

## The IM cockpit view system.

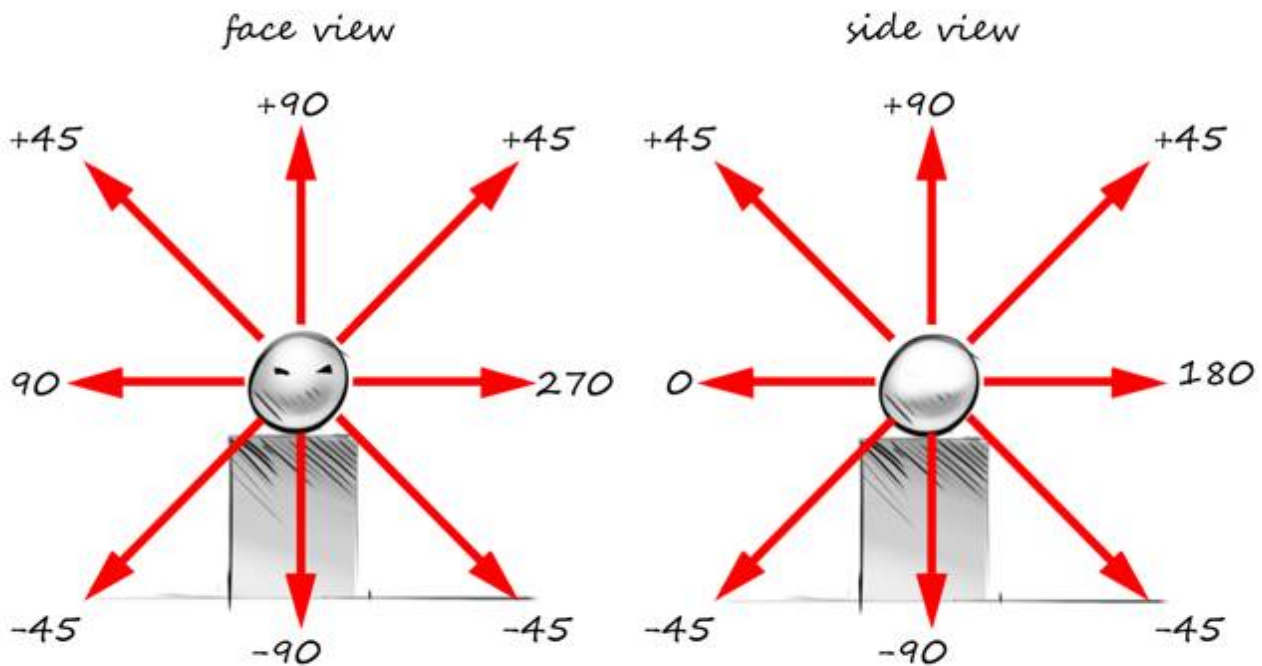
### General assignments:

- front-centered view - numpad 5;
- front-upward view - numpad 8, Joy pov0, «0» angle position (in the addictive snap mode the view pivots upwards vertically);
- right-forward view - numpad 9, Joy pov45, «45» angle position;
- right view- numpad 6, Joy pov90, «90» angle position (in the addictive snap mode the view pivots right horizontally);
- right-backward view - numpad 3, Joy pov135, «135» angle position;
- backward view - numpad 2, Joy pov180, «180» angle position (in the addictive snap mode the view pivots downwards vertically);
- left-backward view - numpad 1, Joy pov225, «225» angle position;
- left view - numpad 4, Joy pov 270, «270» angle position (in the addictive snap mode the view pivots to the left horizontally);
- left-forward view - numpad 7, Joy pov 315, «315» angle position;
- upward view - numpad 0, Joy button 7, «+90» upward angle position;
- downward view - numpad enter, Joy button 8, «-90» downward angle position;
- additional view - numpad del, Joy button 11;
- Field of view (FOV) less - numpad +, Joy button 5;
- Field of view (FOV) more - numpad - Joy button 6;
- FOV by default - numpad \*;
- Position of view (POV) forwards - insert;
- Position of view (POV) backwards - home;
- Position of view (POV) to the left - delete;
- Position of view (POV) to the right - end;
- Position of view (POV) upwards - page up;
- Position of view (POV) downwards - page down;
- Pre-saved view - F10;
- Change view modes - F9 (cycles through the four modes).

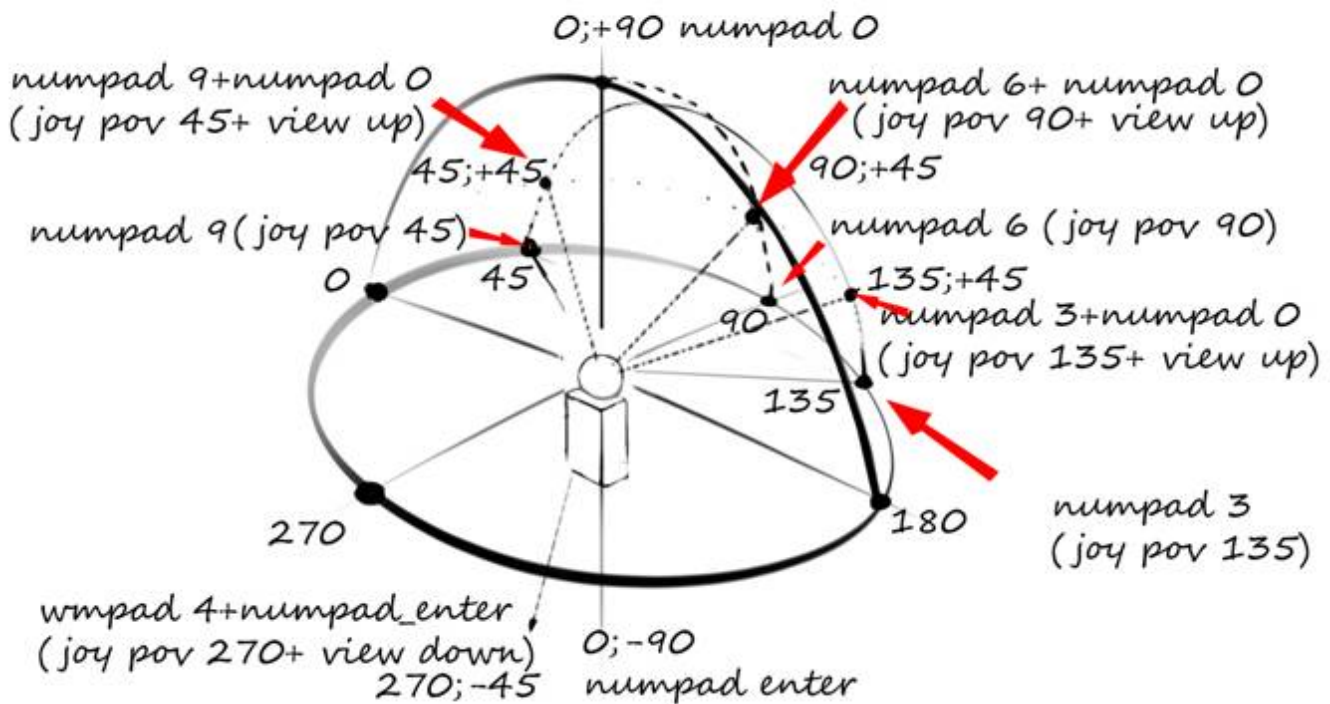
In the Centered snap mode, it is possible to get a +45 or -45 angle of vision for a view by holding two view keys/buttons down at the same time. For example, if you press the "right view" key/button down, along with the "upwards view" key/button, you will get a view looking to the right and angled +45 degrees upwards.

You can modify and create additional view assignments by holding the "additional view" key down while adjusting a numpad key/button view (from 1 to 9 inclusive). This will assign the adjusted "additional view" to this numpad key/button (see below for procedure).

Note: it is possible to specify different keys/buttons in the settings.exe.



view direction in angle coordinates



pilot view direction on example of angle-grid coordinates

There are four snap/pan viewing modes in IM:

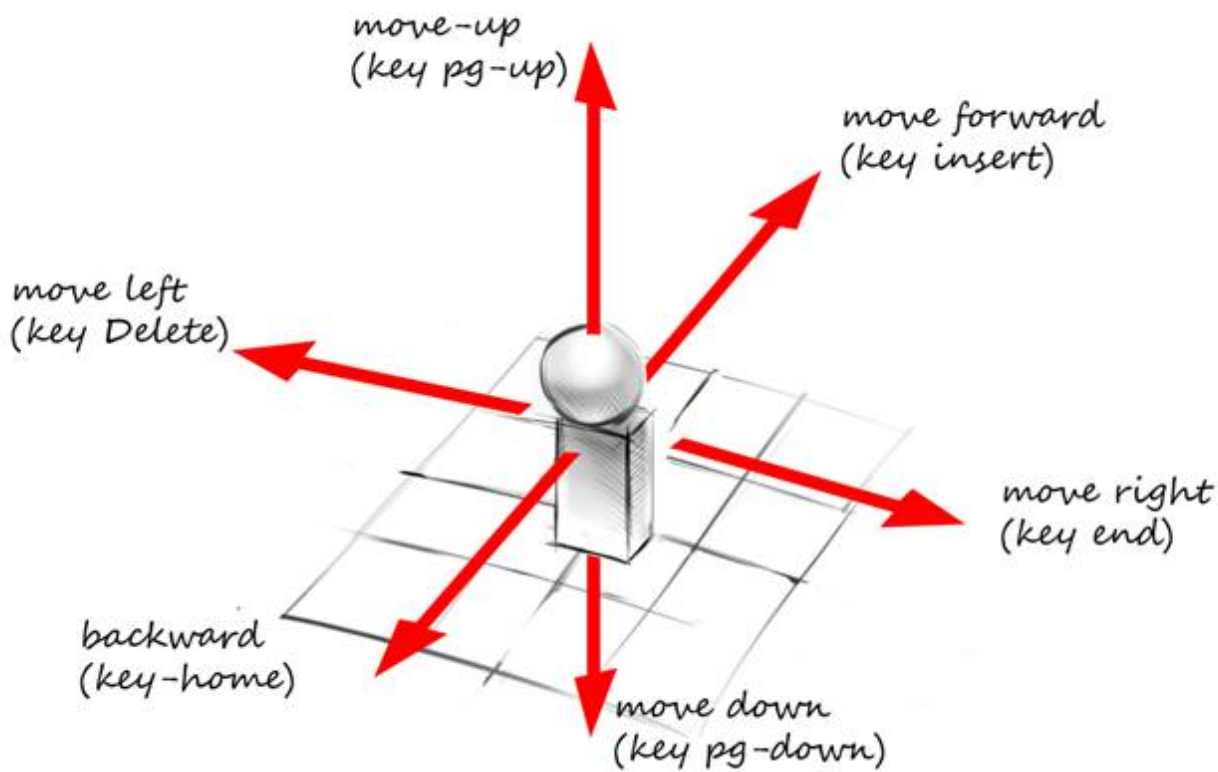
- Pan - smooth and flexible moving of the view done with the mouse;
- Addictive Snap - fixed views that can pan or incrementally rotate by pressing a key/button - you will be able to pan or index move your view in the selected direction per key/button pressed. For example, by repeatedly pressing the "right view" key/button you can rotate your view position from 0, to 25, to 45, to 90 degrees and greater;
- Fixed Snap - preset views selected by pressing a key/button - the view will immediately move and hold the selected view position;
- Centered Snap - quick views which switch and then Centered to the front centered view when the key/button is released.

By default these four viewing modes are cycled through by repeatedly pressing the F9 key.

You can also customize individual views:

- POV - position of view, this is the position of your point of view (and head position), and you can adjust this position on the x/y/z axis to set up your direction of sight (for this purpose it is possible to use the mouse) and then save the newly adjusted positions;
- Remember the FOV (field of view) can also be changed when adjusting views.

A view can be modified individually and then saved. One exception to this is the pan mode - in this mode the view position can be adjusted on the x/y/z axis, but the modified view cannot be saved.



linear pilot head movement on example (x/y/z)

#### Example of view adjustment in the Centered snap mode:

While adjusting view in centered snap mode you should hold the key button, do not release this button while adjusting your current view and in additive snap and Centered snap mode it will be enough to change preset view. You CANNOT save view presets in pan mode.

Its recommended to adjust view presets in fixed snap mode, but the following example – is just an example, no more.

When pressing the "right view" key (numpad 6), and selecting a POV key to adjust the current point of view and saving it, the new view can be registered (this procedure is also available when in the additive and fixed snap modes). With the help of the POV keys; insert/home (the x-axis), del/end (the z-axis) and pgup/pgdwn (the y-axis) - the view angle can be modified (i.e. the view moved around to minimize a wing blocking line of sight, or to raise the view for example, to minimize the fuselage decking blocking the view). FOV can also be modified in these adjustments by using the "numpad -" and "numpad +" keys/buttons. After adjusting to the desired new viewpoint, save the changes by pressing the F10 key. Now the key/button will use the saved view (in this example for numpad 6), as the view will have been switched to this newly adjusted change.

Continuing with this example above, the same procedure applies to combinations of "right view" + up angles (i.e. a view angle to the right adjusted +45 upwards) - you should hold both keys of a "combined" view while adjusting before saving.

There is also a method to assign "additional views" in IM, as an example for having a specific landing or cockpit gauge view. By default the "additional view" key is numpad del (.) (key\_DECIMAL). You can specify 9 (+1) additional views to the numpad keys.

Adjustment of additional views is the same as with the above overview, but in this case it is necessary to hold the "additional view" key down while adjusting the selected numpad key view (by default numpad 1 to 9 + "additional view" key), and then saving the new additional view by pressing the F10 key.

For example, an "additional view" for the RPM gauge on the SPAD 13 can be assigned as follows: While holding the "additional view" key + the numpad 4 key/button down, (do not release) and adjusting the view so that the RPM gauge can be seen as desired (using the mouse for exact adjustment) then by pressing the F10 key- this additional view will be saved. Thus when pressing the same combination of keys again ("additional view" and "left view") a custom view of the SPAD's RPM gauge will be seen.

Accordingly, when specifying new view parameters, you should always press the F10 key to save these adjustments.

### **Combinations of views and their features.**

The Centered snap mode views are also supported when using TrackIR. While viewing with TrackIR, you can also press any of the Centered snap view keys/buttons - to use this view (as an example for a quick look at the gun sight(s) or at the gauges etc.).

Also, when in the pan mode, Centered snap and additive snap - additional views can be used.

All view presets/adjustments are unique to each plane and can be found in the data\LuaScripts\snapviews directory.