

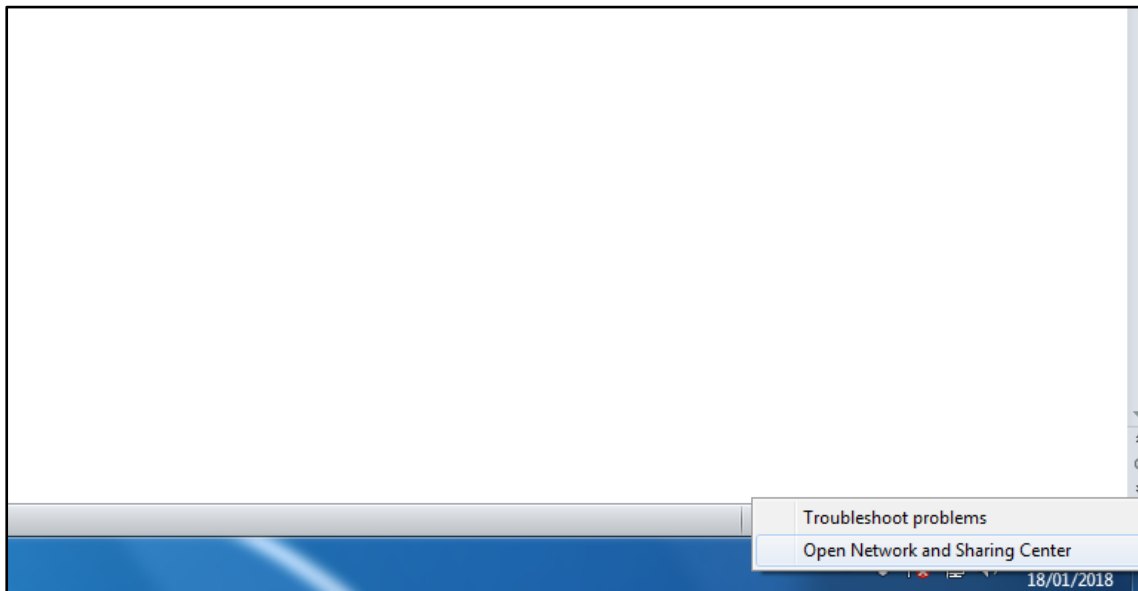
## UDP IP Multicaster / Receiver setup info:

Although the IP Interface Modules are factory set to just plug into a network you may need to change the IP Addresses to avoid conflicts with other devices or work on a different network.

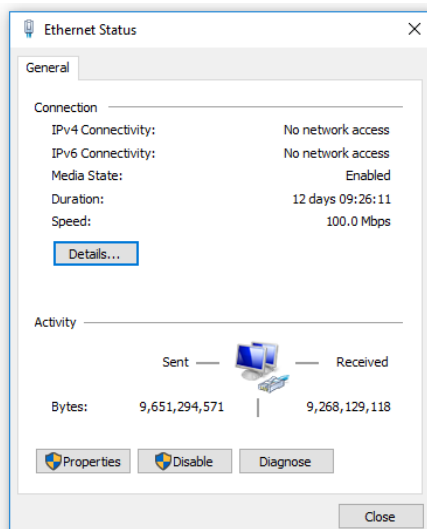
The sending IP Interface is configured as a **Multicaster**. This can be a stand-alone unit or built-in to the controller.

### **MULTICASTER - Changing of addresses and settings.**

Power the Multicaster via the XLR 4 power lead provided or via the MFC, and make sure that the RJ45 plug is connected. After this set in the bottom right hand corner of the taskbar and click "**OPEN NETWORK AND SHARING CENTRE**"

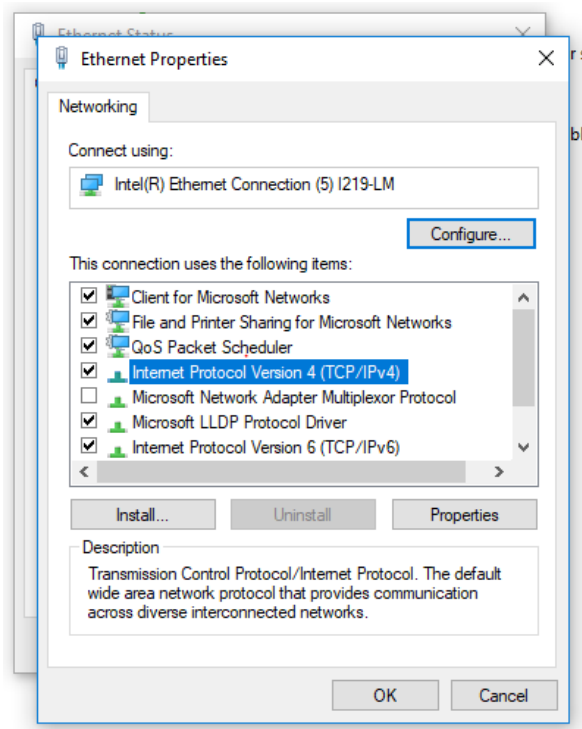


2. Once you have opened this new tab, the page should look like below. Click the '**Local Area Connection**' or '**Network and Sharing Centre**'. You will now need to click on '**Ethernet**' or '**Local Area Network**'



Click '**Properties**'

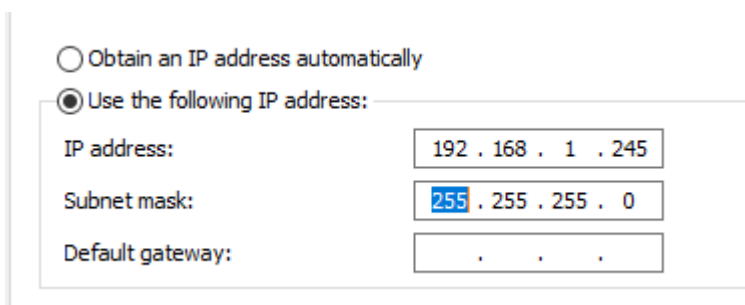
## UDP IP Multicaster / Receiver setup info:



Then select  
**'Internet Protocol Version 4 (TCP/IPv4)'**

Select **'Properties'** again.

This will open a 3<sup>rd</sup> popup window which will allow you to set the IP address of your computer. You should now set it to the same subnet as the IP Interface you want to connect to. The subnet is usually the first 3 numbers of the IP address -192.168.1 – for example. You must input an IP address that does no conflict with anything else on the same subnet .ie: if the Multicaster in the MFC is 192.168.1.240 and the IP receiver at the camera is 192.168.1.202 they are on the subnet (192.168.1.) Set your PC address to 192.168.1.245, for example, as this will not conflict with any of the other addresses.



Click **'Use the following IP address'**

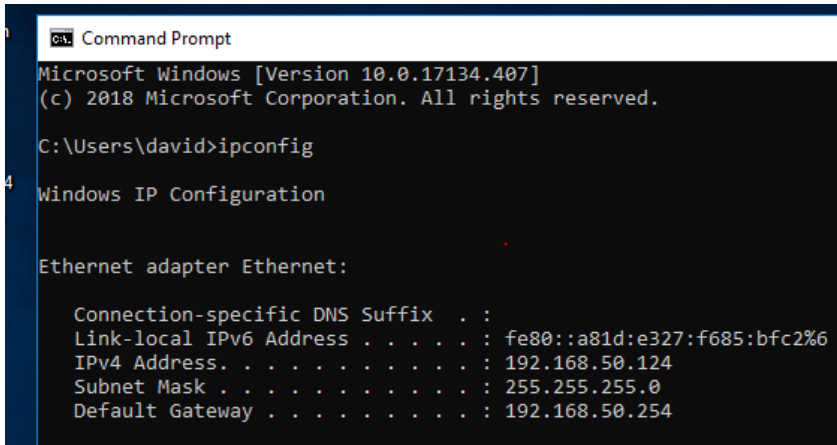
Then enter the address;  
192.168.1.245 for example.

In this example, the subnet mask tells us that the subnet address is the first 3 numbers (192.168.1) and the device (pc) address is the last number (245)

## UDP IP Multicaster / Receiver setup info:

Click **OK**. Then you might need to close the popup for the change to happen. This will then switch your PC to the correct subnet to be able to communicate and change the settings of the IP units.

It might fill in the subnet mask automatically, if not enter the numbers as shown.



```
Command Prompt
Microsoft Windows [Version 10.0.17134.407]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\david>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix . : 
    Link-local IPv6 Address . . . . . : fe80::a81d:e327:f685:bfc2%6
    IPv4 Address. . . . . : 192.168.50.124
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.50.254
```

You can check the new IP address of your PC by using the **'Command Prompt'** window. Search for this in the windows search box.

Type **'ipconfig'** and then hit **Enter**.

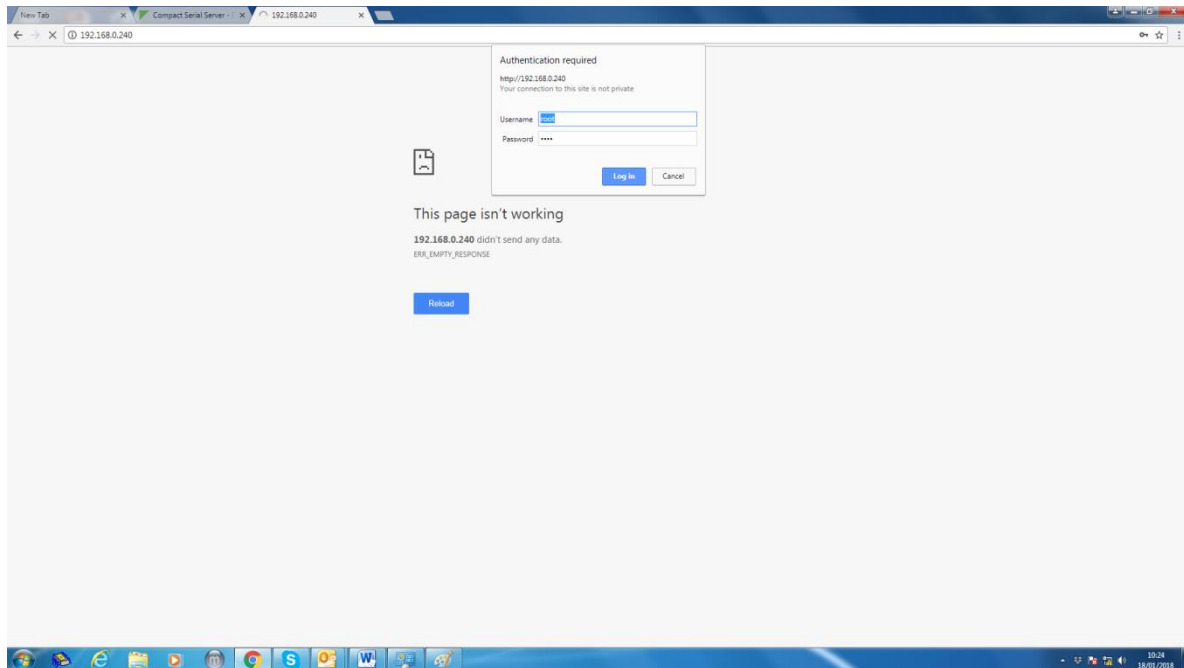
The **IPv4 Address** will confirm the address.

Now open a web browser. (This could be chrome, edge or whatever you use it doesn't matter). In the task bar type the IP address of the Multicaster / Receiver that you wish to change (This should be printed onto the unit itself for easy identification). A login box will appear. This will allow you to log into the receiver that you are addressing. The default login & passcode are:

- **USERNAME: root**
- **PASSWORD: dbps**

The password and log in can be changed in the security tab of the web based settings page. If you are operating in a public environment then we suggest you change this to something else. As **"root"** and **"dbps"** are the default logins for all units.

# UDP IP Multicaster / Receiver setup info:



Once you have logged in, you can change the IP address of the IP module by clicking **'Network'**.

Home

**Configuration**

- Network**
- Serial Port
- Security
- System

**Management**

- Serial Ports
- Connections

**Administration**

- Backup/Restore
- Update Firmware
- Factory Default Settings
- Device Information
- Reboot

Logout

**Network Configuration**

**IP Settings**

Obtain an IP address automatically using DHCP \*  
 Use the following IP address:

\* IP Address:

\* Subnet Mask:

Default Gateway:

\* Changes to DHCP, IP address and Subnet Mask require a reboot to take effect.

▶ DNS Settings

▶ Advanced Network Settings

Set the IP address of the Multicaster like the example above.

# UDP IP Multicaster / Receiver setup info:

Now click '**Serial Port**'. Enter as many destination IP addresses as you need. Normally these will be on the same subnet but sometimes, if you are routing via a router, you can set different subnets.

Home

**Configuration**

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**Serial Port Configuration**

▼ **Port Profile**

Current Port Profile: **UDP Sockets** [Change Profile...](#)

The UDP Sockets Profile allows a serial device to communicate using UDP.

**Profile Settings**

**UDP Server**

The serial device receives data from one or multiple systems/devices on the network

UDP Port: 2101

**UDP Client**

Serial data received is automatically returned to the last UDP client that sent data. You more IP and port pairs below. All serial data is repeated as UDP unicast to all devices

Send data to:

Description	Send To	UDP Port	
Cam 1	192.168.51.41	2101	<a href="#">Remove</a>
Cam 2	192.168.51.42	2101	<a href="#">Remove</a>
Cam 3	192.168.51.43	2101	<a href="#">Remove</a>
Cam 4	192.168.51.44	2101	<a href="#">Remove</a>
dest5	192.168.1.41	2101	<a href="#">Remove</a>
dest6	192.168.1.42	2101	<a href="#">Remove</a>
dest7	192.168.1.43	2101	<a href="#">Remove</a>
Dest8	192.168.1.44	2101	<a href="#">Remove</a>
dest9	0.0.0.0	0	<a href="#">Add</a>

Send data when the following string is found

- CR (carriage return)
- CR/LF (carriage return/line feed)
- Custom string
- 
- Strip string before sending

Send data after the following number of idle milliseconds

ms

Force sending data after the following number of bytes (limits UDP packet size)

bytes

The **standard UDP port is "2101"**. Make sure that the **"send data after the following number of milliseconds"** is set to **1 millisecond**; also as seen in the picture make sure that **"force sending data after the following number of bytes"** is set to **10 Bytes**. If this is not set correctly it will add undesired latency into the system.

## UDP IP Multicaster / Receiver setup info:

Then click “**Basic Serial**” settings make sure the flow control is set to “**NONE**”.

The screenshot shows the 'Serial Port Configuration' page. On the left is a navigation menu with sections: Home, Configuration (Network, Serial Port, Security, System), Management (Serial Ports, Connections), Administration (Backup/Restore, Update Firmware, Factory Default Settings, Device Information, Reboot), and Logout. The 'Serial Port' menu item is highlighted. The main content area has a dark blue header 'Serial Port Configuration'. Below it are expandable sections: 'Port Profile', 'Basic Serial Settings' (expanded), 'Port Security Settings', 'Advanced Serial Settings', and 'Restore Factory Serial Port Settings'. The 'Basic Serial Settings' section contains: Description (text input), Baud Rate (9600), Data Bits (8), Parity (None), Stop Bits (1), and Flow Control (None). An 'Apply' button is located below these settings.

The last thing is to click ‘**System**’ and set the optimization to ‘*Latency*’.

The screenshot shows the 'System Configuration' page. The left navigation menu is the same as in the previous screenshot, but the 'System' menu item is highlighted. The main content area has a dark blue header 'System Configuration'. Below it is an expanded 'System' section with an 'Optimization' dropdown menu set to 'Latency'. An 'Apply' button is located below the dropdown. At the bottom, there is a 'Web Interface' link.

# UDP IP Multicaster / Receiver setup info:

## Changing the IP Receivers settings:

The IP receivers are set up in the same way as the Multicaster however there is no need to set any destination addresses.

Make sure the IP address of the receivers (cameras) is set to one of the destination addresses set in the Multicaster.

In this case the receiver address is set to match Dest1 (192.168.1.41) in the Multicaster.

Don't forget to return you pc address back to your internal network address when you have finished.

Go back to your Ethernet Properties and select;

***'Obtain an IP address automatically'***