

BASIC CONCEPTS

There are 3 main camera modes in MSFS:

Cockpit view



- The cockpit view is the main camera mode of MSFS and is the primary means to interact with the plane
- While in cockpit view, you can control the camera translations, rotations and zoom factor from any camera position
 - Rotations
 - **"Cockpit look left"** (Left shift + left)
 - **"Cockpit look right"** (Left shift + right)
 - **"Cockpit look up"** (Left shift + up)
 - **"Cockpit look down"** (Left shift + down)
 - Or you can press & hold the right mouse button and move the mouse to control the eyepoint
 - Translations
 - **"Decrease cockpit view height"** (down)
 - **"Increase cockpit view height"** (up)
 - **"Translate cockpit view forward"** (Right alt + up)
 - **"Translate cockpit view backward"** (Right alt + down)

- **“Translate cockpit view left”** (Right alt + left)
- **“Translate cockpit view right”** (Right alt + right)
- Zoom
 - **“Zoom cockpit view”** (Mouse wheel up)
 - **“Unzoom cockpit view”** (Mouse wheel down)

- The cockpit view has four (4) default camera positions from the Pilot’s perspective:
 - The VFR position defaults to the pilot seat and offers a good view of both the main instruments and the exterior.
 - It can be activated using the **“Toggle VFR Cockpit mode”** command (F10 by default)
 - The IFR position defaults to the pilot seat and is more focused on the plane’s instruments
 - It can be activated using the **“Toggle IFR Cockpit mode”** command (F9 by default)
 - The Landing position defaults to the pilot seat and offers a good view of the runway.
 - It can be activated using the **“Toggle Landing Cockpit mode”** command (F11 by default)
 - The Copilot position defaults to the copilot seat, in a VFR style position
 - It can be activated using the **“Toggle Copilot view”** (unmapped by default)
 - Additional notes:
 - Using the **“Reset camera”** shortcut (F by default) will always replace the camera to the last used Pilot’s view
 - You can cycle through the VFR, IFR & Landing Pilots view using the **“Next Pilot position”** & **“Previous Pilot Position”** commands

- The cockpit view also has different instrument views
 - Instrument views are preset camera positions focused on each instrument panel of a given plane
 - You can access them using their default shortcuts, **“Toggle instrument view [1, 2, 3...]”** (left ctrl + [1,2,3...] by default)
 - You can also cycle through them using **“Next instrument view”** and **“Previous instrument view”** (by default, A or left shift + A)

- The cockpit view has ten (10) Custom views slots
 - At any time, you can save the current camera position to a Custom view slot, using **“Save custom camera [0, 1, 2...]”** (by default, left ctrl + left alt + [1, 2, 3...])
 - You can then reload this custom view using **“Load custom camera [0, 1, 2...]”** (by default, left alt + [1, 2, 3...])

- Finally, the Cockpit view has a set of 8 Quickviews

- A Quickview allows a pilot to quickly orient the camera preset direction from the pilot seat
- The Quickviews are:
 - **"Cockpit Quickview Up"** (left ctrl + Up), +30° pitch
 - **"Cockpit Quickview Rear"** (left ctrl + Down), +160° yaw
 - **"Cockpit Quickview Right"** (left ctrl + Right), +90° yaw
 - **"Cockpit Quickview Left"** (left ctrl + Left), -90° yaw
 - **"Cockpit Quickview 45° left"** (unmapped by default)
 - **"Cockpit Quickview 120° left"** (unmapped by default)
 - **"Cockpit Quickview 45° right"** (unmapped by default)
 - **"Cockpit Quickview 120° right"** (unmapped by default)
 - You can cycle through the Quickviews using **"Cockpit Quickview cycle"** (Q by default)

External view



- The external view controls the plane from a 3rd person perspective
- You can freely rotate and zoom the camera around the plane
 - Rotations
 - **"External view left"** (unmapped by default)
 - **"External view right"** (unmapped by default)
 - **"External view up"** (unmapped by default)
 - **"External view down"** (unmapped by default)
 - Or you can press & hold the right mouse button and move the mouse to control the eyepoint
 - Zoom
 - **"Zoom external view"** (Mouse wheel up)

- **“Unzoom external view”** (Mouse wheel down)

- Like the cockpit view, the external view has a set of Quickviews
 - A Quickviews allows a pilot to quickly orient the camera preset direction around the plane
 - The Quickviews are:
 - **“External Quickview Top”** (left ctrl + Up), top down view
 - **“External Quickview Rear”** (left ctrl + Down), rear front view
 - **“External Quickview Right”** (left ctrl + Right), right plane profile
 - **“External Quickview Left”** (left ctrl + Left), left plane profile
 - **“External Quickview 45° left”** (unmapped by default)
 - **“External Quickview 120° left”** (unmapped by default)
 - **“External Quickview 45° right”** (unmapped by default)
 - **“External Quickview 120° right”** (unmapped by default)
- From the external view, you can still access the set of cockpit based instruments views using their dedicated shortcuts (ctrl + [1,2,3...]).
- At the moment, you cannot save custom views in External view

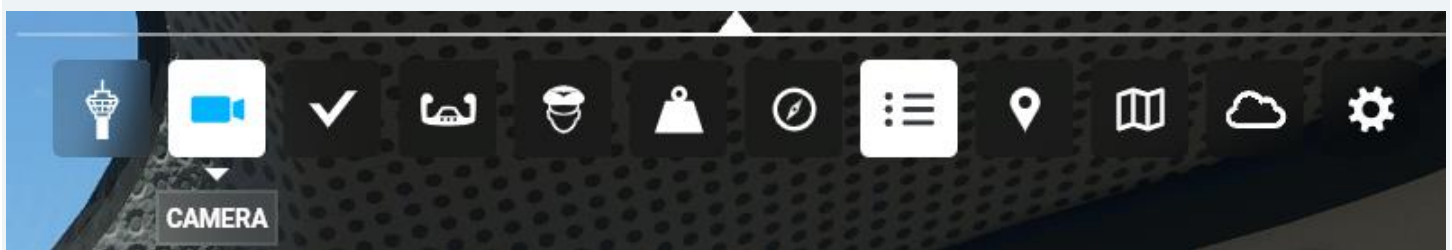
• Showcase views

- The showcase view provides a way to manipulate external camera positions to either capture screenshots and videos, or to enjoy the scenery.
 - The **“Toggle Drone”** input (Insert by default) allows you to activate and deactivate the Showcase mode
- They are split into two (2) different categories: the Fixed camera and the Drone camera
- The Fixed camera are a set of wide angle views positioned on the plane’s fuselage
- **“Toggle Fixed camera [1, 2, 3...]”** (left ctrl + left shift + [1, 2, 3...])
- You can also cycle through them using **“Next Fixed camera”** (A) and **“Previous Fixed camera”** (left shift + A)
- The Drone camera is a highly customizable free moving camera
 - You can freely control its position and rotations
 - Translations
 - **“Translate Drone Backward”** (S by default)
 - **Translate Drone Forward** (W by default)
 - **“Translate Drone Down”** (F by default)
 - **“Translate Drone Up”** (R by default)
 - **“Translate Drone Left”** (A by default)
 - **“Translate Drone Right”** (D by default)
 - Rotations
 - **“Pitch Drone Down”** (Numpad 2 by default)
 - **“Pitch Drone Up”** (Numpad 8 by default)
 - **“Roll Drone Right”** (Numpad 9 by default)
 - **“Roll Drone Left”** (Numpad 7 by default)
 - **“Yaw Drone Right”** (Numpad 6 by default)
 - **“Yaw Drone Left”** (Numpad 4 by default)

- You can set its speed, both for translations and rotations
 - **"Increase Drone Translation Speed"** (F6 by default)
 - **"Decrease Drone Translation Speed"** (F5 by default)
 - **"Increase Drone Rotation Speed"** (F8 by default)
 - **"Decrease Drone Rotation Speed"** (F7 by default)
- You can control its depth of field
 - **"Toggle Drone Depth of Field"** (F1 by default)
 - **"Toggle Foreground Blur"** (left ctrl + F1)
 - **"Toggle Drone Autofocus"** (F4 by default)
 - **"Increase Drone Depth of Field"** (F3 by default)
 - **"Decrease Drone Depth of Field"** (F2 by default)
- You can control its exposure
 - **"Toggle Drone Auto Exposure"** (left ctrl + F4 by default)
 - **"Increase Drone Exposure"** (left ctrl + F3 by default)
 - **"Decrease Drone Exposure"** (left ctrl + F2 by default)
- Its "Follow mode" allows it to move freely in the plane frame of reference
 - **"Toggle Drone Follow Mode"** (Tab by default)
- Its "Lock mode" sets and locks the Drone camera onto the plane.
 - **"Toggle Drone Lock Mode"** (left ctrl + Tab by default)
- The "Follow mode" and the "Lock mode" are not linked, meaning you can activate or deactivate them independently
- You can change the target of the Drone camera (other players, landmarks...)
 - **"Attach Drone to Next Target"** (left ctrl + Page up)
 - **"Attach Drone to Previous Target"** (left ctrl + Page down)
 - **"Lock Drone to Next Target"** (T)
 - **"Lock Drone to Previous Target"** (left shift + T)

USER INTERFACE

A summary of the camera controls and modes can be found in the camera panel located in the in-flight toolbar



CAMERA

COCKPIT

EXTERNAL

SHOWCASE

RESET POSITION

CAMERA TYPE

<

FIXED LOOK

>

UPPER POSITION

☒

SMARTCAM

☒

ZOOM TYPE

<

MANUAL

>

ZOOM LEVEL

50,00%

FREELook SPEED

50,00%

FREELook MOMENTUM

50,00%

INSTRUMENTS AUTOSELECT

☐

^ PILOT

IFR

VFR

Landing

Copilot

^ INSTRUMENT

Instruments 01

Instruments 02

Instruments 03

Instruments 04

Instruments 05

^ QUICKVIEW

Quickview 1

Quickview 2

Quickview 3

Quickview 4

Quickview 5

Quickview 6

Quickview 7

Quickview 8

FREQUENTLY ASKED QUESTIONS

• What is the Smartcam and how can I use it ?

- The Smartcam is a feature accessible from the Cockpit and External views
 - **"Toggle Smart Camera"** (S by default)
- It allows the pilot to focus the camera on the closest point of interest, or a selected one
 - **"Set Custom SmartCam Target"** (T by default)
 - **"Next SmartCam Target"** (left ctrl + Page Up by default)
 - **"Previous SmartCam Target"** (left ctrl + Page Down by default)
- There are several points of interest available for the Smartcam
 - Navigation
 - Navigation points of interest are dynamic and contextually updated, depending on the current flight state.
 - On the ground, it will follow each taxiway intersection.
 - On the runway, before taking off, it will target the climbing slope.
 - After take off, it will target the next waypoint if a flight plan is active, or the closest airport if there's no flight plan
 - During approach, it's updated to the designated runway threshold
 - During final, it is updated to the end of the runway
- Tourism
 - The Smartcam can target landmarks, fauna, etc.
- Multiplayer
 - The Smartcam can target other players
- Activities
 - The Smartcam can target the current mission objective

• What are the lockable versions of the camera controls?

- The lockable camera inputs are activated when their corresponding "lock" control is triggered.
- The pilot can, for example, change the behavior of the mouse from controlling the cursor to controlling the eyepoint when the right mouse button is held.
- Most of the camera controls have a lockable version, allowing for a fine customization of the interaction model.

• Can I map the camera controls to my joystick POV hat?

- Yes, you first have to remove the Quickviews from your joystick POV hat (please refer to the Inputs FAQ for more details)
- Then, you have to set the following commands to each direction of your POV hat:
 - COCKPIT LOOK LEFT
 - COCKPIT LOOK RIGHT
 - COCKPIT LOOK UP
 - COCKPIT LOOK DOWN

- COCKPIT LOOK UP LEFT
- COCKPIT LOOK UP RIGHT
- COCKPIT LOOK DOWN LEFT
- COCKPIT LOOK DOWN RIGHT
- The camera system in MSFS is very versatile and most of the camera controls can be set on any button or axis.

- **How do I remove the HUD from external view?**

- Disable Options > General > Camera > Chase Camera > Display Instrument HUD

- **Are TrackIR devices supported by MSFS?**

- Yes. It is important to launch the TrackIR software before launching the simulation and make sure it is up to date (software version & game list)
- The head tracking device controls add to the camera system, meaning you can still interact with all the camera as you want while wearing the head tracker.

- **While in Drone camera, is there a way to control the plane at the same time?**

- Yes, you can use the "Toggle plane control" (keyboard C by default) command while in the Drone camera to take control of the plane.