

ACES



Affordable Cockpit Emulation Systems

The ACES Story

I'm a flight sim enthusiast just like you. When I decided to start building my own sim at home, I was disappointed to find how little there was on the market that was affordable and targeted to the home enthusiast. Everything was either too expensive, too complicated or both.

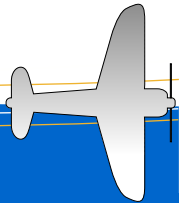
From this disappointment, an idea was born. I have over a decade of experience developing high fidelity flight training systems for commercial and military use. I decided to apply my experience to make what I needed. Since I was going to make it anyway, I might as well offer it to others too. This was the beginning of ACES Affordable Cockpit Emulation Systems. At ACES the products are aimed at the home flight simulation enthusiast. I work to make all the ACES products easy to use and affordable.



ACES
Affordable Cockpit Emulation Systems

info@aces-sim.com
support@aces-sim.com
www.aces-sim.com

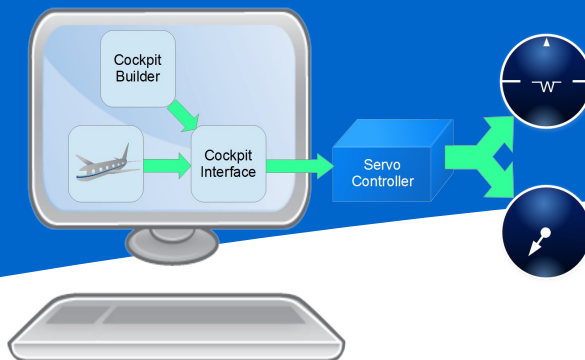
Cockpit Software Suite



Cockpit Software Suite

SOFTWARE TO DRIVE YOUR FLIGHT SIM COCKPIT INSTRUMENTS

- Compatible with:
 - IL2 Sturmovik: Cliffs of Dover* (Requires Team Fusion mod 3.0 or higher)
 - X-Plane 10 (Requires an additional plug-in sold separately)
 - Additional flight sim plug-ins to come (visit www.aces-sim.com for the latest.)
- Plug and play USB connectivity with ACES Instrument Modules and Pololu Mini Maestro servo controllers.
- Runs on Windows 7 and later.



READY...CONFIGURE YOUR INSTRUMENTS

Connect your ACES Instrument Modules and your instruments. Then configure your instruments with the Cockpit Builder app.

Instrument	Index	Units	Controller	Channel
Fuel Quantity	1	gallons	Mini 01	0
Tachometer 100's	1	rpm	Mini 01	2
Brake Pressure - Port	1	psi	Mini 01	3
Brake Pressure - Starbd	1	psi	Mini 01	4
Climb and Descend	1	feet per min	Mini 01	5
Elevator Trim	1	degrees	Mini 01	6
Manifold Pressure	1	psi	Mini 01	7
Oil Pressure	1	psi	Mini 01	8
Oil Temperature	1	degrees C	Mini 01	9
Tachometer	1	rpm	Mini 01	10
Air Speed	1	miles per hour	Stepper01	2
Turn	1	deg. per sec	Maestro 12	0

SET...MAP TO SIMULATION DATA

Use the sim data map wizard or manually enter the simulation data points you want.

Instrument	Index	Units	SM Offset	Subtype	SM Units
Altimeter 100's	1	feet	L_Altitude	9	feet
Altimeter 1,000's	1	feet	L_Altitude	9	feet
Altimeter 10,000's	1	feet	L_Altitude	9	feet
Artificial Horizon Pitch	1	degrees	L_AH	1	degrees
Artificial Horizon Roll	1	degrees	L_AH	2	degrees

Instrument	Index	Value	Units
Air Speed	1	216.678	miles per hour
Climb and Descend	1	147.516	feet per min
Tachometer	1	1860.694	rpm
Directional Gyro	1	240.572	degrees

...FLY!

Start the ACES Cockpit Interface app, then start your flight simulation program. The Cockpit Interface app gathers and converts the simulation data, then sends it to your instruments. You can monitor the data being sent in the Instrument Display window.

QUICK START GUIDE

1. Install the ACES Cockpit Software Suite.
2. Connect your instruments to ACES Instrument Modules and/or Pololu Mini Maestro servo controllers.
3. Connect a power supply to the Instrument Module(s).
4. Connect the Instrument Module(s) USB port to your PC.
5. Start the ACES Cockpit Builder application.
6. Cockpit Builder will recognize the Instrument Module(s).
7. In the My Cockpit window, configure your instruments.
8. Calibrate each instrument using the buttons in the My Cockpit window. Save your instrument configuration.
9. In the Sim Data Map window, use the wizard to generate a sim data map. Save your sim data map.
10. Start the ACES Cockpit Interface application.
11. Load the sim data map you just generated in ACES Cockpit Builder.
12. Start your compatible flight simulator (such as IL-2 Sturmovik: Cliffs of Dover or X-Plane) and fly a mission with your new instruments. (Visit www.aces-sim.com for a list of compatible flight simulators.)

For more information see the Help Center in the ACES Cockpit Builder application. For more information on the Maestro servo controller, see the Pololu documentation.



AT ACES, WE'RE ENTHUSIASTS TOO.

If you have a problem, contact us at support@aces-sim.com. We'll be glad to help.