



Technical Information

September 2021

QIAstat-Dx[®] Analyzer 1.0 Printer Setup Guide

The following information provides additional guidance on how to set up printers with the QIAstat-Dx Analyzer 1.0. This document covers the following information:

- Recommended printers
- General recommendations for printer use
- Step-by-step instructions for setting up USB printers
- Step-by-step instructions for setting up network printers
- Step-by-step instructions for connecting directly to a Windows 7 PC
- Step-by-step instructions for connecting directly to a Windows 10 PC
- Frequently asked questions

Further information

QIAstat-Dx Analyzer 1.0 User Manual: www.qiagen.com/HB-2636

Technical assistance: support.qiagen.com

Recommended printers

Note that we have tested only the printer models listed below. If you are using a different printer model, QIAGEN cannot guarantee compatibility. Tested printer models include the following:

- HP® OfficeJet® Pro 6230
- HP Color LaserJet® Pro M254dw
- HP Color LaserJet MFP M227dw
- HP Laserjet Pro M404n
- HP OfficeJet Pro 8610
- Brother® MFC-9330CDW
- Brother HL-L2370DN

General recommendations for printer use

We recommend the following:

- Use only printers with displays and indicator lights that provide unambiguous information on print job status and printer failure modes.
- Use generic printer drivers, such as those delivered with the system, rather than specific printer drivers.
- Restart the QIAstat-Dx Analyzer by powering it OFF and then ON after Common UNIX Printing System (CUPS) configuration changes, such as adding new printers. Use the power switch on the back. The use of the standby button on the front of the instrument is insufficient.

Step-by-step instructions for setting up USB printers

Note that USB-connected printers may not require installation after plugging them into any USB port of the QIAstat-Dx Analyzer (refer to “CUPS printer driver installation” in the *QIAstat-Dx Analyzer 1.0 User Manual*). This option works only if the generic printer is enabled under the **Printer** settings by selecting the available option **PRINTER (Options → System Config → Printer)**.

Step-by-step instructions for setting up network printers

For the installation of network printers, see “List of tested printers” of the *QIAstat-Dx Analyzer 1.0 User Manual* and the printers recommended above. Ensure that the network printer, QIAstat-Dx Analyzer and the PC connecting to the QIAstat-Dx Analyzer are part of the same local network (see “Network settings” in the *QIAstat-Dx Analyzer 1.0 User Manual*). Ideally, use a local private network with static IP addresses to ensure that CUPS can be accessed as described in the “CUPS printer driver installation” section of the *QIAstat-Dx Analyzer 1.0 User Manual*. Ask your local IT expert how to configure a local private network with static IP addresses, or follow the step-by-step guide below describing how to directly connect the QIAstat-Dx Analyzer to a PC.

Step-by-step instructions for connecting directly to a Windows 7 PC

You can directly connect your PC to the QIAstat-Dx Analyzer via an ethernet cable connected to the ethernet socket located at the back of the device. Once physically connected, follow the steps below to configure network connectivity.

Configure a static IP address on the QIAstat-Dx Operational Module

1. Click **Options** → **System Config** → **Network**.
2. Enable **IPv4**.
3. Click **Save**.
4. Click **IPv4 Setting**.
5. Enter the following IP Configuration:
 - 5a. Disable **Obtain IPv4 address autom.**
 - 5b. **IPv4 Address**: 192.168.1.100
 - 5c. **Subnet mask**: 255.255.255.0
 - 5d. **Default gateway**: 192.168.1.1
 - 5e. The remaining fields do not need to be altered.
6. Click **Save** (Figure 1).



Figure 1. Configuring a static IP Address on the QIAstat-Dx Operational Module.

Configure a static IP address on a Windows 7 PC

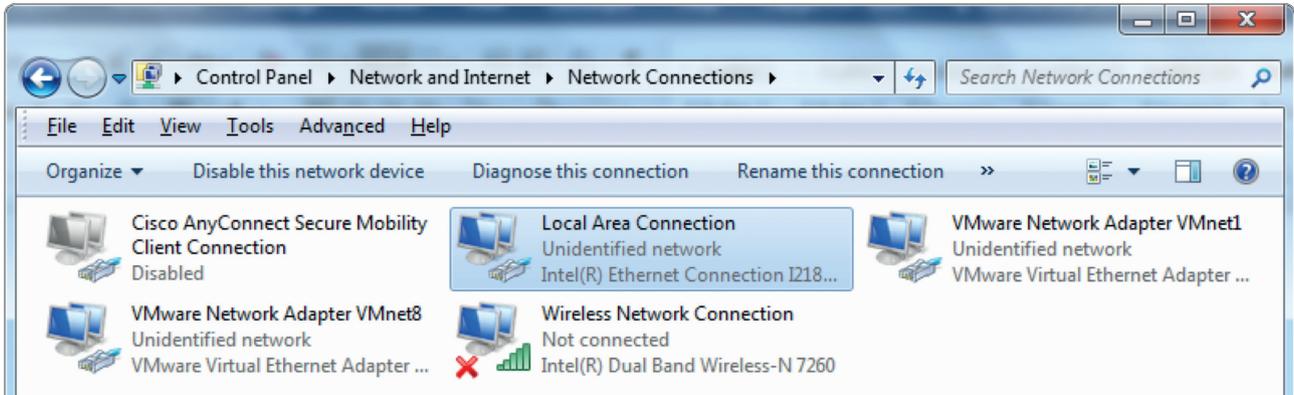


Figure 2. Selecting the ethernet device.

1. In Windows, click **Start** → **Control Panel** → **Network and Sharing Center** → **Change adapter settings**
2. Select the ethernet device (**Local Area Connection**), right click, and select **Properties** (Figure 2).
3. Select **Internet Protocol Version 4 (TCP/IPv4)**, and click **Properties** (Figure 3).
4. Insert the following information, and click **OK** (Figure 4).
 - 4a. Select **Use the following IP address**.
 - 4b. **IPv4 Address:** 192.168.1.101
 - 4c. **Subnet mask:** 255.255.255.0
 - 4d. **Default gateway:** 192.168.1.1

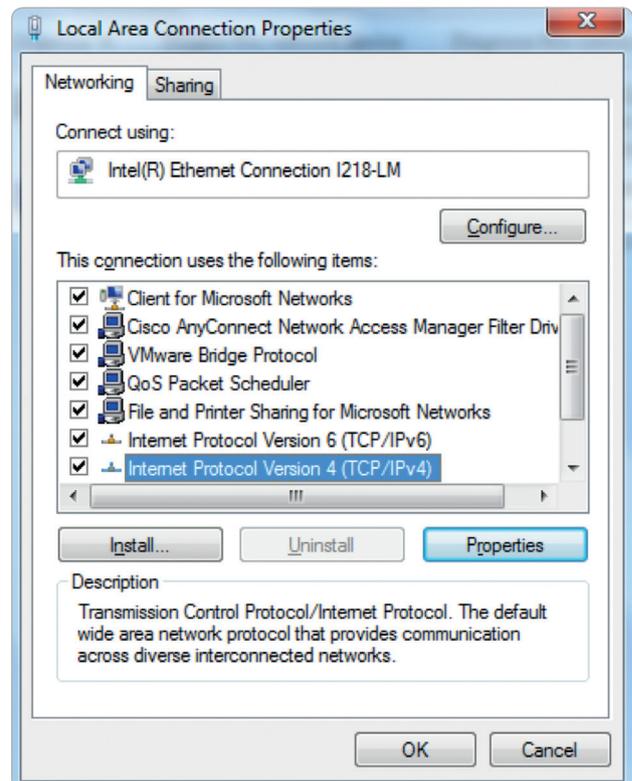


Figure 3. Configuring the Local Area Connection Properties.

Note: If the QIAstat-Dx Operational Module and the PC are connected via an ethernet cable and the settings are completed as described in this section, you should be able to execute the steps described above with the IP address 192.168.1.100.

Step-by-step instructions for connecting directly to a Windows 10 PC

You can directly connect your PC to the QIAstat-Dx Analyzer via an ethernet cable connected to the ethernet socket at the back of the device. Once physically connected, follow the steps below to configure network connectivity.

Configure a static IP address on the QIAstat-Dx Operational Module

Configure a static IP address on the QIAstat-Dx Operational Module following the instruction provided in the “Configure a static IP address on the QIAstat-Dx Operational Module” section above. In this example, it is assumed that the IP address of the QIAstat-Dx Operational Module is statically set as 192.168.1.100.

Configuring a static IP address on Windows 10 PC

1. Click the **Start** menu button and search for the **Control Panel** (Figure 5).

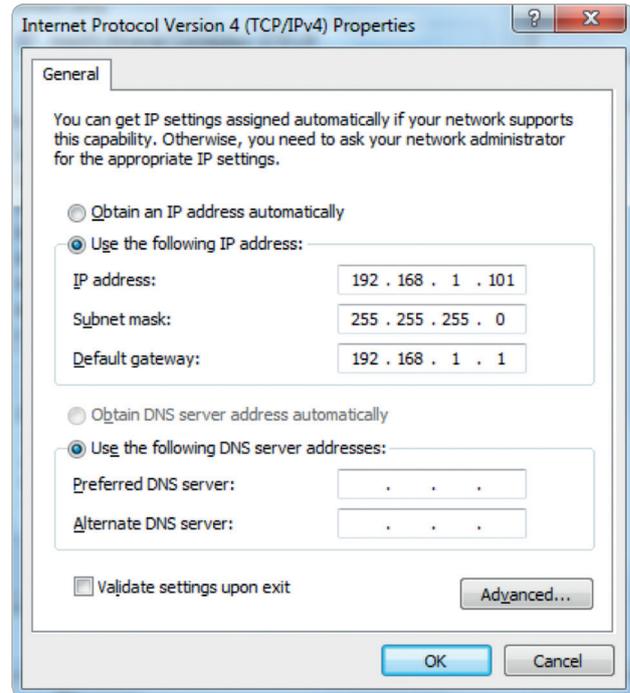


Figure 4. Configuring **Internet Protocol Version 4 (TCP/IPv4) Properties**.

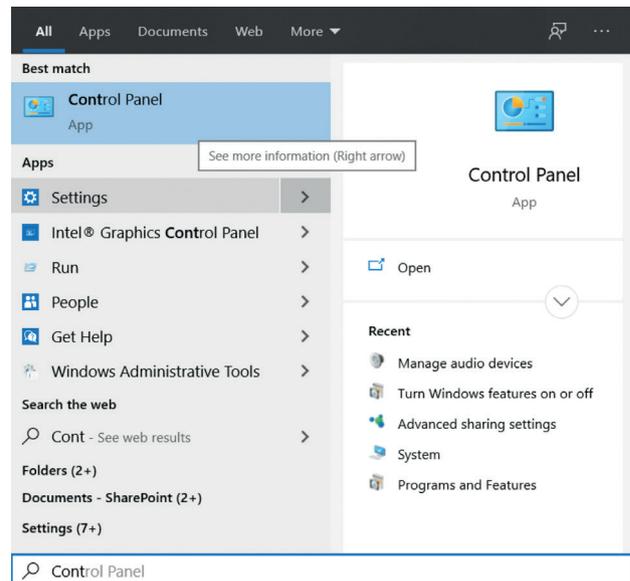


Figure 5. Searching for the **Control Panel** in the **Start** menu.

2. Click **View network status and tasks** under the **Network and Internet** section (Figure 6).
3. In the dialog that opens, click **Change adapter settings**. A new window opens, listing all available network adapters. Select the adapter related to the physical ethernet plug on your PC, usually referred to as "ethernet" (Figure 7).
4. Once the ethernet adapter is selected, click **Change Settings of this connection** (Figure 8).

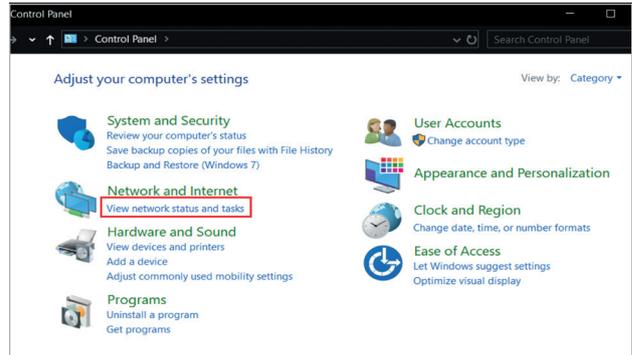


Figure 6. Opening the **View network status and tasks** menu.

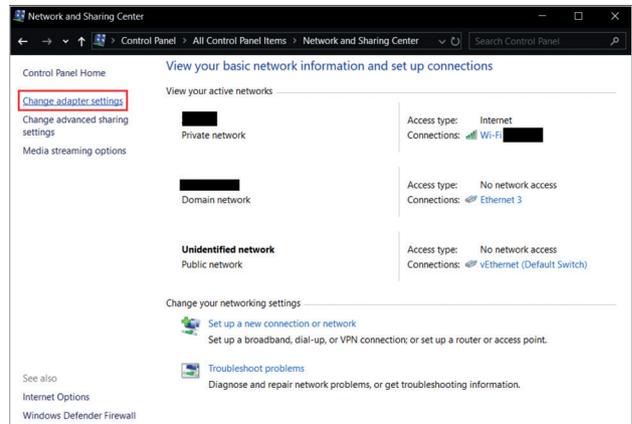


Figure 7. Configuring ethernet settings in **Change adapter settings**.

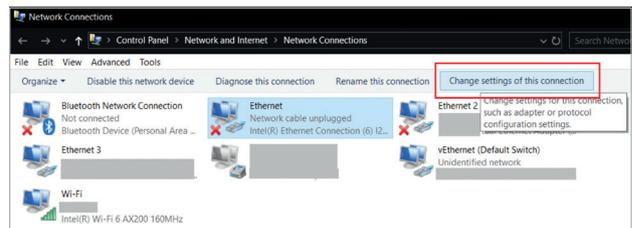


Figure 8. Changing the settings of the ethernet connection.

5. The **Ethernet Properties** window appears. Select **Internet Protocol version 4 (TCP/IPv4)** and tick the corresponding check box. Click **Properties** (Figure 9).
6. Select **Use the following IP address** and enter the following information (Figure 10):
 - 6a. **IPv4 Address:** 192.168.1.101
 - 6b. **Subnet mask:** 255.255.255.0
 - 6c. **Default gateway:** 192.168.1.1
7. Click **OK**.

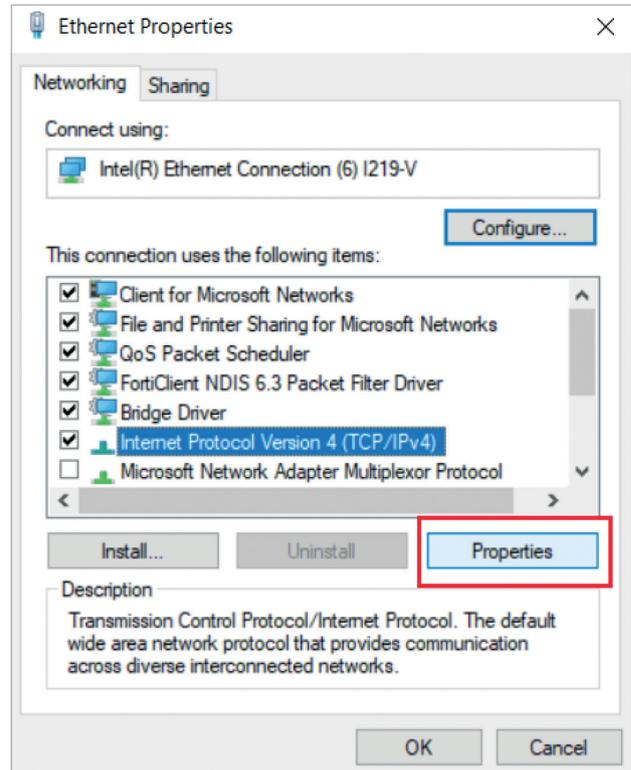


Figure 9. Ticking the **Internet Protocol Version 4 (TCP/IPv4)** checkbox.

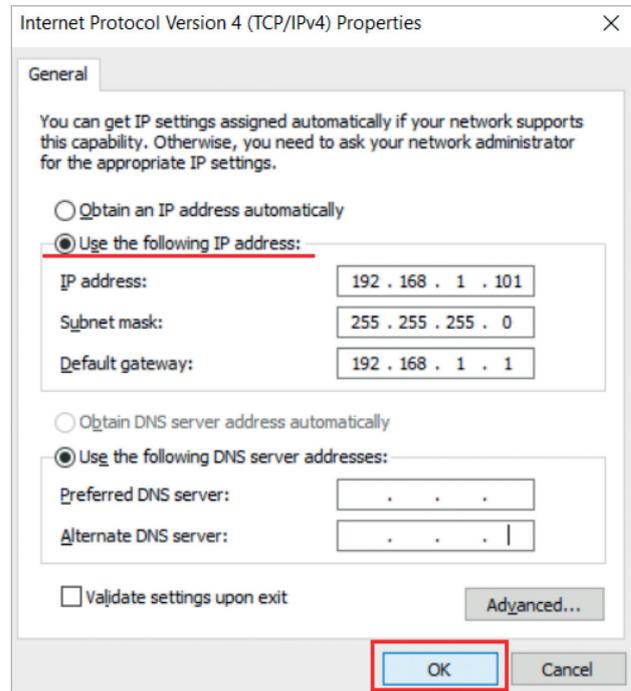


Figure 10. Configuring the **IP address settings**.

Frequently asked questions

These frequently asked questions address printer setup troubleshooting and provide guidance to avoid common printer issues

I am trying to access the CUPS page from my PC, but it does not accept the password. What can I do?

The CUPS password is case sensitive. If a particular CUPS password does not work despite being entered correctly, disable CUPS, save the option, re-enable CUPS and save the option to get a new password.

Where can I find the IP address of the QIAstat-Dx Analyzer?

You can find the IP address of your QIAstat-Dx Analyzer under [Settings](#) → [Network](#) → [IPv4 Settings](#) → [IPv4 Address](#).

The QIAstat-Dx Analyzer is not connected to a local network. How can I connect to the CUPS admin interface from my Windows PC?

- Follow the above step-by-step guide (according to the operating system of your PC) for how to connect your PC to the QIAstat-Dx Operational Module.
- Enable CUPS web interface from [Network](#) → [Enable Cups](#) (enabled).
- Follow the step-by-step guide about how to configure a printer from the CUPS interface.

My USB printer does not print using the generic printer driver. How can I install a custom printer driver?

Try to install a more specific driver for your printer via CUPS. For this purpose, follow the instructions for setting up network printers (see above). Ensure the QIAstat-Dx Analyzer and connecting PC are part of the same local network

(see “Network settings” of the *QIAstat-Dx Analyzer 1.0 User Manual*).

I configured my printer via CUPS, but it does not show up in the printer settings of the QIAstat-Dx application software. What can I do?

- Ensure that the printer is powered on and that the USB or network connection is established successfully.
- Your printer can be accessed via a generic printer driver that is pre-installed on the QIAstat-Dx Analyzer. Try to print via this driver (see “Printer settings” in the *QIAstat-Dx Analyzer 1.0 User Manual*).
- If a custom printer driver was already previously configured, power OFF the QIAstat-Dx Operational Module and then power ON again to make the driver available. To power OFF or ON, use the switch at the back of the instrument. The QIAstat-Dx application software detects the available printer drivers upon start up. When adding a new printer, the QIAstat-Dx Operational Module must be restarted before the new driver will be available.

The printer settings in [Options → System Config](#) of the application software do not show any printers. Also, the generic printer is missing. What can I do?

Re-install the generic printer driver via the CUPS page. Contact QIAGEN Technical Service to request the generic printer driver if it is unavailable.

I configured my printer via CUPS. When I click [Print](#), no report is printed. What can I do?

- Consider that it may take a few minutes to store a PDF report, which must be completed before the printer receives the print job. Avoid pressing the print button several times in a row. This may delay the print process even further.
- Note that, after clicking the print button, the print job may be spooled. To check if a print job is still queued, connect CUPS. On the CUPS page, click [Jobs](#) to review the printer queue on the subsequent page.
- Ensure that the printer being used is not reporting any error. For example, failed previous print jobs, a paper jam or an empty paper tray can cause an error. Be sure to solve these types of errors before printing.
- In CUPS, ensure that the appropriate media size and paper format as they are displayed or selected on your printer: some printers will not print if the paper format is wrong.
- In CUPS, check the status of your print jobs. This can be performed by navigating to [Jobs](#) or clicking the [Manage Jobs](#) button. If necessary, cancel existing and unfinished jobs, as they may block the QIAstat-Dx Analyzer from printing.
- In CUPS, try to print a test page. This can be performed by navigating to [Manage printers](#) and selecting your printer. From the maintenance drop-down, select [print test page](#).
- For network printers, it is preferred to use direct printing (Port 9100). The connections to this port should be checked to ensure they are not blocked by connecting via the socket:9100 protocol (Direct Printing) and setting the filter to [Generic PS](#) or [Generic PCL](#) in CUPS when adding a new printer.

I tried to configure a specific driver for my printer, but the list of drivers does not include my model. What can I do?

Use the most generic driver listed for your printer brand. In the case that none of the listed drivers works, download the CUPS printer driver as a ***PPD** file from the manufacturer's website and select **PPD File** before clicking [Add printer](#).

I tried to configure a driver for my printer, but the CUPS page is not accessible. What can I do?

- Ensure that the printer is connected via ethernet cable. Also, check switches or other hardware devices in your network infrastructure to ensure they are working properly.
- Ensure that the QIAstat-Dx Analyzer and connecting PC are part of the same network (e.g., same gateway, subnet mask).
- Ensure that your network infrastructure allows communication on port 631. Also, confirm that communication via the QIAstat-Dx Analyzer, connecting PC and network printer are allowed.
- Ensure that the QIAstat-Dx Analyzer and connecting PC are in the same local network. For security reasons, the accessibility of the CUPS page is limited to local networks. If possible, connect via a direct ethernet connection and assign static IPs from a private IP address range to the QIAstat-Dx Analyzer and PC.
- Ensure that CUPS is enabled on the QIAstat-Dx Analyzer. The current password is used as the password and expires after 24 hours.
- Clear the browser cache or try a different browser to avoid login credentials from previous login being used by the PC accessing the CUPS page.

CUPS shows that print jobs were canceled, but I did not cancel the print job. What does this mean?

If a print job is listed as cancelled and you did not cancel it, an incompatible printer driver might have been used. Try printing via the generic printer driver instead.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit instructions for use or user operator manual. QIAGEN instructions for use and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services (or your local distributor).

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