MCP737PRO3 – ETHERNET Version

The package include the MCP737PRO3, the power supply and the Ethernet 3mt cable



Verify the classful of your network

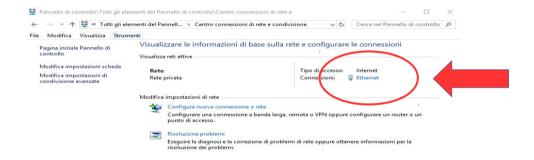
If your network is already a "C" class (normally are "C" class) you have only to check that the 192.168.1.40 is a free address and not already used from some other computer of device. Refer to the table below to see what is your network class.

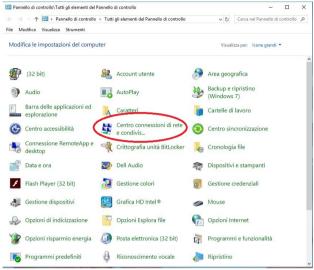
Differentely if your network belong to an other class you need to modify the MCP ip address to match with the class network. For example if your network is a "B" class and the ip address of your PC is 128.95.1.10 you need to modify the MCP ip. For exemple with this value 128.95.1.20. Remember to modify this value into the ini file too.

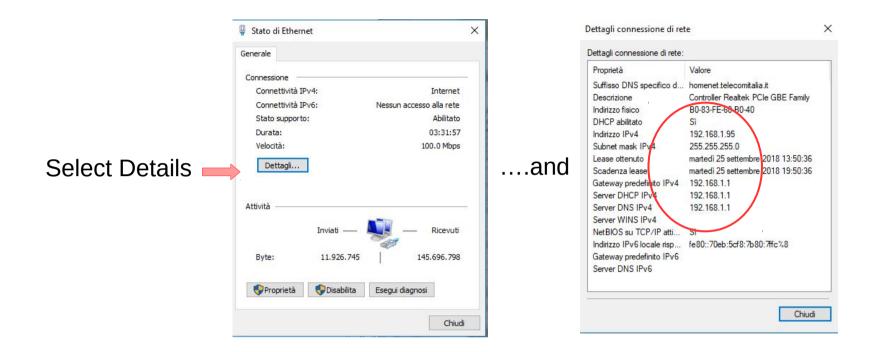
Class	Start Bit	start interval	End interval
A	0	0.0.0.0	127.255.255.255
В	10	128.0.0.0	191.255.255.255
С	110	192.0.0.0	223.255.255.255
D (multicast)	1110	224.0.0.0	239.255.255.255
Е	1111	240.0.0.0	255.255.255.255

Check the classful of your network

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





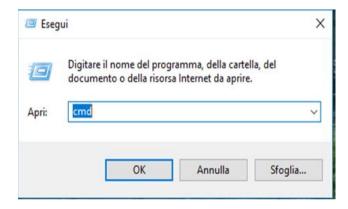


In this axample the network class is "C" and the computer ip is 192.168.1.95, so the default MCP address (unless there is another computer or device with this address in the network) should alredy work.

Test the connectivity

To check if the MCP 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:\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>
```

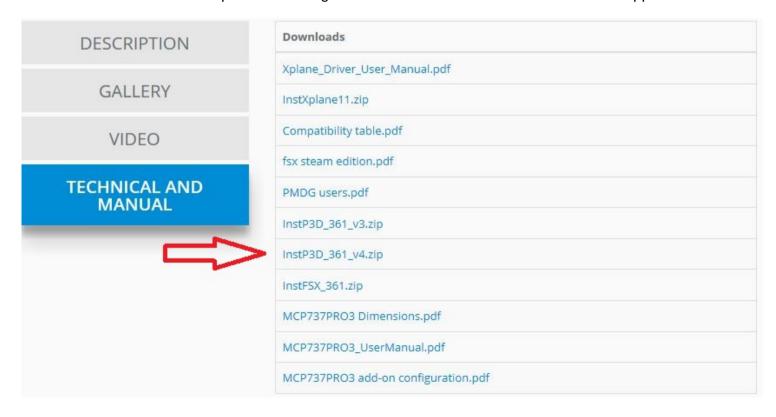
Download the communication driver

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. The Cpflight driver MUST be always installed on your PC (also if you flight with other add-on like Prosim737, Project Magenta ecc) because include important tools used for the first hardware setup and also to test it.

Is mandatory to install the Cpflight driver under the simulator folder, differentely the simulator will not add the Cpflight menu to the addon menu bar of the simulator.

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

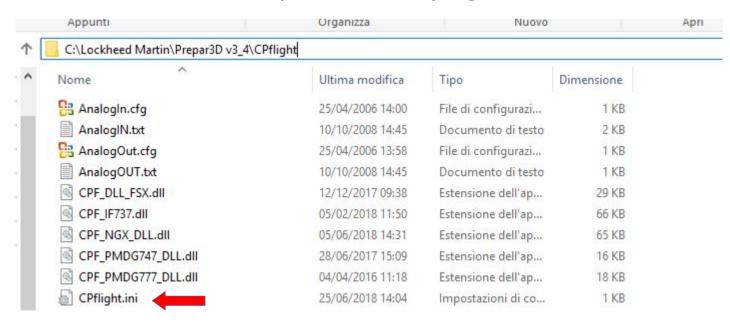


Install the driver

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



Into this folder search and open the file cpflight.ini



Configure the cpflight.ini file

Set the ETHERNET flag to 1...

```
CPflight.ini - Blocco note

File Modifica Formato Visualizza ?

AUTORUN = 0

ETHERNET = 1

TCPIP = 192.168.1.40

PORT = 4500

XPLANE = 0
```

.... save and close the file

Verify the MCP connection

Now you are finally ready to use the MCP. To verify that all is correct run the program testcpflighthardware.exe that you can find always into cpflight folder. The MCP will start and after few second you will be able to check all the MCP functionality

Select to open the MCP test window

CPflight Hardware Test Rel. 3.03 SERIAL NUMBER 0810013 — X

BL On BL Off

The state of the state of

Test switches and Knobs. You will be able to see on the screen the hardware command



Connect the MCP to Simulator

Now you are finally able to use your MCP with P3D or FSX in combination with the most used add-on but before is better to verify your simulator version and the installations of all the feature.

For FS2020 users: Browse into your Cpflight\lib folder and run the simconnect.msi installer. This installation will start and will require only few seconds.

For FSX users be sure to have installed the FSX SP2.

For P3D users be sure to have installed SimConnect files. Simconnect is not installed automatically. Must be installed by the user. The P3D program must be not active during this installation.

To allow the Cpflight driver (that use simconnect sdk) to work properly with P3D please browse in your system on the folder where you installed P3D and find this path:

....\Lockheed Martin\Prepar3D vX\redist\interface\FSX-SP2-XPACK\retail\lib\ and double click on the simconnect.msi file. This installation will start and will require only few seconds.

Run now the simulator. The first time after the Cpflight driver installation FSX or P3D will ask you if you want to load the file CPF_DLL_FSX.dll. Please agree and confirm.

After that you will be able to see into FSX or P3D add-on menù bar the Cpflight menù. If you do not see the Cpflight menu probably there is something wrong into dll.xml file. So please check:

FSX (or FS Steam) users: check into this path c:\Users\Your PC name\Appdata\Roaming\Microsoft\FSX

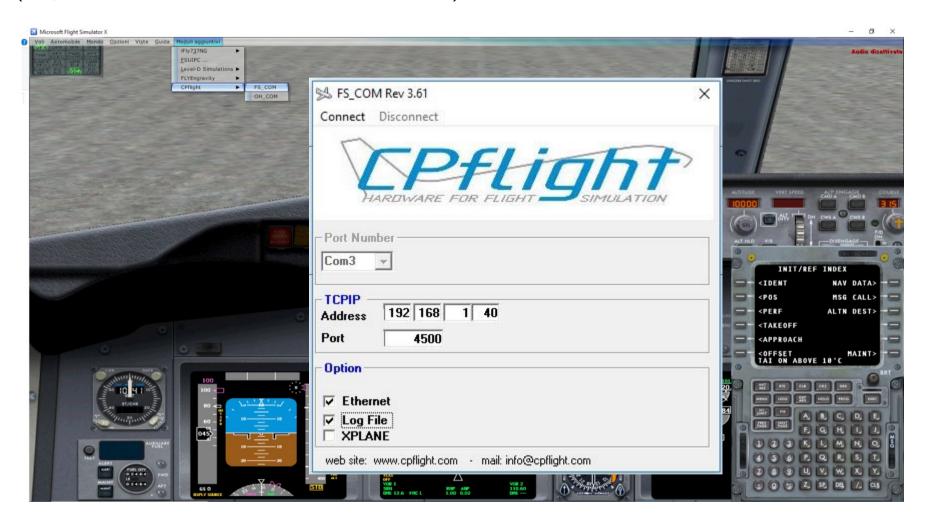
P3D users: check into this path c:\Users\Your PC name\Appdata\Roaming\Microsoft\Lockheed Martin\Prepar 3D vX

Verify that this instructions are into the dll.xml file (Note that Appdata is an hide folder so you need to enable the system to show the hide files and folder):

```
.....
<Launch.Addon>
<Name>CPF_Menu_FSX</Name>
<Disabled>False</Disabled>
<Path>CPflight\CPF_DLL_FSX.dll</Path>
</Launch.Addon>
....
...
```



For iFly737 users from addon menu open Cpflight menu and run the driver fs_com and select Connect into driver menu bar. Wait about 10 seconds to allow to the hardware to start and to syncronize the simulator data (IAS, HDG.... Value and the MCP annunciator status).





For FSX or P3D users: you need to enable the sdk communication. Please browse to you FSX or P3D folder and open with a text editor the file 737NGX_Options.ini located into c:\....\Your Simulator folder\PMDG\PMDG737NGX. To the bottom of this file please add this 2 lines:

[SDK] EnableDataBroadcast = 1

After that save and close the file and run your simulator loading a PMDG flight. Select Connect Menu of the driver window and wait about 10 seconds to allow to the hardware to start and to syncronize the simulator data.

For FS2020 users please refer to this video:https://youtu.be/A5aQKhORZjM



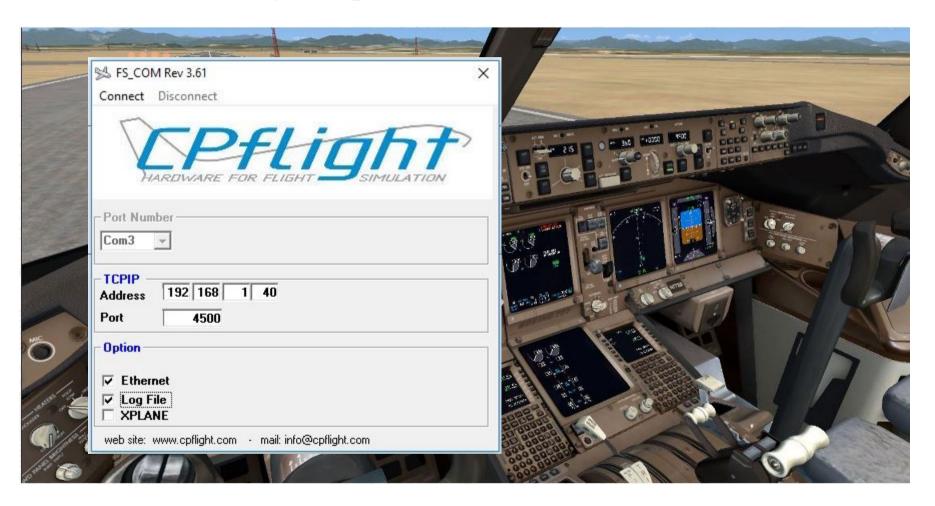


For P3D users: You have to enable communication output between PMDG777X and CPFlight hardware open the file 777X_Options.ini located under your simulator folder (E.g. c:\....\Your Simulator folder\PMDG\PMDG777X)

To the bottom of this file please add this 2 lines:

[SDK] EnableDataBroadcast=1

Then save and close the file and load a PMDG777X flight and run fs_com driver



Due to the differences between MCP777 and MCP737 and MCP747 panels please refer to the follow table to find the right corrispondence

B 777	B737	
CLB CON	N1	
A/T	SPEED	
PUSH SPD KNOB	SPD INT	
IAS/MACH	C/O	
LNAV	LNAV	
VNAV	VNAV	
FLCH	LVL CHG	
HOLD	HDG SEL	
PUSH HDG KNOB	CMD B	
VS / FPA	V/S	
HOLD	ALT HOLD	
PUSH ALT KNOB	ALT INTV	
APP	APP	
LOC	VOR LOC	
A/P	CMD A	
HDG TRK	CWSA	
V/S FPA	CWSB	

B 777	B747	
CLB CON	THR	
A/T	SPD	
PUSH SPD	PUSH SPD	
KNOB	KNOB	
IAS/MACH	SEL	
LNAV	LNAV	
VNAV	VNAV	
FLCH	FLCH	
HOLD	HOLD	
PUSH HDG	PUSH HDG	
KNOB	KNOB	
VS / FPA	V/S	
HOLD	HOLD	
PUSH ALT	PUSH ALT	
KNOB	KNOB	
APP	APP	
LOC	LOC	
A/P	CMD L	
HDG TRK	CMD C	
V/S FPA	CMD R	

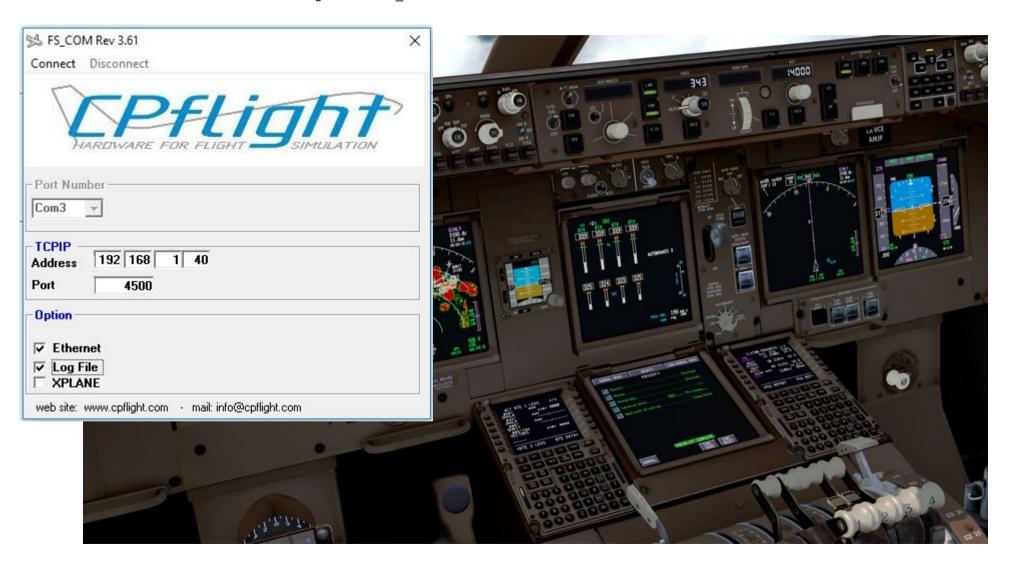


For P3D users:To enable communication output between PMDG747 Queen of the skies and CPFlight hardware open the file 747X_Options.ini located under your simulator folder (E.g. c:\....\Your Simulator folder\PMDG\PMDG747)

To the bottom of this file please add this 2 lines:

[SDK] EnableDataBroadcast=1

Then save and close the file and load a PMDG747 flight and run fs_com driver



XP11/XP12

XP11/XP12 users can interface the Cpflight MCP737PRO3 using Midwest737Simulation driver from this web page:

https://www.midwest737simulations.com/cpflight-plugin-for-x-plane.html Is payware driver, browse into Midwest737simulation web site for more informations

This driver allow to interface with Zibo737-800, IXEG B737-300, X737 and Threshold LevelUP 737-600NG, -700NG, -800NG, -900NG and -900BR.

Also Standard X-Plane 737 is managed by the driver but due to lack of important features we suggest using Zibo.



FOR PROJECT MAGENTA USERS

To enable communication with Project Magenta and MCP737PRO3 open "mcp.ini" file located into MCP folder using a text editor.

Into mcp.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 MCP737PRO3 you need only to run Project Magenta MCP software. If your intention is to use Cpflight hardware with Project Magenta software, due to upgrades and Changes, for more details and information we warmly suggest to ask directly to Project Magenta Support.