# Start User Guide Pilot-Controlled-Lighting for MSFS2024

## Introduction

Pilot-Controlled Lighting (PCL) systems, commonly found at many small airfields and towered airports worldwide, have been overlooked in the history of flight simulation franchises.

The challenges in simulating runway lighting that can be activated individually, the variety of systems in use, and the absence of a comprehensive global database of airports that support PCL have hindered its development and implementation.

However, with the introduction of MSFS2024, addressing these complexities has become more feasible. VeroRoutes is proud to announce the first implementation of PCL within the flight simulation community.

## Installation and startup

The tool can be installed on a custom community directory assigned by user, or by default on the default directories defined by MSFS:

On **MSFS Store or Game Pass** Community folder is located on:

C:\Users\[YOURUSERNAME]\AppData\Local\Packages\Microsoft.FlightSimulator_<RANDOMLETTERS>\LocalCache\Packages\Community

%localappdata%\Packages\Microsoft.Limitless_8wekyb3d8bbwe\

For the **Steam version** of MSFS2024, the directory is located on:

C:\Users\[YOUR USERNAME]\AppData\Roaming\Microsoft Flight Simulator\Packages\Community.

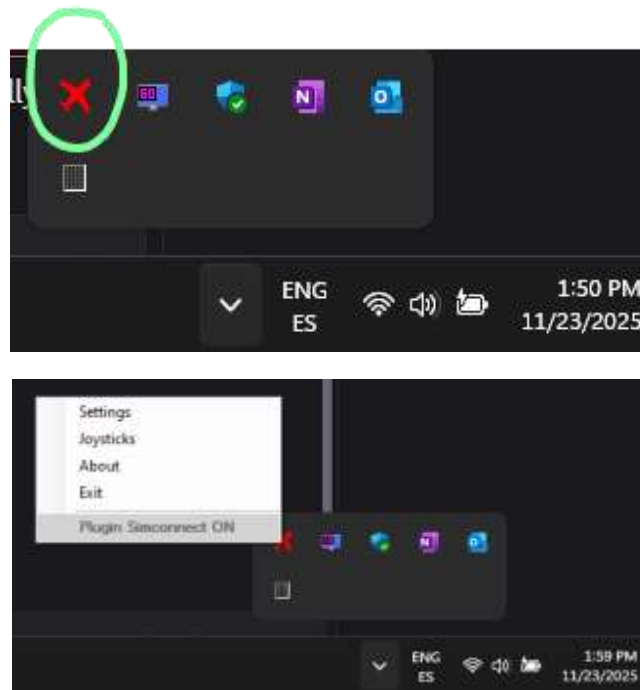%appdata%\Microsoft Flight Simulator\Packages\Community

For the **boxed edition**:

C:\Users\[YOUR USERNAME]\AppData\Local\MSFSPackages\Community

%localappdata%\MSFSPackages\Community

Once the installation is complete, the PCL Simconnect utility will launch and initialize the settings. After that, the utility will start automatically whenever MSFS2024 is launched.

A small user interface program is installed and placed in the system tray or notification area of Windows. The application manages the various parameters, as well as the joystick or control input bindings for PCL activation.





By default, the user interface program launches with Windows. It can be disabled from the options menu.

The application can also be started from the Windows Start menu. Simply search for **pcl-client** or **veroroutes**

## Coverage Map

The coverage map below shows the list of airports having PCL systems included in the add-on:

[Coverage Map](#)


## Operation

The application starts automatically every time MSFS is run, and runs in the background waiting for the user's input.
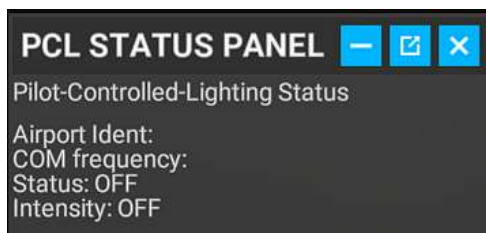
At the vicinity of an un-towered or tower-closed airports, pilots tune the assigned PCL frequency and press the push-to-talk key three, five, or seven times within five seconds.

The maximum distance of pcl activation is set to 10.8nm

The PCL frequency can be found on the airport chart. It usually uses the CTAF or tower frequency.


<u>Toolbar menu</u>

The menu is available when selecting a Free flight. A small menu displaying the system status is available on the main toolbar. Press the icon     to display it.

```
PCL STATUS PANEL  ─ ⬚ ✕
Pilot-Controlled-Lighting Status

Airport Ident:
COM frequency:
Status: OFF
Intensity: OFF
```


<u>Keyboard shortcuts</u>

By default, PCL can be activated at a selected airport by pressing the keys.

PCL activation: Num Lock

PCL deactivation: CTRL + Num Lock

The default keyboard assignments can be easily modified to any joystick or flight controls on the user interface application located on the system tray (see previous chapter).

The keyboard assignments can be modified in the settings file located in the folder [your community folder]\veroroutes-pcl\bin\settings.txt.

Example:
KEY_PCL_ACTIVE=L
KEY_PCL_RESET=VK_LCONTROL+L
Key L is assigned to PCL activation

Below is more detailed info on keyboard codes:
https://learn.microsoft.com/es-es/windows/win32/inputdev/virtual-key-codes
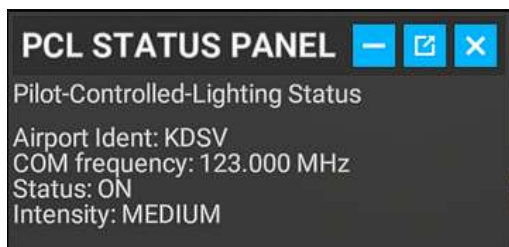
PCL Intensity levels:

LOW intensity: press Num Lock 3 times within 5 seconds.

MEDIUM intensity: press Num Lock 5 times within 5 seconds.

HIGH intensity: press Num Lock 7 times within 5 seconds.

After activating of the PCL system, the menu displays the updated status:

**PCL STATUS PANEL** ─ ☑ ✕
Pilot-Controlled-Lighting Status

Airport Ident: KDSV
COM frequency: 123.000 MHz
Status: ON
Intensity: MEDIUM

## Trial-version

The following airports have PCL available on the trial version:

ICAO  PCL Frequency [MHz]

KDSV  123.000

EGTF  123.430

YSBK  125.950

The timeout is limited to five minutes instead of fifteen on the full version.

Note the full version includes approx. 4500 airports worldwide

For support, please contact us via email or open a ticket on Discord:

https://discord.gg/w6DtQn4PfW
support@veroroutes.com