

# Touchstone DG2470 Data Gateway

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User Guide

Release 24 STANDARD 1.3 February 2015

## **Installing and Connecting your Data Gateway**

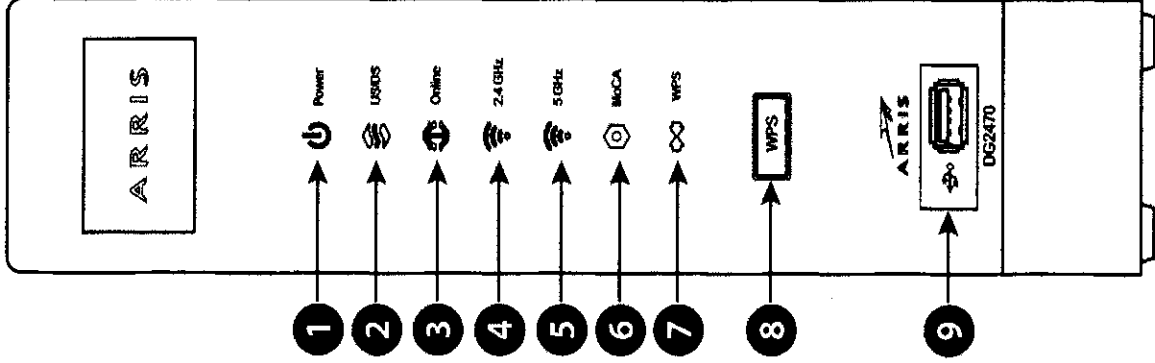
Before you start, make sure that:

- You have contacted your cable company and verified that they provide data service using standard DOCSIS technology.
- You have all the Items You Need (page 10).
- Cable and power outlets are available near the computer. If a cable outlet is not conveniently located, your cable company can install a new one.

If you have ordered service, your cable company should configure the Data Gateway automatically. You need only follow the instructions in this section to install and connect the Data Gateway.

## Front Panel

The front of the Data Gateway has the following indicators.

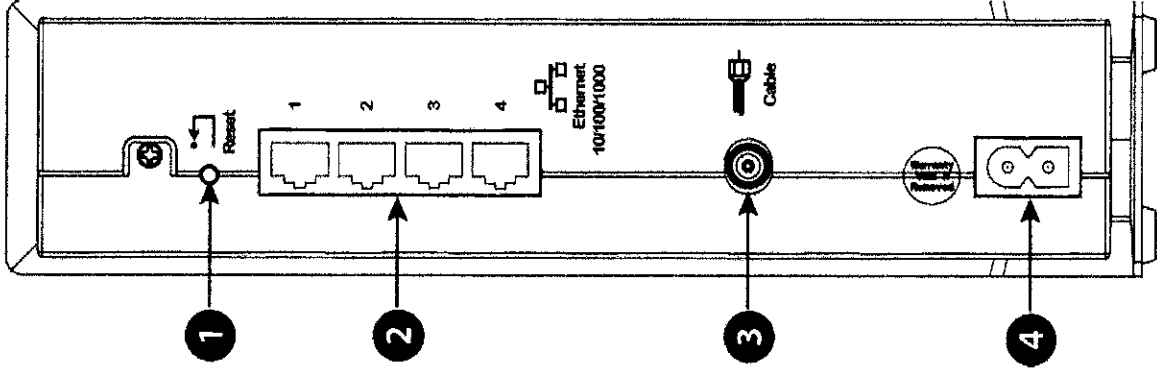


1. **Power:** indicates whether AC power is available to the unit.
2. **US/DS:** indicates upstream/downstream connectivity.
3. **Online:** indicates internet data transmission status.
4. **2-4 GHz:** indicates the status of the 2.4 GHz wireless LAN.
5. **5 GHz:** indicates the status of the 5 GHz wireless LAN.
6. **MoCA:** indicates connectivity between the Data Gateway and other home devices connected via the MoCA network.
7. **WPS:** indicates Wireless Protected Setup (WPS) is active.
8. **WPS Button:** begins associating the Data Gateway with a wireless device.

9. **USB:** USB host connector - future support for external USB devices.

## Rear Panel

The rear of the Data Gateway has the following connectors and controls.



1. **Reset button:** resets the Data Gateway as if you power cycled the unit. Use a pointed non-metallic object to press this button.
2. **Ethernet (1 - 4):** connectors for use with a computer LAN port.
3. **Cable:** connector for the coaxial cable.
4. **Power:** connector for the power cord.

## Selecting an Installation Location

There are a number of factors to consider when choosing a location to install your Data Gateway:

- ❑ Is an AC outlet available nearby? For best results, the outlet should not be switched and should be close enough to the Data Gateway that extension cords are not required.
- ❑ Is a cable jack available? For best performance, keep the number of splitters between the jack and cable drop to a minimum. Each splitter attenuates (reduces) the signal available to the Data Gateway. A large number of splitters can slow down the Internet connection and even affect your telephone service.
- ❑ If you are connecting devices to the Ethernet ports, can you easily run cables between the Data Gateway's location and those devices?
- ❑ If you want to install the Data Gateway on a desktop, is there enough space on either side to keep the vents clear? Blocking the vents may cause overheating.
- ❑ How close are your wireless devices? The Data Gateway wireless connection range is typically 100–200 feet (30m–65m). A number of factors can affect connection range, as described below.

### Desktop Mounting Instructions

Position the Data Gateway so that:

- ❑ air flows freely around it
- ❑ the back faces the nearest wall
- ❑ it will not fall to the floor if bumped or moved
- ❑ the ventilation holes on the sides of the unit are not blocked

### Factors Affecting Wireless Range

A number of factors can affect the usable range for wireless connections.

Increases range	<ul style="list-style-type: none"> <li>❑ Raising the unit above the devices (for example, installing the Data Gateway in the upper floor of a multi-story dwelling)</li> <li>❑ Adding a wireless extender to the network</li> </ul>
Decreases range	<ul style="list-style-type: none"> <li>❑ Lowering the unit below the devices (for example, installing the Data Gateway in a basement)</li> <li>❑ Metal or concrete walls between the Data Gateway and other devices</li> <li>❑ Large metal appliances, aquariums, or metal cabinets between the Data Gateway and other devices</li> <li>❑ Interference and RF noise (2.4 GHz wireless phones, microwave ovens, or other wireless networks)</li> </ul>

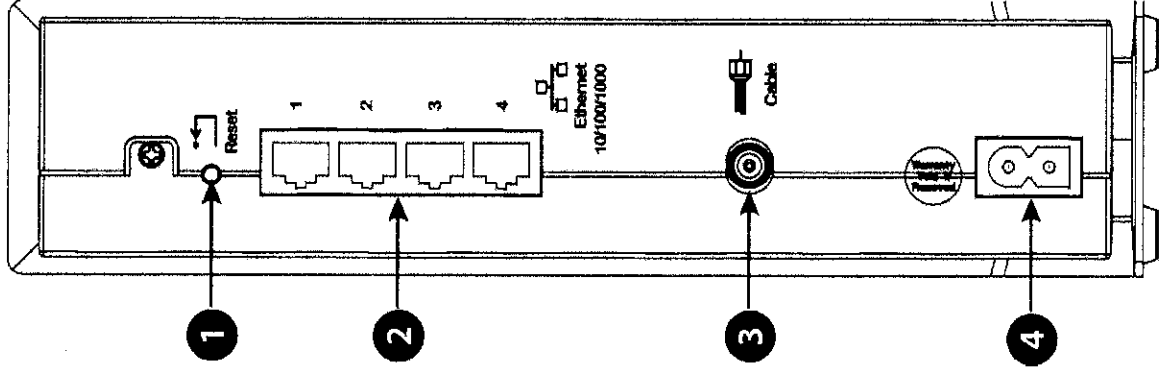


**Note:** Note that decreasing the range of your wireless network may be beneficial, as long as the decreased range is sufficient for your needs. By limiting your network's range, you reduce interference with other networks and make it harder for unwanted users to find and connect to your network.



**Note:** Setting the transmit power level to High increases the range. Setting it to Medium or Low decreases the range proportionately.

## Connecting the Data Gateway



1. Connect one end of the coax cable to the cable outlet or splitter, and the other end to the Data Gateway's Cable connector (3). Tighten the connections by hand, then tighten an additional  $1/8$  turn with a wrench.



**Note:** For best performance, use high-quality coax cable and minimize or eliminate splitters between the cable jack and the Data Gateway. If you are using MoCA for your home network, MoCA filters must be installed on any legacy client devices. Your cable company will install these filters for you.

2. Insert the plug from the power cord into the Power connector on the back of the Data Gateway (4) and insert the power cord into a convenient AC outlet.  
The Power light on the front of the Data Gateway lights up, then flashes once (refer to the LED tables shown in Using the Data Gateway). See Troubleshooting (page 33) if the Power light does not turn on.
3. Connect one end of the Ethernet cable to any Ethernet port on the back of the Data Gateway, (2) and the other end to the Ethernet port on a computer, hub, or broadband router.



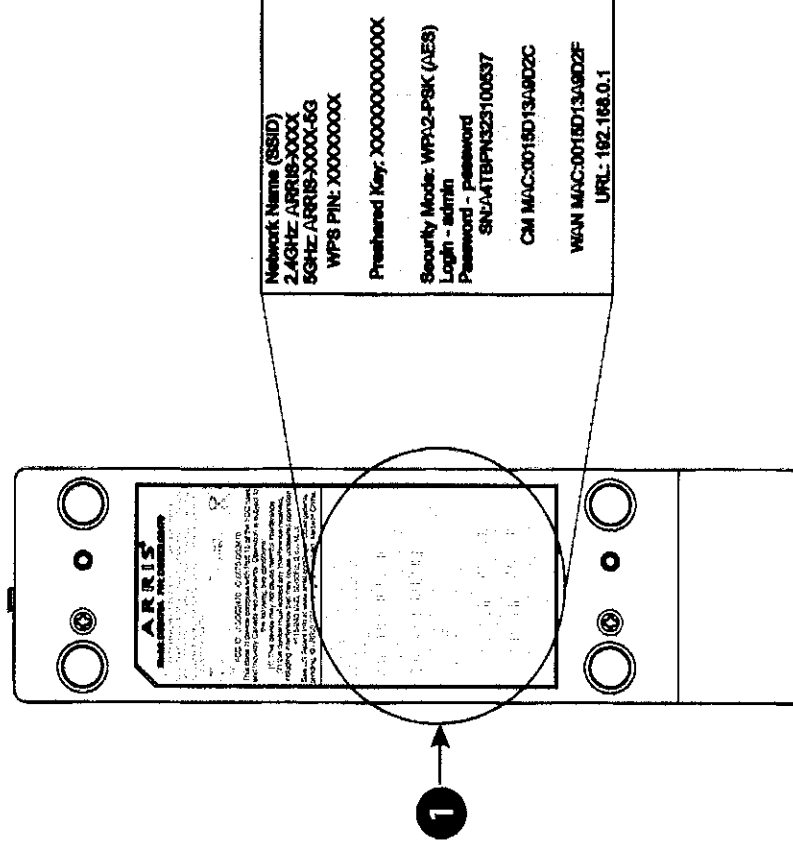
**Note:** If you are connecting to a computer, use the Ethernet cable included in the Data Gateway package.

## Configuring Your Wireless Connection

The DG2470 ships with wireless LAN security set by default. See the security label on your product for the factory security settings.



**Note:** You must set up your computer and other client devices to work with the security settings on the DG2470. Refer to the documentation for your client device for instructions on setting security. On most computer systems you only need to select the network name (SSID) device and enter the encryption key. If your computer or client device supports Wi-Fi Alliance WPS (Wireless Protected Setup), activate WPS on your computer or client device and the DG2470 simultaneously to easily set up your system security.



1. Security Label

If you need to modify the Data Gateway's default wireless security settings, or if you want to configure any other wireless LAN settings, refer to the following instructions.

## Accessing the Configuration Interface

Follow these steps to access the configuration interface. You should have already set up the DG2470 as described in Installing and Connecting your Data Gateway (page 16).

1. If security has been properly set up on your computer to access the wireless LAN on the DG2470, use the connection utility for your operating system to connect to the wireless LAN using its network name (SSID), as shown on the security label.
2. If you cannot access the wireless LAN, you must first establish a wired Ethernet connection between your computer and the DG2470.
3. In your web browser, open the page <http://192.168.0.1/> to access the wireless router setup.

### *The Login screen displays.*



**Note:** The default user name is "admin". The default password is "password", in lower case letters.

4. Enter the user name and password and click the Apply button to log in.

### *The System Basic Setup screen displays.*

5. Use the online help information to set configuration parameters as required.



**Note:** Most configuration parameters that you may want to set can be accessed on the System Basic Setup screen, including the security mode and setting a system password.

## Setting Parental Controls

The Parental Control feature allows you to block specified keywords and web sites from being accessed and also to specify trusted computers in the network. Trusted computers are not affected by the parental control settings.

## Finding the MAC Address of a Computer

In order to set up trusted computers you must first determine the MAC address of those computers.

Use the operating system of your computer to find its MAC address, as follows:

**Windows:** from the Start menu, find and select the Control Panel. Double-click Network Connections (Windows XP), or Network & Sharing Center (Windows Vista or Windows 7). Then double-click either "Wireless Network Connection" for a wireless connection, or "Local Area Connection" for an Ethernet connection. Next click the Details button (Windows Vista or Windows 7), or click the Support tab and then the Details button (Windows XP). The "Physical Address" line shows the MAC address.

**MacOS X:** open System Preferences and click the Network icon. To find the Ethernet MAC address, select Built-in Ethernet from the Show drop-down, then click the Ethernet tab.