Opencockpits Modules (OCM), used with the Level-D 767, powered by lekseecon.

EFIS, MCP, ATC, COMM and FMC.

Version 3.0
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Configuration Instructions

1. Install **SIOC 4.0** (or later). I recommend to install SIOC at another drive then C, for instance D:\SIOC.

2. Install lekseecon, select **components**: **Opencockpits PnP Modules Support**

3. Check that you have **plugged in all** your OC modules

4. Run **..\lekseecon\ocm\ocm_configurator.exe**
   The ocm_configurator (in subfolder ocm of lekseecon folder) will first try to find your SIOC folder. Normally, if you stick to the naming conventions it will be found.
   If not, an MS DOS window will pop up and you will be prompted to enter the full path of your SIOC folder, starting from the drive letter up to the last letter of the SIOC folder name, e.g 'D:\MyOwnStrangeSIOCfoldername'

   After that the ocm_configurator will try to detect your USB OC modules.
   If it cannot detect any modules, a MS DOS Window will pop up with this message referring to the instructions (in case of problems) at the next page.

   Finally it will write a fresh **sioc.ini** with the correct configuration parameters in your SIOC folder.
   If it cannot write to the sioc.ini file because of no access permission, a MS DOS Window will pop up with this message. Change the permission by right clicking at the sioc.ini file, select Properties and select the Security tab. Edit the permissions for Users and select at least the write permission.

   ocm_configurator will report in an MS Dos window which modules were detected and that your sioc.ini is configured. Type <return> to close the MS Dos window.

   Note that you have to run the ocm_configurator:
   - The first time after installing the SIOC and lekseecon software packages;
   - And then, each time you plug in or out an Opencockpits Module.

That's all, configuration is finished!

Run FS9 or FSX, and load a Level-D 767 flight.
Run SIOC.exe and finally.
Run lekseecon.exe.

Enjoy your modules!

In case of problems:

In case (some of) your module (-s) do not work, you can always try to set the right parameters yourself. Go to the sioc.ini in SIOC folder and study the sioc.ini file that was generated by the *ocm_configurator*:

CONFIG_FILE:
You have to replace the question marks by the name of the file you need, the convention is easy, for just one module it is mcp.ssi, efis.ssi, .. for two modules efis_mcp.ssi and so on, the sequence: is efis_atc_mcp_comm_fmc.

MASTER statements:
The first is for the EFIS, the second for the MCP, the third for the ATC and the fourth for the COMM. Remove the semicolon for the statement(s) that you need, and replace 1001 by the device number at your computer for your EFIS module. You can find that device number when you run SIOC.exe and look in the devices window (top right). Same for 1002, replace it by the device number for the MCP, replace 1003 by the device number of the ATC, and replace 1005 by the device number of the COMM

USBKEYS section:
If you have the FMC747 module, remove the semicolons for these two lines and replace number 1004 by the device number at your computer for your IOCKeys module. You can find that device number when you run SIOC.exe and look in the devices window (top right).

FSUIPC:
Default FSUIPC is enabled. You may disable it if you run MCP and of FMC only.

EFIS Functionality

The 737 EFIS has been adapted to be used with the Level-D 767:

FPV button: Master Switch
MTRS button: TCAS on/off

Left rotary: Captains Altitude Orange Bug
Right rotary: Altimeter (QNH)

VOR1 => Captains VOR1/ADF1 to VOR1
OFF => Captains VOR1/ADF1 to VOR1
ADF1 => Captains VOR1/ADF1 to ADF1

VOR2 => Captains VOR2/ADF2 to VOR2
OFF => Captains VOR2/ADF2 to VOR2
ADF2 => Captains VOR2/ADF2 to ADF2

Mode Rotary Switch:
APP => FULL ILS
VOR => FULL VOR
MAP => MAP
PLN => PLAN

Range Rotary Switch
5 and 10 give Range 10
320 and 640 give Range 320
the others are OK

Row of seven buttons from left to right:
1: Cancel button of Eicas panel
2: Recall button of Eicas panel

3: WPT
4: ARPT
5: RTE DATA
6: NAVAID

7: Toggles Captains Chronometer cyclic between START-STOP-RESET

MCP Functionality

Full Boeing 767 MCP implementation with Cold and Dark Cockpit support and Lights Test

Special assignments to make this 737 MCP work for the Level-D 767:

CMD A: L CMD, CMD B: C CMD, CWS B: R CMD

HDG SEL push button:
- single click: HDG SEL
- double click: HDG HOLD

SPD Button:
- single click: SPD
- double click: SPD Intervention

BCRS push button is implemented via CWS A with extra functionality:
- single click: BCRS
- double click: Lights test

Note: Two clicks within a time interval of 0.7 seconds are taken as a double click.

ATC Functionality

Note: make sure you have a valid transponder code in your 767 panel when you start lekseecon.

Cold and Dark
If the left electrical bus of the 767 is off, this module will be cold and dark, just as in the Level-D 767.

Lights Test
If you push the Ident button a lights test will be activated.

Display:
Shows the squawk code in the Level-D 767 (if the panel value is >= 1000) or the one you are currently dialing.

Rotaries:
You can dial squawk frequencies between 1000 and 7777.
As soon as you start dialing a 'd' will show up in front of the squawk code to indicate that you are dialing in a new one that is not yet synchronized with the one in the 767 panel. If your new freq is ok, you should set the XPNDR switch in the other position (1 or 2, does not matter) upon which lekseecon will update the squaw code in the panel, so both are synchronized (and the 'd' will disappear).
[Note: I had to implement this trick because the Level-D 767 SDK only understands key presses, no values]

TCAS:
ALT Source 1 = SQUAWK SBY
ALT Source 2 = SQUAWK ON

XPDR:
STBY = XPDR ONLY
ALT RPTG OFF = XPDR ONLY
XPNDR = XPDR ONLY
TA ONLY = TA ONLY
TA/RA = RA/TA

COMM Functionality

The 737 COMM has been adapted to be used a the COMM1 radio in the Level-D 767 (which actually has a quite different VHF radio). Note that this implementation is just one way, from the hardware to the sim, not vice versa, if you set a COMM frequency with the mouse it will not be visible at the COMM module, so just do not do that.

Cold and Dark
If the left electrical bus of the 767 is off, this module will be cold and dark, just as in the Level-D 767.

Lights Test
If you push the test button a lights test will be activated.

Displays:
The left display shows the Active frequency and the right display shows the standby frequency.

Rotary:
You can change the standby frequency with the rotary. Only valid frequencies can be dialled.

Tfr button:
Switches active and standby frequencies, the new active frequency will be send to the Level-D panel.

FMC Functionality

69 keys