



SkyScout for X-Plane

User's Manual

Version 1.0 – Revised October 20, 2020



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About SkyScout

SkyScout is a web based EFIS (PFD/MFD/EICAS) system specially designed to provide an enhanced experience in the X-Plane environment.

X-Plane pilots will easily emulate a glass-cockpit-style at home just using additional monitor, laptop computer, iPad, iPhone, Android tablet or phone: all you need is one or more devices with a compatible web browser.

Users can enjoy X-Plane in many different ways. Real pilots or students may require real EFIS simulation for their training. Other users want to have real aircraft immersion by using homemade cockpit replicas or VR.

Specifically designed for virtual pilots willing to take full advantage of all the simulator features in real time, without pausing the sim. X-Plane pilots will enjoy this software maximizing their potential when flying online or offline and increasing their skills by learning how to get the full power available in X-Plane simulator.

Scale your home cockpit by using one or more devices to display the PFD, MFD, moving map, switch panels, weather control, route manager and much more by using SkyScout, the most flexible, easy and cheap way to build your home cockpit.

SkyScout also allows users to configure proprietary Dataref definitions in case some of your planes are not using the standard X-Plane Dataref. This feature is recommended for advanced users only.

You can try a fully-functional demo version of SkyScout for free with flight time limitation only. Free demo version of SkyScout will work for 10 minutes each flight and will terminate both SkyScout and X-Plane sessions after this time period. You can use the demo version several times with 10 minutes flight time limitation.

We strongly recommend to install and test demo version of SkyScout for free and test it with your preferred aircraft before purchasing it. A major number of planes will be totally or partially compatible with SkyScout, but you have the chance to know this in advance.

Home cockpit setup examples using SkyScout

SkyScout is designed to be flexible and fit in everyone's budget. Any reasonable modern device with a web browser can be a part of this EFIS, totally independent of the original aircraft instrument set.

Simple android tablet and smartphone Mac, iPad and android tablet



GA glass cockpit using touch screens Airliner home cockpit 3 monitor EFIS





Executing SkyScout

Please, read and proceed with SkyScout installation manual steps first.

Windows: execute SkyScout.exe at X-Plane 11\SkyScout folder. An icon in the windows system tray will show up with additional menu options.

Linux and Mac: execute SkyScoutServer at X-Plane 11/SkyScout_osx-x64/Server folder. It will open a terminal window you can minimize. Close this terminal window when you want to finish.

SkyScout will be accessible from your web browser using <http://localhost:9889> in the same computer you have SkyScout installed in or in external devices using the IP address of your host computer instead localhost and always adding :9889 after the IP address. Example: <http://192.198.1.10:9889>. To get your host IP address, check X-Plane network settings tab.

First time it runs, could take some time to start, refresh your browser if it doesn't show up.

Important: if you want to open two SkyScout browser screens in the same computer to be used in additional monitors, is strongly recommended to use two different browser types. In example you can use Chrome for PFD and Firefox for MFD. Never open two instances of the same browser type. The main reason for this is performance, opening two SkyScout sessions in same browser type slows it down.

Using SkyScout free browser for Windows:

There is a free custom-made browser for SkyScout (Windows OS only) available for download.

It's a light-weight web browser based on Chromium Engine Framework that connects and opens SkyScout interface directly in full screen mode and improves performance if several browser windows are opened.

Strongly recommended for home cockpit makers willing to have more than one EFIS screen.

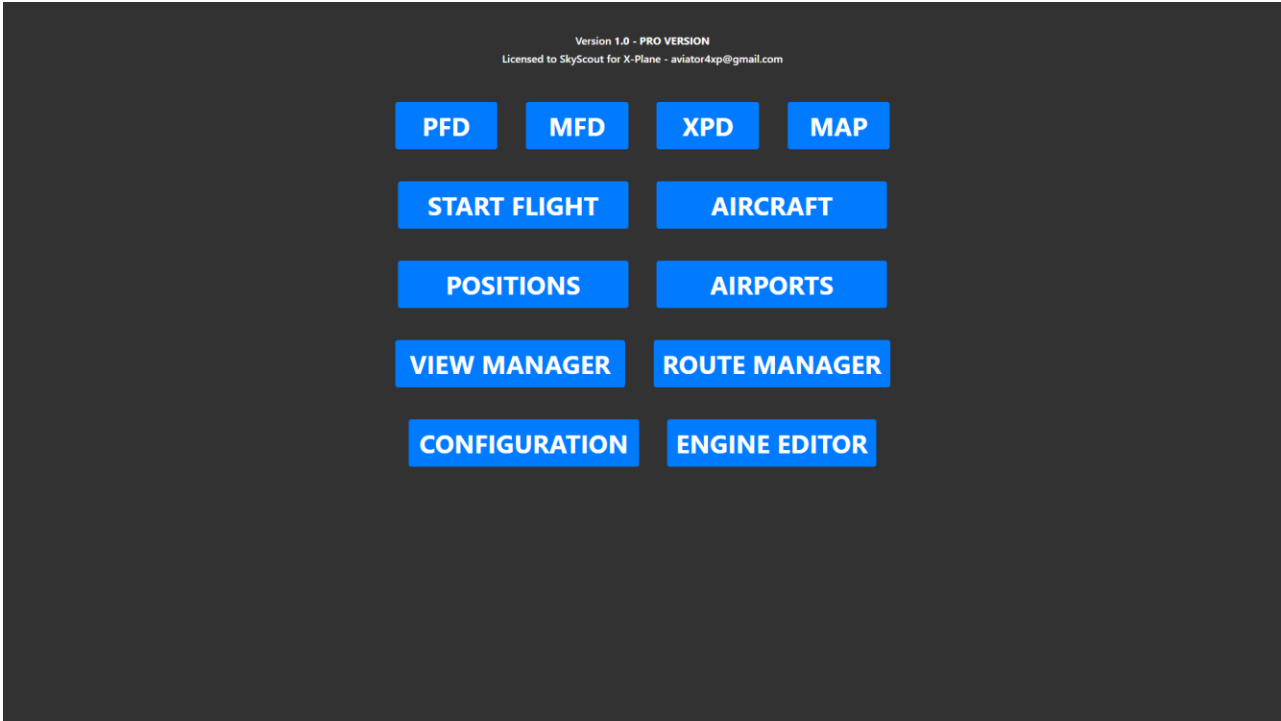
This browser is free and provided to be used with SkyScout for Windows only, without any commercial responsibility, liability or support. We provide this free tool as an optional resource for SkyScout "As Is" and "As Available" without warranty of any kind. Use it at your sole risk only.

Please, refer to SkyScout browser user's manual for additional information and instructions.



Using SkyScout

The first screen in your browser when SkyScout is accessed lets you select the EFIS screen:



Current available options:	
PFD	Primary flight display
MFD	Multi-function display
XPD	X-Plane function display
MAP	Moving map only display
START FLIGHT	Start a new flight menu
AIRCRAFT	Installed aircraft list (<i>only shows compatible ones</i>)
POSITIONS	Saved positions list
AIRPORTS	Airport database and maps
VIEW MANAGER	Management custom views
ROUTE MANAGER	Management for saved flight plans
CONFIGURATION	SkyScout configuration options
ENGINE EDITOR	Engine instruments editor

PFD

SkyScout primary flight display consists of a set of primary aircraft instruments and functions.



Main instruments and indicators: horizon line, pitch scale, roll scale and pointer, slip/skid, turn and compass, attitude, air speed, altimeter, vertical speed, autopilot information and indicated values, flight director, reference speeds, HSI source, GPS information, reference speeds, barometer, temperatures, pressure and time indicators.

There are several additional widgets (tabs) that can be hidden and shown to provide different layout configuration.

By default, from left to right and up to bottom, we can see, but not limited to:

- Autopilot (top left)
- Flight information (top center)
- Elevation chart (top right)
- Engine instruments (bottom left)
- Basic aircraft controls (bottom right)
- Map (hidden in this screenshot)

PFD – Menu and widget configuration

By clicking or touching in an empty area on the PFD screen, the menu and widgets labels are shown. Clicking on the black labels hides or shows selected widget.

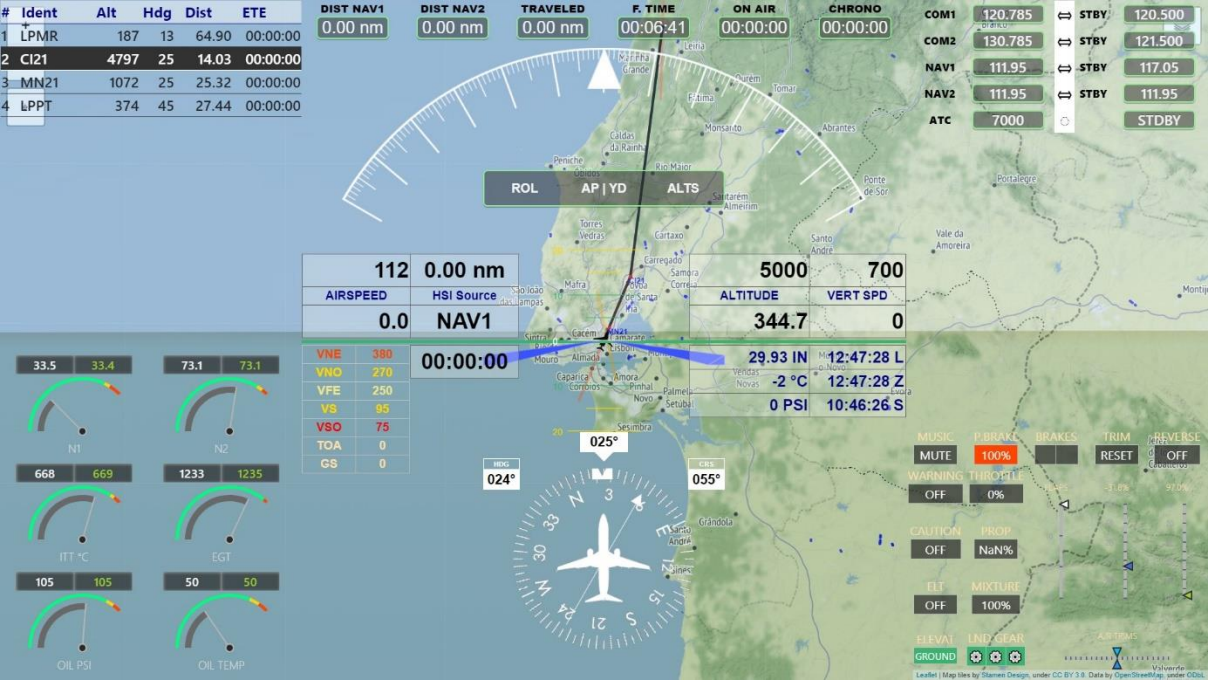


The PFD always memorizes the latest layout configuration, labels are hidden after few seconds.

Reference speeds, ETA, barometer and pressure and times can be also be hidden and shown by clicking on the name labels for airspeed, his source, altitude and vertical speed.

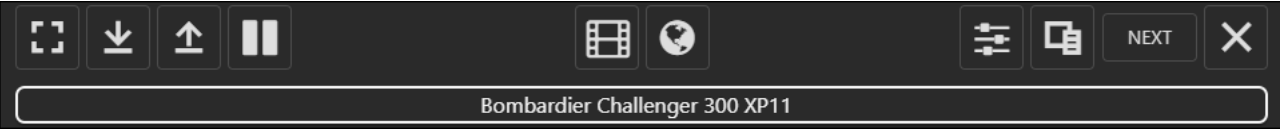
The map transparency can be also configured to allow map widget overlap with compass and heading indicators.

Use the menu options to handle widgets or PFD layout. Full map can be configured as a background of the PFD.



PFD – Menu

Menu options in the PFD

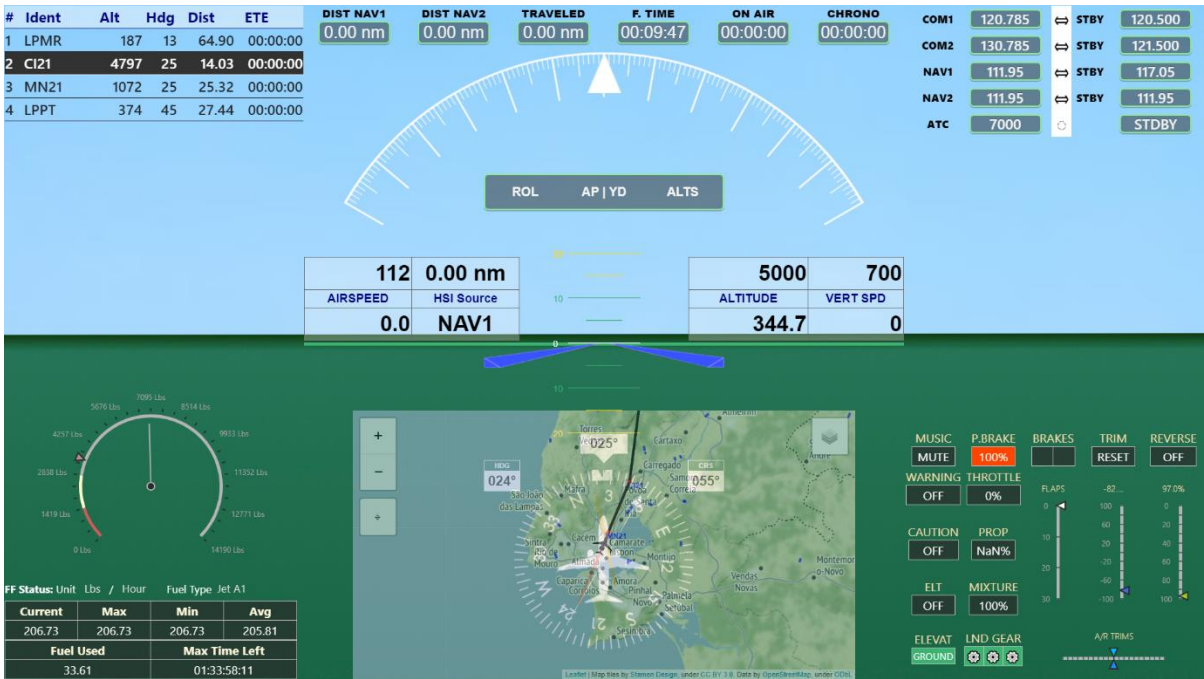


Current available options:	
	Full screen browser. This function behavior depends both in browser and device type.
	Show/expand all available widget tabs.
	Hide/collapse all available widget tabs.
	SIM toggle pause.
	Normal EFIS mode and background
	Transparent map for EFIS background
	Display settings: map transparency, time, field of view.
	Map source selector
	Goes to next menu page
	Closes PFD and goes back to the EFIS screen selector

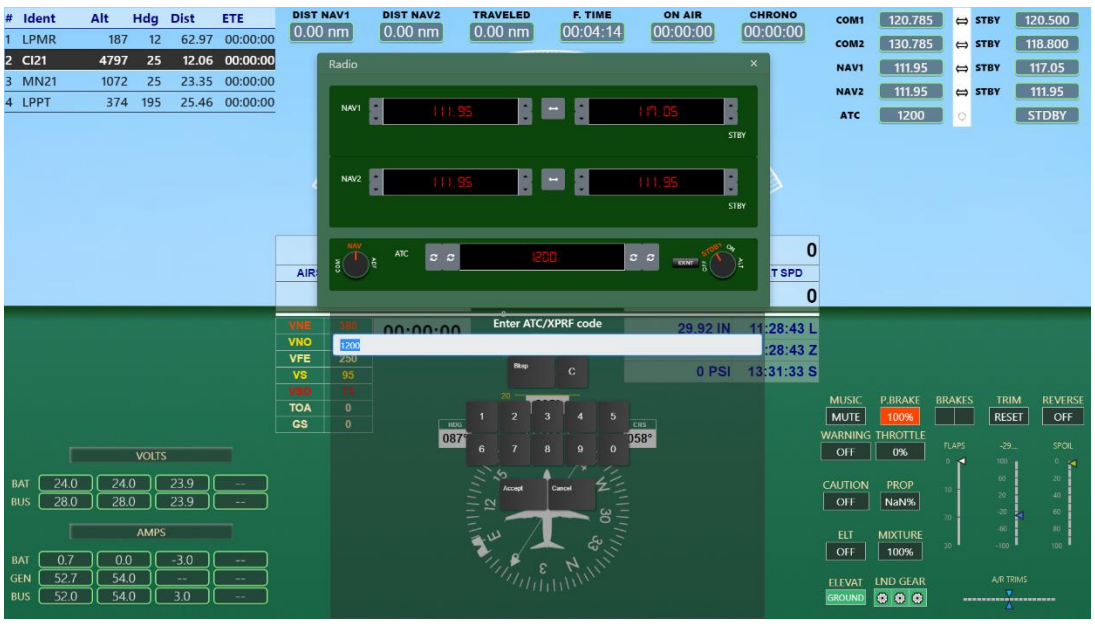
PFD – Additional widgets

The additional configurable PFD widgets are:

Route and radio widget on the top, fuel and electrical widget on the bottom left.



Radio, transponder, barometer and more can also be set using popups by clicking or touching on them.

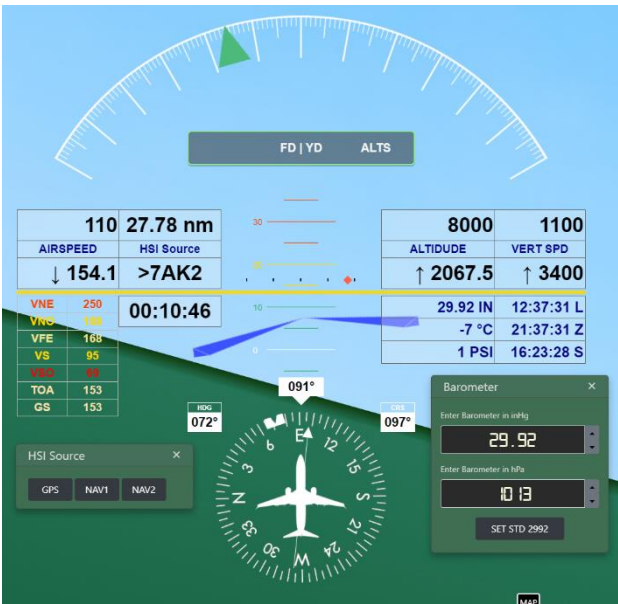


PFD – Enhanced functionality and information

SkyScout PFD is designed to have enhanced functionality with a set of insets, popups and visual alerts along with extended and detailed flight information.

Reference speeds and visual warnings

Multifunctional insets and popups



GPS waypoint distance and ETA

Bank angle visual alert



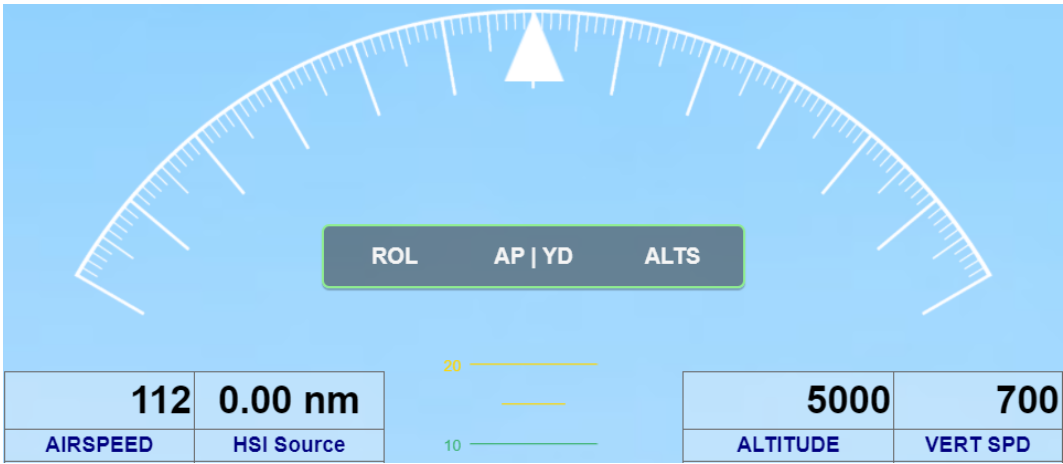
PFD – Autopilot



The autopilot widget in the PFD contains all the autopilot buttons to interact with. It has two modes: push and pull. Basically, two available sets of buttons switched from the last bottom right button in the grid.

Default autopilot functions are based on standard X-Plane autopilot datarefs. Users can customize them for non-standard planes. We don't provide customization for each and every plane. Additional information about how to configure specific custom functions for autopilot buttons are provided in separated documents.

The indicated values and autopilot information is also shown in the center of the PFD.



Autopilot active functions are shown in a dark gray indicator at the center of the roll indicator. Indicated air speed, altitude and vertical speed for autopilot are shown over current values.

PFD – Autopilot II

Indicated values can be changed using the mouse wheel up and down over each indicator or clicking (touching) over. By clicking or touching, a popup virtual keyboard will show up to manually enter the new indicated value.

The screenshot displays the PFD Autopilot II interface with a virtual keyboard overlay. The keyboard is used to input a new altitude value of 5000. The interface includes various flight parameters and a heading scale.

112	0.00 nm		5000	700
AIRSPEED	HSI Source		ALTITUDE	VERT SPD
0.0	NAV1		344.7	0

VNE	380	00:00:00	29.93 IN	12:52:21 L
VNO	5000			:52:21 Z
VFE	250		0 PSI	10:51:19 S
VS	95			
VSO	75			
TOA	0			
GS	0			

The virtual keyboard overlay includes the following elements:

- Navigation keys: Bksp, C, +, -
- Number keys: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
- Directional keys: ↑, ↓
- Action keys: Accept, Cancel, SYNC

PFD - Route information widget

This widget shows route information based on loaded flight plan.

The screenshot displays the PFD route information widget. At the top, there are summary statistics: DIST NAV1 (0.00 nm), DIST NAV2 (0.00 nm), TRAVELED (0.00 nm), F. TIME (00:11:18), and ON AIR (00:00:00). Below this is a table with the following data:

#	Ident	Alt	Hdg	Dist	ETE
1	LPMR	187	12	62.97	00:00:00
2	CI21	4797	25	12.06	00:00:00
3	MN21	1072	25	23.35	00:00:00
4	LPPT	374	195	25.46	00:00:00

A 'WAYPOINT INFO' popup is open for the selected leg (LPPT). It includes the following fields:

- Icao: LPPT
- Name: Lisboa
- Elevation: 374
- Country: Portugal
- Transition Alt: 4000
- Iata: LIS

The popup also features a tabbed interface with 'Actions', 'Frequencies', 'Runways', 'ILS', 'VOR', and 'WEATHER'. The 'ILS' tab is active, showing the following data:

↑	Name	H...	Freq.	Action
03	ILS-cat-I	23	109.10	NAV1 NAV2 STB1 STB2
21	ILS-cat-III	203	109.50	NAV1 NAV2 STB1 STB2

Additional information and actions are shown in a popup by clicking or touching a leg of the route.

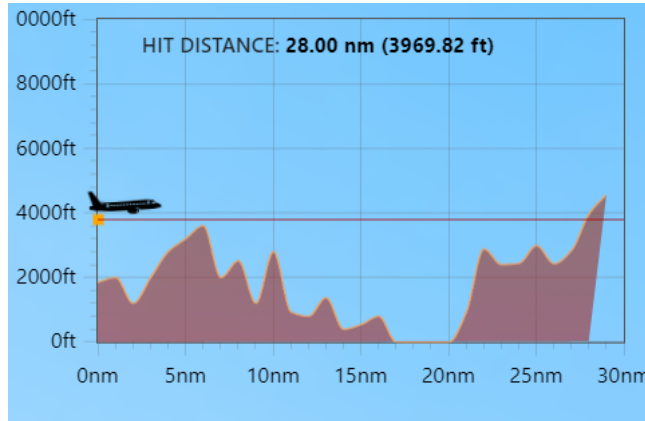
Route and flight planning functions can be managed from PFD, but is easier to handle using MFD as explained in MFD route manager in this manual.

SkyScout can create routes and flight plans as explained in another section of this manual, limited to airports, navaids, altitudes and user points. There are no advanced features such fuel, performance or procedures.

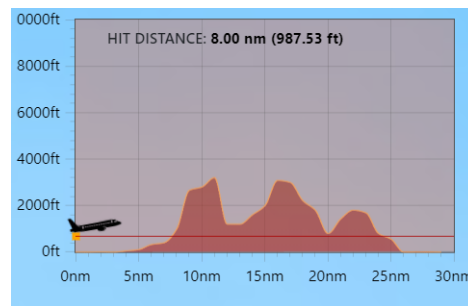
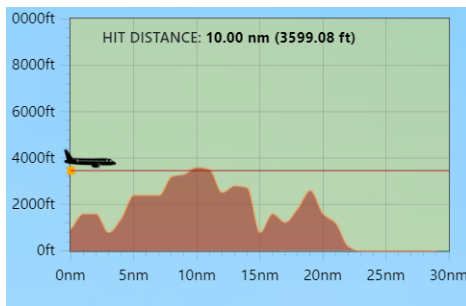
SkyScout provides an easy and quick way to create and activate your flight plan and also to perform some GPS functions: direct to, change destination, etc. but is not intended to be a full featured professional flight planner.

PFD - Elevation chart widget

The elevation chart widget is a 2D elevation instrument showing the elevation profile for a distance of 30nm in front of the heading of the plane.



It is not an elevation or altitude radar but a Ground Proximity Warning System.



It is relative to current heading and constantly updated on turns.

Note: we have plans to provide more sophisticated instruments and functionality related to altitude and elevation in future versions of SkyScout.

Important warning: the elevation database is a free 3rd party resource downloadable from <https://www.ngdc.noaa.gov/mgg/topo/gltiles.html> and not included in SkyScout by default. Users must download all tiles from <https://www.ngdc.noaa.gov/mgg/topo/DATATILES/elev/all10g.zip> and extract all included files directly in X-Plane 11\SkyScout\Data\elevation\all10 folder.

See also Configuration section for installation assistant on this resource.

PFD - Radio widget

The Radio widget is located at the top right of the PFD and displays all the frequencies for COM and NAV along with ATC transponder.



Clicking on the different elements and areas of this widget additional popup windows will show up for frequency dialing, transponder code and functions and more.

PFD - Engine information widget

The engine widget shows engine instruments and information.



Engine instruments are not automatically pre-configured for each plane since there is no information about the available panels and instruments in each aircraft.

SkyScout provides an engine information editor that allows user to set up to 6 different gauges for each aircraft. Please refer to the Engine Editor section of this manual.

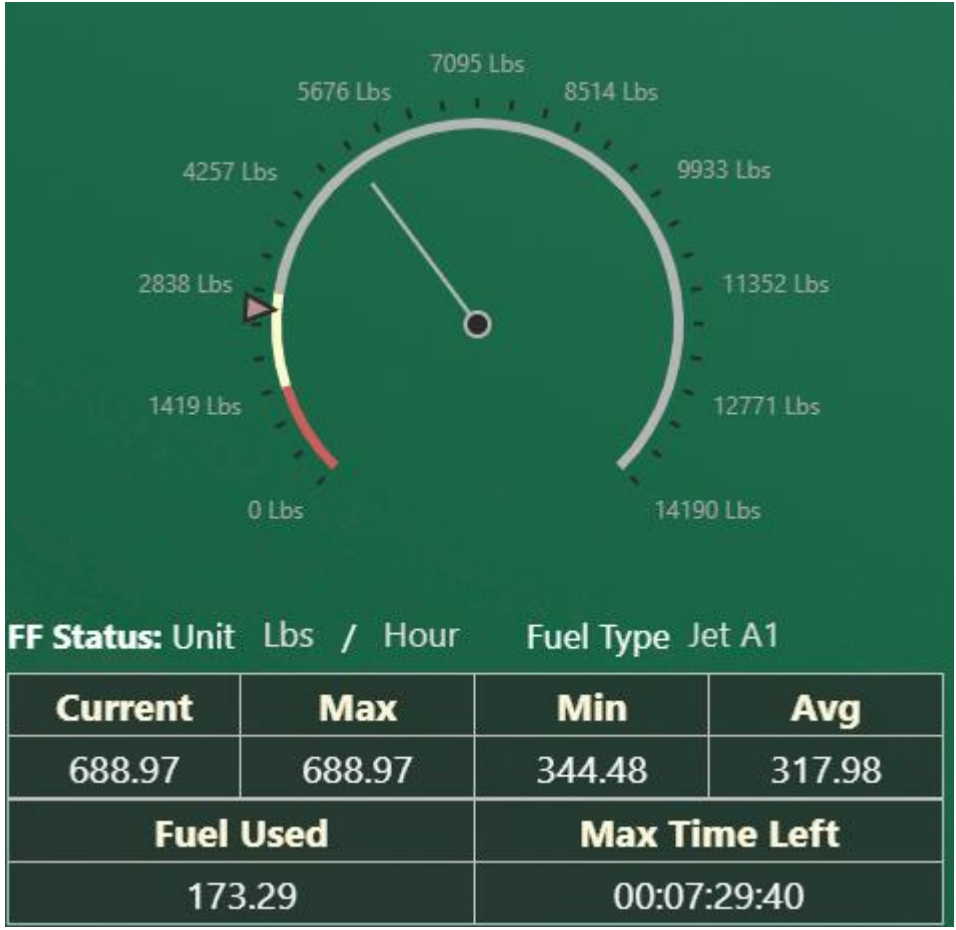
Engine gauge instruments are limited to the X-Plane standard engine systems: N1, N2, TRQ NM, TRQ LBFT, EPR, MAP, EGT, CHT, ITT, PROP, OIL PSI and temperature and they work using standard X-Plane engine datarefs.

Custom engine datarefs are not supported in the current version although its planned for future updates.

Edited engine instruments are stored for specific aircraft and can be updated anytime.

PFD - Fuel information widget

Use the PFD fuel widget to display main fuel information.



Extended fuel functions are also available in the MFD.

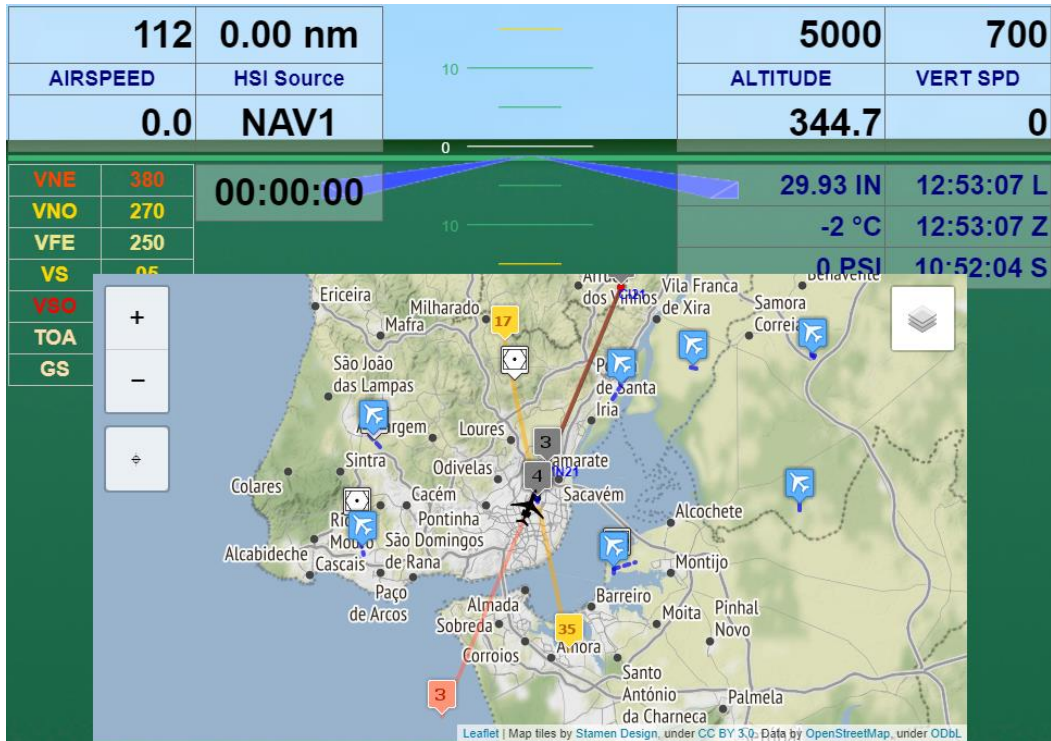
PFD - Electrical information widget

PFD electrical widget is informational only and shows generical electrical aircraft information related to batteries, generators and bus.



PFD - Map widget

The map widget shows the PFD inset map.



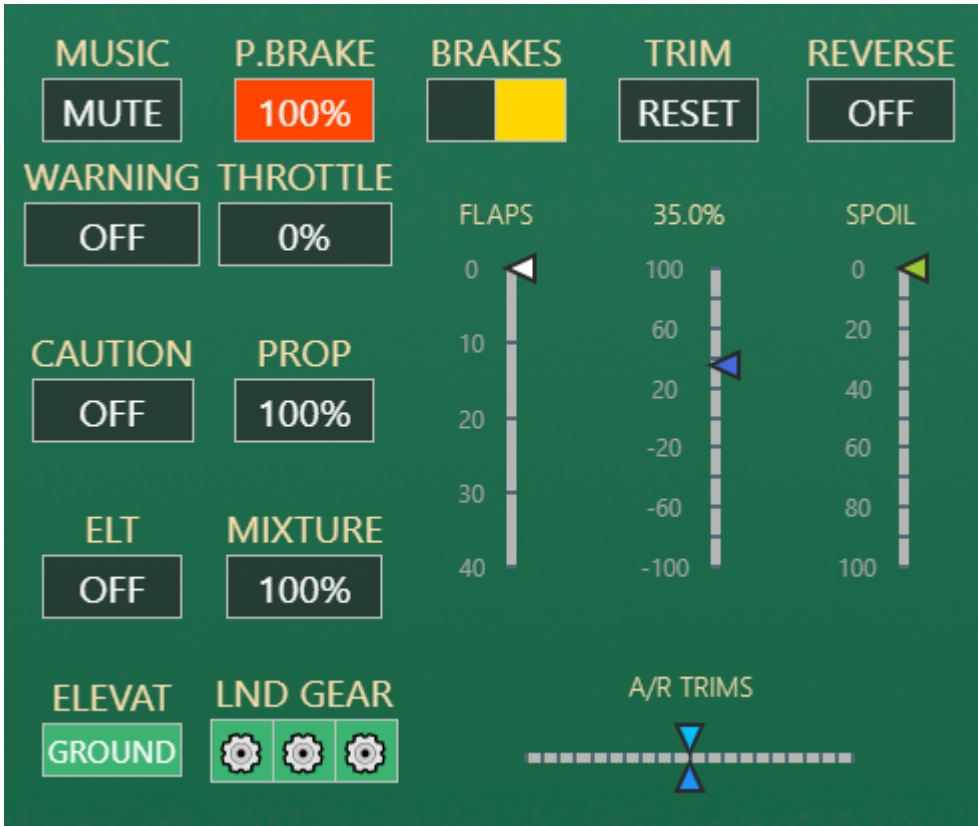
This is a zoom-able and scroll-able map with flight route information and some other advanced functions: airport and runway information, frequency autodial, GPS functions, waypoints and much more.



The MFD provides advanced and extended map features, see MFD Map section for further information. Use transparency settings for this widget in the top menu option.

PFD - Aircraft controls widget

Main aircraft controls are displayed in PFD widget.



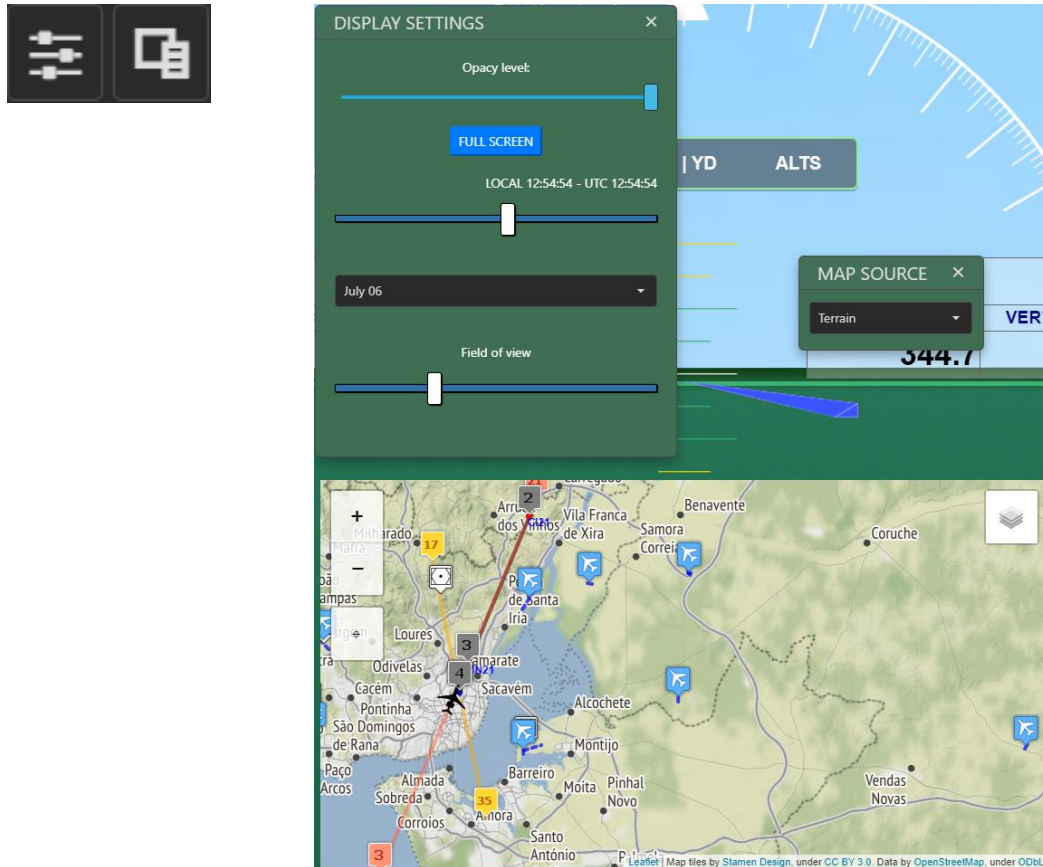
Some of the controls can be also set using this widget:

Parking brake, trim reset, reverse, warning and caution, landing gear can be activated clicking or touching on them.

Flaps, spoiler and trim controls can be also used and behavior is related to the clicked area of a specific control. Elevator trim goes up or down depending on if user clicks on the upper or the lower area of the indicator. Alerion and rudder trims are also depending on left and right areas.

PFD – Display settings and map source

There are two additional widgets in the PFD top menu to configure some display settings and map source.



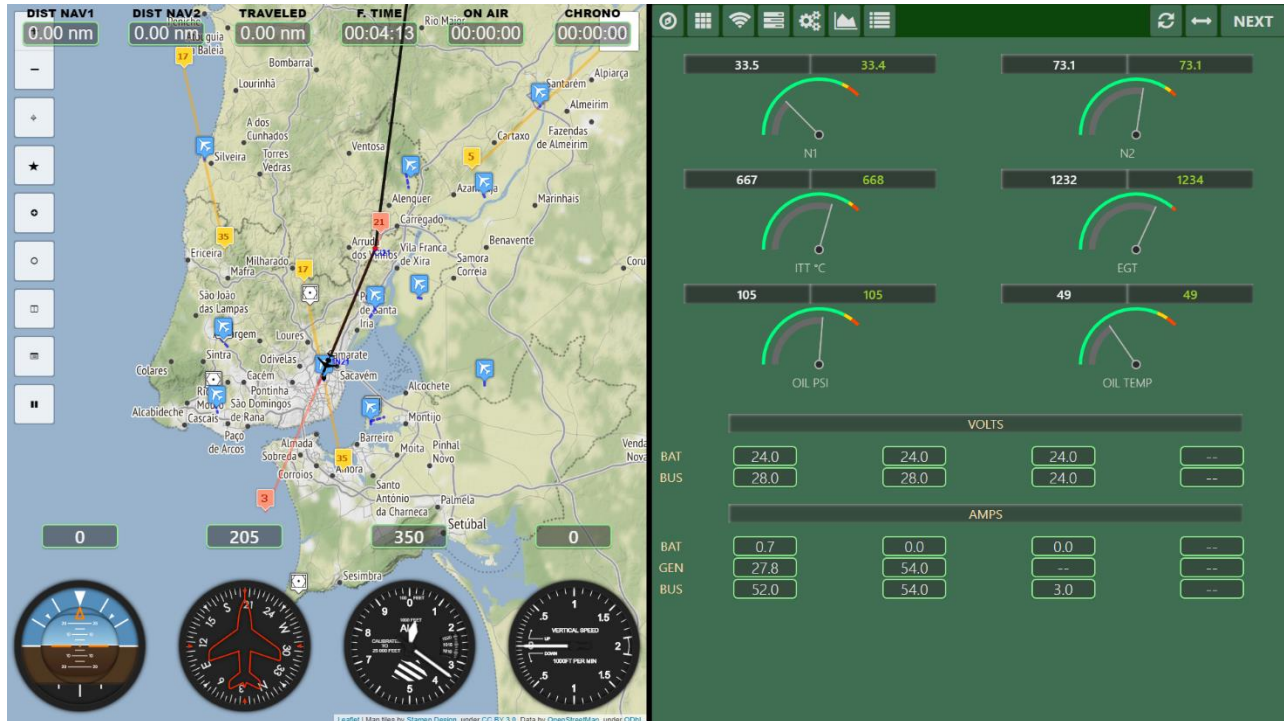
Users can set the map widget or background map transparency, full screen mode, local time and data as well as field of view using the controls on the display settings widget.

Additionally, users can select different map sources to use in the map widget or the background map. Copyrights and attributions will be shown on the bottom-right side of the map according to each map provider license documentation.

Important: SkyScout is using free map source services under Creative Commons Attribution or similar licenses. WE ARE NOT RESPONSIBLE of the map servers provided in SkyScout "As Is" and "As Available". Out of our responsibility, Map server providers can interrupt, suspend or terminate their services.

MFD

The SkyScout multifunction display shows moving map with additional and advanced flight functions.



The MFD extends the functionality of some PFD functions and adds additional ones.

Layout can be single panel or dual panel.

MFD is typically used to show full moving map and route in single panel mode or dual panel moving map plus something else.

The available panels for panels in MFD are:

- Autopilot
- Switches
- Radio
- Fuel
- Engine indicators
- Elevation chart
- Route management

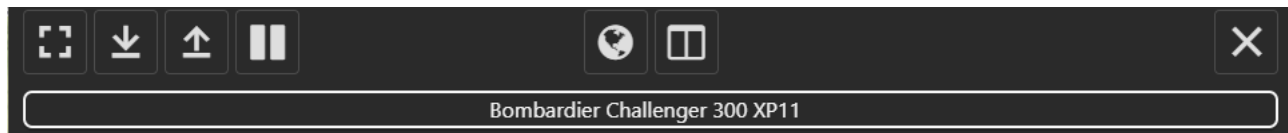
Other additional panels allowed in the MFD not directly related to the aircraft are:








- Airport list.
- WebFMC. (only available if 3th party WebFMC plugin is purchased, not included in SkyScout)
- View manager.
- Interactive weather control.
- SIM control.
- Music.

All of the panels listed above are also available in PFD with some feature limitation.

MFD – Main nenu

Main menu options in the MFD



Current available options:	
	Full screen browser. This function behavior depends both in browser and device type.
	Show/expand all available widget tabs.
	Hide/collapse all available widget tabs.
	SIM toggle pause.
	Show only map in the MFD
	Dual display mode
	Closes PFD and goes back to the EFIS screen selector

MFD – Dual panel menu - I

Main set of options buttons in the dual panel menu



Dual panel main menu options:	
	Autopilot
	Switch panels
	Radio devices
	Fuel management
	Engine instruments
	Elevation chart
	Route
	Swap dual panel positions
	Expand dual panel to full screen
	Show next set of buttons

MFD – Dual panel menu - II

Second set of options buttons in the dual panel menu



Dual panel main menu options:	
	Airport list
	WebFMC panel (requires WebFMC free or commercial version of this plugin to be installed separately, not included in SkyScout by default)
	View options
	Interactive weather
	SIM control panel
	Music panel
	Swap dual panel positions
	Expand dual panel to full screen
NEXT	Goes back to the main set of buttons

MFD – Map

Full moving map and airport, runways, ILS, VOR features in SkyScout:



Users can select different map sources in SkyScout. Copyrights and attributions will be shown on the bottom-right side of the map according to each map provider license documentation.

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MFD – Map functions

FUNCTION	DESCRIPTION	POP-UP OPTIONS	
	<p>Show or hide map layers</p>	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Airports <input checked="" type="checkbox"/> Runways <input checked="" type="checkbox"/> ILS Feathers <input checked="" type="checkbox"/> ILS Markers <input checked="" type="checkbox"/> VOR/DME Markers <input checked="" type="checkbox"/> Plane <input checked="" type="checkbox"/> Route 	<p>Select the layer of elements you want to show or hide when using the map.</p>
	<p>Zooms map in and out</p>		
	<p>Follow the plane</p>		<p>Switch to "follow plane" mode if it was cancelled by any user action</p>

FUNCTION	DESCRIPTION	POP-UP OPTIONS	
	<p>Save this position</p>		<p>Stores current position of the plane as a favorite position.</p> <p>SkyScout can start favorite positions to start new flight later in that specific location.</p>
	<p>Select start position</p>		<p>Selects a position where you want to start a new flight in, immediately after Go is pressed.</p>
	<p>Airport marker</p>		<p>Shows basic airport information</p> <p>Shows Airport menu</p> <p>Sets GPS as Direct to</p>

FUNCTION	DESCRIPTION	POP-UP OPTIONS	
	Runway marker		<p>Shows basic airport information</p> <p>Sets airport altitude in autopilot</p>
	ILS marker and course		<p>Show ILS information, sets ILS frequencies, heading for this ILS course and airport altitude in autopilot</p>
	Toggle plane shadow		
	Toggle MFD dual mode.	This can be done also from the top menu	
	Map type selector		<p>Select the type of the map you want to use.</p>
	Toggle pause music	Pauses background music if music was activated in the music screen.	<p>See music option in the MFD second dual panel menu.</p>

MFD – Autopilot panel

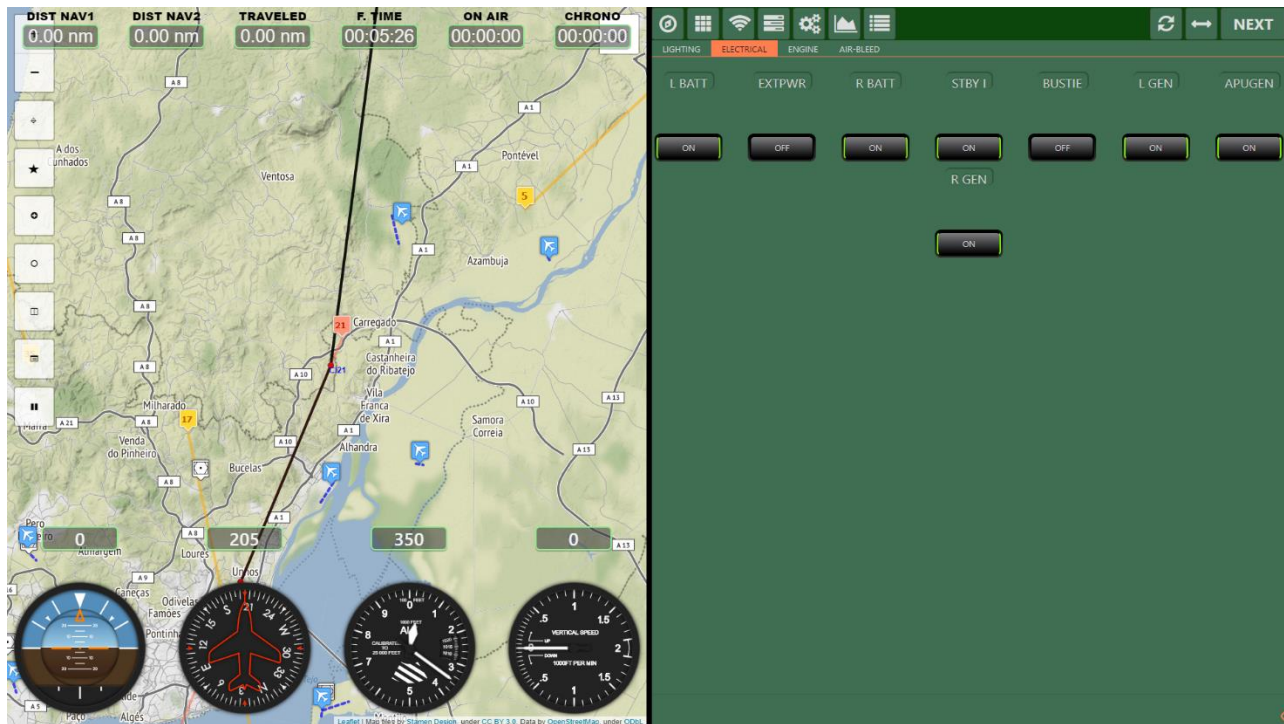
The autopilot panel in the MFD shows the same PFD button functions and layout, with enlarged buttons.



All autopilot buttons features explained in the PFD section applies to this screen.

Autopilot bug values as desired air speed, altitude, vertical speed, heading or course can be set only from the PFD.

MFD – Switches panel



The standard switch panel in SkyScout is based on standard switches for X-Plane, Cessna and other standard planes will work totally or partially with this switching system.

WARNING: *Lights and engine switches are what changes most from one plane to another, there is no standard and almost every aircraft has a totally different configuration. **Don't expect this panel to be 100% compatible with all of your planes.***

SkyScout allows advanced users to customize button panels for specific aircraft needs or custom datarefs, using a standard set of predefined switches, buttons, sliders and knobs.

Panel customization will be explained in a different manual and this is only recommended for advanced users, contact support for further information.

Switch panels created for our Aviator Pro product are fully compatible here, maybe small layout changes could be required.

Switch panels are also available in the PFD screen in an overlay window in the second set of buttons of the main PFD menu.

MFD – Radio panel



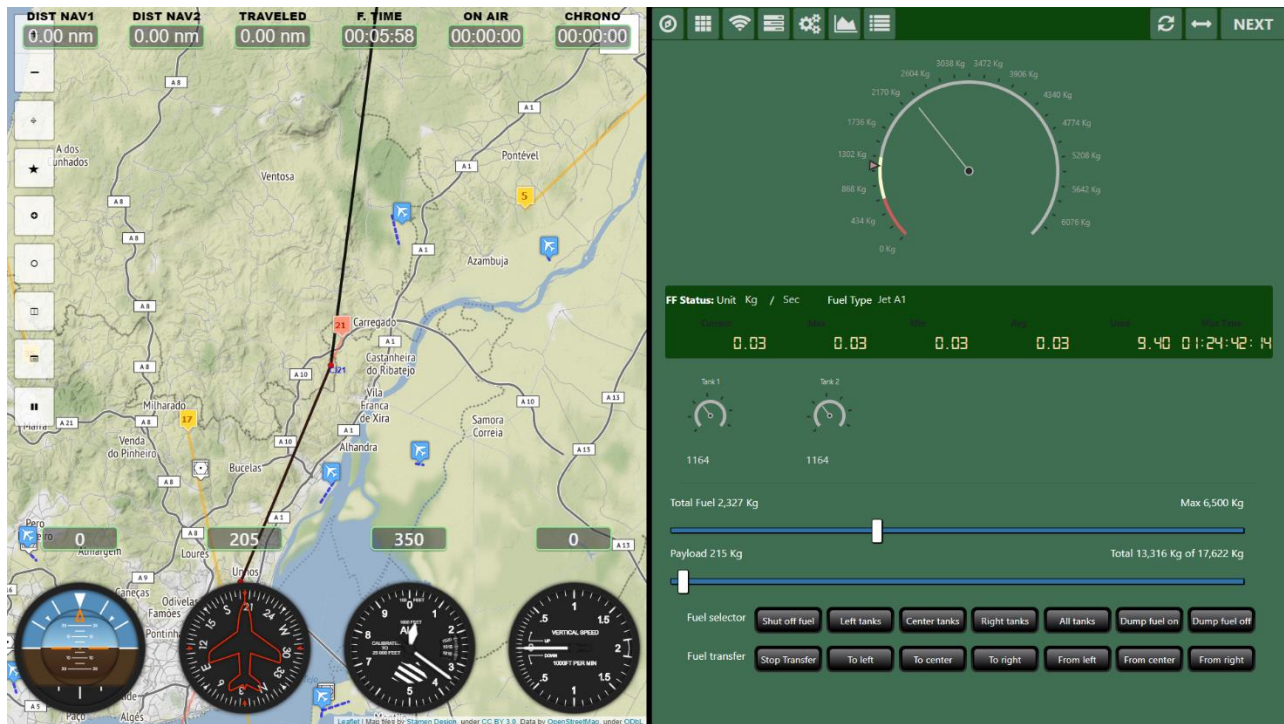
The radio panel consist of seven individual radio devices plus the transponder device.

Each radio device has used/active frequency on the left side and stand by on the right side. Stand by flip button in the middle.

Use the four buttons under the transponder display to set each transponder digit sequentially. To set the transponder mode use the knob.

Radio panel is also available in the PFD screen as a widget and in an overlay window in the second set of buttons of the main PFD menu.

MFD – Fuel panel



The fuel panel contains all the fuel gauges, fuel flow information panel, slider for total fuel and payload as well as command buttons to perform all available X-Plane actions.

Main gauge shows total fuel plus individual indicators per tank. Tank gauges on the right show individual tank information up to 10 tanks. Below each tank numeric value allows to increase and decrease weight individually. Total fuel slider selects global fuel weight. Use payload slider for extra payload weigh.

Fuel flow information panel allows to change measurement units, time units and fuel type, affecting this last one only to gallons.

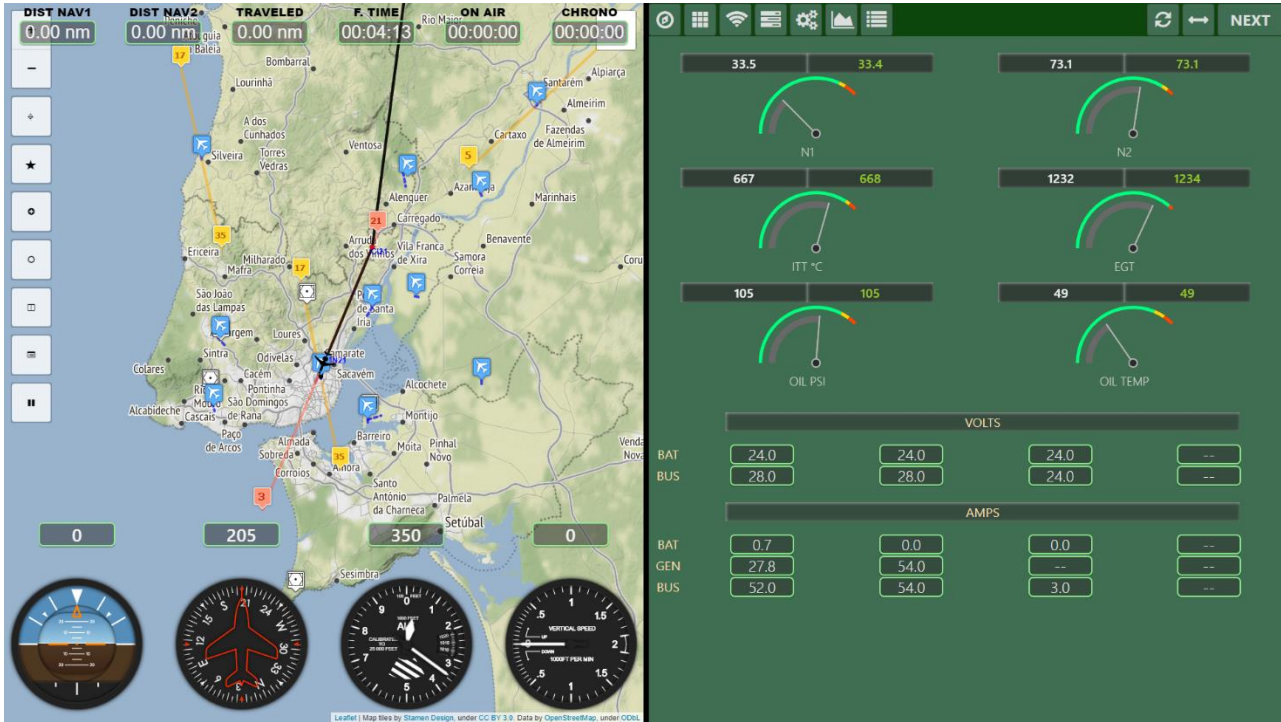
This panel handles X-Plane standard planes fuel features. Planes with fuel customization may not work or partially work in this panel.

This panel is similar to the standard X-Plane Weight and Fuel screen, adding some extra information and of course, you don't have to pause your flight.

Fuel panel is also available in the PFD screen as a widget and in an overlay window in the second set of buttons of the main PFD menu.

MFD – Engine panel

Engine panel in the MFD combines both PFD engine and electrical widgets



The engine and electrical panels are also available in the PFD screen as widgets.

Same information provided for both panels in the PFD section is shown here with the difference of the layout size. Elements in MFD are larger than in PFD.

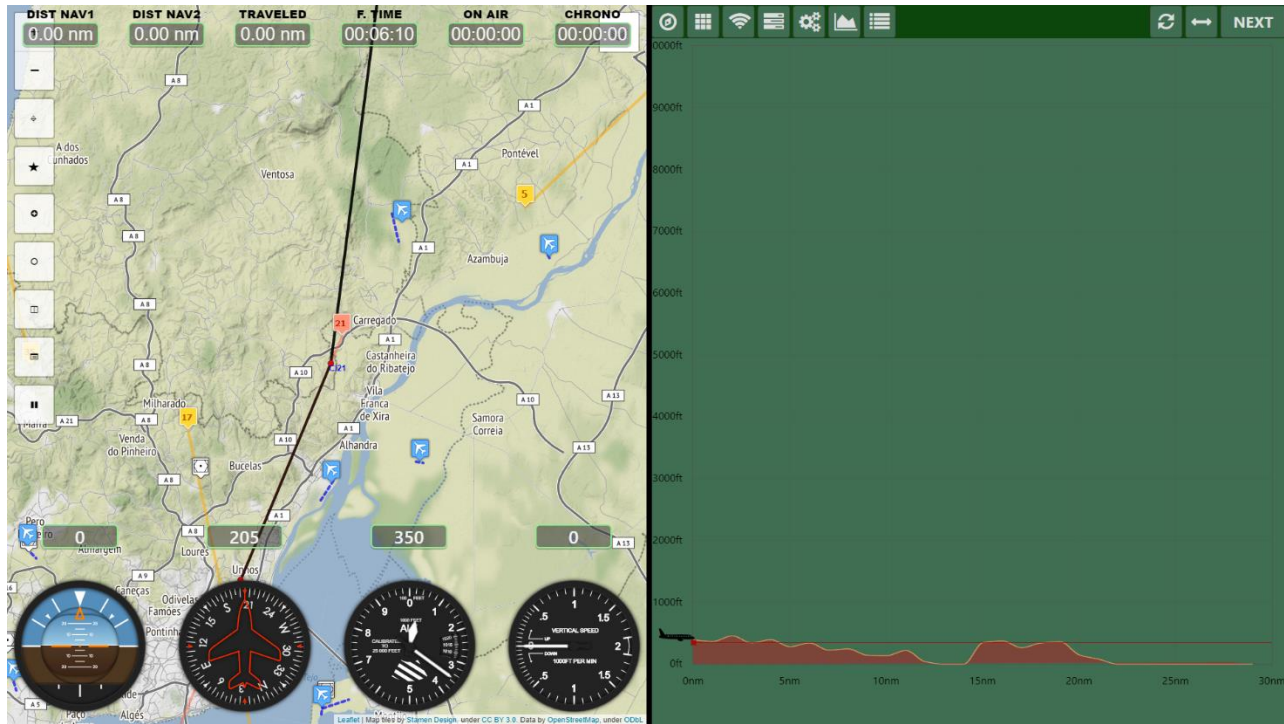
Engine panel has to be edited by users to match each plane instruments. There is no automatic way to the plane engine instruments.

There is an engine editor in the SkyScout main landing page. Refer to this section of the manual for additional information on this screen.

Available engine instruments and datarefs are restricted to X-Plane standard ones, custom made engine instruments for specific planes may not work in SkyScout.

MFD – Elevation panel

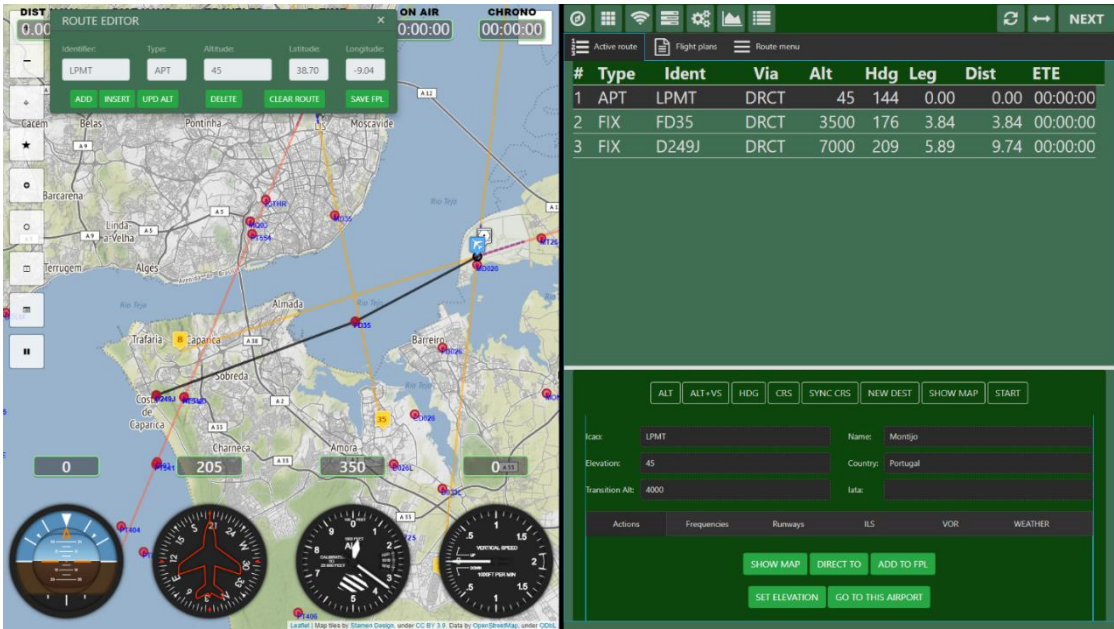
The elevation panel in the MFD displays a larger representation of the same PFD widget.



All instructions described in the PFD elevation section of this manual applies here.

Please see "Third party dependencies" or "PFD - Elevation chart widget" for additional information of this screen.

MFD – Route panel



Current route panel options:	
Active route	Waypoint table and selected waypoint specific information
Flight plans	List of current saved flight plans in X-Plane output table. A flight plan can be loaded and activated from this list.
Route menu	All route available functions including route editor.

Users can see all the waypoint information for the selected route along with lot of additional automated features depending on the active waypoint, some examples are: Full Airport information, frequencies auto-tuning, setting altitude, heading, CRS and much more. Interactive route information also available in the map.

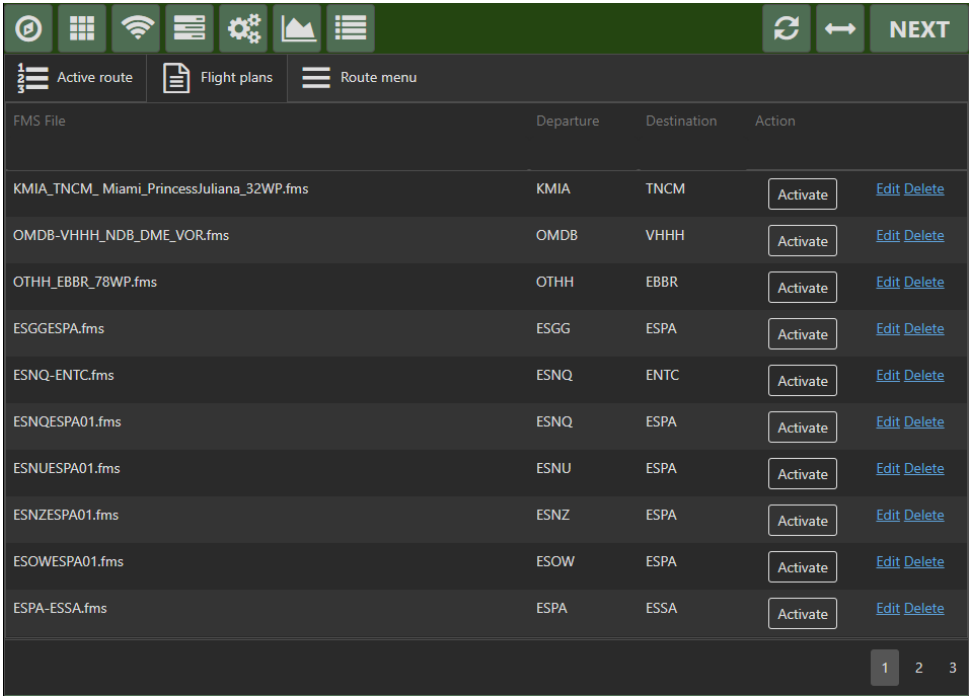
Important Warning: All GPS, route and flight plans features in SkyScout depends and require FlyWithLua 3rd party plugin to be already installed. We don't include FlyWithLua plugin in SkyScout installation, it has to be separately installed by the users. We don't provide FlyWithLua plugin support either, it is provided by the FlyWithLua developer in the X-Plane.org forums.

SkyScout GPS, route and flight plans features will not work without FlyWithLua plugin installed and working correctly. This function and behavior could also be affected by the aircraft itself.

Custom made GPS systems may not work with SkyScout that requires the aircraft to be compatible with X-Plane XPLMNavigation API.

MFD – Route panel – Flight plans

This screen shows list of available flight plans in FMS format located in X-Plane \Output\FMS plans folder.



Only compatible files are shown. Additional data be added to a flight plan by clicking on the Edit link.

Users can use this list to activate a route based on the selected flight plan. Activate will load the route without changing current location.

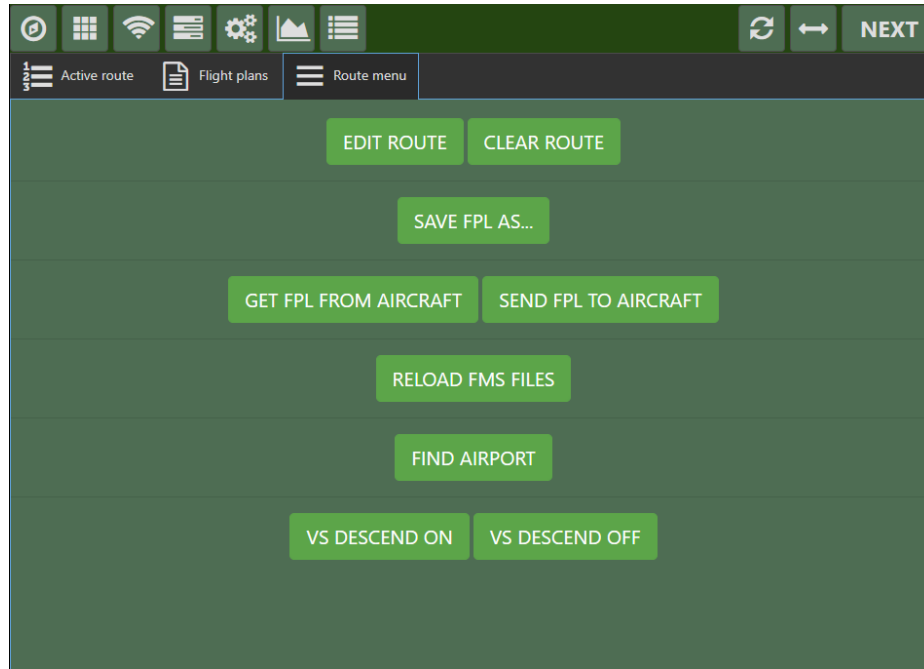
When a flight plan is activated, SkyScout will try to load it into the plane automatically, this will happen if FlyWithLua is installed and the current aircraft is compatible with X-Plane XPLMNavigation API. This feature usually works with most of the GA planes. Airlines with a custom-made GPS system will probably not work.

If SkyScout cannot load the flight plan automatically in the aircraft GPS, it can be also done manually by the user, loading the same flight plan in both SkyScout and the current aircraft, then the SkyScout route features will only work partially.

After a route is started or activated the map will show the flight plan route and waypoints with pop-up options available in each waypoint. Active route tab with route-related features will update with the loaded flight plan.

MFD – Route panel – Route menu

Route and flight planning functions can be managed from the MFD Route menu.



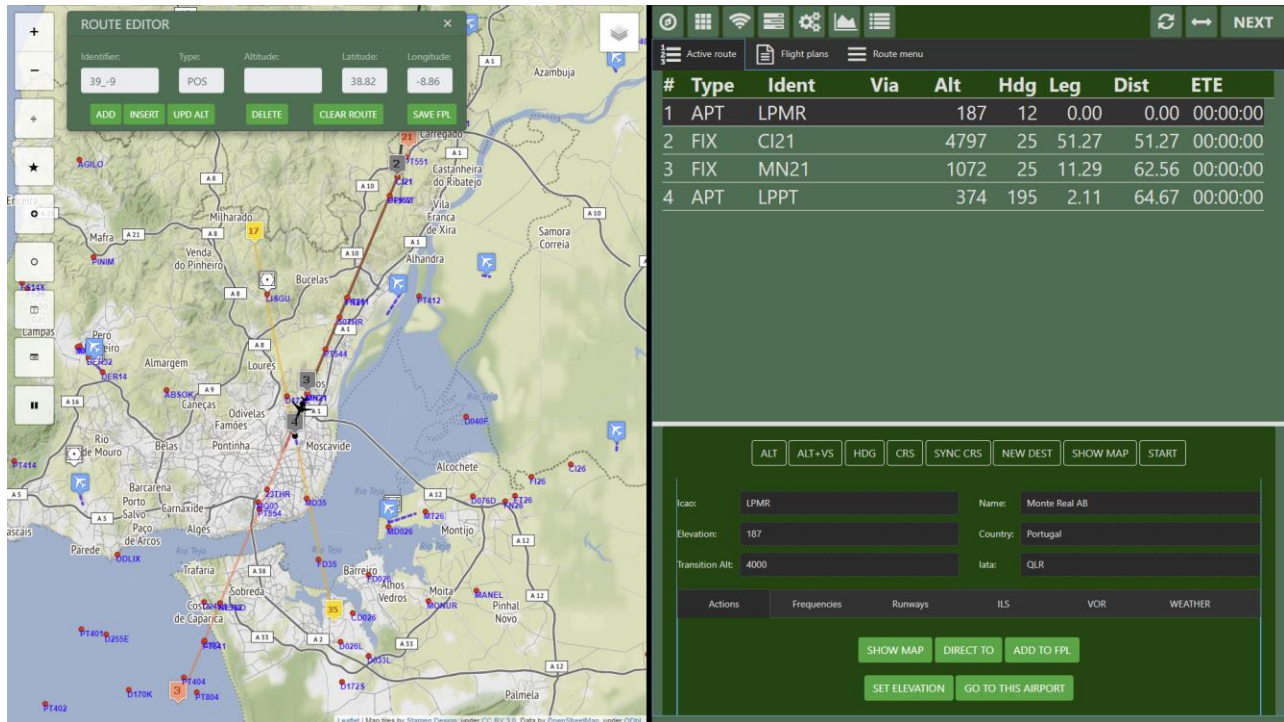
Current route menu options:

Edit route	Enables the route editor allowing active flight plan to be edited
Clear route	Clear active route in SkyScout and GPS aircraft if compatible GPS
Save FPL as...	Save current flight plan in X-Plane \Output\FMS plans folder
Get FPL from aircraft	Sends current route waypoints to the aircraft GPS if compatible
Get FPL to aircraft	Gets current route waypoints from the aircraft GPS if compatible
Reload FMS files	Reloads all flight plans in X-Plane \Output\FMS plans folder
Find airport	Open airport list to find a specific airport
VS descend ON	Enables VS descend (experimental feature still in development)
VS descend OFF	Disables VS descend (experimental feature still in development)

Warning! *The VS descend feature is an experimental landing function still in development:* Where there is no ILS system at a destination airport, and having the destination airport as last waypoint of the current loaded flight plan, by entering the airport altitude in the GPS altitude bug, SkyScout will continuously adjust autopilot vertical speed according to distance, altitude and speed. Autopilot has to be active. This function doesn't align the plane to the runway, just the vertical descend calculation using autopilot VS. Pilots can use SkyScout map to try the best align of the plane to the runway, if low visibility.

MFD – Route panel – Route editor

SkyScout can create routes and flight plans



This route editor is limited to airports, nav aids, altitudes and user points. There are no advanced features such as fuel, performance or procedures.

By clicking on Edit route in the Route menu, the route editor will pop up and the active route waypoint list will show up. Nav aids will be also shown in the map, zoom-in if they are not.

Users can touch or click on: airport icons, runways, ILS markers, runway markers, waypoints or just on any location on the map (user points). Then, clicked object will be shown in the route editor widget and altitude can be modified.

Current route editor options:

Add	Adds current element as last waypoint of the active route
Insert	Inserts current element after the selected waypoint
Update altitude	Updates the altitude (ONLY) of the selected waypoint
Delete	Deletes selected active route waypoint
Clear route	Clear the active route from SkyScout and plane GPS if compatible
Save FPL	Save current flight plan in X-Plane \Output\FMS plans folder

When done, send the edited flight plan to the plane using route menu so changes will take effect.

MFD – Airports list

This screen shows the airport list found in X-Plane configuration.

Icao	Name	Country	Iata	Elevation	Transition Alt
LELL	Sabadell	Spain	QSA	460	6000
KMPI	Mariposa-Yosemi...	United States	RMY	2253	18000
M44	HOUSTON MUNI			337	18000
LFCJ	Jonzac Neules	France		127	
9IS5	J & Y	United States		786	
3DE	Deiter			1297	
SILW	Mudubim 1	Brazil		1493	
ME45	Goosefair	United States		40	
4A9	Isbell Fld			876	18000
31N	Roadcap			731	
84WA	D and B Airpark	United States		55	
SC23	Eagles Nest-Fairvi...	United States		459	
ZMHU	Khujirt	Mongolia	HJT	5423	
2X57	Annandale Ranch	United States		1205	
KHMP	Henry Co	United States		881	18000

Actions	Frequencies	Runways	ILS	VOR	WEATHER
Name	Frequency	Action			
ATLANTA APP	128.575	COM1	COM2	STB1	STB2
ATLANTA DEP	128.575	COM1	COM2	STB1	STB2
AWOS 3	124.825	COM1	COM2	STB1	STB2
CTAF/UNICOM	122.725	COM1	COM2	STB1	STB2

The airport grid allows to find and filter airport by several fields, see them on the Map along to all the airport information available for selected airport.

User can change current location to selected airport or auto-tune Radio and ILS frequencies.

This is an MFD panel version of the Airports screen in the main SkyScout landing page.

MFD – WebFMC

The WebFMC panel integrates 3rd party plugin inside SkyScout



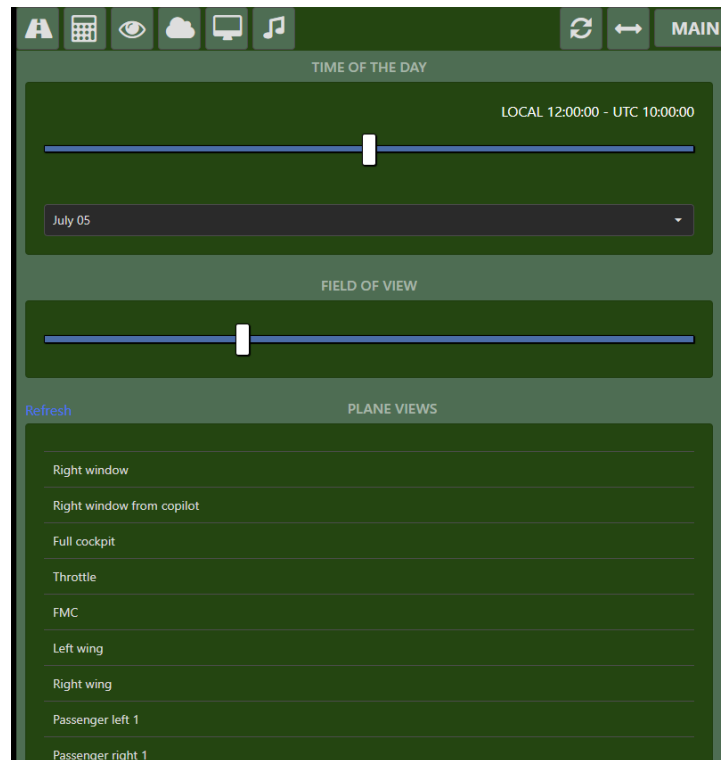
If SkyScout detects WebFMC plugin installed, then MFD adds this option to the dual panel.

This feature requires WebFMC free or commercial version of this plugin to be installed separately, not included in SkyScout by default.

Important: We are not the developers of WebFMC and not selling or supporting it. Contact to the WebFMC developers' team if you have questions about this plugin or support is required.

MFD – Views panel

This panel allows the user to use plane-specific views options created by the view manager



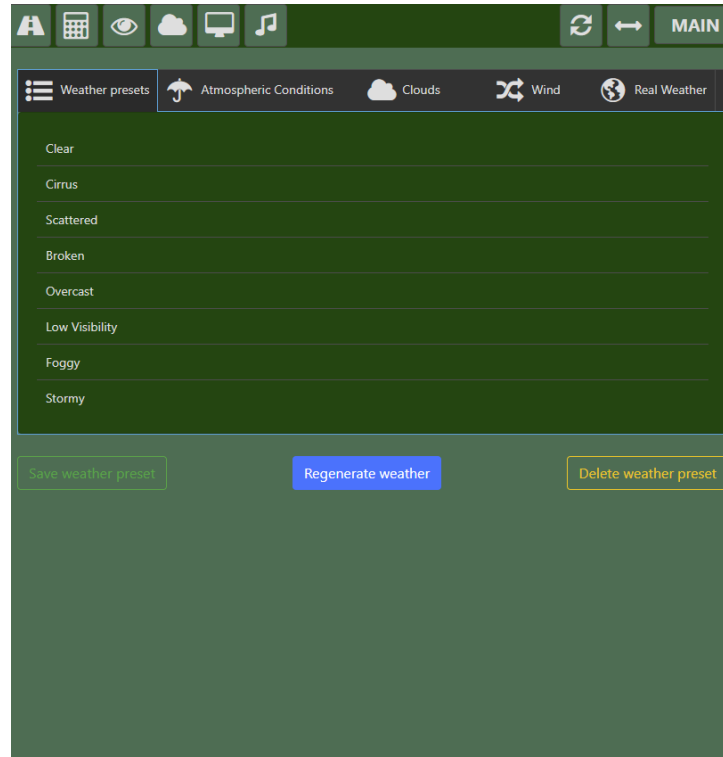
There are three master views: Pilot, Cockpit and Copilot. User can set three of them differently for each plane allowing to bypass the standard X-Plane field of view in monitor settings. SkyScout will load automatically each plane views every time a plane is loaded and set Pilot view at the beginning.

Date, time and field of view can be also changed here.

Refer to view manager section of this manual.

MFD – Interactive weather

Use the weather panel to change weather options interactively without pausing the sim or the flight, click regenerate weather button after any change.



Store your favorite weather presets and use them on the fly, manage your atmospheric conditions, cloud layers, wind layers and activate real weather. All the standard built capabilities in X-Plane.

Important: weather panel works with the standard weather system in X-Plane, other different weather plugins may not work from this panel.

MFD – SIM Control

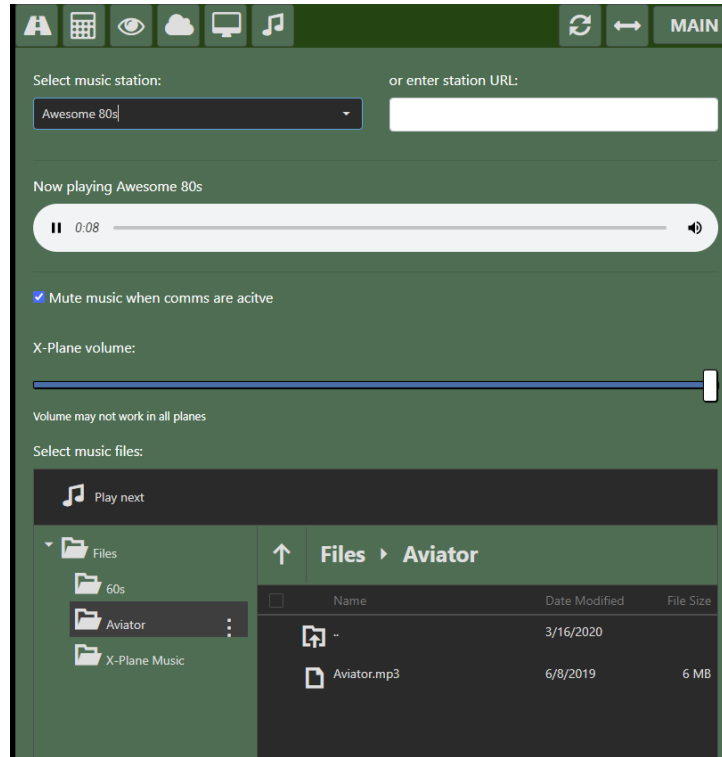
The SIM control panel allows users to perform some X-Plane SIM functions remotely.



Current available options:	
X-Plane	Activate some X-Plane functions remotely: ATC, Chrono timer, maps, pause, recording and more.
Quick View	Access to the views created in the view manager – Quick view mode
Ground Handling	Request ground handling services and push back
Performance	Some FPS performance counters
Custom buttons	Configurable custom buttons – see configuration options

MFD – Music panel

Use Music panel to select the Internet radio stations or mp3 files you want to listen during your flight.



There is a dropdown list to select predefined radio stations, or you can enter your radio station URL on the right side if it's not in the list.

Radio station list can be updated using the file `\X-Plane 11\SkyScout\Data\music.data`, please pay attention to the row format in case you want to update this file.

Mp3 files should be located inside `\X-Plane 11\SkyScout\Data\music`, you can create different music subfolders here to classify the music.

Music is played using the used browser media player. There is also a slider to mix the volume of the plane engines with the music (this feature may not work in some planes). Pilots can check the option to mute music when radio comms are active.

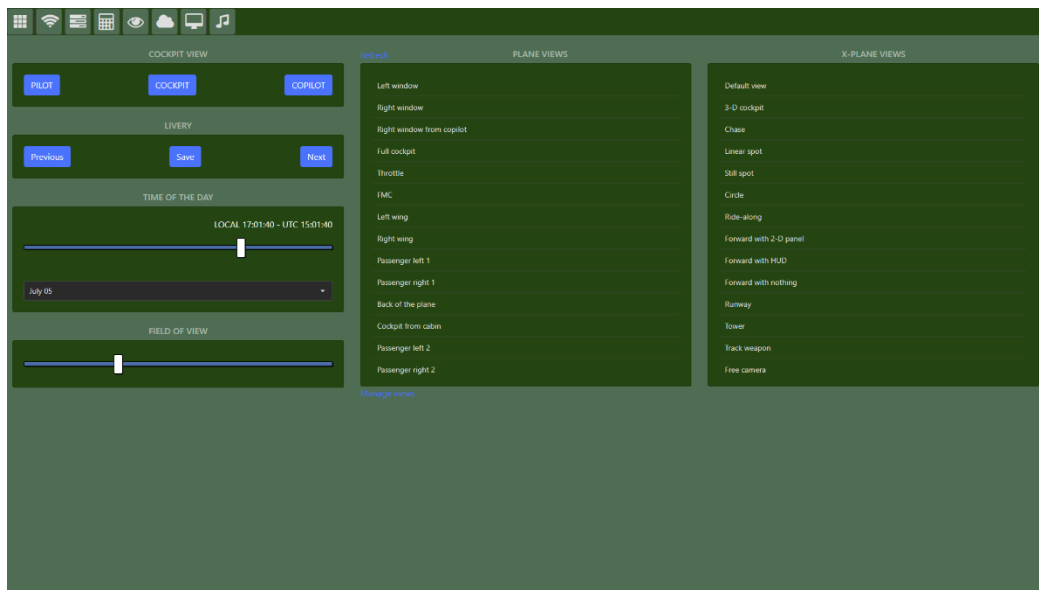
Warning! Music is played on the device where SkyScout browser is in. If SkyScout is accessed from external computer, Android or iPad, music will be played there and will be not mixed with regular X-Plane sounds. In this case, it is recommended to connect the external device to the main computer via the aux input in the sound card and be able to mix sounds.

XPD

The XPD screen to display some secondary panels out of the EFIS environment

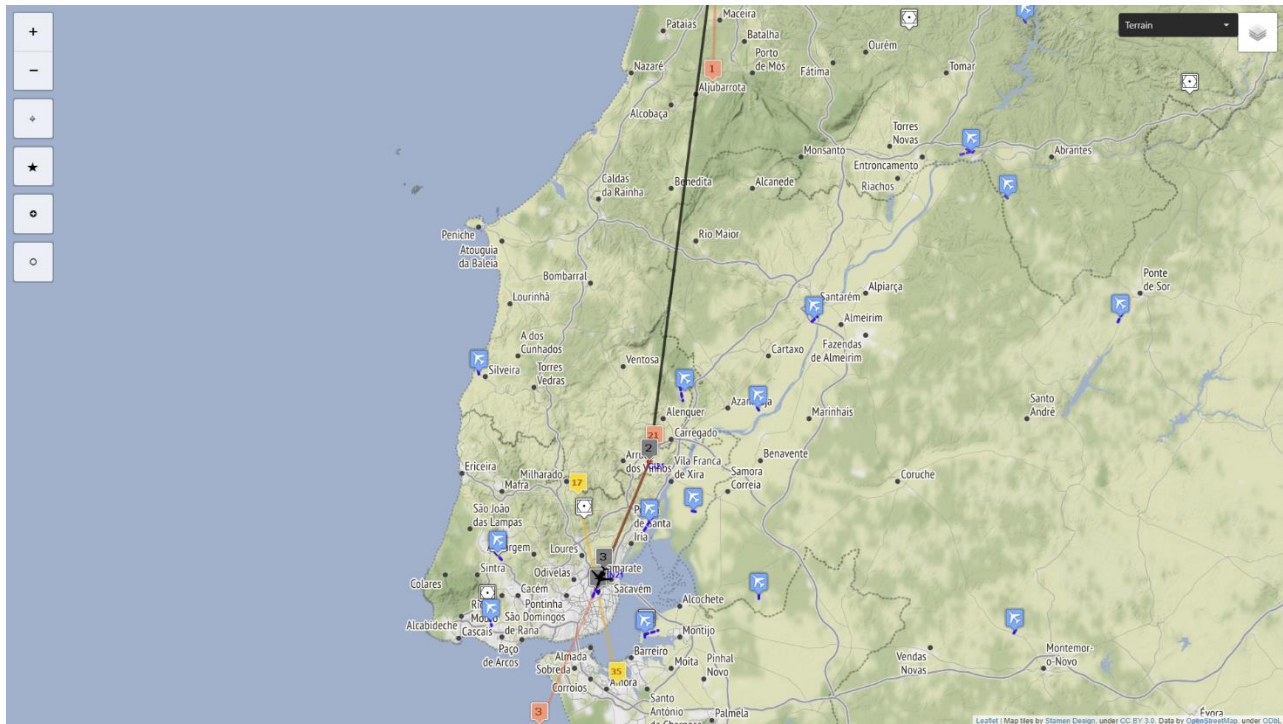


This screen provides a different layout for some existing panels in PFD and MFD to use in different screens or devices for flexible cockpit configuration



MAP

This option displays the moving map only without any other MFD features



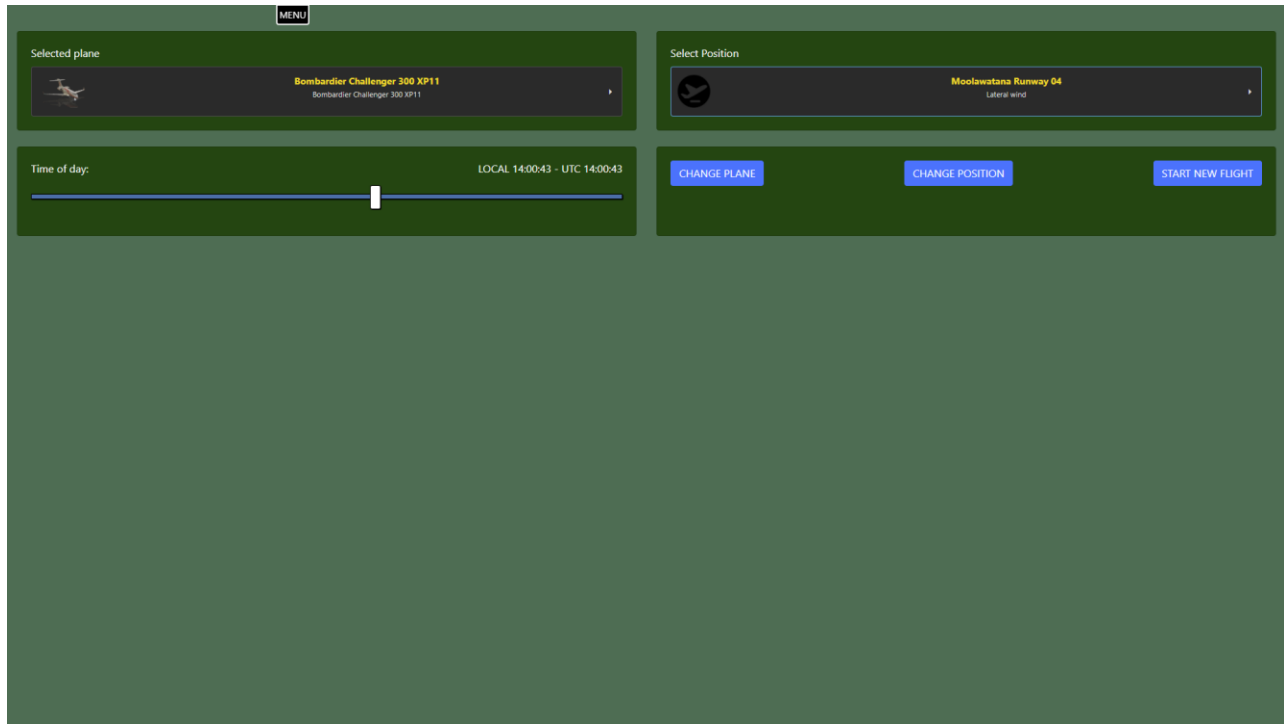
Use this screen to display stand-alone moving map only for flexible cockpit configuration with limited map features.

Refer to the MFD – Map section of this manual to full features information.

Exit this panel by clicking on the top menu.

START FLIGHT

This screen allows users to start a new flight in a similar way to the standard X-Plane Flight



Configuration, with some slightly different features and improvements:

Plane selector will show only planes marked as favorite in the Aircraft screen.

Position selector shows only favorite positions created by the Map screen option.

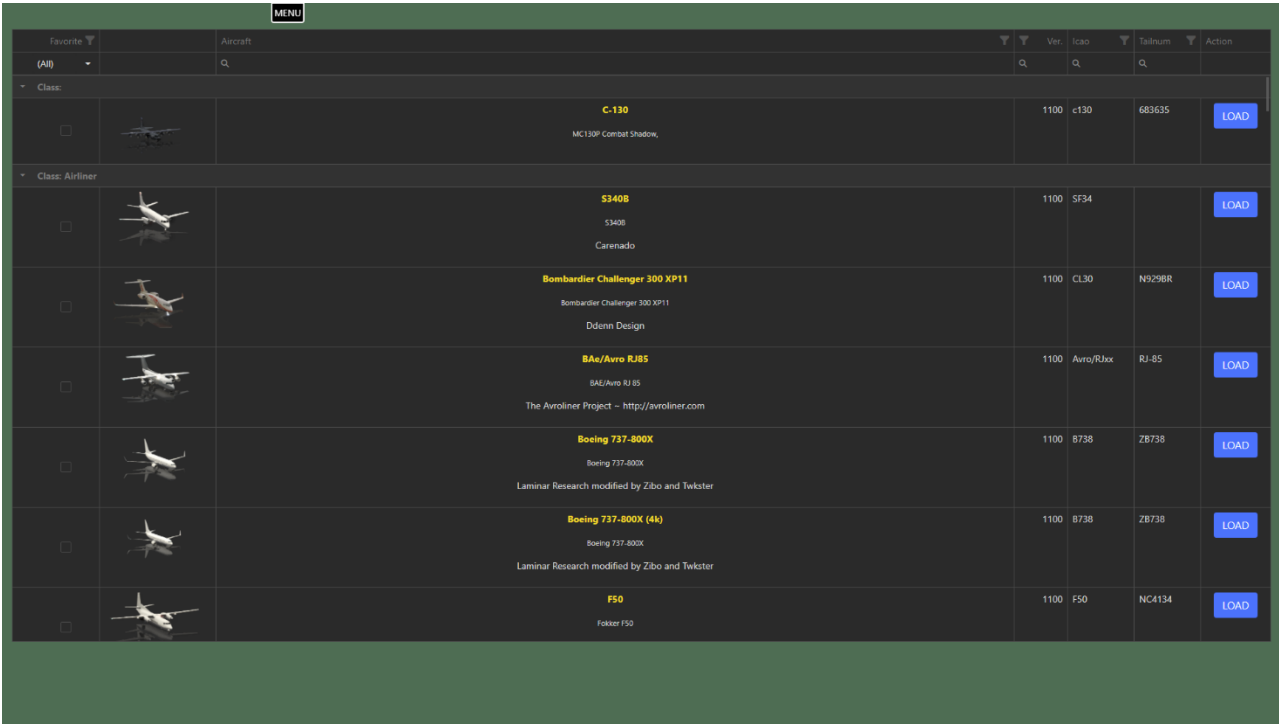
Time of the day selector.








There are three available options to start the new flight, change the plane only, change position only or start a full new flight.

Exit this panel by clicking on the top menu.

AIRCRAFT

This screen shows the list of compatible aircraft detected in X-Plane aircraft folder.



Favorite	Aircraft	Ver.	Icao	Tailnum	Action
<input type="checkbox"/>	 C-130 MC130P Combat Shadow	1100	c130	683635	LOAD
Class: Airliner					
<input type="checkbox"/>	 S340B S340B Carenado	1100	SF34		LOAD
<input type="checkbox"/>	 Bombardier Challenger 300 XP11 Bombardier Challenger 300 XP11 Ddenn Design	1100	CL30	N929BR	LOAD
<input type="checkbox"/>	 BAe/Avro RJ85 BAE/Avro RJ85 The Avroliner Project - http://avroliner.com	1100	Avro/RJ85	RJ-85	LOAD
<input type="checkbox"/>	 Boeing 737-800X Boeing 737-800X Laminar Research modified by Zibo and Twister	1100	B738	ZB738	LOAD
<input type="checkbox"/>	 Boeing 737-800X (4k) Boeing 737-800X Laminar Research modified by Zibo and Twister	1100	B738	ZB738	LOAD
<input type="checkbox"/>	 F50 Fokker F50	1100	F50	NC4134	LOAD

First column is to mark your favorite planes. Only favorite planes will be shown in the "START NEW FLIGHT".

Selected plane can be loaded into X-Plane in current ground position, never inflight.

Exit this panel by clicking on the top menu.

POSITIONS

This screen shows list of favorite created positions.

Name	Descrip	Country	City	Airport	Runway	Image Url	Action
Lisbon Runway 03	Use this runway to go north	Portugal	Lisbon	LPPT	03	img/position.png	GO Delete
Moolawatana Runway 04	Lateral wind	Australia	Moolawatana	YMWT	04	img/position.png	GO Delete
Andernos-les-Bains Runway 31	Grass runway	France	Andernos-les-Bains	LFCD	31	img/position.png	GO Delete
Hector Intl Runway 31	Short runway	United States	Hector	KFAR	18	img/position.png	GO Delete

Positions can be created using the Map “star” button. Inflight altitude positions can be stored too and start new flights up there later.

Altitude, heading and speed are stored for specific inflight positions.

Users can create positions on runways or airport ramps. Just use X-Plane location menu to position the plane then store this position in SkyScout using the start button on the Map.

User can edit position data or delete stored positions.

Exit this panel by clicking on the top menu.

AIRPORTS

This screen shows the airport list found in X-Plane configuration.

The screenshot displays the 'Airports list' interface. On the left is a table with columns for Icao, Name, Country, Iata, Elevation, and Transition Alt. The row for 'YMWT' (Moolawatana) is highlighted. Below the table is a 'GO TO THIS AIRPORT' button. On the right is a map view showing the selected airport location with a blue dashed line indicating the runway orientation. A 'MENU' button is visible at the top center of the interface.

Icao	Name	Country	Iata	Elevation	Transition Alt
LELL	Sabadell	Spain	QSA	460	6000
SSCT	Cianorte	Brazil		1836	
CYQH	Watson Lake	Canada	YQH	2225	18000
XLFOBE	Cervens	France		2034	
C00	Mercer County	United States		740	
YMWT	Moolawatana	Australia	MWT	262	
IN87	Singletons Landing Strip	United States		685	
KALI	ALICE INTL	United States	ALI	178	18000
YMTO	Monto	Australia	MINQ	757	10000
SM11	Wilds Field	United States		884	

The airport grid allows to find and filter airport by several fields, see them on the Map along to all the airport information available for selected airport.

Click on the Airport tab to see selected airport information.

The screenshot shows the detailed view for the selected airport 'YMWT'. It includes input fields for Icao, Name, Elevation, Country, Transition Alt, and Iata. Below these fields are tabs for 'Actions', 'Frequencies', 'Runways', 'ILS', 'VOR', and 'WEATHER'. The 'Runways' tab is active, displaying a table of runway data.

Runway	Total Length	Width	Surface
04 - 22	1029.2	96.01	Dirt
1 - 19	910.91	49.99	Dirt
15 - 33	1050.85	49.99	Dirt

User can change current location to selected airport or auto-tune Radio and ILS frequencies.

Exit this panel by clicking on the top menu.

VIEW MANAGER

This screen allows the user to create plane-specific views.



There are three master views: Pilot, Cockpit and Copilot. User can set three of them differently for each plane allowing to bypass the standard X-Plane field of view in monitor settings.

SkyScout will load automatically each plane views every time a plane is loaded and set Pilot view at the beginning.

Exit this panel by clicking on the top menu.



ROUTE MANAGER

This screen shows list of available flight plans in FMS format located in X-Plane \Output\FMS plans folder.

FMS File	Departure	Destination	Action
OTHH_EBBR_78WP.fms	OTHH	EBBR	Activate Edit Delete
PAJN_7AK2_48NM_10WP.fms	PAJN	7AK2	Activate Edit Delete
PAJN_7AK2_50NM_10WP.fms	PAJN	7AK2	Activate Edit Delete
PAJN_PAGS_46NM_10WP.fms	PAJN	PAGS	Activate Edit Delete
SA15_SAWE.fms	SA15	SAWE	Activate Edit Delete
SAWO_RWY07_49NM_SWP.fms	SAWO	SAWO	Activate Edit Delete
SBBR_SBRF_01.fms	SBBR	SBRF	Activate Edit Delete
SBFZ_SBRF.fms	SBFZ	SBRF	Activate Edit Delete
SBRFSBNT.fms	SBRF	SBNT	Activate Edit Delete
SBSGSBRF01.fms	SBSG	SBRF	Activate Edit Delete

1 2 3 4

[Re-scan for new FMS files](#)

Additional comments can be added to a flight plan.

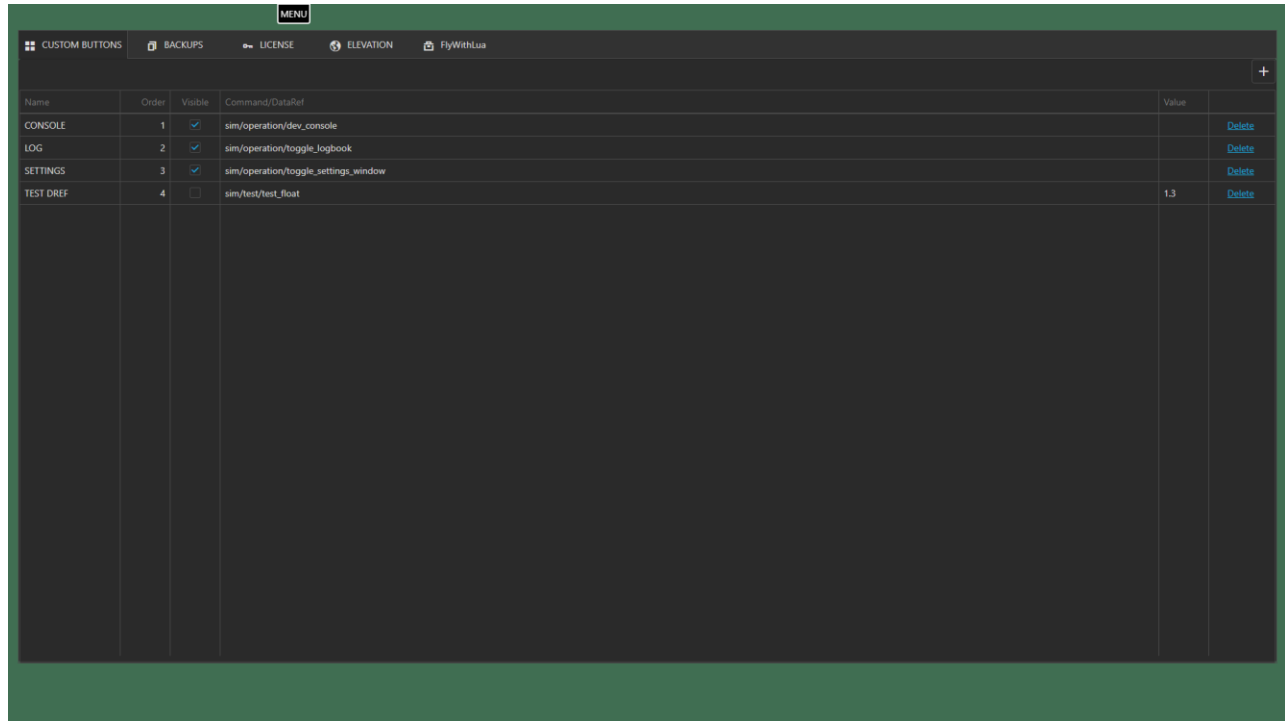
Users can use the list to Start or Activate a route based on selected flight plan. Start option will move to departure airport at specified location. Activate will load the route without changing current location.

After a route is started or activated the Map will show the flight plan route and waypoints with pop-up options available in each waypoint.

Exit this panel by clicking on the top menu.

CONFIGURATION

This screen provides different configuration options in SkyScout.



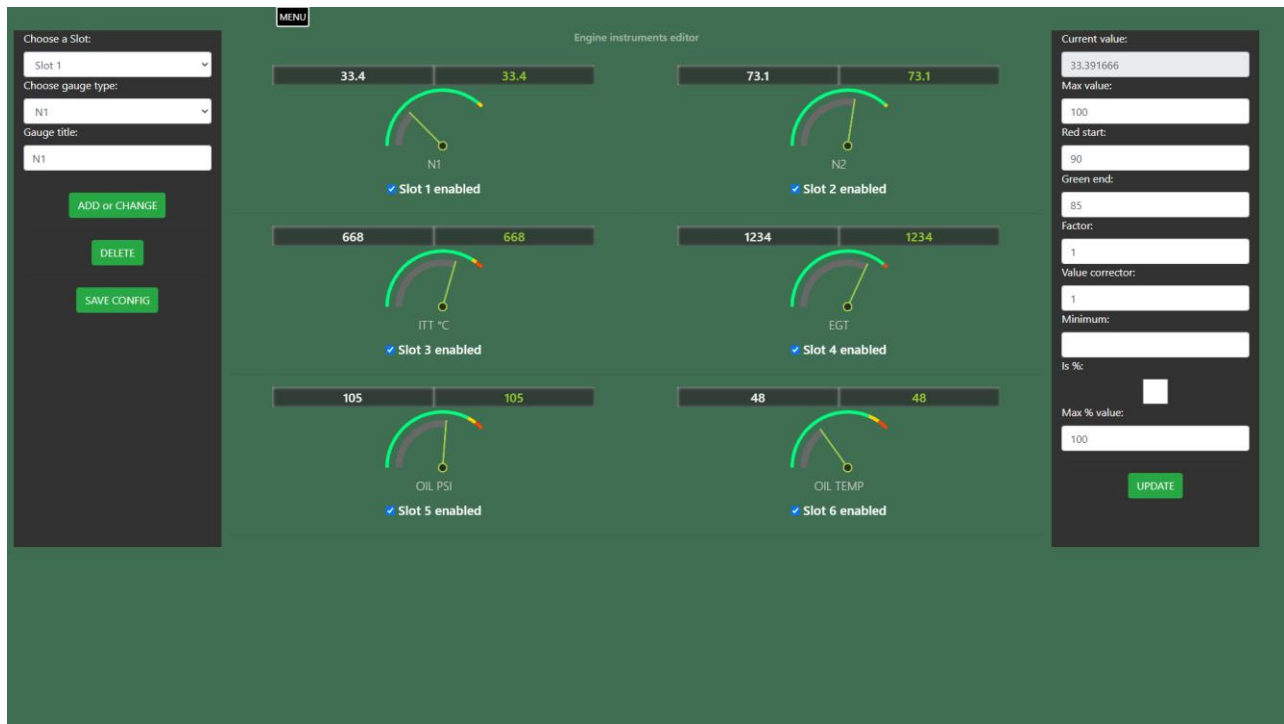
Current available configuration options:

CUSTOM BUTTONS	Create custom buttons to use in the MFD SIM control panel
BACKUP	SkyScout's Data subfolder backup option
LICENSE	Show license information and license backup option
ELEVATION	Elevation database user's installation assistant. Read indicated PDF document
FLYWITHLUA	FlyWithLua plugin user's installation assistant. Read indicated PDF document

Exit this panel by clicking on the top menu.

ENGINE EDITOR

Use this tool to create indicators for the engine panel of the loaded aircraft



There are six available slots as show in the screenshot above, two per row, three rows total.

Use left panel tools to select a slot number, engine gauge type and title, then click on Add or Change to add or change selected slot gauge or delete to delete selected slot.

Click on Save config every time you want to save changes of current configuration.

Use right panel to update Max, Red, Green values of the gauges as well as other value correctors.

Engine factor multiplies ALL values of the gauge by the factor.

Value corrector multiplies only the current gauge value not affecting to Max, Red, Green values.

Minimum value blocks the minimum value that the gauge can go.

Is % check box indicates when a gauge value is shown as %, this affects to other thresholds.

Max % value is the Max value if different than 100% when gauge is in % mode.

Click on UPDATE to change the gauge thresholds and values and don't forget to Save config.

Exit this panel by clicking on the top menu.



Release Changes

Update 1.0 – October 20, 2020

- Initial SkyScout release