

Portables Mikrokoptertool 2011

Christian Brandtner

Portables Mikrokoptertool History

- ▶ Idea: Thomas Kaiser 2008
- ▶ Under development: Peter Mack (woggle)
Sebastian Böhm (sebseb7)
Christian Brandtner (Cebra)
- ▶ Software and Hardware under GNU/GPL license

Portables Mikrokoptertool 2011

Functions and Features

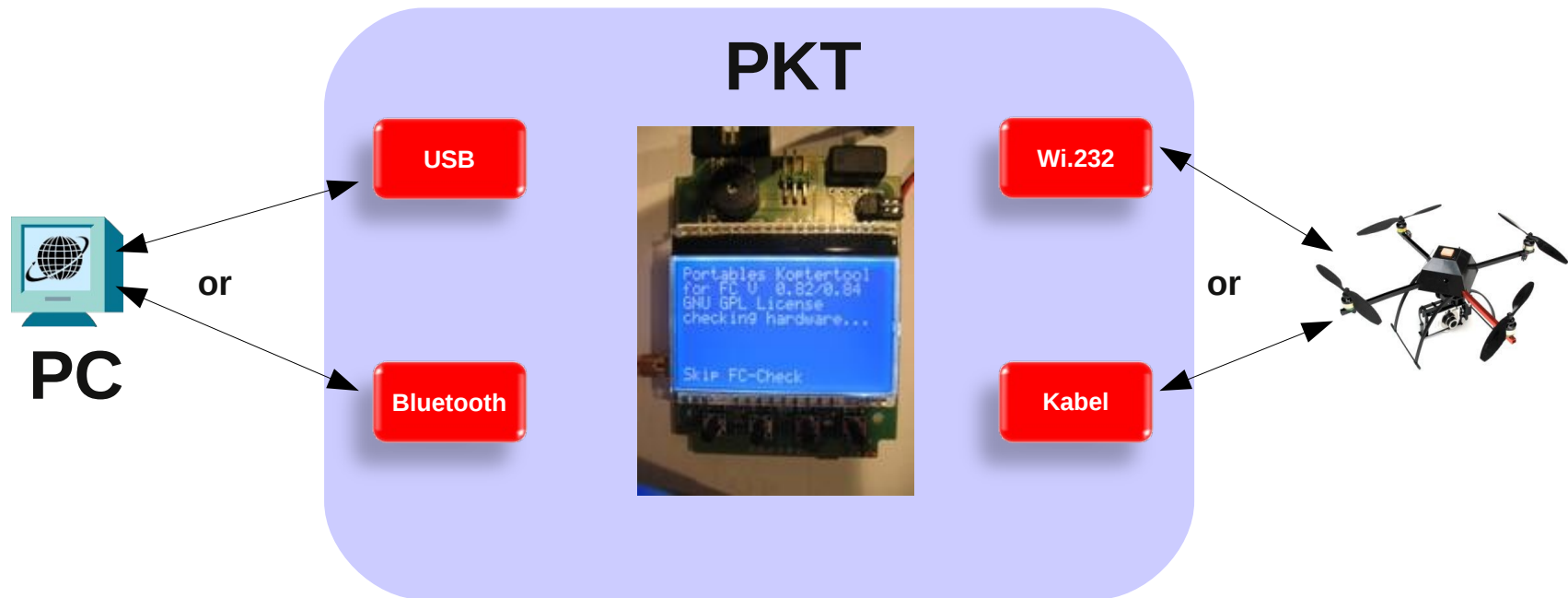
- ▶ The mainfunctions are the configuration of a Mikrokopter without using a PC
- ▶ Presentation of the actual flightdata
- ▶ Presentation of debugdata
- ▶ Offline: BL-controller test
- ▶ Connection to PC USB or Bluetooth
- ▶ Automaticly detection and configuration Wi.232
- ▶ Akustic undervoltagealarm from MK in OSD-operation
- ▶ Akustic undervoltagealarm from PKT akku
- ▶ Compatibility to Hardwareversions 1.2, 1.3, 3.x

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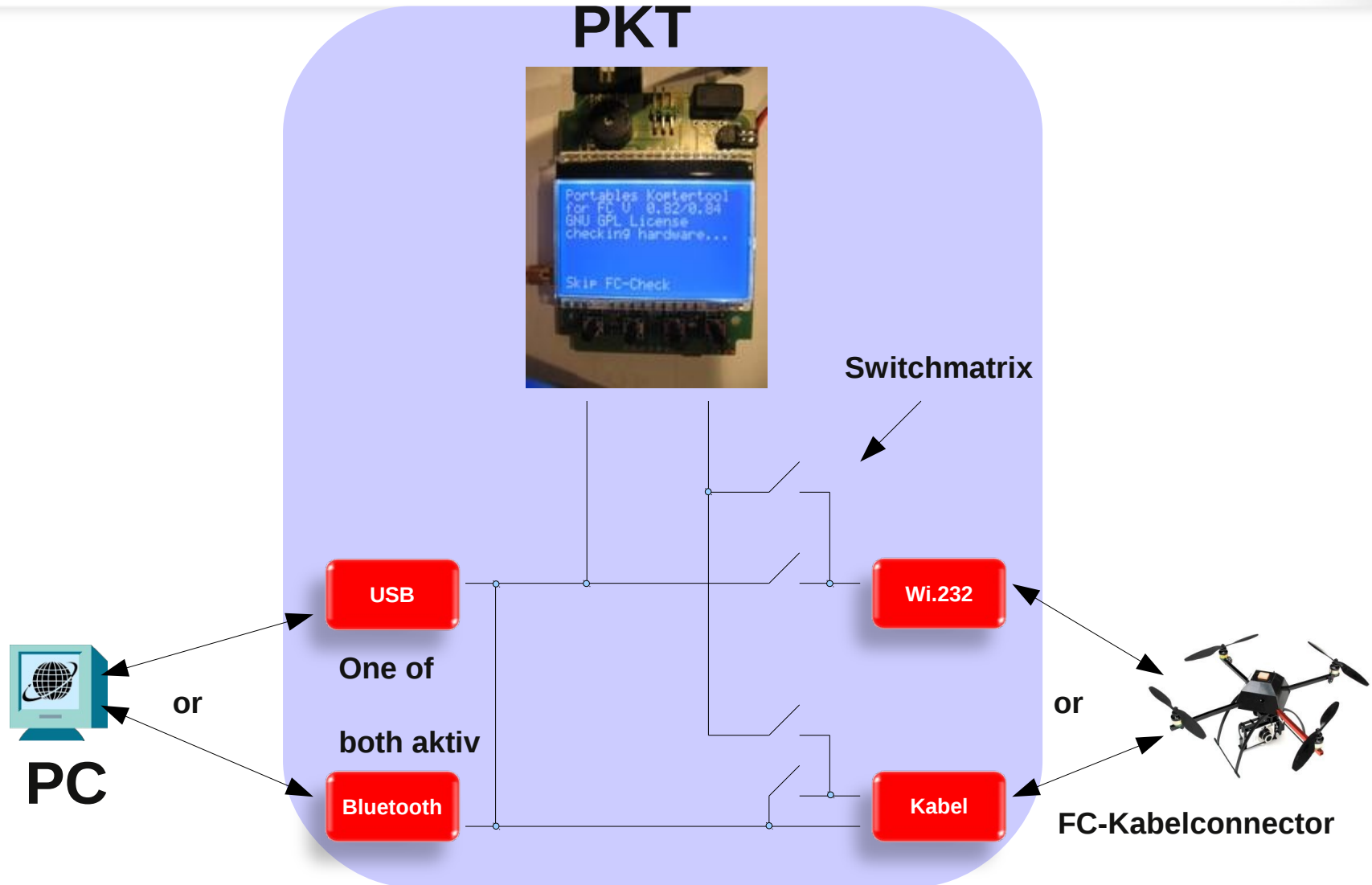
Connections

- ▶ Direct with kabel to FC of Mikrokopter
- ▶ Wireless over Wi.232 to Mikrokopter
- ▶ Connection to PC over USB with connection to Mikrokopter via wireless(Wi232) or direct
- ▶ Connection to PC over Bluetooth with connection to Mikrokopter via wireless (Wi232) or direct.

Portables Mikrokoptertool 2011 Overview



Portables Mikrooptertool 2011 Connections



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Hardware

- ▶ PCB 80x60mm
- ▶ Suitable for Strapu box 2062
- ▶ Grafikdisplay 128x64
- ▶ Buttons for Menucontrol (future Touchpanel)
- ▶ USB (PC-connection to Mikrooptertool, Bootlader)
- ▶ Bluetooth (PC-connection to Mikrooptertool)
- ▶ Wi232 connection (wireless connection to Mikrooptertool)
- ▶ Directconnection to Mikrooptertool with 10wire FC kabel
- ▶ Lipo Akku 1S
- ▶ Lipo Undervoltgewarning (PKT)
- ▶ Servoconnection
- ▶ I2C connection (BL-Tester)

Portables Mikrokoptertool 2011 Software

- ▶ Configuration for FC 0.82/0.84
- ▶ OSD display flightparameter
- ▶ 3D-display
- ▶ Setup for PKT parameter:
 - lowbat warnung MK
 - displaylight timeout
 - LCD orientierung
 - language MK-parameter(DE,EN,FR)
 - Wi.232 parameter, (TxRx Channel, Networkgroup, Networkmode)
- ▶ USB-connection to FC
- ▶ Bluetooth-connection to PC
- ▶ Wi.232 configuration with PC (USB)
- ▶ PKT-softwareupgrade over USB (Bootlader or Menu)
- ▶ BL-controller test for one motor(under development)

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Current situation 07/2011:

PCB 3.6 under development
planned finishing 08/2011

Software in Mikrooptertool SVN for hardware 1.2, 1.3, 3.x

Change requests and errors to:

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