

I have a Huddlecams but I need to control it over my network, is that possible?

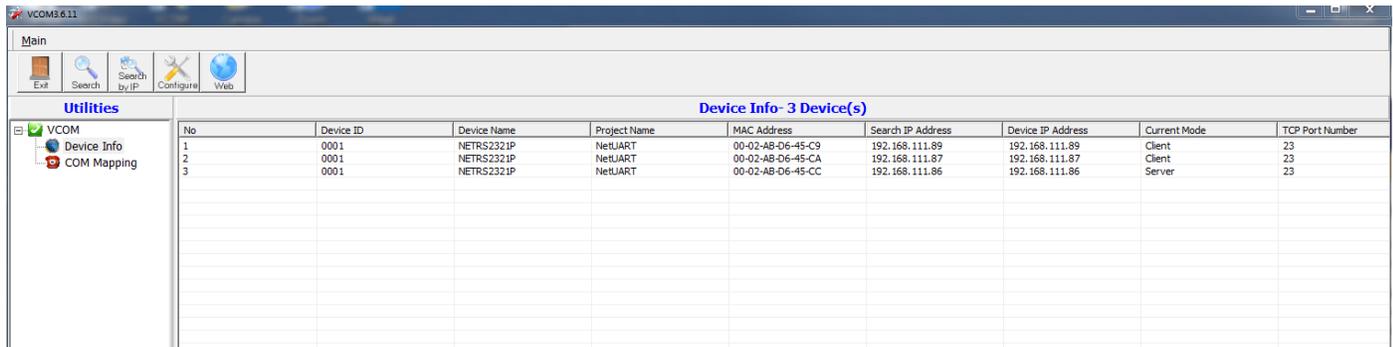
There are a variety of devices out there that can handle VISCA control over your network, the main issue is these devices can be pretty difficult to set up. I am going to run through using the [Startech NETS2321P](#) to control a Huddlecams over your network.

The first thing I want to mention is that there are 2 main ways to do this. Using TCP you get a direct connection between 2 devices. With the UDP mode, you point one unit to multiple others. This way you can use one joystick or PC to control up to 7 cameras. I would recommend the UDP mode since it is very versatile and works perfectly even with one camera.

So with this setup, you will need one of these Startech pieces for each camera you want to control as well as the joystick or PC you wish to control the cameras with. So if you need 5 cameras, you would get 6 devices.

These devices work by sending serial commands over your network, so naturally the first thing you want to do is set the IP addresses of your devices to be something static in the range of your network (if you need help figuring out your IP range please ask your network admin, or see the extras section at the end of this guide).

If you download the program that comes on the little CD in your device box, you will get access to the VCOM software that lets you see the IP address of any of these devices on your network. If you don't have a CD drive please download the software [here](#). So at this point, plug in all of the devices to the network and make sure they have power.



The screenshot shows the VCOM3.6.11 software interface. The main window displays a table titled "Device Info- 3 Device(s)". The table has the following columns: No, Device ID, Device Name, Project Name, MAC Address, Search IP Address, Device IP Address, Current Mode, and TCP Port Number. The data in the table is as follows:

No	Device ID	Device Name	Project Name	MAC Address	Search IP Address	Device IP Address	Current Mode	TCP Port Number
1	0001	NETS2321P	NetUART	00-02-AB-D6-45-C9	192.168.111.89	192.168.111.89	Client	23
2	0001	NETS2321P	NetUART	00-02-AB-D6-45-CA	192.168.111.87	192.168.111.87	Client	23
3	0001	NETS2321P	NetUART	00-02-AB-D6-45-CC	192.168.111.86	192.168.111.86	Server	23

If you start the VCOM software and hit "search" in the upper left you should get a list of all your Startech devices that are currently on your network and their IP address. All of your devices should have an IP address of 10.1.1.1 as their default. The next step is to change the IP address of your computer to be in the same range as these devices so you can connect and change their IP address to something in your networks range. If you could please follow [this guide](#) it will walk you through setting your computer to a static IP address. You would want that address to 10.1.1.2 in this case.

Now, unplug all of the Startech pieces except one. This is the one you want to be your master unit, or the one that will be used by the joystick. Type in the IP address of the unit (10.1.1.1) into a search engine (we recommend you [download Opera](#) and use that) you should then be prompted for an ID and password, they are both **admin**.

You should be greeted with a simple IP interface that will let you adjust all the settings on your device. The first thing you will want to do is put in the IP address you want this device to use to be on your network. Do this by going to the “System IP” tab on the left side of the page. You should see this

StarTech.com® **System IP Configuration**

- ⊕ Administrator
 - [Authentication](#)
 - [System IP](#)
 - [System Status](#)
 - [Load default setting](#)
 - [Firmware update](#)
- ⊕ TCP Mode
- ⊕ UDP Mode
- ⊕ UART
- ⊕ Reset Device

Setting	Value
IP Address	192 . 168 . 111 . 86
Subnet Mask	255 . 0 . 0 . 0
Gateway	192 . 168 . 111 . 1
DNS	8 . 8 . 8 . 8
IP Configure	<input checked="" type="radio"/> Static <input type="radio"/> DHCP
VLAN Tag	<input checked="" type="radio"/> Disable <input type="radio"/> Enable : VLAN ID 1 (1-4094)

Change your IP address, and then change your gateway to match (the first 3 sets of numbers should be the same, but you can leave the last digit a 1 just as I have done in my above picture. The DNS should be 8.8.8.8. These are googles DNS servers that they leave open for the public and are very reliable. Once you finish please press the update button.

You should be able to repeat this process for any more of the Startech devices that you plan on using, giving each of them their own unique IP address. It is always recommended to write the IP address down for each device.

Now that all of your Startech devices are on the network, you can go back to the first one you set up which is going to be our master unit. If you go into the IP interface for that unit, and go to UDP mode on the left, you should see this screen.

StarTech.com® **UDP**

- ⊕ Administrator
 - [Authentication](#)
 - [System IP](#)
 - [System Status](#)
 - [Load default setting](#)
 - [Firmware update](#)
- ⊕ TCP Mode
- ⊕ UDP Mode
- ⊕ UART
- ⊕ Reset Device

Item	Value												
Mode	<input type="radio"/> Listen <input checked="" type="radio"/> Normal <input type="radio"/> Disable												
Local Port	21												
Remote Address	<table border="1"> <thead> <tr> <th>IP</th> <th>Port</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="radio"/> 192 . 168 . 111 . 87 IP <input type="radio"/> 0 Domain Name</td> <td>21</td> </tr> <tr> <td><input checked="" type="radio"/> 192 . 168 . 111 . 89 IP <input type="radio"/> 0 Domain Name</td> <td>21</td> </tr> <tr> <td><input checked="" type="radio"/> 0 . 0 . 0 . 0 IP <input type="radio"/> 0 Domain Name</td> <td>0</td> </tr> <tr> <td><input checked="" type="radio"/> 0 . 0 . 0 . 0 IP <input type="radio"/> 0 Domain Name</td> <td>0</td> </tr> <tr> <td><input checked="" type="radio"/> 0 . 0 . 0 . 0 IP <input type="radio"/> 0 Domain Name</td> <td>0</td> </tr> </tbody> </table>	IP	Port	<input checked="" type="radio"/> 192 . 168 . 111 . 87 IP <input type="radio"/> 0 Domain Name	21	<input checked="" type="radio"/> 192 . 168 . 111 . 89 IP <input type="radio"/> 0 Domain Name	21	<input checked="" type="radio"/> 0 . 0 . 0 . 0 IP <input type="radio"/> 0 Domain Name	0	<input checked="" type="radio"/> 0 . 0 . 0 . 0 IP <input type="radio"/> 0 Domain Name	0	<input checked="" type="radio"/> 0 . 0 . 0 . 0 IP <input type="radio"/> 0 Domain Name	0
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What you are going to want to do, is leave this device in “normal” mode, and then type in the IP addresses of all of your other Startech units (the port is 21). In my example above, I have 2 other devices that are connected. One this is complete, be sure to hit the “update” button at the bottom of the page.

Now, you are going to go into the IP interface for each of the slave units. For each one, you want to point the unit to the master unit. So in my example below, 192.168.111.86 is my master unit, and I am pointing my other Startech pieces back to that IP address, and on the master unit, I am pointing towards all the slave units.

Item	Value	
Mode	<input type="radio"/> Listen <input checked="" type="radio"/> Normal <input type="radio"/> Disable	
Local Port	<input type="text" value="21"/>	
	IP	Port
	<input checked="" type="radio"/> <input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="111"/> . <input type="text" value="86"/> IP	<input type="text" value="21"/>
	<input type="radio"/> <input type="text" value="0"/> Domain Name	
	<input checked="" type="radio"/> <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> IP	<input type="text" value="0"/>
	<input type="radio"/> <input type="text" value="0"/> Domain Name	

The last thing you will need to do to get control of your camera over the network is to set the Baud rate of each Startech device to be the same as your camera. All of the cameras come out of the box set to be 9600 Baud rate. So if you log into the IP interface of each unit, and then go to the UART tab, you would then change the Baud rate to be 9600.

You should now have control of your cameras over the network. Sometimes it will take a minute or so for the control to kick in, be sure to be patient. Make sure each camera has a different VISCA address, if you need to know how to do this please see [this guide](#).

EXTRAS

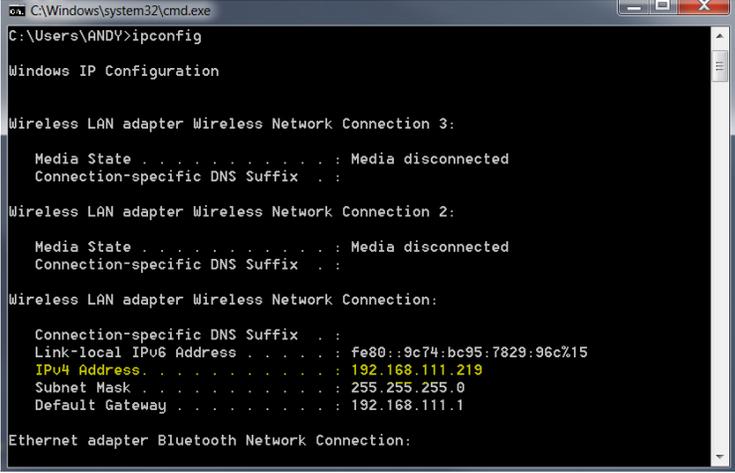
1. **Discovering your Network IP range.** *NOTE: Changing your IP address without talking to your network admin could lead to conflicts with your network. If you change your address to one that is already in use it will cause communication problems.*

If you need to discover the IP address range of your network you can do so by using command prompt for Windows or Terminal for Macs.

To do this on a PC, you would type "CMD" into your search bar in the Windows menu. You should see a black box pop up with the ability to type in the box.

If you type "ipconfig" and hit "Enter" on your keyboard you will see a bunch of information pop up in your command prompt.

When you see “IPv4 Address” that is your computers IP address on your current network. So you would use the first 3 sets of numbers from this as your IP range.



```
C:\Windows\system32\cmd.exe
C:\Users\ANDY>ipconfig

Windows IP Configuration

Wireless LAN adapter Wireless Network Connection 3:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Wireless Network Connection 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Wireless Network Connection:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::9c74:bc95:7829:96c%15
    IPv4 Address. . . . . : 192.168.111.219
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.111.1

Ethernet adapter Bluetooth Network Connection:
```

If you need to find the IP range of your MAC computer, you would first open a new finder window and then go to Applications, and then Utilities. You should see the program “Terminal” in that menu, select that program.

Now, you would type in “IP config getifaddr en0” Once you type this string and click “Enter” on your keyboard you will receive back an IP address.

So the IP range of my network, according to my MAC is 192.168.111.xxx, you can use this to figure out the IP range in which your camera needs to be set.