en/RangeExtender

LotharF MikroKopter.de

Inhaltsverzeichnis

<u>1 RangeExtender</u>	1/6
2 The connection	
2.1 Connection via Bluetooth or USB.	
<u>3 Connection at the MikroKopter</u>	4/6
<u>4 Load RangeExtender</u>	5/6
<u>5 Technical data / delivery package</u>	6/6

1 RangeExtender

<u>Shoplink</u>



With the RangeExtender, a wireless connection can be established to the MikroKopter over a large range (>1000mtr).

The connection will be relayed via USB or Bluetooth on the RangeExtender to the more powerful Wi.232 module. In that way a connection will be established to the Wi.232 module on the MikroKopter. The RangeExtender will be supplied with power via an integrated battery.

2 The connection

The RangeExtender can be used i.e. on a:

- Tablet
- Smartphone
- Computer
- etc.

(appropriate software required, i.e. MK-TabletTool (Link), KopterTool, Dubwise etc.).

In this way a transfer and display telemetry data from the Kopter is possible. You are also able to send <u>WayPoints</u> to the Kopter.

2.1 Connection via Bluetooth or USB



The RangeExtender can be easily connected with a Tablet, Smartphone etc. . Here you proceed as follows:

- 1. Switch ON the RangeExtender with the switch on the side the green LED *Power* flashes.
- 2. At the used device switch to the settings / Bluetooth settings and start the Bluetooth Scan. (See instruction of the used device)
- 3. After a short time the RangeExtender should be found with its identification.
 - ◆ Identification = *RangeExtender*
- 4. Now the RangeExtender can be assigned to the device (Pairing).
- 5. Here now the four-digit Bluetooth-Key (PIN) of the RangeExtender need to be entered.

♦ Bluetooth-Key (PIN) = **0000**

- 6. After a successful Pairing the RangeExtender can be used with an appropriate program.
- 7. Has been established a connection via Bluetooth (i.e. tablet computer) with the RE, the blue LED *Bluetooth* will light at the RE.

3 Connection at the MikroKopter

With the delivery of the RangeExtender comes also a Wi.232 module for the MikroKopter. This Wi.232-receiver will be connected with the ribbon cable to the connector **Debug** on the NaviCtrl . > If only a FlightCtrl is used on the Kopter you need to connect the Wi.232 receiver to the 10-pin header at the <u>FlightCtrl</u>.

Throughout the missing GPS system the transfer of the telemetry data is not possible.



(To enlarge -> click on the image)

4 Load RangeExtender

The RangeExtender uses a 3,6V/800mAh NiMH battery. With this battery the RangeExtender can work without additional power over a longer period of time. If the battery has used up its power, a warning signal will sound and the battery needs to be charged.

To load the battery the RangeExtender can be connected either way with the USB cable to a PC, Laptop etc. or to a suitable power supply with a 5V= Output.

After connecting a USB cable to the RE and to an appropriate device the red LED *Charge* will light. If the battery is completely charged the red LED will go OFF and you can disconnect the USB connection.

INFO: The battery will be also charged if the RangeExtender is switched OFF.



5 Technical data / delivery package

Delivery package:

- RangeExtender
- Wi.232 Kopter
- USB cable
- Ribbon cable with 2x 10-pin pinheader

Technical data:

- Weight RangeExtender = 110g
- Weight Wi.232 Modul Kopter = 9g
- Power supply RangeExtender = 3,6V/800mAh NiMH battery
- Connector = USB
- Loading = via USB (5V)
- Display for: Power, Charge, Rx/Tx, Bluetooth connection
- Battery life = 7-8 hours
- Bluetooth PIN = 0000
- Individual RE-ID = needed for the use of the MK-TabletTool

The RangeExtender can be ordered in four different versions:

- EU Version
 - ◆ Channel 0 (868,300MHz) ID 0 (Brown)
 - ◆ Channel 0 (868,300MHz) Id 1 (Red)
- US Version
 - ◆ Channel 2 (903,023MHz) (Blue)
 - ◆ channel 4 (905,279MHz) (Green)

The different colored antennas of the RangeExtenders shows you the channels:

	HE SO	
	RangeExtender	Channel "0" (EU) ID 0
1	RangeExtender	Channel "0" (EU) ID 1
	RangeExtender	Channel "2" (US)
1	RangeExtender	Channel "4" (US)

(To enlarge -> click on the image)