

EXTENDED GUIDE: How to Connect the Aerocut Velocity/One/Prime/X/X Pro NETWORK CARD on a Local Area Network (LAN)

Create a Local IP Address for the Aerocut When installing the AeroCut on a Local Area Network

For the AeroCut to be recognized by Intellicut on the Local Area Network (LAN) a unique IP address must be programmed via a utility called WIZNET. You will need to identify and designate an IP address that is on your network to program into the Aerocut. Here we will describe a method to use to understand what a valid IP address for your network could be. We recommend you work with your network administrator in securing an IP address for the AeroCut that will work on your network.

How to Choose an IP Address

On the network PC that you have installed Intellicut, in the **Windows search menu type: ETHERNET SETTINGS** and select Ethernet Settings under windows System Settings, then drop down the ethernet network that the Aerocut is on. This will produce the network information in the screen shots below; the first showing a network in manual/static mode and the second showing the network in automatic/ dynamic mode. The information we are looking for is the network's IPv4 address and IPv4 gateway (if manual/static). From these IP addresses we can assign a Local IP for the Aerocut.

IP settings	
IP assignment:	Manual
IPv4 address:	10.1.10.42
IPv4 subnet prefix length:	24
IPv4 gateway:	10.1.10.1
IPv4 DNS servers:	75.75.75.75 75.75.76.76

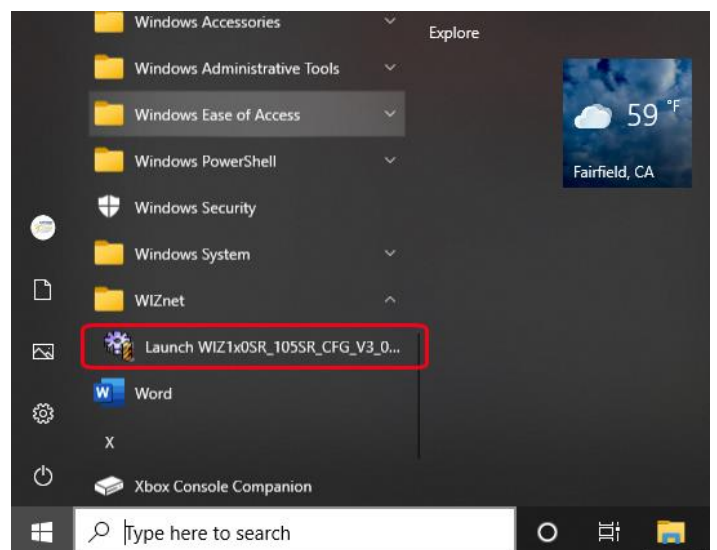
In this example we are showing two PCs on the same LAN; one has an IPv4 address of **10.1.10.42** and the other **10.1.10.252**.

IP assignment:	Automatic (DHCP)
DNS server assignment:	Automatic (DHCP)
Link speed (Receive/Transmit):	1000/1000 (Mbps)
IPv6 address:	2603:3024:32c:2100::846a 2603:3024:32c:2100:5d8:4d77:d694:457
Link-local IPv6 address:	fe80::5d8:4d77:d694:457%13
IPv6 DNS servers:	2001:558:feed::1 (Unencrypted) 2001:558:feed::2 (Unencrypted)
IPv4 address:	10.1.10.252
IPv4 DNS servers:	75.75.75.75 (Unencrypted) 75.75.76.76 (Unencrypted)

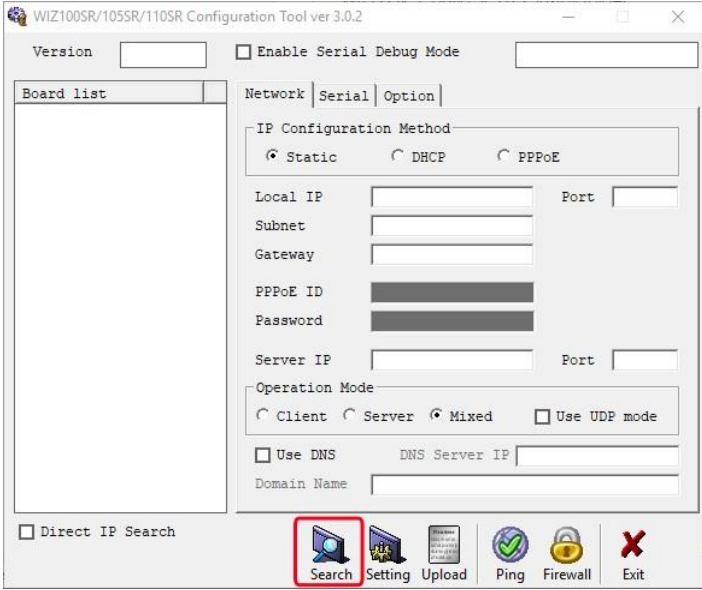
What is important to note is the first three numbers (in this case 10.1.10). Those will remain the same with the IPv4 address you select. You will then choose a unique 4th number between 2-255 that is not being used by another device on your LAN. In this example, we choose 155, so the Local IP we will program to the AeroCut will be 10.1.10.155. Keep in mind this is an example of sample network and probably is not the same as your network.

Programming the AeroCut with the WIZNET utility

The network card installed on the AeroCut is produced by WIZNET and comes with a configuration tool to program IP address onto the card. After installation of Intellicut, you will find file WIZ1xxSR_Config.zip in your Intellicut Program Files folder or can download it here: [WIZ1x0SR_105SR_CFG_V3_0_2.exe](#) Unzip this file and then **Run Install.exe**. Before running the WIZNET application from your windows menu, ensure your AeroCut is turned on and connected to your network through an Ethernet cable and the AeroCut screen is on the main menu. **Launch WIZNET.**

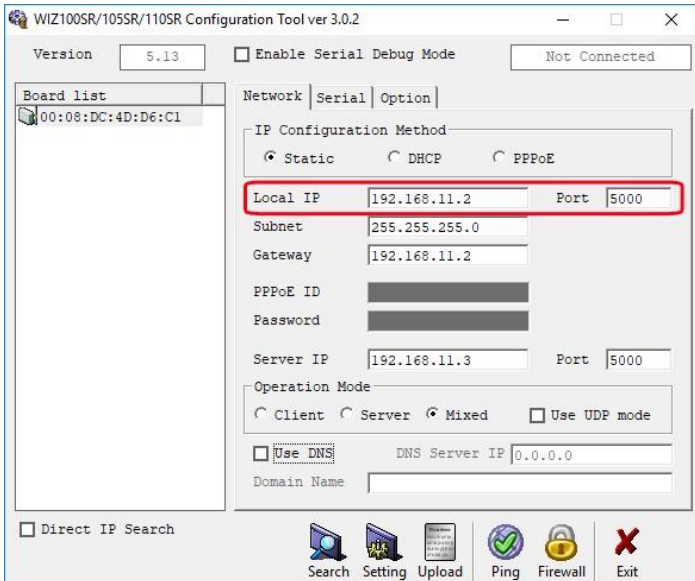


When you launch WIZNET, you will see this screen:

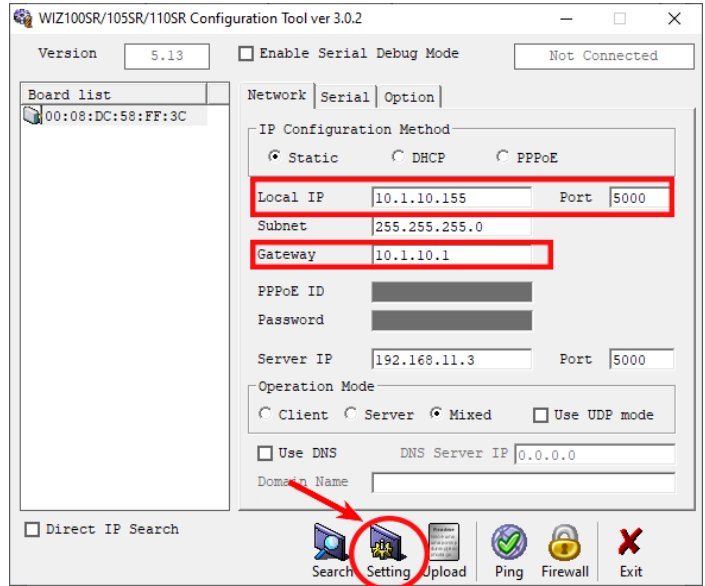


Steps to program the AeroCut Network Card:

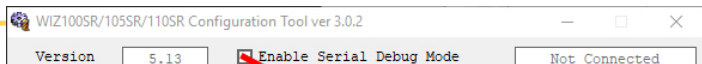
1. Click on the Search button.
2. The AeroCut should be found on your network and show under Board List. Select the AeroCut listed in the board list and this will display the configuration of the Aerocut's network card.
3. Verify that the IP Configuration Method is Static. If the machine has never been programmed then the Local IP and Gateway will be the default card value of 192.168.11.2, otherwise the value could have been programmed during testing or demonstration of the machine to another IP address.



4. Program the **Local IP** and **Gateway IP** with the values determined on page one. For the Local IP use the first three numbers from the network IP, and then the fourth number you have assigned with a unique value of 1-255. For the Gateway, this is usually the first three numbers of your IP with the fourth number being a 1. For our example the Local IP is 10.1.10.155 and the Gateway is 10.1.10.1. Verify the port is 5000 and the subnet mask is 255.255.255.0. The default IP of 192.168.11.2 cannot be used and must be changed. **Click on the Settings button at the bottom to store changes.**



5. Click on the Serial tab (shown below). The values shown above must match what is shown on your screen. Typically, the Speed defaults to 57600. Change this to 38400 using the drop-down. If any changes were made, **click on the Setting button to store these values to your WizNet board.** You may now exit the Wiznet software.



HOW TO PROGRAM THE AEROCUT Velocity/One/Prime/X/X Pro NETWORK CARD with a direct Ethernet Connection

Connecting a laptop to the Aerocut with a Direct Ethernet connection

Another method that we recommend to program the AeroCut WIZNET card and test the connection is to connect a laptop directly to the AeroCut via an Ethernet cable. This method allows you to validate that communication can be established with Intellicut and the AeroCut before getting other network issues involved.

To begin, connect the laptop with an ethernet cable. If your laptop does not have an ethernet port, you can purchase a USB->ethernet cable adapter. In the Windows search menu type: ETHERNET SETTINGS and select the ethernet network.

Ethernet



Unidentified network
No Internet

Click Edit under IP Settings. Be sure to set this to Manual (if automatic) and click IP4 to ON. You will need to complete the network settings; remember this is just so that you can communicate directly with the AeroCut; if your laptop has Manual settings you can leave them and note the first three numbers of the IP address. If not, use the settings in the example to the right. Remember to switch the IP Settings to Automatic after you are done in order to reconnect to your network.

Edit IP settings

Manual

IPv4

On

IP address

10.1.10.33

Subnet prefix length

24

Gateway

10.1.10.1

Preferred DNS

75.75.75.75

Alternate DNS

75.75.75.76

Proceed to **Steps to program the AeroCut Network Card** on the previous page.