CDU737PRO



THIS MANUAL IS SUITABLE FOR CDU737PRO version

This manual is intended for Flight Simulator use only and may not be used in any real world aviation application. The authors are not responsible for any errors or omissions.

FOREWORD

Thank you for your CDU737 choice; through this hardware you will meet a realism never experienced before in your flight with Flight Simulator.

Note: This manual contains the latest information at the time of drafting. Due to the continuous evolving of the product some features could be been modified. Eventual later information can be found at CPflight website www.cpflight.com

CPflight modules are produced to meet requirements from the hobby market. The use of our products in professional or commercial environments is not permitted without approval of the CPflight management; please contact us at info@cpflight.com if you need to exploit our products in professional or commercial environments

This is a full scale replica of Boeing 737 Central Unit Display, look and functionality are reproduced with high details.

CDU737PRO is equipped with:

- custom made keyboard
- Own 640x480 color display (No need to connect to any video output of your PC)
- Ethernet cable to allow you to connect the CDU737PRO to your LAN
- -12 Vdc 2 A Power supply
- 6 Fastners and dzus to fix to your structure
- -compatible with Prosim737, Project Magenta PMDG737ngx, PMDG737ngxu and iFly737. Time by time could be add new compatibility.

CONFIGURATION MENU

Connecting the CDU to the power line the hardware will start. Wait until the monitor show the CPflight LOGO. The hardware in this moment is ready to connect with the used addon.

By default the CDU is configured in DHCP mode so the ip address is automatically assigned in your LAN. To know this number (useful to configure your addon) please push and hold pushed the MENU button (since release 1.6 the button to push and hold pushed is the button \mathbf{M}) until the video will show the MENU' window. (see picture below)



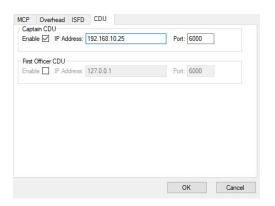
In this window you can see the assigned ip address (useful for example to configure Prosim window), and other option to customize your CDU. In the upper side of the monitor a legend will drive you to use the buttons to browse into MENU' window.

In the option you can disable the DHCP mode (not suggested), set the CDU side (captain or First officer), reduce the screen saver time and choose to 5 different font. Once changed some setting, if confirmed, the CDU will reboot to save the new setup.

Always in this window you will check the update and eventually upgrade the CDU with a new firmware. This is an online operation so you don't need to do anything, only confirm the request to upgrade. Even in this case the CDU will reboot to load the new firmware.

PROSIM737 CONFIGURATION

In Prosim737 configuration window set the CDU737PRO ip address (that you have read before into CDU737PRO menu window). Running the Prosim737 CDU application the hardware will start and will operate with Prosim software.



PROJECT MAGENTA CONFIGURATION

Fisrt Setup

Turn On the CD737PRO and wait until the monitor show the screen saver. From Project Magenta CDU folder run the application CDU.exe and using your mouse or your computer keyboard write the string /CPIP and wait few second.



The Project Magenta program will start with an automatic search to verify if there is a CPflight CDU737PRO connected and when found on the hardware monitor will disappear the screen saver and in the left bottom side of the display hardware will appear for short time the string INIT FMC L in case of FMC captain side or INIT FMC R in case of FMC F/O side.

This operation is required only for the first time, afterwards the connection is established every time you run CDU.exe

PMDG CONFIGURATION

To use the CDU737PRO with PMDG737ngx or PMDG737ngxu you have to install the cpflight driver. CDU driver is located into CDU737PRO page in the section Technical and Manual

Please be sure to install the CPflight folder under ..\Lockheed Martin\Prepar3d Vx folder.

Once installed into CPflight folder you can find the application CDU_COM.exe and the configuration file CDU_CPflight.ini

Into the fileCDU_CPflight.ini you have to set the assigned ip CDU address. The CDU assign automatically in dhcp mode a free ip address of your LAN.

Please, once connected, push and hold pushed the CDU menu button until you will see the menu window. Into this window you will find the assigned ip address. Write this ip into CDU_CPflight.ini file in CP or FO position. Do not modify the Port value (default is 6000, hold this value). Save the setting and close the file. Refer to the paragraph CONFIGURATION MENU of this manual

Sample of CDU_CPflight.ini file

TCPIP CAP = 192.168.1.57 TCPIP FO = 192.168.1.68 PORT = 6000

Remember also to enable the PMDG SDK adding this line at the end of the 737NGX_Options.ini or 737NGXu_Options.ini

Note that EnableDataBroadcast = 1 and EnableCDUBroadcast.0=1 must be set to enable the CDU captain side. If you have also the FO side you need to add also the line EnableCDUBroadcast 1=1

If you do not have the CDU FO side you no need to add this last line Save the setting and close the file.

Sample of 737NGX_Options.ini in case both CDU are connected

[SDK]
EnableDataBroadcast = 1
EnableCDUBroadcast.0=1
EnableCDUBroadcast.1=1

CDU_COM APPLICATION



Run Prepar3d and load a PMDG flight. From CPflight folder run the application CDU_COM.exe and select "Connect" into CDU_COM application menu bar.

The Screen saver on the hardware will disappear and the hardware will show the PMDG characters.

Annunciators, keyboard and monitor are now interfaced and working with PMDG737ngx or ngxu addon.

Closing the application (or selecting "Disconnect" into CDU_COM menu bar) you will disconnect the hardware by the addon. The CDU will show again the Screen Saver CPflight Logo.

iFly CONFIGURATION

To use the CDU737PRO with iFly737 no need any configuration into the simulator, only load an iFly flight and run the the CDU_COM application

IMPORTANT - CDU SHUT DOWN PROCEDURE

Is very important to not remove the power supply when you see the screen saver or the CDU is working. In this case will be done an unexpected shut down with an high risk to corrupt the CDU operative system so to avoid this please proceed following the next procedure.

At the end of the flight when you close Prosim, PM or CPflight driver connection on the CDU monitor will appear the CPflight logo. Now to switch-off the CDU737PRO you need to operate in this way:

- 1-)Push and hold pushed the decimal point button (\cdot) until the screen saver will disappear
- 2-) In case you want remove the power please wait about one minute again before disconnect by the electrical line

3-) If you do not disconnect by the electrical line, the CDU will remain in a stand-by status. To use again push (simple push, no hold pushed) again the decimal point button and the CDU will start again. In this case wait again to see the screen saver before run the application (PROSIM, PM or CPflight driver).

Just below the CDU737 dimensions:

