

# FCU320PRO – ETHERNET Version

The package include the FCU320PRO, 12Vdc power supply and 3mt Ethernet cable



# Verify the classful of your network

If your network is already a “C” class ( normally are “C” class) you have only to check that the 192.168.1.40 is a free address and not already used from some other computer or device. Refer to the table below to see what is your network class.

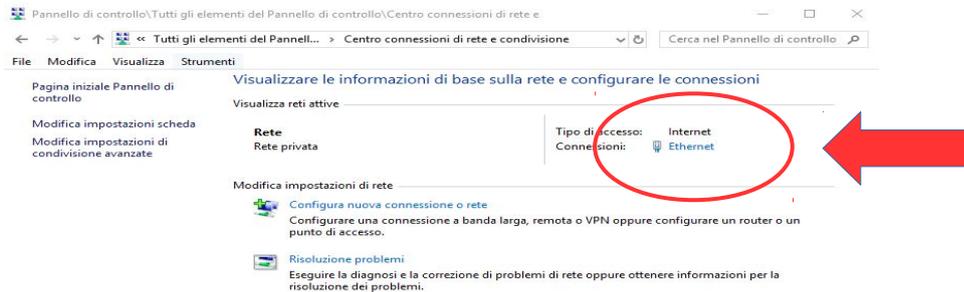
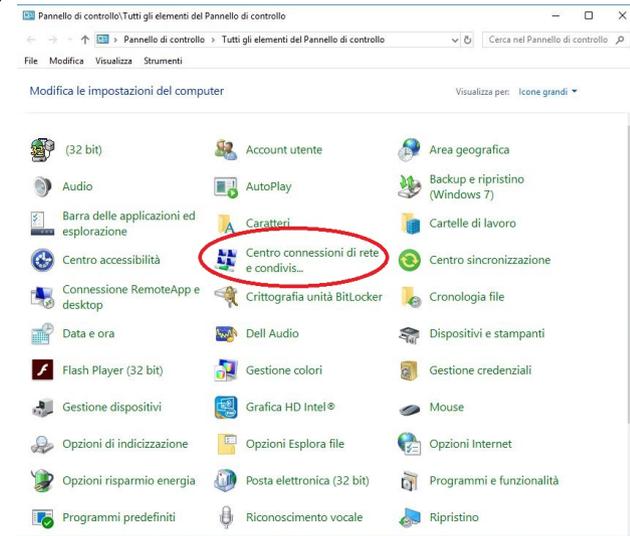
Differently if your network belongs to another class you need to modify the FCU320PRO ip address to match with the class network. For example if your network is a “B” class and the ip address of your PC is 128.95.1.10 you need to modify the FCU ip. For example with this value 128.95.1.20.

Remember to modify this value into the ini file too.

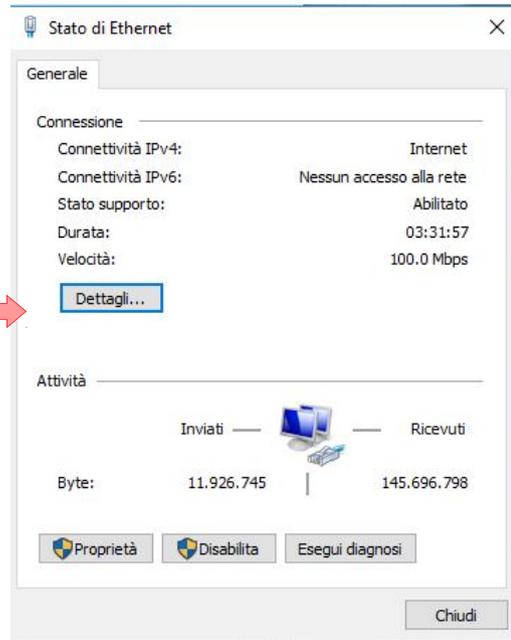
Class	Start Bit	<u>start interval</u>	End interval
A	0	0.0.0.0	127.255.255.255
B	10	128.0.0.0	191.255.255.255
C	110	192.0.0.0	223.255.255.255
D (multicast)	1110	224.0.0.0	239.255.255.255
E	1111	240.0.0.0	255.255.255.255

# Check the classful of your network

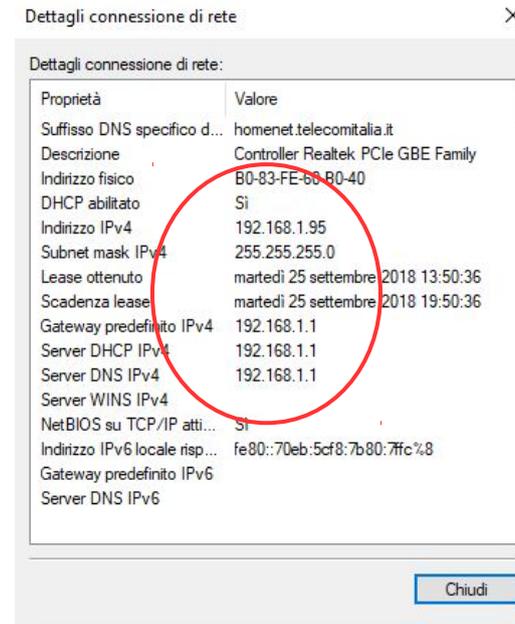
Open the control panel and select “network and sharing center” like in the image at side



Select Details →



....and

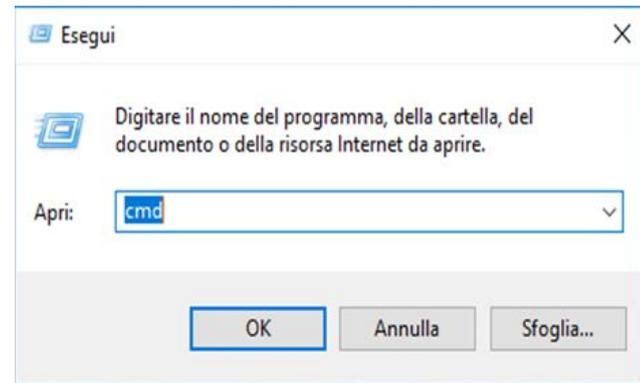


In this example the network class is "C" and the computer ip is 192.168.1.95, so the default MCP address ( unless there is another computer or device with this address in the network ) should already work.

# Test the connectivity

To check if the FCU is now able to receive and send command in your network you can use the ping command

Execute “run” utility and in the window write the command cmd.



In this window write the command ping 192.168.1.40 and if all is ok you will be able to read that four message are sent and four message are received

```
C:\WINDOWS\system32\cmd.exe
C:\Users\Paolo>ping 192.168.1.40

Esecuzione di Ping 192.168.1.40 con 32 byte di dati:
Risposta da 192.168.1.40: byte=32 durata<1ms TTL=128

Statistiche Ping per 192.168.1.40:
    Pacchetti: Trasmessi = 4, Ricevuti = 4,
    Persi = 0 (0% persi),
Tempo approssimativo percorsi andata/ritorno in millisecondi:
    Minimo = 0ms, Massimo = 0ms, Medio = 0ms

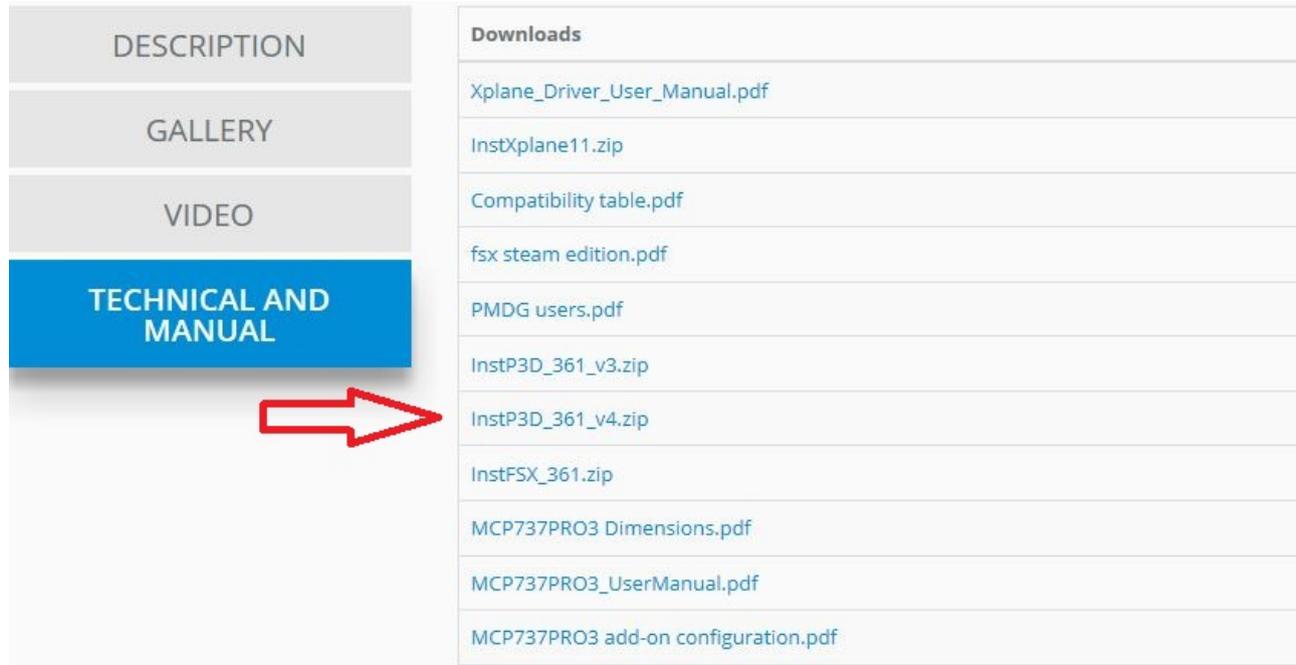
C:\Users\Paolo>
```

# Download the communication driver

From CPflight web site download the communication driver, take care to select the right version because have to match with the simulator version installed on your computer. In this example was the version for P3D V4. Is warmly suggested to install the Cpflight driver also if you use addon like Prosim A320, Jee hell or Project Magenta because is included a tool helpful to check the hardware

To see in the simlator addon menu bar ( FSX and P3D users ) is mandatory to install the Cpflight driver under the simulator folder, differently the simulator will not add the Cpfligh menu to the add-on menu bar of the simulator (only for mFSX or P3D version ). In case of use of FS2020 you can install the Cpflight driver in any folder of your computer

If, for example, you have installed FSX under C:\ you have to install the driver like a subfolder of FSX so in this case you have c:\Microsoft Flight SimulatorX\CPflight. In case of P3D c:\LockHeed\Martin\Prepar3D Vx\CPflight. In case of Steam edition c:\Steam\Steamapps\Common\FSX\CPflight



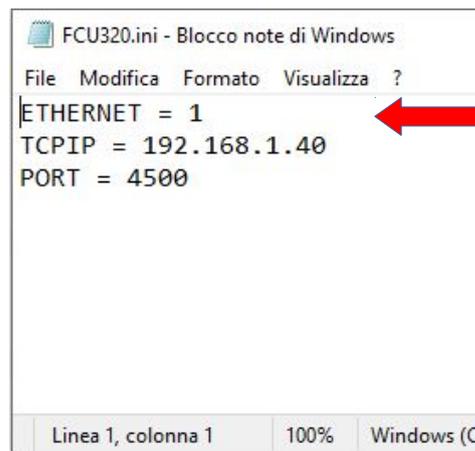
DESCRIPTION	Downloads
GALLERY	<a href="#">Xplane_Driver_User_Manual.pdf</a>
VIDEO	<a href="#">InstXplane11.zip</a>
<b>TECHNICAL AND MANUAL</b>	<a href="#">Compatibility table.pdf</a>
	<a href="#">fsx steam edition.pdf</a>
	<a href="#">PMDG users.pdf</a>
	<a href="#">InstP3D_361_v3.zip</a>
	<a href="#">InstP3D_361_v4.zip</a>
	<a href="#">InstFSX_361.zip</a>
	<a href="#">MCP737PRO3 Dimensions.pdf</a>
	<a href="#">MCP737PRO3_UserManual.pdf</a>
	<a href="#">MCP737PRO3 add-on configuration.pdf</a>

# Install the driver

Be sure to install the driver under the simulator folder, differently will not appear the cpflight menù into the add-on menu bar.



Into this folder search and open the file FCU320.ini. Open this file and set to 1 the ethernet flag, differently the FCU will not start using the Cpflight test utility ( TestFCU.exe application located into Cpflight folder). In this file you have also to set the same FCU320 ip ( default is 192.168.1.40). If you changed the ip in the hardware through the FCU programming MENU ( refer to FCU320 manual for this operation) you have to set into this file the same ip address. At the end save and close the file



# Verify the FCU320 connection

Now you are finally ready to use the FCU320. To verify that all is correct run the program TestFCU.exe that you can find always into cpflight folder. The FCU ( with all the modules connected ( if any )) will start and after few second you will be able to check all the FCU functionality selecting the name of the hardware to check from the tree option ( see the image below )

Select to open the FCU test window



Test switches and Knobs. You will be able to see on the screen the hardware command. After this check you will be able to use the hardware with your used addon sure that the ip configuration is correct and that the hardware correctly work.



To enable communication with ProSim A320 open Prosim configuration window and into CPFlight hardware box select Ethernet in FCU Type option and set the right ip into Ethernet ip\_port tab ( see the example below ).

The screenshot shows the ProSim configuration window with the 'Hardware options' tab selected. The 'CPFlight V2 hardware support (New)' option is checked and enabled. The 'CPFlight V2 Advanced' dialog box is open, showing the 'FCU' tab with 'Ethernet' selected as the FCU type. The 'Ethernet' section shows the IP:Port set to 192.168.1.60 and 4500. The 'Com Delay (ms)' is set to 40 and the 'Reconnect Delay (sec)' is set to 6.

Option	Enabled	Advanced
CPFlight V2 hardware support (New). Should not be used at the same time as the Legacy CPFlight driver.	<input checked="" type="checkbox"/>	Advanced
Directinput support for joysticks	<input checked="" type="checkbox"/>	
EHID Server	<input type="checkbox"/>	
FDS hardware support	<input type="checkbox"/>	Advanced
FDS Ethernet	<input type="checkbox"/>	
Flight Illusion support	[Not installed]	
FSC Hardware support	<input type="checkbox"/>	Advanced
FSCockpit hardware support	<input type="checkbox"/>	Advanced
FSUIPC support	<input type="checkbox"/>	
Generic COM port/TCP driver	<input checked="" type="checkbox"/>	Advanced
IOCP Server	<input type="checkbox"/>	
Phidgets support	<input type="checkbox"/>	Advanced
Phidgets 22 support	<input type="checkbox"/>	Advanced
PoKeys USB and Ethernet support	<input type="checkbox"/>	Advanced
Poldragonet ethernet hardware	<input type="checkbox"/>	
Pololu support	<input type="checkbox"/>	
SimASPAirSpace	<input type="checkbox"/>	
SimIO boards	<input type="checkbox"/>	

CPFlight V2 Advanced

FCU type: Ethernet

USB Port: COM1

Ethernet IP:Port: 192.168.1.60 4500

Com Delay (ms): 40 Reconnect Delay (sec): 6

OK Cancel

Currently running latest ProSimA322 version



## FOR PROJECT MAGENTA USERS

To enable communication with Project Magenta and FCU320 open “FCU.ini” file located into FCU folder using a text editor.

Into FCU.ini file search the key CpflightIP. As default the CPFlightIP will be equal to 0.

Please insert the IP address on the MCP for example:

CpflightIP = 192.168.1.40.

The line CPPort will be already setted on number 4500.

Save the mcp.ini file and close it.

To start-up the FCU320PRO you need only to run Project Magenta FCU software.

To use Cpflight hardware with Project Magenta software, due to PM upgrades and changes, for more details and information we warmly suggest to ask directly to Project Magenta Support.