

This guide is a primary source for setup instructions; only refer to the M5029 wSeries User's Guide when directed in this document. Please read completely before performing installations, setup or configurations on the wSeries device.

1 System Requirements and Key Notes

System Requirements:

Virtual Coordinator only works with Windows 7, Vista, and XP.

Router must support 802.11 b or 802.11 g

Router security must NOT be any type of WPA Enterprise

Computer cannot be running both Virtual Coordinator and Dashboard at the same time.

Key Notes:

- **Highlighted text** – Procedure steps to follow when using the same computer to configure and use Virtual Coordinator.
- To speed up the process, we recommend using another computer or iPhone or iPad to setup and configure the Virtual Coordinator software.
- **The examples in blue** are suggestions for IP addresses to enter. However, your router may differ from these examples. Read your router manual for the required IP addresses.

1.1 ADHOC Mode Configuration

The ADHOC connection is not supported by some wireless adapters, please wait about 3 to 5 minutes until the wireless sign stops running, this will assure the wireless connection is stable – otherwise the configuration will fail. If an error occurs, install a browser app on an iPhone called “Dolphin” and ignore all popup error messages during the configuration. Note that Dolphin has not been tested on an Android.

NOTE: Safari does not work well in ADHOC mode.

In this document, refer to section “3.2 ADHOC Mode Procedures” for WiFi setup steps..

1.2 Dashboard and VC Compatibility Concern

For smooth compatibility, the Dashboard and VC apps cannot be installed on the same computer, even though wSeries works with both. We recommended using VC because Dashboard uses unnecessary functions with wSeries devices.

Virtual Coordinator for wSeries includes Ethernet products that support iServer.

1.3 Adding wSeries with Dashboard

Adding wSeries with Dashboard is different from all other Ethernet products; please read all the procedures before adding wSeries with Dashboard. ADHOC is the only way to add wSeries devices to VC or Dashboard.

2 Computer Setup

2.1 Initial Setup Procedures Following wSeries User Guide

1. The configuration Computer MUST RUN CONTINUOUSLY and MUST have a static IP address.(Follow “Disable Power Safe Options” procedure in the wSeries User’s Guide.)
2. Install Latest Java Runtime Environment.
3. Make Firewall Exceptions.(Follow “Firewall Exceptions” procedure in wSeries User’s Guide.)

IMPORTANT: Make sure to change these Firewall Exceptions to the port numbers.

2.2 Choose a Static IP Address

Procedures:

1. Follow “Appendix M” in M5029 wSeries User’s Guide to implement a static IPv4 address.

NOTE: the static IPv4 address: 169.254.1.2 only applies if using the same computer to run VC to configure wSeries.

2. Finish configuring wSeries in AD-HOC. (Refer to Section 1.1 ADHOC Mode Configuration in this document.)
3. Change the IPv4 address to a static IP address that the Router supports.

TIP: If you are using a mobile phone and have finished the ADHOC configuration, find out what default gateway IPv4 address your WiFi Router is using. Locate the default gateway either online or in your router’s manual or refer to section 2.3 Checking and Confirming IP Address in this document.

4. Find the default IPv4 address of the router being used.
Example defaulted router IP address: 192.168.1.1
5. To choose a static IPv4 address, change the last number to a different desired number that the router supports (typically 2-254); and avoid DHCP reserved IP addresses. (Refer to router’s manual for allowed IP addresses.)

Example 192.168.1.93

2.3 Checking and Confirming IP Addresses

1. Open up “command prompt”
2. Type “ipconfig” and hit “enter”
Now you can scroll and find the IP address of the computer along with the router.
3. IPv4 address = your computer’s IP address.
4. Default Gateway = Router’s default IP address.

3 Install VC Software

WARNING: Uninstall OMEGA Dashboard before installing VC on the configuration Computer.

If you have already installed VC with Dashboard previously installed, use this workaround to correct:

1. Uninstall OMEGA Dashboard.
2. Click the setup VC application, and “Repair.”

TIP: Change HTTP Port If Busy:

Go to Windows Start->Newport->Virtual Coordinator->Port Settings.

CHANGE the firewall exception for “vc_http” with the same port number you choose.

For this example, choose 82

NOTE: The default HTTP port 80 is sometimes busy, if so, change to port 81 or 82, only when necessary.

3.1 Connect the Sensors and Power ON the wSeries

WARNING: Follow section “3.3.4 Powering ON the Transmitter” in the M5029 wSeries User’s Guide.

3.2 ADHOC Mode Procedure

See section 1.1 ADHOC Mode Configuration for WiFi power up information, then proceed with the steps below. Refer to Figure 3.5 in section “3.3.7 Initial Configuration” for Transmitter’s embedded web server settings.

3. Connect either the WiFi of the computer or phone to the network (wifi) of the wSeries.
 - a. The name of the network should be “TXnnnn”, where “nnnn” is the last four digits of the MAC address of the wSeries.
4. In an internet browser, type “http://169.254.1.1” into the search bar. A configuration screen should appear. (Refer to Section 1.1 for more details.)
5. Enter your routers SSID and password--click the correct credentials for security. (These credentials are used to access the network of the Router.)
6. Under TCP/IP Network Configuration, select one of the following DHCP options:

Check DHCP Recommended for easier set-up--no IP for wSeries is necessary, but uses more battery power.

Uncheck DHCP Assigns a static IPv4 address to the wSeries device:

- Creates a static IP Address that your router supports that is DIFFERENT from the static IP address of the configuration computer running VC.

Example choose 192.168.1.205

- Netmask (also called Subnet Mask) usually should be 255.255.255.0.
- Gateway Address is located when checking ipconfig, using Section 2.3 or routers manual.
- Uses less battery power.

7. Under Virtual Coordinator: Virtual Coordinator IP is the static IP address of the computer running virtual coordinator.

As per example in step 2.2: 192.168.1.93

The rest can stay the same.

3.3 Save Changes then click Reboot

NOTE: Saving changes will refresh the page.

TIP: When saving changes, ignore any Web browser messages about the network being disconnected, it is the web browser error that says it is disconnected during the setup process. If the wSeries device still reads the last 8-digits of the MAC address, there is nothing wrong.

After rebooting from ADHOC, the device should start reading sensors on the display.

If you used the same computer to run VC and configure the wSeries, remember to change your computers static IP address to what you chose earlier in Section 2.1.

As per example in step 2.2: 192.168.93

3.4 To Access

- Connect any computer or phone you are using to the router WiFi.
- Open up a Web browser and type the static IP address of VC computer and HTTP port number into the SEARCH Bar.

According to the examples in this document “http://192.168.1.93” into the search bar

If you have changed the HTTP port, you must use “http://192.168.1.93:nn” where “nn” is the HTTP port.

4 Troubleshooting

We recommended to turn-off the Firewall when troubleshooting.

Refer to “Appendix H” in M5029 wSeries User’s Guide for more troubleshooting procedures.

- After rebooting from ADHOC, the device should start reading sensors on the display. If not, the device has not connected to a router or found your computer or power saver is off.
Check:
 - All the IP addresses are entered correctly.
 - Router is not using any WPA enterprise security
 - Make sure the router supports 802.11b or 802.11g, and the 2.4 GHz bandwidth is on.
 - If ADHOC mode needs to be reassessed to apply new changes—the power up procedure must be performed again--refer to section 1.1 ADHOC Mode Configuration for the procedure.
- If you cannot access the Virtual Coordinator page on a different device, then the Firewall settings are wrong.
 - Check firewall settings, and refer to appendices K and L of the wSeries User’s Guide for applicable Firewall settings.
- Check wSeries User’s Guide for additional troubleshooting tips.