Hang Sim 2.0 - The Light Aviation Flight Simulator.

The main features in Hang Sim

Minimum Requirements

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The HUD View

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The main features in Hang Sim:

- Highly realistic flight model built especially to simulate low speed flight characteristics and control.
- Unique atmospheric model which simulates the flow of air over 3D terrain , specially tailored to meet the atmospheric effects encountered by hang gliders , Paragliders and Ultralights in real flight.
- Realistic thermals which makes soaring as real as possible.
- Photo realistic 3D scenery based upon aerial photography and topographic data.
- Built using the latest technology in 3D graphic acceleration and Sound mixing.
- Built to exploit 3D graphic accelerators and deliver excellent graphic quality at maximal frame rate.
- Advanced yet easy to use virtual cockpit, allowing 360 degrees look around.
- A simulation that is truly built to expand using open formats for all files, thus making third party improvements as easy as possible.

The benefits of registering HangSim are:

- You will have an unlimited game time.
- You will have additional sceneries , adventures and challenges.
- You will receive free upgrades and add-ons.

How to buy HangSim:

The registered version of Hang Sim costs 25\$ and can be purchased and downloaded online , Registration is with a credit card via secure server.

To register simply point your browser at:

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http://www.vpmag.com/hangsim/index.htm

http://www.alberts.com/authorpages/00013308/HangSim.htm

http://members.tripod.com/~ilanp/index.htm

Minimum Requirements:

- Pentium 133
- Windows 95
- DirectX 5.0
- 3D Graphic accelerator with 4MB.

Note:

Although the program may actually run without the use of 3D graphic accelerator with 4 MB is not recommended for use without one, as the most impressive performance and the most fun comes when playing the game using the proper hardware.

Although the program does not require a sound card to run , it is recommended to use one as many effects incorporate the use of sounds.

Controls And Keys:

Hang Sim includes more than one flight model , the two most significant ones are:

- Hang Glider flight model.
- Aircraft flight model.

Hang Sim can be controlled using the mouse or a joystick , the mouse is the default means of control and the joystick can be activated by pressing "J" or "K".

In a Hang Glider the controlls are actually reversed - pushing the control bar forwards will actually put you in a climb and not in a dive as you would expect in a conventional aircraft , this effect exists only when using the mouse for control.

 Flight Control

 Engine Control

 Simulation Time Control

 Screen Mode (FullScreen Only)

 View Control

 Panel Display

 Weapon system

 Sound control

 Ground resolution

 Launch Site locations

Flight Controls

The panning reset toggle allows direct control by simply moving the mouse, with this toggle off the left mouse button has to be pressed in order make a control input.

Using the Mouse:

Panning Reset Toggle F12

<u>Action</u>	Panning Reset ON	Panning Reset OFF
Pitch up	Mouse Forward + Left Button	Mouse forward
Pitch Down	Mouse Back + Left Button	Mouse Back
Roll left	Mouse Right + Left Button	Mouse Right
Roll Right	Mouse Left + Left Button	Mouse Left

Using the Joystick:

Enable Joystick	J or K (depends on type of joystick)
Disable Joystick	J or K (depends on type of joystick)
<u>Action</u>	
Pitch up	Stick Back
Pitch Down	Stick Forward
Roll left	Stick Left
Roll Right	Stick Right

Other Controls:

Breaks Toggle	SpaceBar
Thermal AutoPilot	А
Deploy Parachute	С
Release Parachute	С

Engine Control

Motor OFF	Left Arrow		
Motor 1500 RPM	Right Arrow		
Increase Motor RPM	Up Arrow		
Decrease Motor RPM	Down Arrow		
Motor RPM can be set to negative to give an airbrake effect !			

Using The Joystick:

Increase Motor RPM	Throttle Up
Decrease Motor RPM	Throttle Down

Simulation Time Control

Increase Time	PgUp
Decrease Time	PgDown
Increase Simulation Rate	F4
Decrease Simulation Rate	F3
Frame Rate counter	F7
Reset Rate	F11

Screen Mode (FullScreen Only)

Query Screen Mode	/	

Increase Screen Mode >

Decrease Screen Mode <

View Control

Pilot's View	F1
Chase View	F2
GunSight View	F5
Virtual cockpit control	Mouse Movement + Right Button Joystick button1 + movement
Map view	F6
Increase Visibility	Home
Decrease Visibility	End
Increase Field Of View	Insert
Decrease Field Of View	Delete
Reset View	F11

Panel Display

The panel display is a cyclic view with several modes:

HUD View	F6
Panel view	F6
View Only	F6
Map view	F6

Weapon system

Toggle Gunsight F5

Fire Rocket Enter Joystick Button2

Note:

The Gunsight is a helmet mounted sight , to change the direction of your fire , simply pan your view using the virtual cockpit control and fire when ready.

Sound control

Toggle Sound ON/OFF	S
Toggle MIDI ON/OFF	Μ
Increase Volume	+
Decrease Volume	-

Ground resolution

Increase Ground Resolution F8

Decrease Ground Resolution F9

Level Of Detail Toggle L

Query Wind direction and strength W

Note:

Toggle the Level Of Detail only in cases you want to squeeze more frame rate and trade off graphic quality.

The ground resolution control is designed to change the amount of textures that is used by the 3D accelerator to render the ground , setting it too high may slow the simulation.

Changing these options is not recommended unless you understand what they mean.

Launch Site locations

Store Launch site	Backspace
Recall Launch Site	Tab

The Hud View

The Hud view includes several flight instruments, its measuring units are (m/sec) and (meter), if you feel more comfortable with (ft/min) and (ft) switch to the Instrument Panel view.

Со	mpass	v		
 20		23 24	25 26	 27
Airspeed	<i>g</i>	RPM	ROC	
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				100
Тіл	ne is 02	:48 <i>Mes</i>	sages	

<u>The Speed Indicator</u> measures glider speed in m/sec.

<u>The g meter</u>	measures load factor in units of g.
The RPM indicator	measures engine RPM.
The ROC indicator	measures Rate Of Climb in m/sec.
The ALT indicator	measures glider altitude ASL in meter.
<u>The messages line</u>	displays general status messages.

The Instrument Panel View

The instrument panel is based on the Ultralight instrument panel , this layout is also called VFR instrument panel. It's measuring units are (ft/min) , (knots) and (ft) , If you are more comfortable with (m/sec) and (meter) switch to the HUD view.



The Speed Indicator	measures glider speed in knots.
The ALT indicator	measures glider altitude ASL in ft.
The ROC indicator	measures Rate Of Climb in ft/min.
The RPM indicator	measures engine RPM.

About The Author

Hang Sim has been written by Ilan Papini , first version released in June 1998.

Ilan is an aeronautical engineer with extensive professional experience both in aeronautics and in software development.

His acquaintance with Hang Gliding Started in 1985 when he designed , built and flight tested his own custom made Hang Glider.

Later on having received formal Hang Gliding training he has been an active Hang Glider for five more years during which he perfected his own power kit made of two propeller engines mounted on the center part of the Hang Glider.

Later on Ilan turned his interest to light aircraft and received his Private Pilot License.

In recent years llan continues his flying activities on conventional aircraft and as a simulator enthusiast develops simulations and add-on sceneries for Microsoft Flight Simulator.

Realizing the limitations of existin simulations, ilan decided to create a one of his own, in this simulation IFR navigation and ATC would not be of great importance, but thermals, ridge effects and uncompromising photorealism would.

The result of this effort is called Hang Sim.



For further details, and feedback contact Mr. Ilan Papini by Email at : <u>ilanp@netvision.net.il</u>

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