OPENCOCKPITS RADIO NAV B-737

INSTALLATION AND USER'S MANUAL

Opencockpits

All for your cockpit

DESCRIPTION OF THE MODULE

The module reproduces the Navigation radio of the Boeing B-737. It is manufactured in two versions: Amber digits and white digits. Faceplate description:

1. Active frequency display:
   - It shows the active frequency in the simulator.
2. Standby frequency:
   - It shows the standby frequency that has been previously selected with knobs 3 and 4.
3. Outer selection knob:
   - It selects the entire part of the Standby frequency (the format of the frequency being III.DDD; I = integer, D = decimal)
4. Inner selection knob:
   - It selects the decimal part of the Standby frequency
5. TEST pushbutton:
   - In the real radio, this button would be used for functions that are not implemented in the simulator (squelch, etc…) but Opencockpits, in order to make it useful uses it as a test for the digits (turns on all digits for a few moments showing 888.888)
6. Transfer pushbutton:
   - It changes the Standby frequency into Active and vice versa.

HARDWARE INSTALLATION

Just connect the module to an USB port with the cable provided.

Configuration of the IOCModules.ini file:

Initial Values

To disable any module, because it is not available or you want to disable an existing one, insert "//" at the beginning of the corresponding line of the initial values. This is handy when for instance, there is only one module available and the rest of the radios are used with the panels of the simulator and the mouse, because if it is not disabled the IOCModules will not allow to change the frequency and will always show 108.00 in the window.

[Valores iniciales]
[Initial values]
set_com1=118000
set_com2=118000
set_nav1=10800
set_nav2=10800
set_adf1=1000
set_adf2=1000
set_atc=1200

Activation of the radios

In this next parameter of the file, what we do is to activate or not the modules. Together with the Initial Values, it will allow us to use or not the simulator's own panels. As said before, it is handy when using only some modules jointly with the simulator.

For that, we must change the parameter Yes for No, or vice versa:

[Activacion de Radios]
[Radio Activation]

active_com1=Yes
active_com2=Yes
active_nav1=Yes
active_nav2=Yes
active_adf1=Yes
active_adf2=Yes
active_atc=Yes

COM & NAV modules order

If we indicate NO in the next parameter what we get is to switch module #1 for module #2, this is useful if we already have the modules in place and want to switch the position without physically touching them, i.e. if we have module NAV1 in the right side of the pedestal, to convert it in NAV2 it will suffice to change the line for this one:

FIRST_DEVICE_NAV1=No

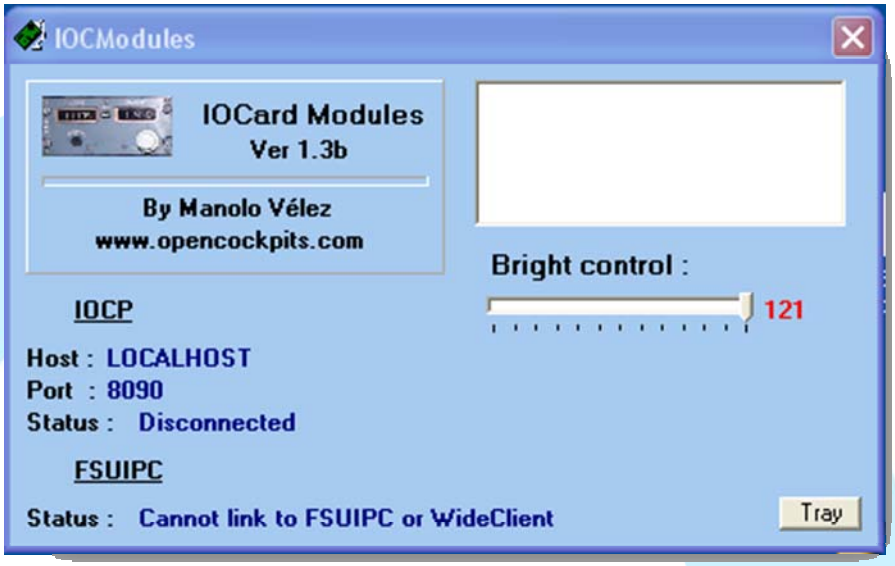
[Orden para COM y NAV]
[COM & NAV modules order]
[Change to NO for device number minor assigned to COM2 or NAV2, if YES, minor device number is COM1 or NAV1]
FIRST_DEVICE_COM1=Yes
FIRST_DEVICE_NAV1=Yes

Brightness

The parameter allows establishing the brightness of the displays, and let it fixed every time the module is used.
[Brillo por defecto 1-121]
[Bright 1-121]
bright=121

Being 121 the higher value and 1 the lowest.

Once the parameters in the IOCModules.ini are configured, IOCModules.exe can be run. That will make the digits to light up and at the same time connect with the simulator, allowing the modules to be used. A look alike dialog window will appear:



The Brightness Control of the digits can be seen. Sliding this control to the right the brilliance will increase and it will decrease to the left.

Likewise it will show in the upper panel the modules that are connected and active (in the sample image there is no active module) and also it can be seen if the simulator and the IOCP Server are connected or active.

Finally the program can be minimized clicking in the Tray button.

USING SIOC WITH THE MODULES:

Actually it is possible to accede to the programming of the modules by means of our SIOC programming language, for that purpose the 3.7 version includes the definition of the variables of each module, se we can program the module to our liking.

Albeit technically the programming of the module under IOCModules is correct, with this SIOC option details like controlling the brightness with the hardware, or maybe the COLD&DARK option, etc…, can be added.

TECH SPECIFICATIONS:

- Plug&Play.
- Alimented thru the USB port.
- Fully black lighted, including TFR pushbutton and side lettering.
- Brightness control by software.
- High precision concentric dual encoder.
- Compatible with any module from other manufacturers.
- No complementary module needed.
- Measures: 145x65 mm.