

# CATALOG BOEING 737 NEW GENERATION TRAINERS



Our B-737 NG Cockpit Trainer allows trainnes to practice the aircraft systems and procedures and to visualize the response.

It has been built by Opencockpits and is composed of fully functional cockpit modules.

Currently we offer 3 models of Cockpit Trainer:

- Open structure with only Captain side.
- Open structure with Captain and F.O.
- Closed Cockpit shell with all components.

## **CAPABILITIES:**

This trainer is capable of procedure training for normal, abnormal and emergency procedures.

The trainer included Engine instruments, IFR instruments, Navigation instruments, and can be practiced level of autoflight, F/D, Autopilot, Autothrottle and basic flights.

Can be practiced FMC procedures, checklists with engine fails, system fails...





All the components of the simulator are modular, which implies an easy and low maintenance cost.

The measurements are the same as in the simulated aircraft, as well as the functionalities, where practically all the elements are operative.

The panels are all backlit in warm white, generating the same cabin environment as the real plane.

Our products are adapted to the different uses that the client wants to make of the simulator, both for purely private use, and to be marketed as an entertainment simulator, in flight schools for procedural and flight practices ...

Opencockpits offers a wide variety of options to adapt to the needs of the client, and being directly manufacturers of the products we are open to specific adaptations that the client wants to make in his installation.

## **MAIN INSTRUMENT PANEL**

Manufactured in metal and painted in the oven with textured paint.

Includes all elements such as MCP, EFIS, CDUs, and other additional panels.

It has industrial displays for PFD, ND and EICAS, as well as Standby instruments, which are functional in terms of their visualization.

Includes ambient led light, landing gear lever, analog gauges, all of them operative.













## OVERHEADS UPPER AND FORWARD

With the same philosophy as the rest of the cockpit, the Overheads are designed in a modular way, for easy and quick access to any of its parts, so that maintenance costs are minimal.

All the gauges are operative, as well as all its elements, including the engine start system, which, as in the real plane, once the engines are started, the switches automatically return to their position.







## **PEDESTAL**

This module is composed of a rack in aluminum painted in the oven, where following the same philosophy as in the rest of the cockpit, each element is connected individually, being able to replace each of them easily and quickly.

The configuration of 2 COM, 2 NAV, 2 ADF and ATC allows a perfect simulation of the entire system, with special attention to the anti-fire panels.

All the backlight is controlled from the panel itself on the pedestal, including the door closing panel, which some customers are connected to a real door at the entrance.



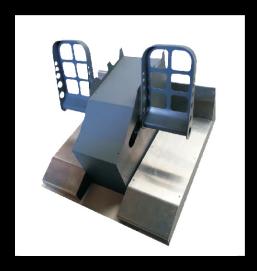














## YOKES, RUDDERS PEDALS & STEERING

All the controls of our cockpit are designed in a robust way, using iron and cast aluminum for them.

The control loadingl is not electronic, and is done by spring and in the case of yoke by pneumatic system, which can be adjusted for the customer.

The double controls are physically connected through links.

All controls use 12-bit analog / digital converters and software filter to achieve greater motion sensitivity.

### THROTTLE QUADRANT

The Throttle Quadrant is the only component manufactured by another company, but we are selected this unit by the good quality and complete integration with others modules in the cockpit.

It has all the features of the real, with motorization for the movement of the power handles of the engines, Speed Breakes with Flight detent, Trim wheel, trim indicators and parking brakes.

The trim also works in manual mode and the entire module is backlited.

It is 98% built in aluminum and steel.











## **PILOT SEATS**

Awesome replica B737-scale pilot seat with details such as:

- \* J-Rails with adjustable displacement.
- \* Adjustable seat height.
- \* Tilt adjustable backrest.
- \* Height adjustable backrest.
- \*Adjustable lumbar area.
- \* Folding and height adjustable armrests.
- \* Quilted and fleece lining as real.
- \* Bag for lifevest.
- \* Warning indicators and instructions sewn and glued to the backing fabric.
- \* Headrest optional

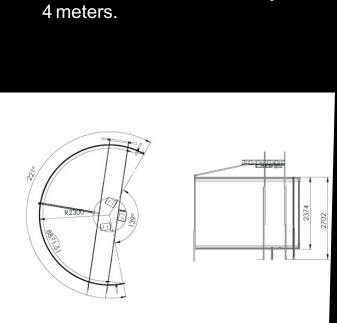
Strong steel construction,

## **VISUAL SYSTEM**

Our visual system is based in one cylindrical screen of 220 degrees and 2.3 meters of radius.

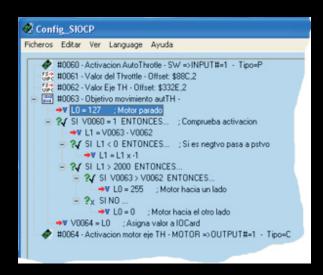
We use 3 channels with Full HD projectors with specific software for warp and blend.

The optimum height from the ground is 2.7 meters, and with the radius of 2.3 meters it fits in an environment of 5 by 4 meters.









IOC Monitor ver 2.0

Consola ON/OFF

(Double click for connect)

SIDC - AVIONICS/2 - Ver 5.1 B2 #5415 - IP=192 168.0.193:8093

J SIDC - AVIONICS-1 - Ver 5.1 B2 #7632 - IP=192 168 0.192 8092

IDX = 17 · USB-Expancion V3 · Device = 54
 IDX = 16 · IOCard-Chrono · Device = 50

DX = 18 - USBServos v3 - Device = 56
 DX = 14 - USBFMC V1.0 - Device = 58

♦ IDX = 15 · IOCard-Chrono · Device = 4

◆ IDX = \* · USB·Dimmer · Device = 13

◆ IDX = 3 · USBServos v3 · Device = 9
◆ IDX = 4 · USBServos v3 · Device = 7

DX = 7 · USB·Expancion V3 · Device = 5
 DX = 6 · USBServos v3 · Device = 2
 DX = 5 · USB·Expancion V3 · Device = 11

DX = 20 - USB-Pedestal 737 - Device = 125
 DX = 2 - USBEFIS V2.0 - Device = 129

♦ IDX = 1 · USBEFIS V2.0 · Device = 127

♦ IDX = 21 · USBServos v3 · Device = 115

◆ IDX = 0 · MCP V3.0 · Device = 131

J SIOC - VISUAL - Ver 5.1 B2 #311 - IP=192 168.0.191.8100

◆ IDX = 13 · USBFMC V1.0 · Device = 3



#### **INTERFACE SOFTWARE**

The interface software that includes our cockpit is one of the most powerful on the market.

Allows in real time, check and test any element of the cockpit, from computers, indicators, displays, switches, controls ...

With its powerful script language it also allows to develop specific simulations for any element. Being able to program for example the opening of a real access door, an air conditioner, or any imaginable condition.

It has a development SDK in case it is used in specific tasks.

It is compatible with practically all the simulation software of the market.

## COMPUTERS AND ELECTRONIC SYSTEM

In the installations we make, we incorporate the entire system of industrial computers and electronic racks.

The rack includes 3 computers, 1 main with Intel latest generation processor i7, with a powerful Nvidia graphics card of the 1080 family with up to 4 graphic outputs.

The other 2 computers are dedicated to avionics.

The system includes ethernet switches, industrial USB hubs, Wifi modem, wiring, several converters and everything necessary for a perfect connection with the cockpit.





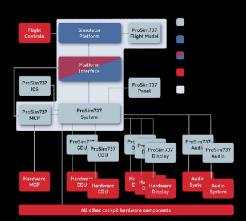














### **SIMULATION SOFTWARE**

Our simulator is prepared to be used directly with professional Prepar3D, and PROSIM-737.

These programs would complete the simulation of the B737's cabin.

Prepar3D is basically used for the flight model (adjusted by P737), generation of the visual environment, and basic aircraft model.

Prosim737 is the software that is responsible for the simulation of systems and avionics, as well as the console of the instructor.

## DIFFERENT OPTIONS OF COCKPITS



Full Cockpit with Shell



Cockpit without Shell and Floor



Full Cockpit without Shell



Only for Captain seat

## OPTIONAL COMPONENTS



## OPTIONAL VISUAL SYSTEM

This is a system based in 3 x 65" displays 4K resolution with special supports for cover the main parts of the pilots visual.



### **STICK SHAKERS**

Like the real system, those stick shakers connected to the simulation contribute to a greater realism by generating vibrations on the control columns



## **SEAT BELTS**

Replica of Seat Belt for use with our seats.



http://www.opencockpits.com e-mail:sales@opencockpits.com

Opencockpits S.L.U. CIF B21466537 Polígono Romeralejo Naves 9 ,10, 11 21007, Huelva, Spain