# H135

#### **Hype Performance Group**



H135 Helicopter

Build .447 (Freeware)

User Guide V 1.4

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Step-by-step instructions to download, install and run the Airbus H135 in Microsoft Flight Simulator 2020.

Based on Version 1.3 by Hype Performance Group

You can find other manuals and translations on <a href="http://dvrgl.georgl.info">http://dvrgl.georgl.info</a> With thanks to Dave and the HYPE team for their excellent product, have fun D-VRGL

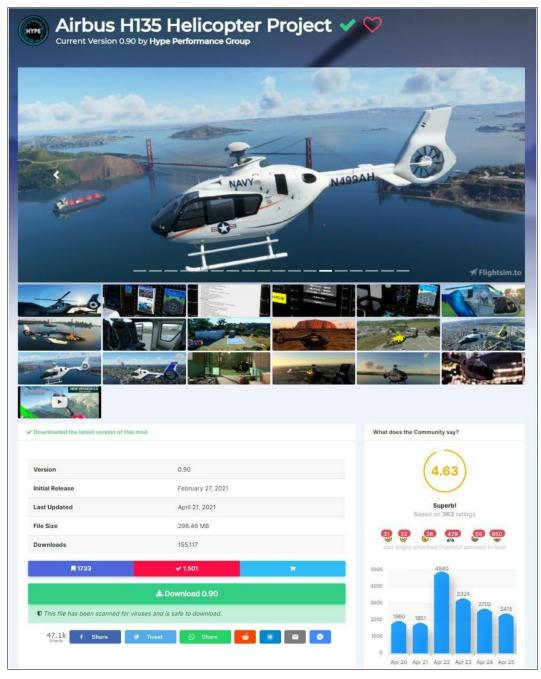
### Content

Installation and preparation	3
Download from flightsim.to	
Unpack the zip file to your community folder	3
Start (or re-start) Microsoft Flight Simulator and Select the Airbus H135	
Map Controls: THROTTLE AXIS	
Map Controls: PRIMARY CONTROL SURFACES	6
Your first flight	7
Pick an airport and runway and get Ready to Fly	7
(Optional) Cold start power up if you started off runway	7
Power is turned on through the overhead panel:	7
Move your throttle through: Min -> Max -> Min	8
Turn on full pumps: PRIME pumps for start, and FWD and AFT pumps for flight	8
Engage the auto pilot and Stability Augmentation System	
Enable FLIGHT mode using MOUSE WHEEL UP on the red/yellow ENG I or ENG II switches	10
Warm start: (from runway)	10
Bring one engine from IDLE to FLIGHT to fly, or press Ctrl+E	10
Cold & dark start: (from parking)	10
Increase collective (your Throttle control) to take off and go fly!	11
FLIGHT MODES – Control the level of difficulty of your experience	11
Higher performance mode – "NR HI"	12
Hotkeys	12
Co-Pilot and doors	13
(OPTIONAL) EFBConnect – display webpages in the cockpit	
Feedback on this guide	13

### Installation and preparation

#### Download from flightsim.to

https://flightsim.to/file/8970/airbus-h135-helicopter-project



Unpack the zip file to your community folder

Unzip and place the hpg-airbus-h135 folder into your Community folder:

 For those who purchased the game from Windows Store (paste this link into File Explorer address bar): %LocalAppData%\Packages\Microsoft.FlightSimulator\_8wekyb3d8bbwe\LocalCache\Packages\Community\

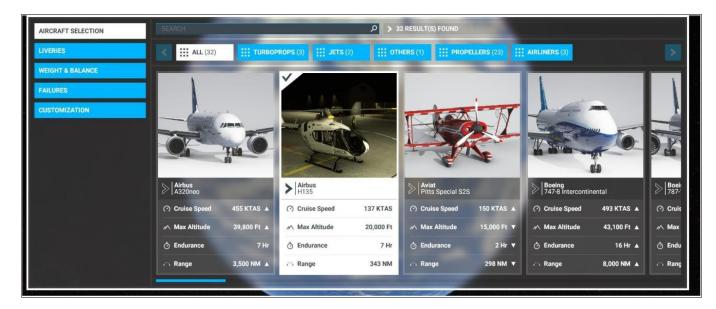


• For those who purchased the game from Steam Store – look in your Steam games install folder.NOTE: Ensure that you do not have an extra folder in the path. Community\hpg-airbus-h135\layout.json. Check that

your unzipping program did not add a second folder which will prevent the aircraft from being recognized by MSFS.

• TIP: For Advanced users that cannot locate Community folder: Enable Dev Mode, Tools -> Virtual File System, then look at Mounted Bases.

Start (or re-start) Microsoft Flight Simulator and Select the Airbus H135



#### Map Controls: THROTTLE AXIS

THROTTLE AXIS => controls the helicopter 'Collective' => up and down

**IMPORTANT NOTE** – mapping 'Throttle Axis' Is critical, (not THROTTLE 1, 2, ....) This will control the collective pitch of

the main rotor which controls climb and descent. The H135 will manage the engine RPM automatically through the

FADEC (Full Authority Digital Engine Control).

> CONTROLS							
KEYBOARD		MOUSE		ARDUINO MICRO			
KEYBOARD PROFILE		DEFAULT		ARDUINO FUTABA INTERFACE			
SENSITIVITY	THROTTLE 4 INCREASE						
SEARCH	THROTTLE 4 INCREASE (SMALL)						
throttle	THROTTLE 4 AXIS (0 TO 100%)						
SEARCH BY INPUT	THROTTLE 10%						
Select an input	THROTTLE 20%						
	THROTTLE 30%						
FILTER	THROTTLE 40%						
ALL 🔀	THROTTLE 50%						
EXPAND / COLLAPSE ALL	THROTTLE 60%						
	THROTTLE 70%						
	THROTTLE 80%						
	THROTTLE 90%						
	THROTTLE AXIS	L		Joystick Silder X			
	THROTTLE CUT						

NOTE: After the flight control module has loaded, you should see your collective move the leverl within the cockpit. If

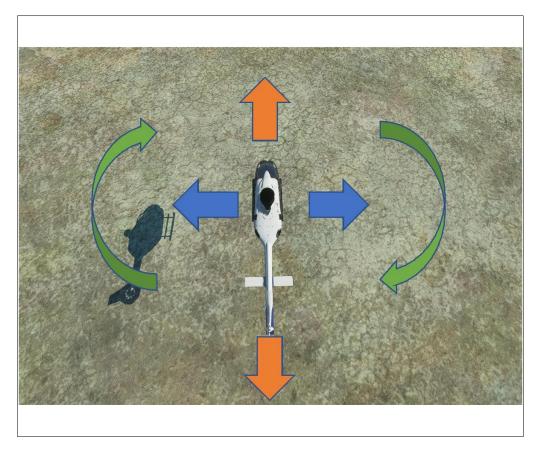
you don't, you should check that you don't have a file called **SimConnect.cfg** in your PC's main Documents folder. If so,

rename the file to any other name and restart the sim.

#### Map Controls: PRIMARY CONTROL SURFACES



AILERON => controls left & right sideways motion 'cyclic' ELEVATOR => controls forward & backwards motion 'cyclic' RUDDER => controls rotation 'yaw' (right pedal turns clockwise)



## Your first flight

### Pick an airport and runway and get Ready to Fly

Picking a runway start will have the engine running, switch engines to FLIGHT



#### (Optional) Cold start power up if you started off runway

Power is turned on through the overhead panel:

*Note* – *Ctrl* + 4 *shortcut will show overhead switch panel:* 

- Switch on BATTERY (down)
  - Avionics should also be on: AVIO 1 and 2 (down)



Move your throttle through: Min -> Max -> Min

This will remove the "COLLECTIVE POSITION UNSAFE" warning.

*Note* – *Ctrl* + 1 *shortcut will show primary displays:* 



Turn on full pumps: PRIME pumps for start, and FWD and AFT pumps for flight





#### Engage the auto pilot and Stability Augmentation System

Before flight, you must first engage the system which provide stability augmentation and auto pilot functionality.



Each amber OFF must be extinguished, by pressing it. When the button is blank, it means the system is ON.

A.TRIM is required for auto pilot functionality. AP1 AP2 and BKUP each provide stability augmentation on 3 axis' (pitch,

roll and yaw). If you disengage all of AP1, AP2 and BKUP you will be in an unstabilized configuration. Modern helicopters

are not intended to be flown like this and you should land immediately if you find all 3 systems inoperative.

When you are ready to fly, all 4 buttons will be blank:



If you see the warning AFCS DISENGAGED on the primary flight display, you should check the configuration above.



#### Enable FLIGHT mode using MOUSE WHEEL UP on the red/yellow ENG I or ENG II switches

*Note – Ctrl + 3* shortcut will show ENG engine control panel:



#### Warm start: (from runway)

Bring one engine from IDLE to FLIGHT to fly, or press Ctrl+E

#### Cold & dark start: (from parking)

• Use your mouse wheel to bring each engine from OFF into IDLE, wait for primary display to show 'IDLE', then from IDLE to FLIGHT.

Engine RPM is managed automatically based on collective input.

TIP: You can also press Ctrl+E to get going right away, or click **READY FOR TAKEOFF** on the tablet.

**IMPORTANT** - Wait for the main rotor RPM to increase and ROTOR RPM warning to clear.

Primary display will then show the following – you're ready to fly!

- LDG ON = Landing light is on
- A.TRIM RELEASED = AP is not on for takeoff



TIP: Press the ACK soft key to dismiss the messages, so you may see new messages in bright colour.

#### Increase collective (your Throttle control) to take off and go fly!

If you're new to helicopters then you may find the external view easier to see how the helicopter tilts as you control it.



#### FLIGHT MODES – Control the level of difficulty of your experience

The tablet home page has a tile which lets you select between the three flight modes:

- XBOX = Designed for the Xbox and PS4 controllers. This is the easiest mode.
- **BASIC** = Default mode, powerful control but torque effects removed.
- ADV = Advanced mode, more real helicopter characteristics including needing to control the antitorque.

<u>БТС</u>	NAV Upper Modes	G ALT	
AP Inactive Rais	Left	Up <sup>Syclic</sup> Right Down	
Left Coll Beer	, Right		
Flight Mode	- TE	° <b>⇔ 60</b>	
L2: Basic	FLIGHT TOOLS	AIRCRAFT CONFIG	
Cold & Dark	Ready for Takeoff	Shutdown Engines	
	•		

#### Higher performance mode – "NR HI"

The "NR HI" button to the left of the ENG engine control switches enables a higher performance mode with faster climb rate and more sensitive collective. Click the button to enable and max vertical speed from a hover increases from approx. 550ft per minute to 1,100ft per minute.



### Hotkeys

CONTROL Input	H135 Function Det	fault keyboard binding
TOGGLE VARIOMETER	FADEC On/Off	
TOGGLE WING LIGHTS	SPOT LIGHT On/Off	
MIXTURE 3 AXIS (0 TO 100%)	SPOT LIGHT Up/Down	
MIXTURE 4 AXIS (0 TO 100%)	SPOT LIGHT Left/Right	
AUTOPILOT MASTER	Basic Auto pilot including HDG, ALT, NAV modes.	Z
	Note: VS mode is not supported, even though it	
	visibly engages.	
AUTOMATIC ENGINE START	Start engines and engage FADEC	Ctrl+E
	Control panel view shortcuts	CTRL+1, 2, 3, 4

TIP: See the tools\KEY BINDINGS.txt for a complete listing of special hotkeys.

TIP: MSFS generic keyboard shortcuts - <u>https://www.gamesradar.com/uk/microsoft-flight-simulator-2020-keyboard-controls/</u>

### Co-Pilot and doors

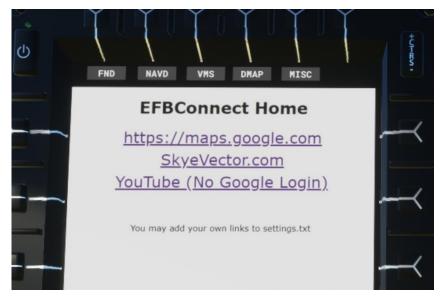
- Co-pilot show / remove simply click on the left seat co-pilot / seatbelt
- Doors click on the front inside handle, or use tablet menu to open / close

### (OPTIONAL) EFBConnect – display webpages in the cockpit

When switching to the EFB page, you will see a notice to start the EFBConnect app:



You may join our discord for the EFBConnect download (free, but beta): https://discord.com/invite/2atu5xQ



### Feedback on this guide

Message me on Discord:

• Maintainer: davux3 (Dave)

• Originator: OneSeventyTwo (Neil) (Helpfully created this documented and pushed Dave to update it – we all thank Neil!)