

## Guide to Direct Ethernet Connection

These instructions are for directly connecting a computer running Microsoft Windows OS (Version 7+) to a new VIRON Laser System using a crossover Ethernet cable. The VIRON is factory configured with a Static IP Address.

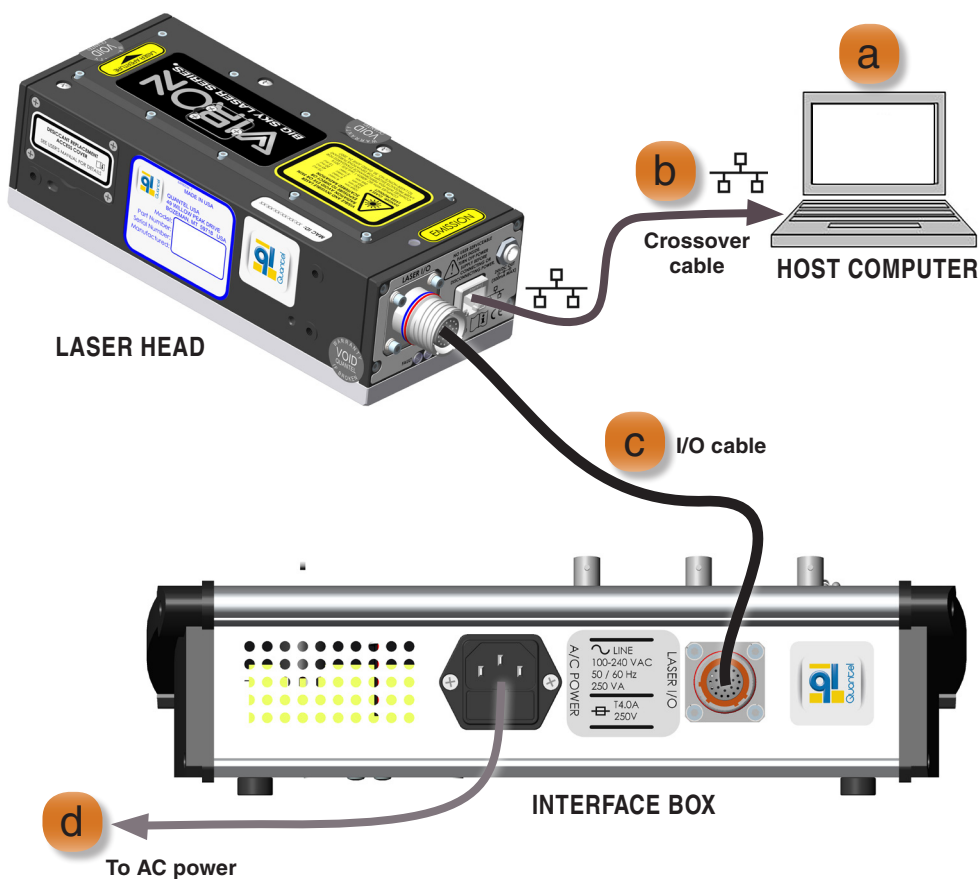
### 1 Read the User Manual.

Connect the USB memory device to a computer system and read the User Manual for important safety instructions and operation details. You can request additional copies from Quantel's customer service.



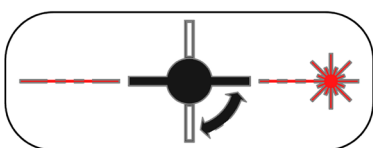
### 2 Connect the System.

- Provide an Ethernet capable host computer running Windows 7 or newer OS. **Disconnect the host computer from any LAN or WLAN.** It must be stand-alone.
- Connect the crossover Ethernet cable (PN 70100028LF) between the Laser Head and host computer Ethernet ports.
- Connect the I/O cable (PN 0036950X-X.X) between the Interface Box and the Laser Head.
- Connect the power cord from the Laser Head to AC power.

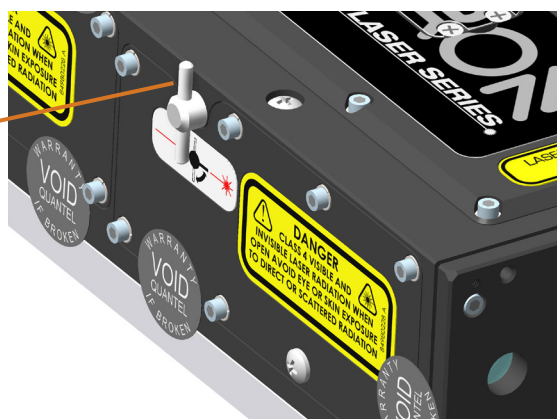


### 3 Close the Shutter.

Manual shutter is closed when the handle is in this orientation.



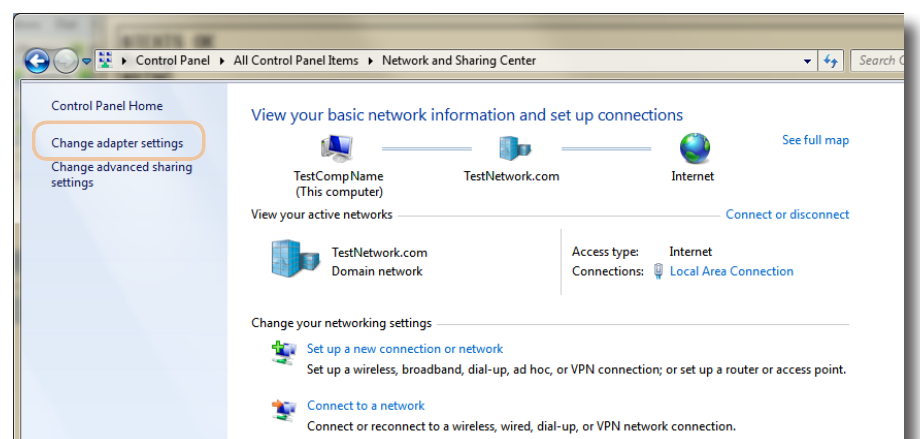
SHUTTER LABEL



Wear eye protection. Follow all safety precautions as though the system is capable of lasing at anytime while it is turned on.

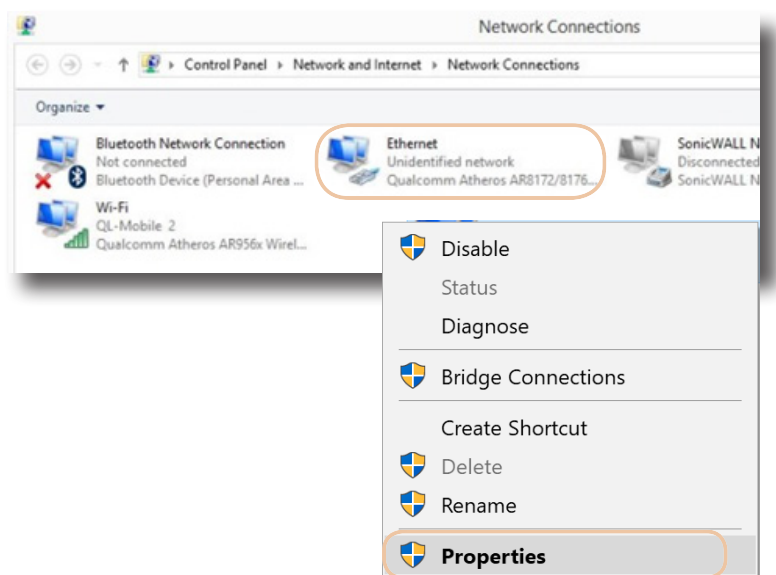
### 4 Setup the Host Computer.

- Ensure the host computer is not connected to any LAN or WLAN.
- From Windows, open the **Network and Sharing Center**.



- Select **Change Adapter Settings**.
- Select **Local Area Connection** as the network to configure.

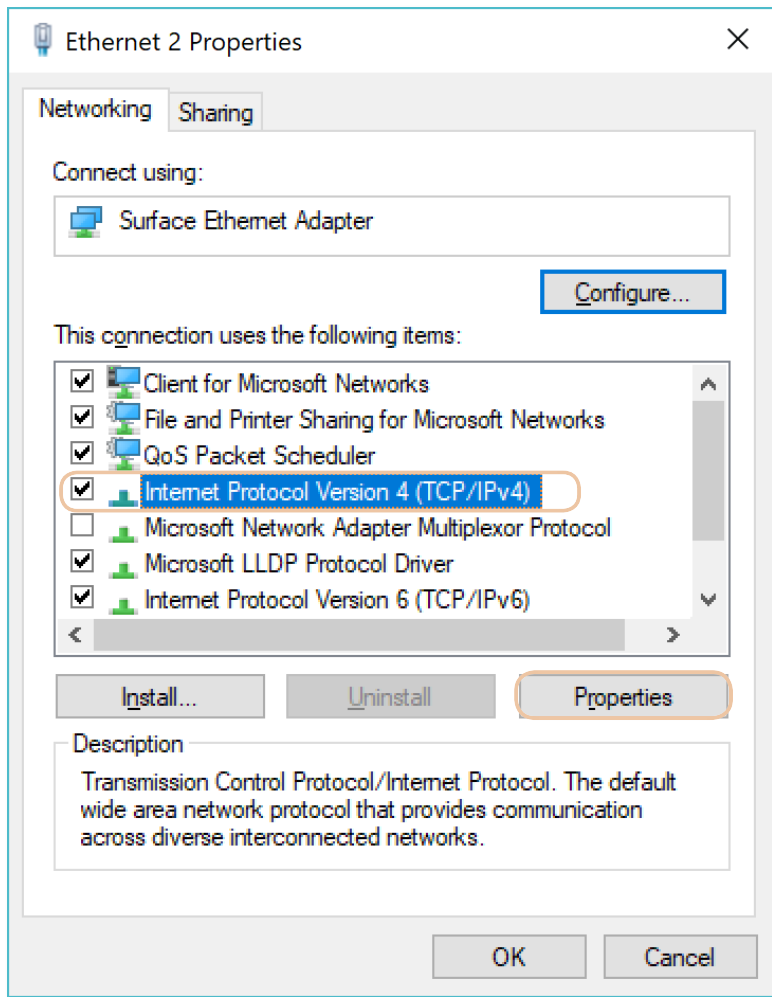
**Note:** If you don't see a Local Area Network option listed, look for an equivalent local area connection. For example it may show as Ethernet. Don't use a Bluetooth, or Wi-Fi network connection. You can check if you are configuring the correct one by turning the Viron on/off and noticing which network adjusts for the change.



- Right-click on the network. Choose **Properties** to show the Local Area Connection Status dialog box.

Continue to the reverse side of the page.





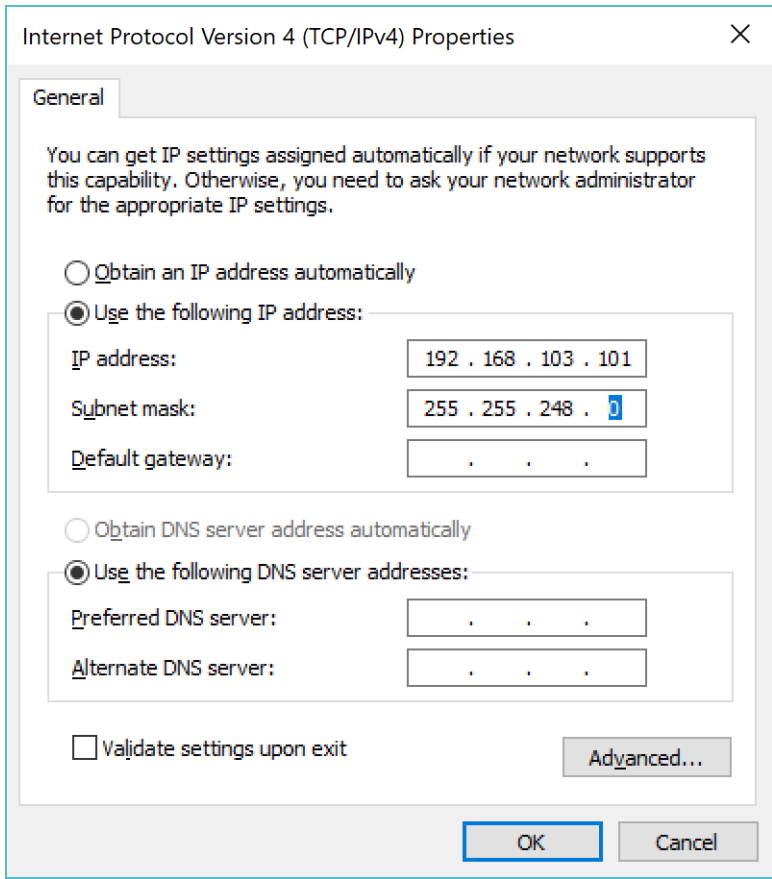
- Select **Internet Protocol Version 4 (TCP/IPv4)**. Use the scroll bar if needed.
- Click **Properties**.
- Record your original information in case you need to restore it later.

Original IP address:

\_\_\_\_\_ . \_\_\_\_\_ . \_\_\_\_\_ . \_\_\_\_\_

Original Subnet mask

\_\_\_\_\_ . \_\_\_\_\_ . \_\_\_\_\_ . \_\_\_\_\_



- Assign the following:  
static IP address 192.168.103.101  
subnet mask 255.255.248.0
- Click **OK** to close the dialog boxes.
- Click to **Close** the Local Area Connection dialog.

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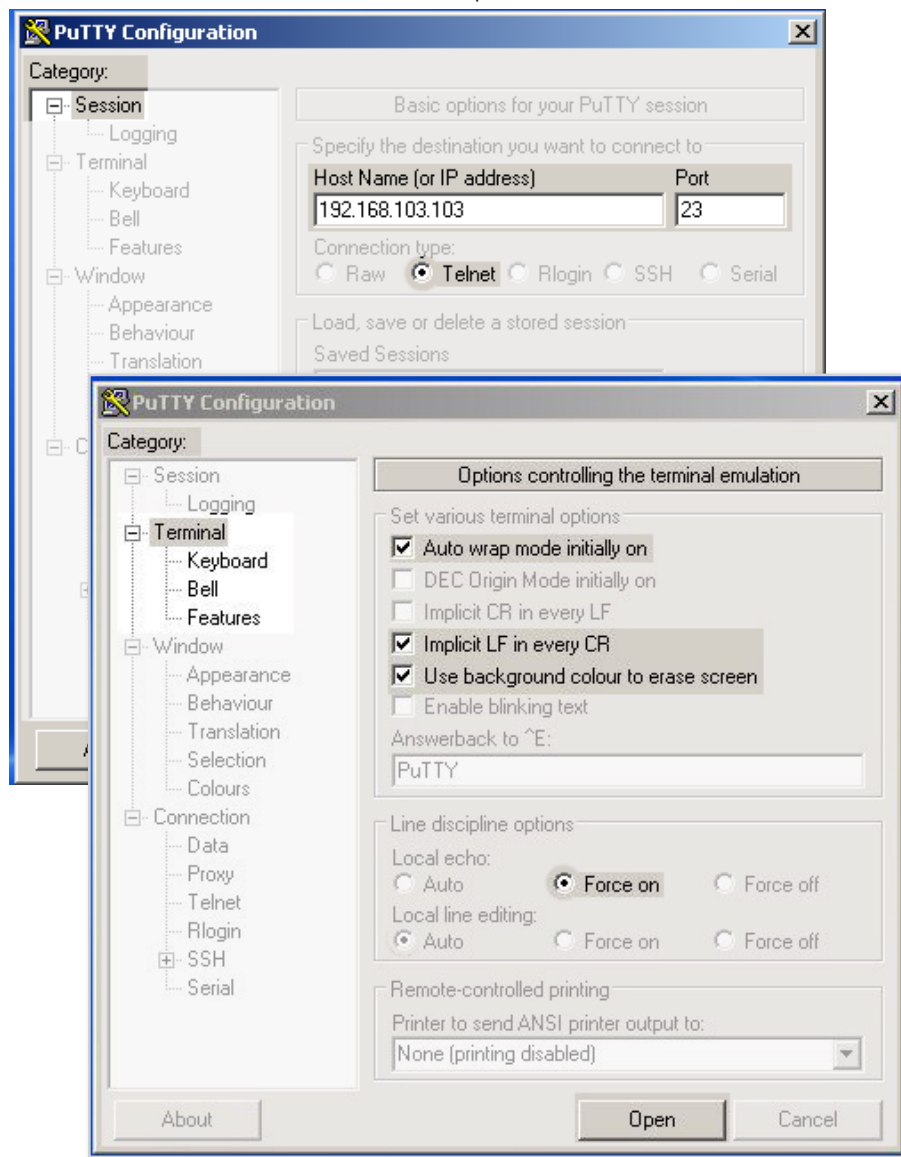
## Turn on the Laser System.

- Connect the Interface Box AC Mains power cord to 100-240 VAC, 50/60 Hz power.
- Turn on the Key Switch. The LEDs on the panel illuminate.

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## Launch PuTTY.

- Launch PuTTY or similar Telnet software. PuTTY is readily available from [putty.org](http://putty.org).
- From the **Session** category, set the following:  
Connection type: **Telnet**  
Host Name [or IP address]: **192.168.103.103**  
Port **23**
- Set the Terminal options as shown above.



- From the PuTTY session, click **Open** to establish communications with the laser. A command window appears with a cursor at the beginning of the command line.
- Enter **\$LOGIN VRABCDEF** where **ABCDEF** are the last 6 characters of the MAC ID from the laser label. The login is case-sensitive. If the login is successful, a *chirp* sound results.  
*Example:* MAC ID 00:80:A3:B9:4D:F3, enter **\$LOGIN VRB94DF3**.



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Your Viron system is now ready to accept commands. Remove the protective sticker from the laser aperture before lasing. **Always follow all safety procedures.**