en/LancCtrl_V1.0

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1 LancCtrl Version 1.0

Shoplink: LANC-Ctrl

INFO:
Sony Videocameras build since 2013 feature a new multi-connection. Only the "VMC-AVM1" adapter (Link) can connect it to the LANC-Ctrl..

1.1 video of usage

The LANC-Ctrl is a control board to control cameras or video-cameras via SONY LANC-Interface (like SONY cx730 / cx760).
The LANC control can also be connected to the FlightControl or stand alone on a receiver.
Via a ultrabright red LED the status of the camera is visible (Standby, REC, Photo,..)
The recording will be started via a switch on the remote control. And the recording will run until the switch is switched back to 'off'. That makes the recording much more safe compared with a the start/stop button via IR.

1.2 The following functions can be used:

- Zoom-in & out (variable speeds - from very slow to very fast)
- REC Start/Stop
- Photo shutter (in Video and photo mode)

1.3 Technical Data

- Weight: approx.47g incl. cables
- Dimension: approx.30x20mm
- Cable length: Red-LED-Cable approx.30cm
- Cable length: SONY AV-Cable approx.30cm
- Cable length: Servo cable approx.30cm

IMPORTANT - Please read!

The LANC-Ctrl has two inputs - PPM1 + PPM2.
Do **NOT** connect this inputs at the same time to the FlightCtrl and the connected receiver!

Connect always booth inputs (PPM1+PPM2) either directly to the FlightCtrl **OR** the receiver.

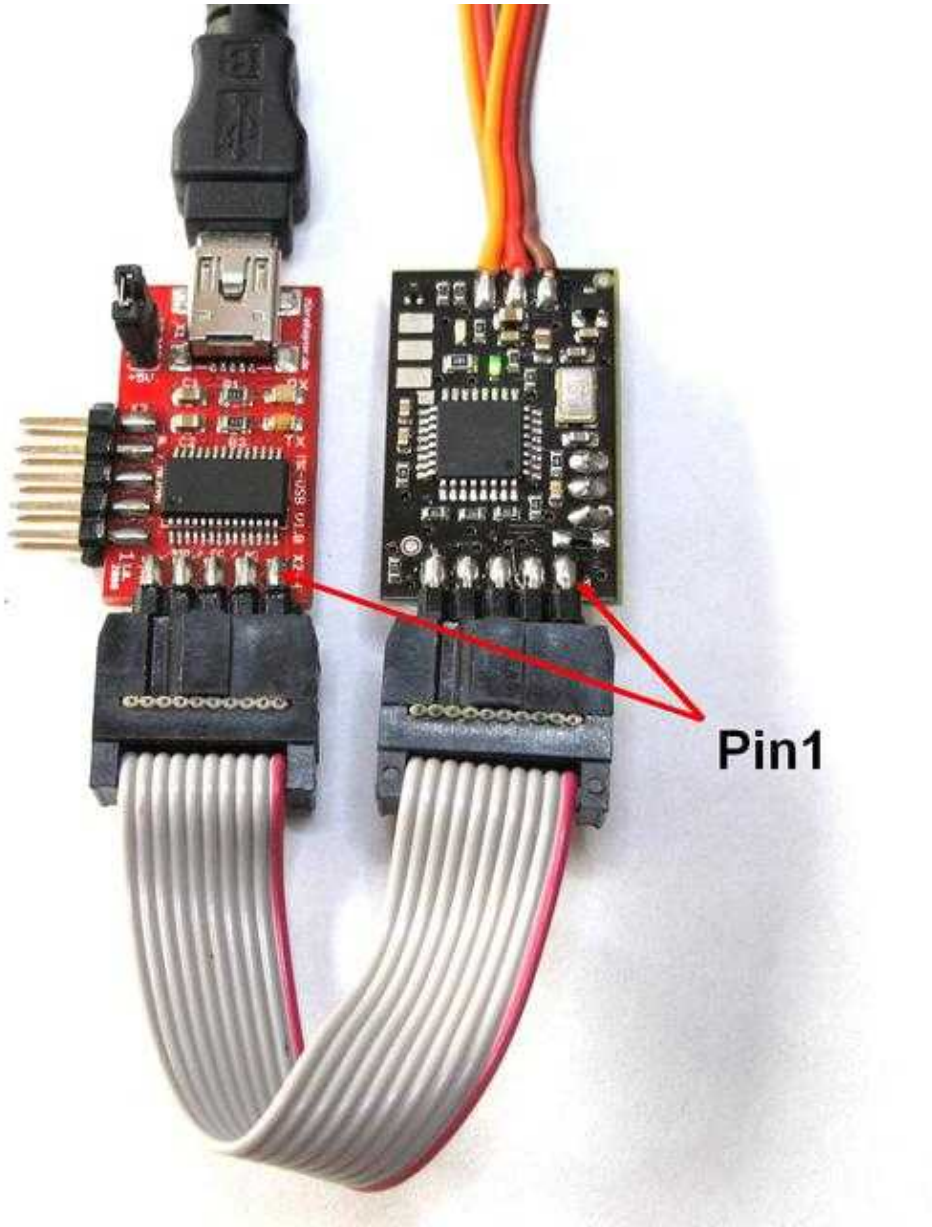
To eliminate the destroying of the LANC-Ctrl and the FlightCtrl, the IR-Ctrl have now for the inputs only one PPM-Cable and one JR-Data cable (gray).
The powering of the IR-Ctrl is only to do with the PPM-Cable. The JR-Data cable have only the needed data connection. This cable is connected to the PPM contact.

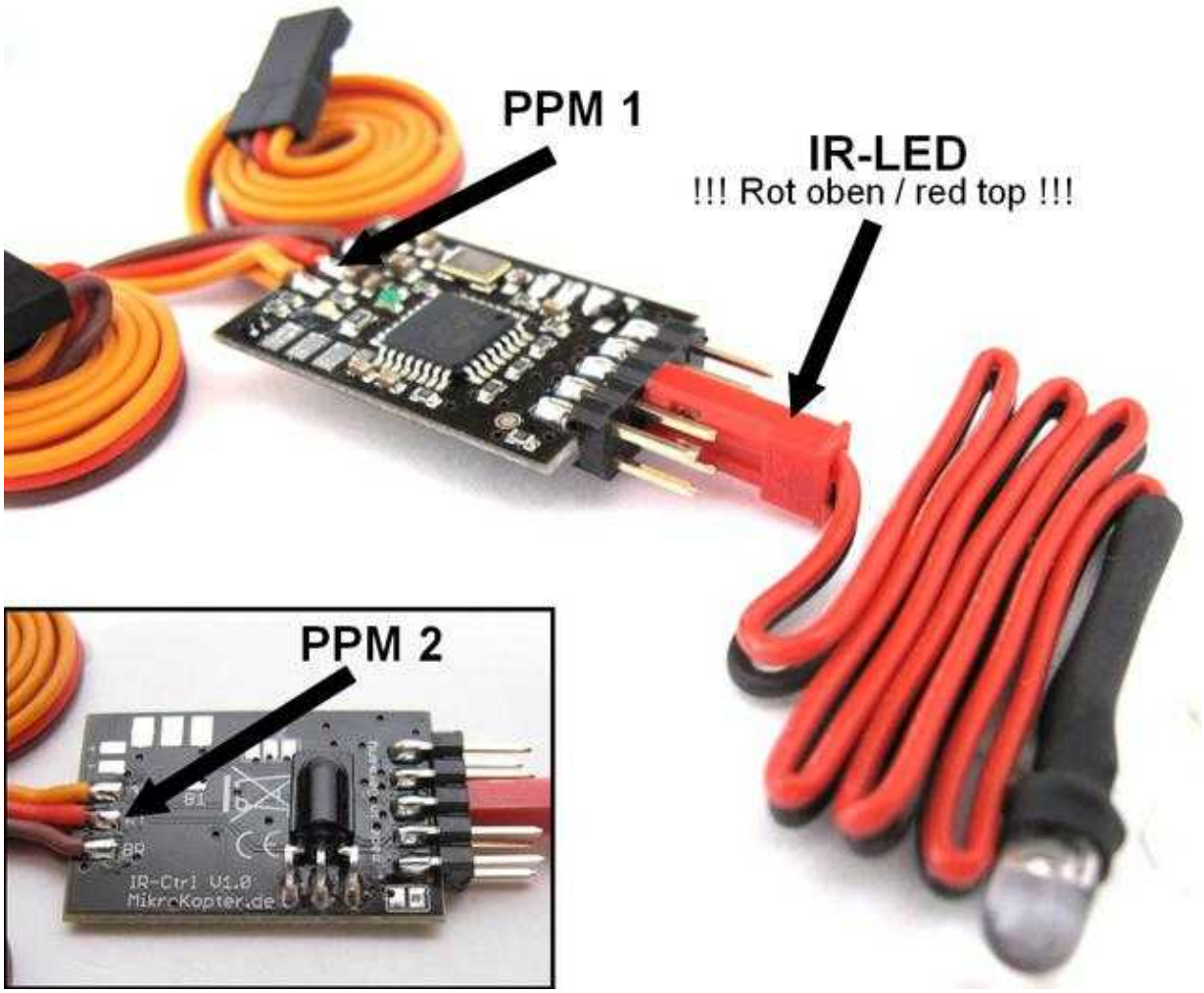
2 Inputs/Outputs

The IR-Ctrl has got two PPM Inputs (PPM1 + PPM2). In that way a total of 4 functions (2 for each Input) can be triggered.

Via the pin-header the IR-Ctrl:

- can be connected via the MK-USB to the KopterTool for updates,
- the LED can be connected,




PPM 1
IR-LED
!!! Rot oben / red top !!!
PPM 2
IR-Ctrl V1.0
MikrocKopter.de

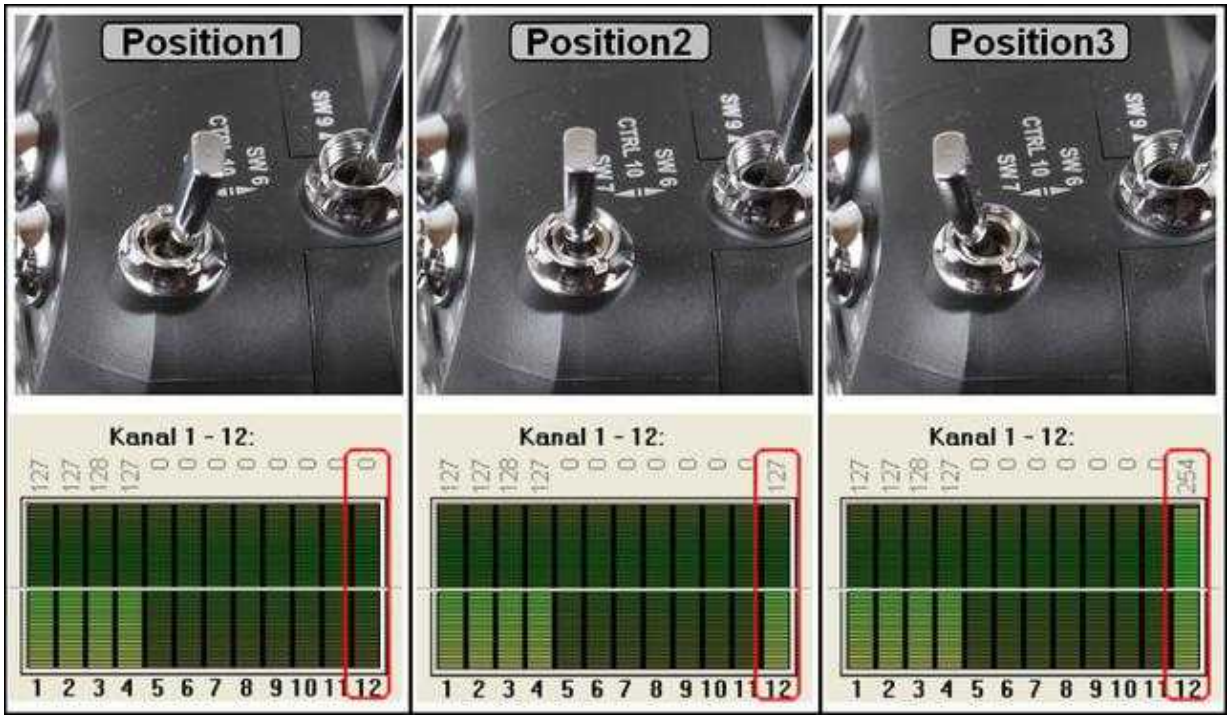
ATTENTION: The plug of the LED must be connected in that way that the red side points upwards (pointing to the IC).

3 The connection - which switch?

The IR-Ctrl can be connected either way to the servo-outputs of the FlightCtrl or to a regular receiver with servo-outputs.

On the transmitter, the stages switch (REc/Photo) should be assigned to a 3-stage switch or poti. The Zoom must be assigned to a Poti.

3.1 Record and photos



Switch for recording:

- Pos.1 = Record off
- Pos.3 = Video recording (Attention: the camera must be in video mode, not photo mode!)
- From 'off' into middle position: Photos without video
- From 'rec' into middle position: Photos during video recording (for the cx730 or cx760 only possible in 25i or 50i video format)

3.2 Zoom

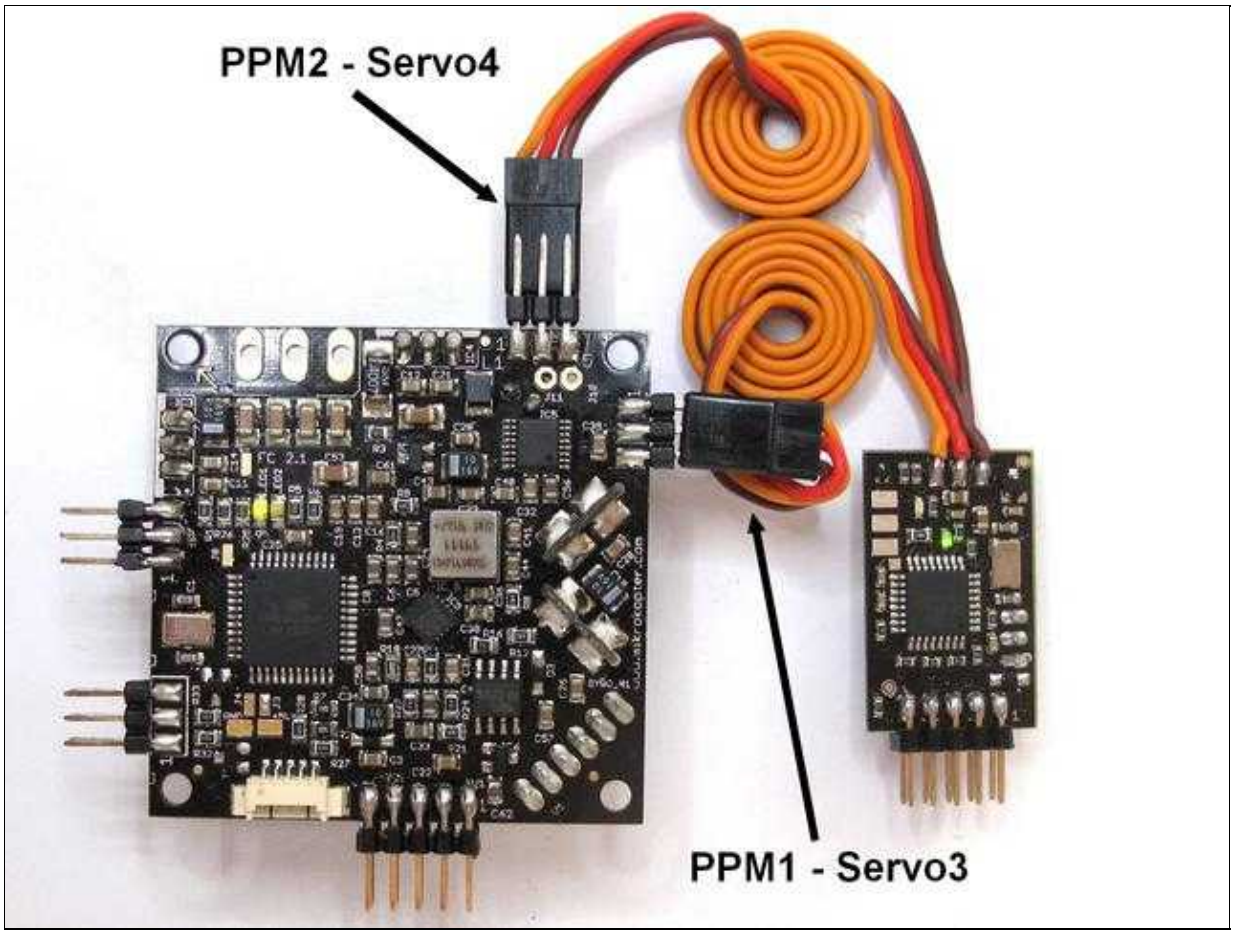
In and out-Zooming is possibe in eight different speeds.

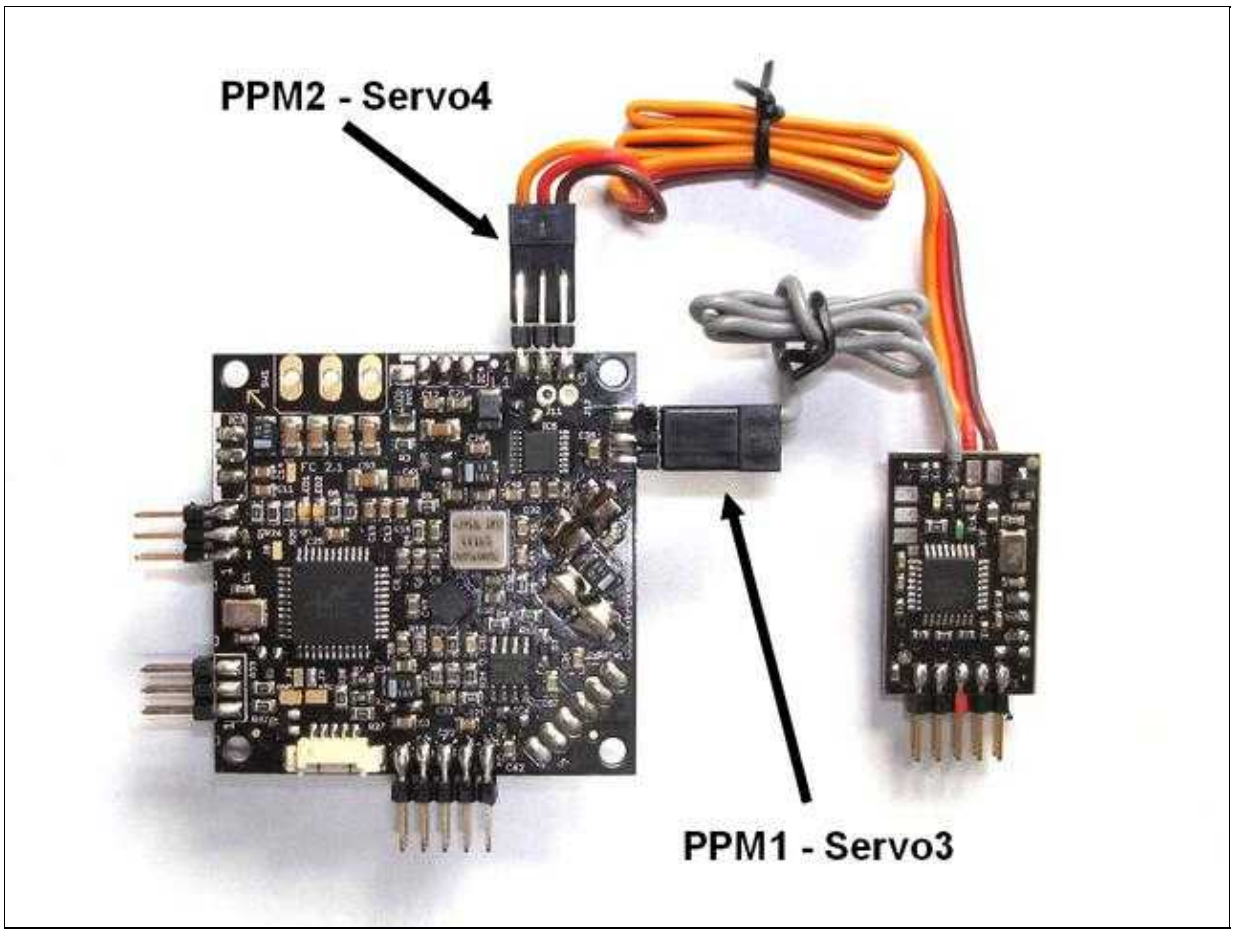
Middle position ist the idle position.

⚠ If the switch is in 'Rec' position and the camera can't record (SD-card full), the Zoom doesn't work correctly.

3.3 Connection Servo-Output FlightCtrl

The IR-Ctrl can be connected to the servo-outputs "Servo3" and "Servo4" (Link) on the FlightCtrl . Those both outputs you can control directly with a channel (Poti1-8) (Link) or via the switch outputs (Out1/Out2).

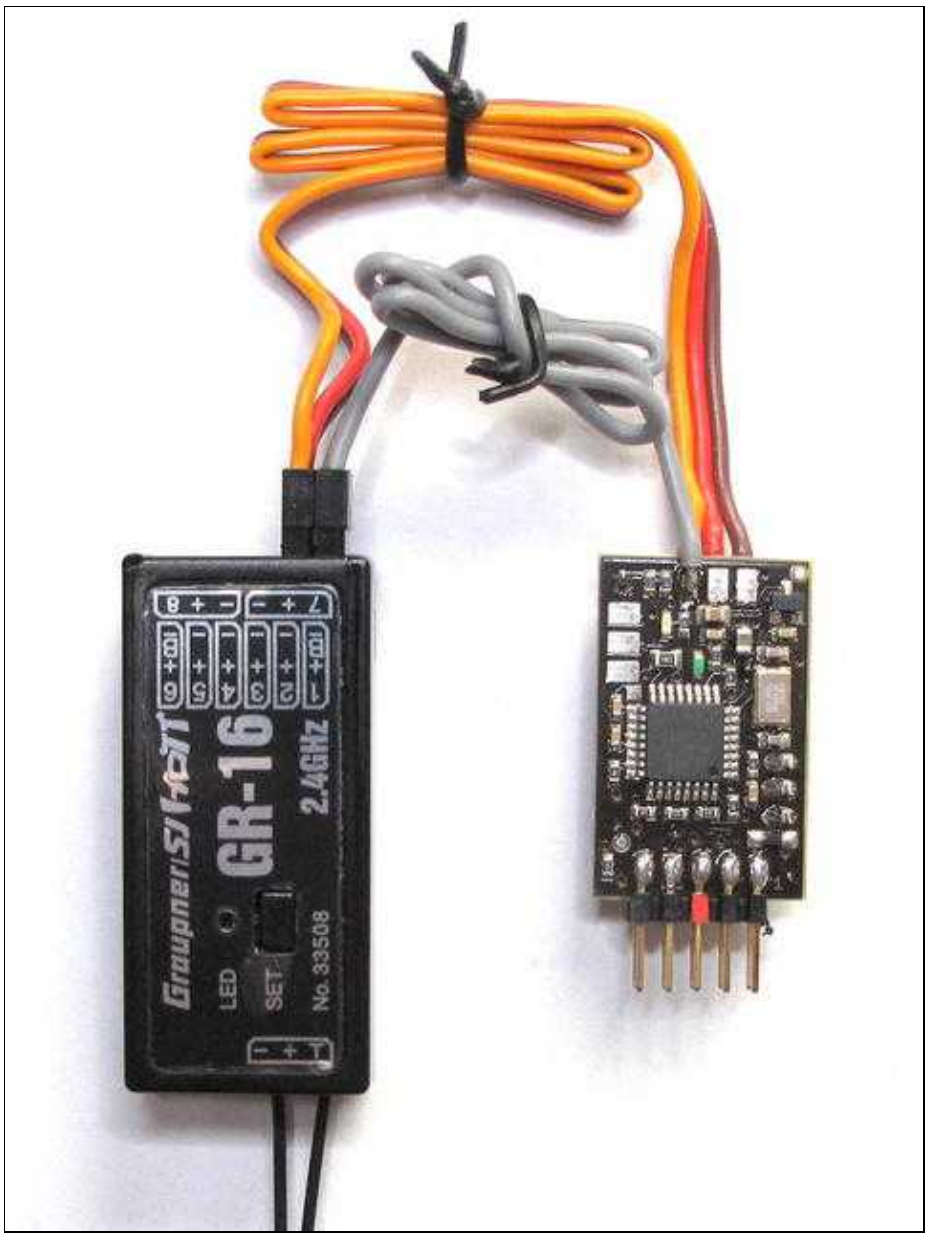




3.4 Connection to Receiver

If you control the camera separatly with a second transmitter and an additional receiver you can connect here also the IR-Ctrl.
It is also possible, using the transmitter Graupner MC-32 HoTT, to set two more channels and get them via the receiver, i.e. the GR32.


Graupner/SJ HoTT
GR-16
2.4GHz
LED
SET
No. 33508


GR-16
2.4GHz
LED
SET
No. 33508

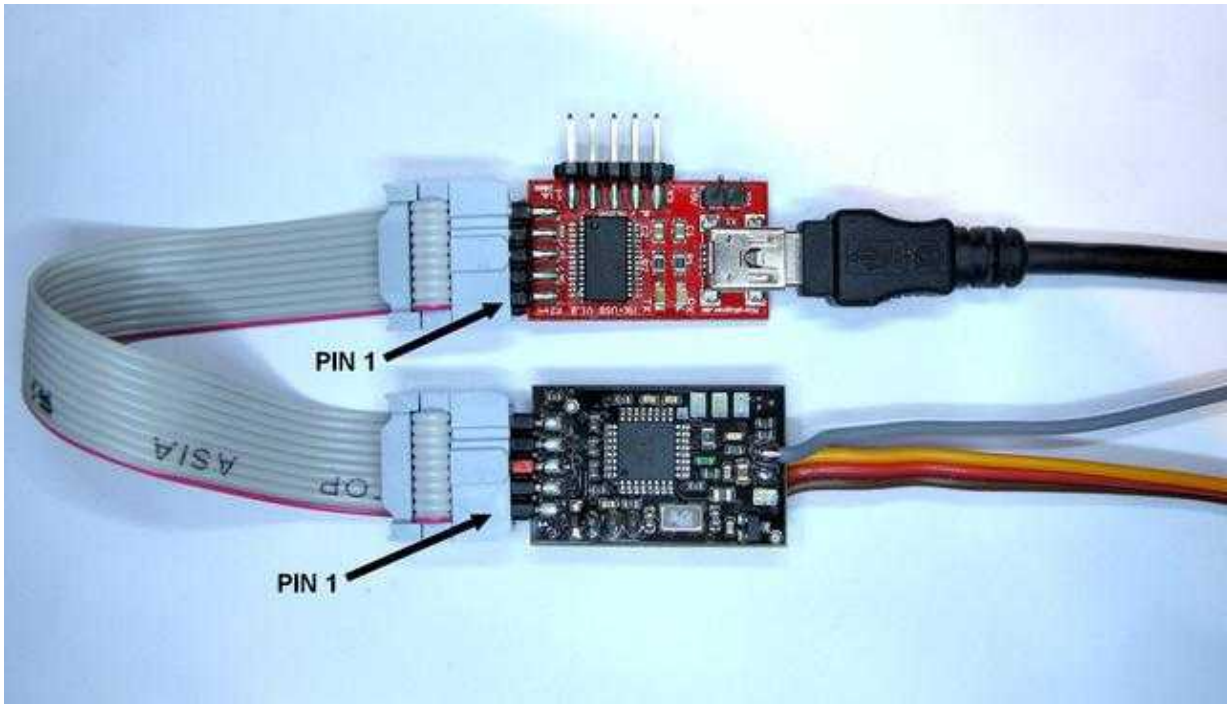
IMPORTANT:
If you connect the IR-Ctrl direct to the receiver (as shown here in the picture) you **must** adjust the channel transfer on your receiver!

3.5 Channels on the Graupner HoTT MC-32

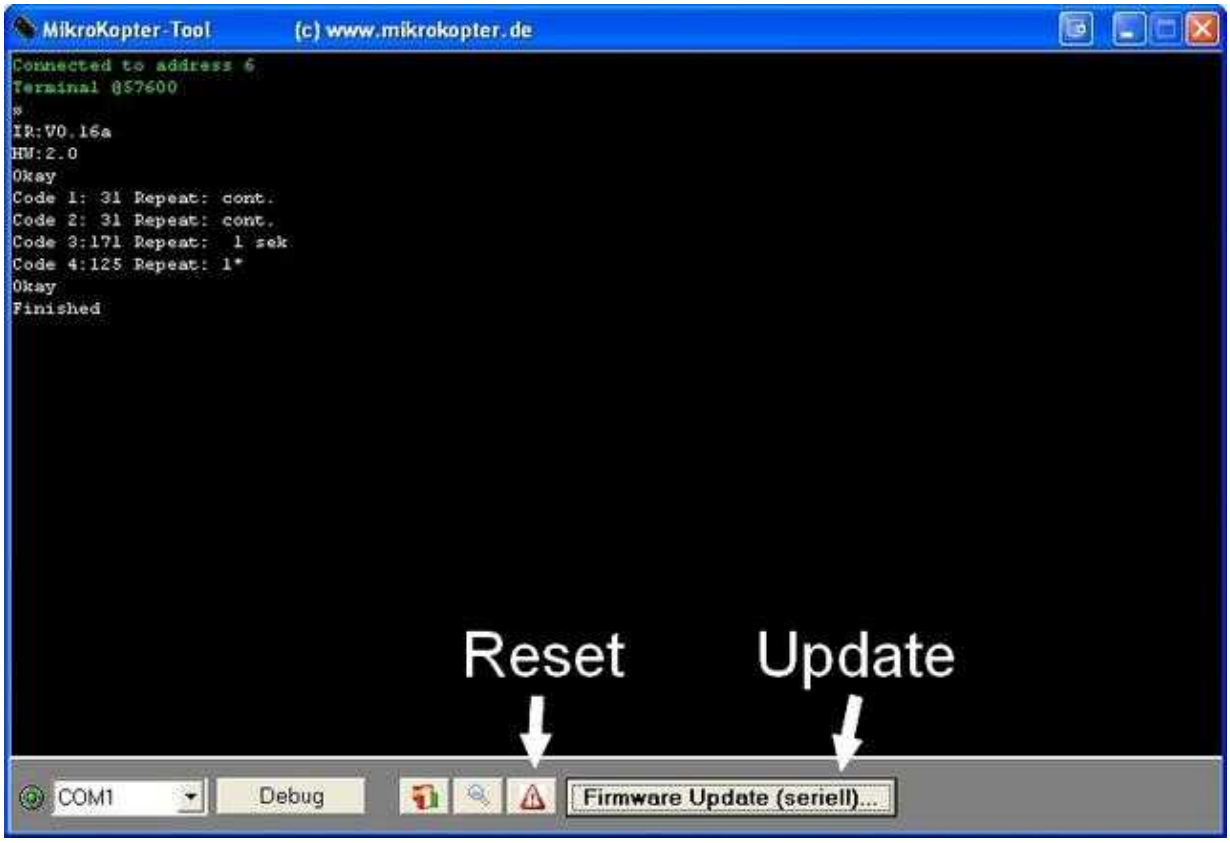
The MC32 has 16 channels. It is possible to assign the upper channels to the outputs on the GR-16 receiver. So it is possible to use them without occupy the on the FC.

4 Reset LANC-Ctrl / Updates

You can connect the LANC-Ctrl, like all other MikroKopter-Boards, to the MK-USB.



Via the KopterTool (from V1.78c) it is possible to refresh the LANC-Ctrl with new Updates or reset back into the delivery status.
(After a reset, the default functions are restored)



4.1 Firmware

- 0.16 Firmware LANC

4.2 alternative Firmware

- Alternative Firmware LANC

There are Cameras that need a different command for starting the video (tested on SONY CX350VE)

4.3 Photo releases with different interval

Here a Version with different intervals for photo releases (3-10sek)

http://mikrocontroller.com/files/upload/LANC_020_Intervalle.zip

Also the SONY camcorder takes photos when the PPM-Input is connected to GND. So you can take photos by a contact switch or the FC-Output

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- KategorieMK-Baugruppe/de