

System design

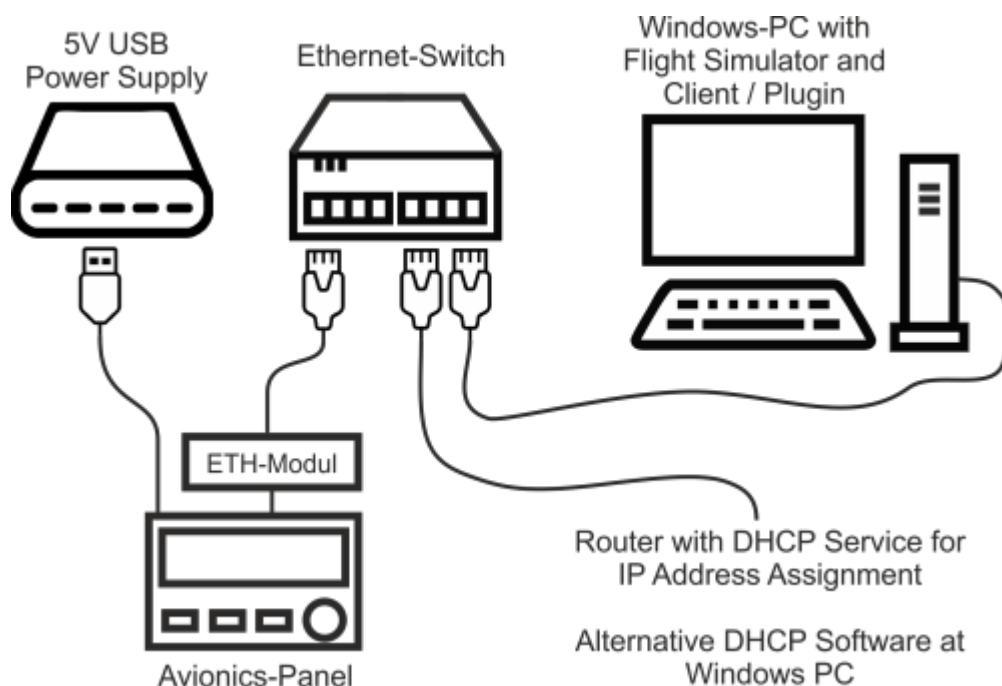
System components wired

The Avionics panel needs a few premises to be used.

- 5V power supply over MikroUSB connector
- Ethernet network for communication
- automatic IP v4 address assignment via DHCP
- Panel software

These necessary conditions can be met by the following devices:

- USB plug-in power supply unit, USB hub with external power supply or USB port of the PC
- Ethernet switch provides the node between the Avionics panel and the PC
- DHCP server for automatic address assignment. A Router that provides an Internet connection and WLAN has an integrated DHCP server. This assigns IP addresses to new devices in the network. Such a router does not need an internet connection to make the DHCP function usable. Usually an Ethernet switch is integrated, which is sufficient for first tests.
- Alternatively, DHCP software can be installed on the Windows PC that implements such an IP address assignment.
- [SimConnect client](#) or the [X-Plane plugin](#) serves as panel software.



Schematic of a wired network with the Arduino panel

System components Wifi (only test version)

Das WIFI-Panel needs a few premises to be used.

- 5V power supply over MikroUSB connector
- Wifi network with WPA2 encryption for communication
- Router with WPS function for login in WLAN and DHCP server for IP address assignment
- Panel software

With a router that implements a wifi network, the prerequisites for communication are usually met. Routers usually have the WPS function to establish the radio connection of a new device to the router within a short period of time (e.g., 2 minutes) without having to enter the SSID and password on the device. Subsequently, the IP address assignment takes place via the DHCP function.

[SimConnect client](#) or the [X-Plane plugin](#) serves as panel software.

From:
<http://www.simandit.de/simwiki/> - Wiki

Permanent link:
http://www.simandit.de/simwiki/doku.php?id=hardware:anleitungen:ardu-panel_en:systemschema_en

Last update: **2022/07/27 20:44**

