Your modem will then automatically forward you to your generator set on the local network.