en/Video

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1 Prolog

If you want to see the live image on the ground from an attached camera at the Kopter you need to have an additional video transmitter and receiver.
The used (video-)camera should be able to provide a video image during the photo- and video shooting (live view).

INFO
Most of the (Video-)cameras comes with a video cable. With this cable in example you can connect the (video-)camera to a TV to watch the recorded material.
This cable has usually 3 cinch plugs (or cinch couplings) in colors yellow, red and white (or black). The video image comes via the yellow cinch plug.

Examples:

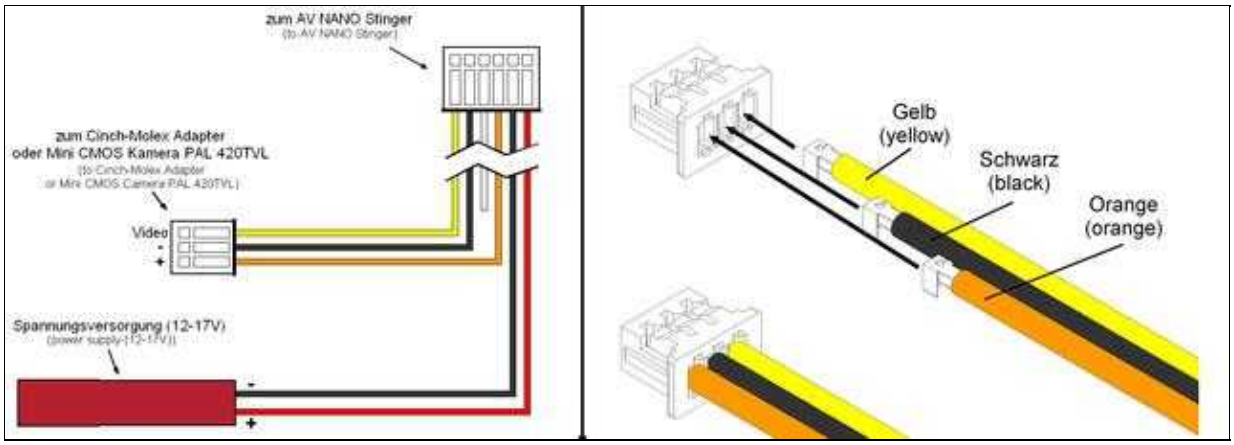




2 AV NANO Stinger transmitter

The *AV NANO Stinger Video transmitter* can work with a normal PAL video signal. A HDMI signal can not be transmitted.
The Video transmitter includes 2 cables. Only the one with the 6 wires will beused.

Three of this cables you have to connect with the little Molex-socket.
Here you can see how to do it:



(to enlarge -> click image)

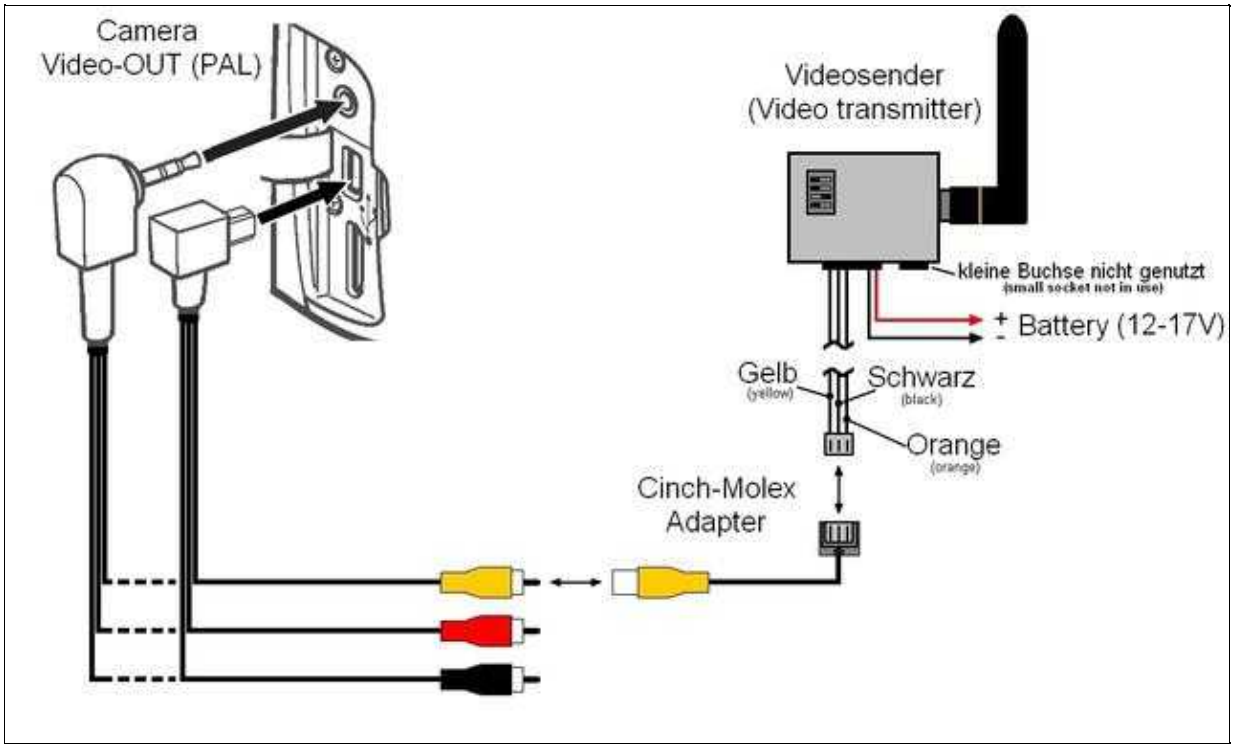
3 At the MikroKopter - Video transmitter

At the MikroKopter you need to have a video transmitter. This video transmitter need to be connected to the (video-)camera.
For that reason that most of the (video-)cameras have a PAL video output (via jacks or USB) with the appropriate cinch plug the connection with the Cinch-Molex-Adapter to the video transmitter is pretty easy.

3.1 Example: Camera with PAL video output

Most of the (video-)cameras provide a video output e.g. via a jack or an USB port. An appropriate connection cable comes mostly with the camera.
That cable need to be connected with the yellow cinch plug to the video transmitter.

To supply the video receiver with power you can connect the receiver e.g. to the power distribution board of the Kopter.



(To enlarge -> Click on the image)

Bill of material (BOM):

Should be available:

- (Video-)camera + video connection cable

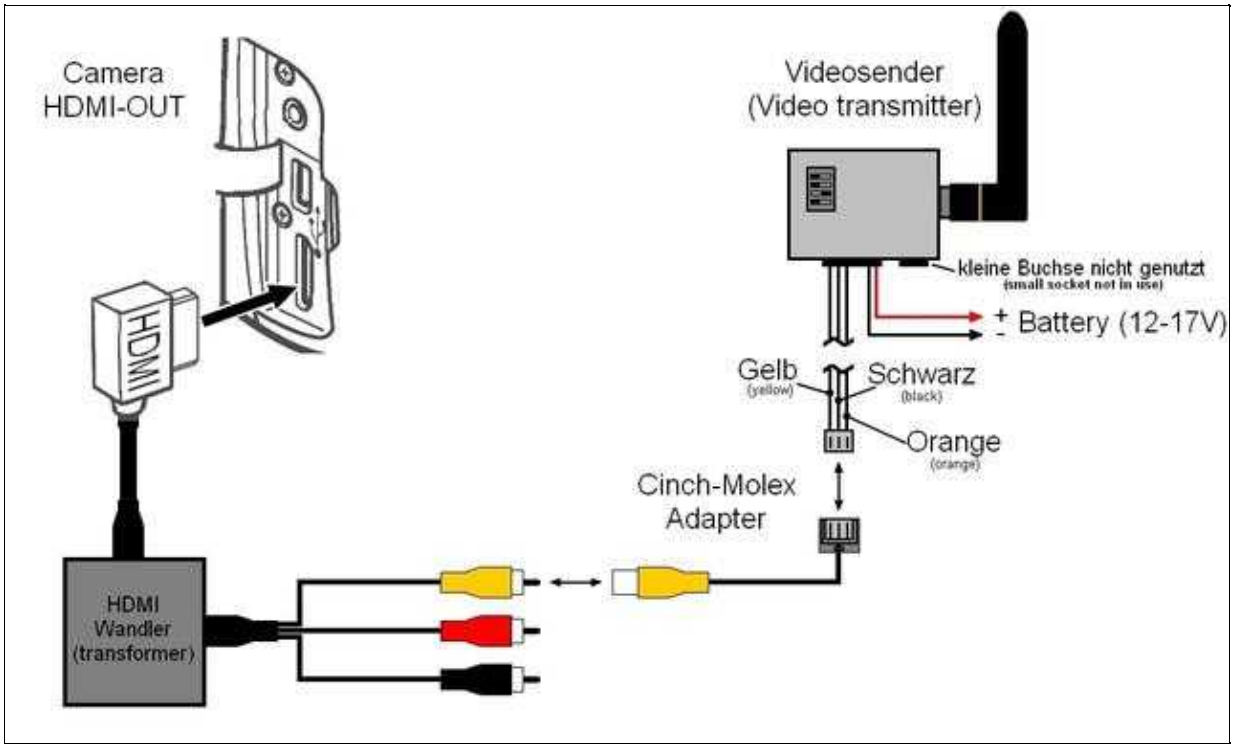
Is required:

- Video transmitter (AV Nano Stinger: Link)
- Cinch-Molex-Adapter (Link)
- Clip Nano Stinger (for attachment of the video transmitter to the camera mount SLR1/2: Link)
- BEC cable 2pole socket (can be soldered to the power distribution board for the power supply of the video transmitter: Link)

3.2 Example: Camera with HDMI video output

If a camerea with a HDMI output is used an additional HDMI-Converter must be used. This converter changes the HDMI signal into a PAL signal.

To supply the video receiver with power you can connect the receiver e.g. to the power distribution board of the Kopter.



(To enlarge -> Click on the image)

Bill of material (BOM):

Should be available:

- (Video-)camera + HDMI-connection cable + HDMI-Converter

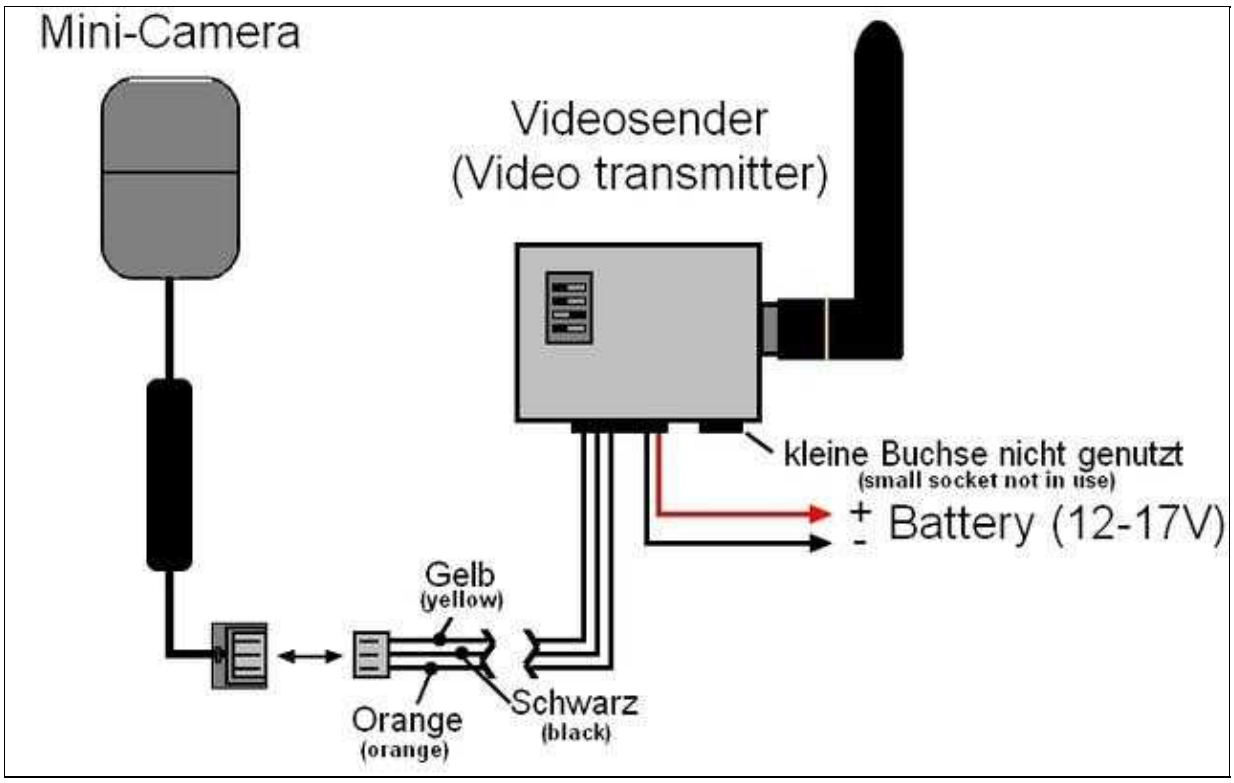
Is required:

- Video transmitter (AV Nano Stinger: Link)
- Cinch-Molex-Adapter (Link)
- Clip Nano Stinger (for attachment of the video transmitter to the camera mount SLR1/2: Link)
- BEC cable 2pole socket (can be soldered to the power distribution board for the power supply of the video transmitter: Link)

3.3 Example: Mini CMOS camera

If you use a camera without video output you can also carry a small light mini camera in addition to the Kopter instead.
The mini camera need to be assembled in example to the camera mount and the view direction should be set in that way the camera takes the shooting.

To supply the video receiver with power you can connect the receiver e.g. to the power distribution board of the Kopter.



(To enlarge -> Click on the image)

Bill of material (BOM):

Is required:

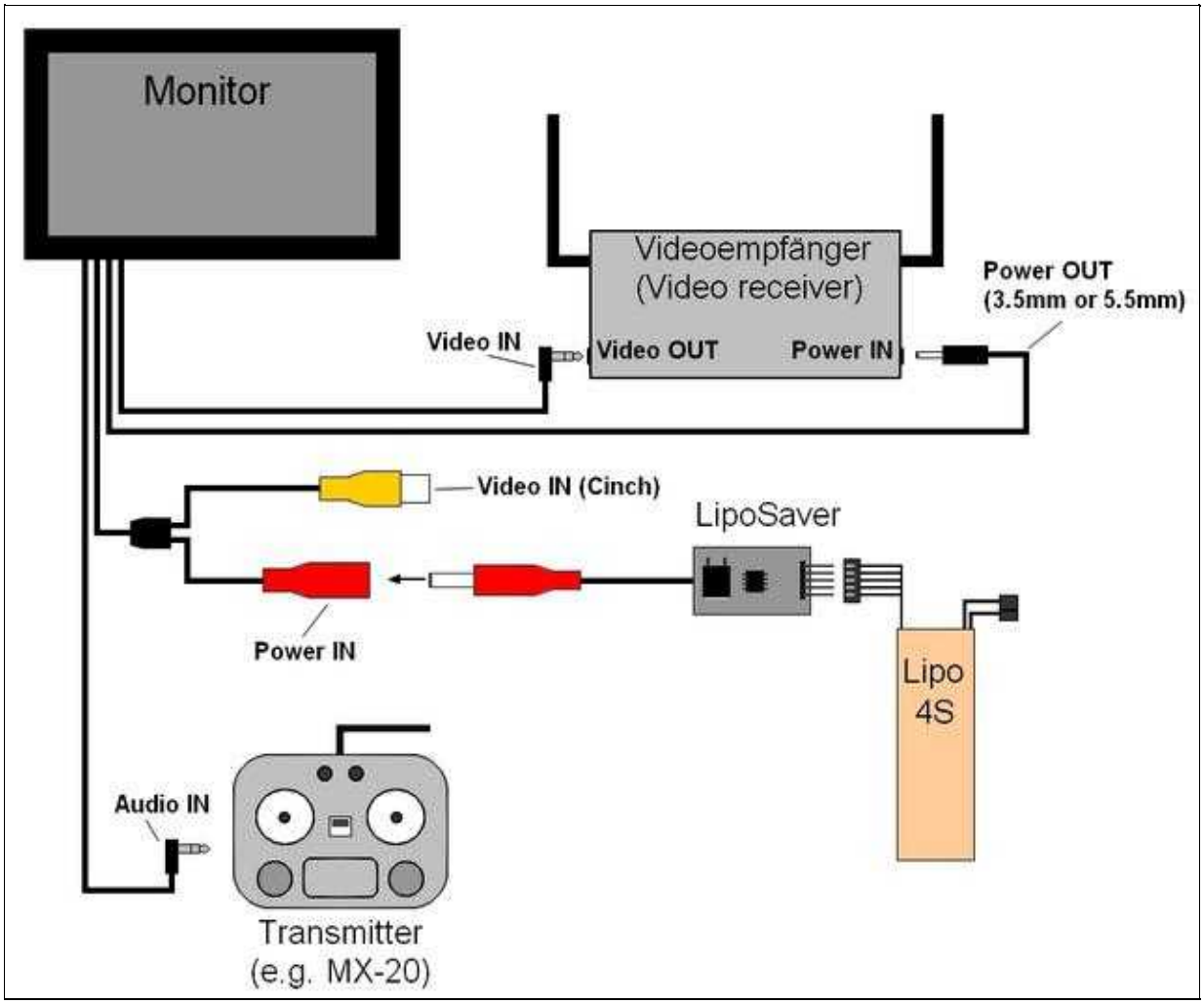
- Video transmitter (Nano Stinger: Link)
- Clip Nano Stinger (for attachment of the video transmitter to the camera mount SLR1/2: Link)
- BEC cable 2pole socket (can be soldered to the power distribution board for the power supply of the video transmitter: Link)
- Mini CMOS camera (Link)
- Holder for the Mini Camera to assemble it e.g. to the SLR1/2 (Link)

4 On the ground - Video receiver

Via a video receiver you can receive the signal from the video transmitter.
Video receiver you can get with one or two antennas. Receiver with two antennas can be switched to the antenna with the better reception.
To a receiver with two antennas you can connect also different antennas.
In example a stub (for narrow areas) and a directional antenna (for longer distance).

To watch the received video image you need to have in example a monitor.
An appropriate monitor with holder for a video receiver and a Lipo for the power supply you can easily order in our MikroKopter Onlineshop.
The connection is more than easy.

4.1 Example: Video receiver at MK-Monitor



(To enlarge -> Click on the image)

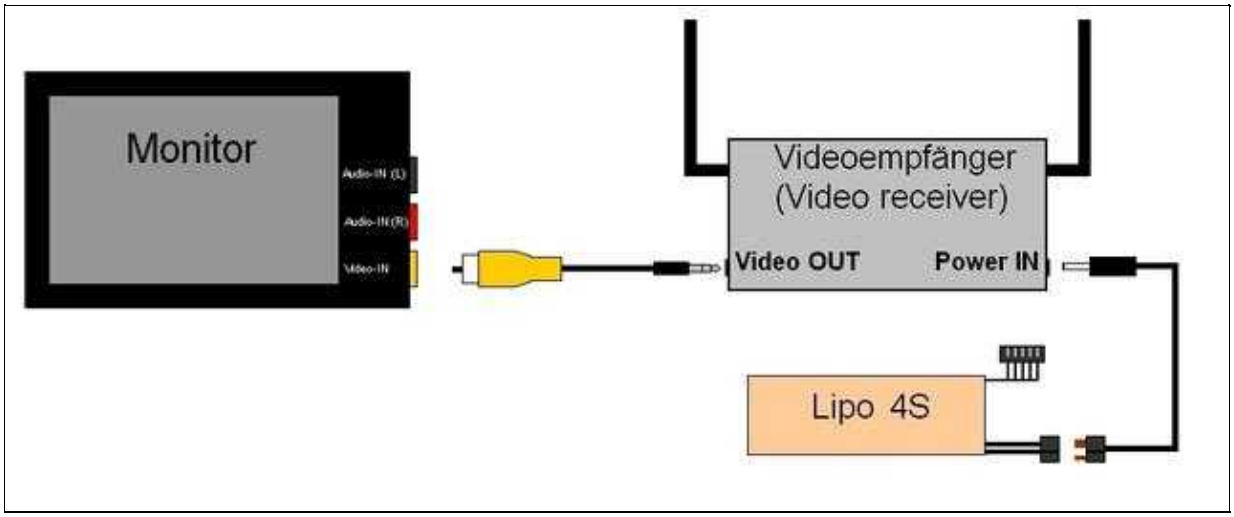
Bill of material (BOM):

Is required:

- Monitor with 5.5mm (Link) or 3.5mm jack (Link) (for the supply of the video receiver)
- Video receiver:
  - ♦ Video receiver 5,8 GHz Iftrontech Nano AV-Receiver ((5.5mm): Link)
    or
  - ♦ Video receiver 5,8 GHz Iftrontech Passport AV-Diversity Receiver ((3.5mm): Link)
    or
  - ♦ Video receiver 5,8 GHz Iftrontech Yellow Jacket Pro AV-Diversity Receiver ((5.5mm): Link)
- Lipo (Link})

4.2 Example: Video receiver at monitor

The connection of a conventional monitor takes also place via the cinch inputs:



(To enlatge -> Click on the image)

Bill of material (BOM):

Should be available:

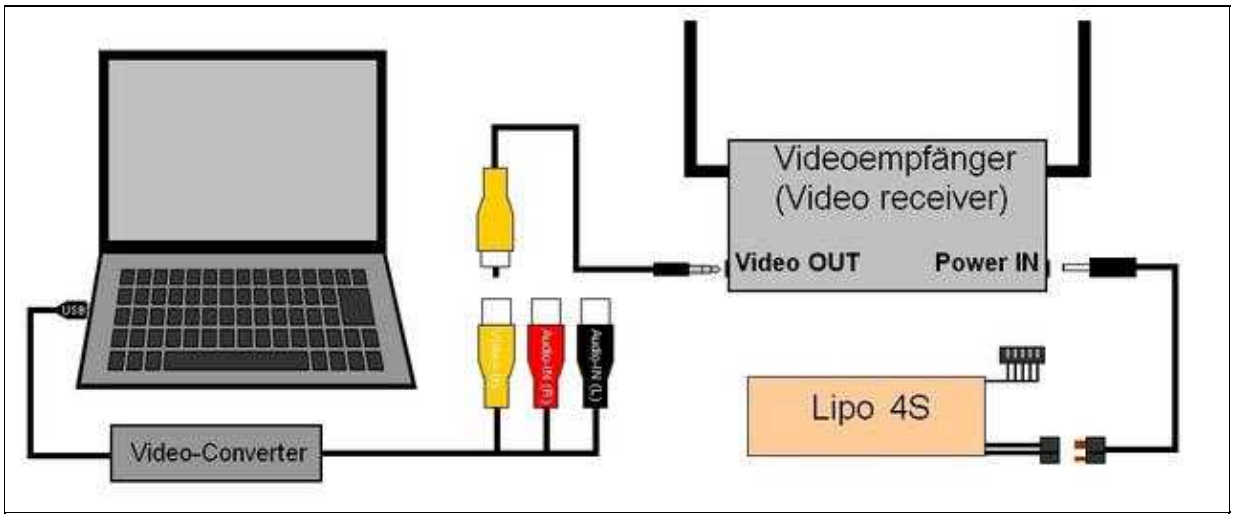
- Monitor with Cinch Video input

Is required:

- Video receiver:
  - ♦ Video receiver 5,8 GHz Iftrontech Nano AV-Receiver ((5.5mm): Link)
    or
  - ♦ Video receiver 5,8 GHz Iftrontech Passport AV-Diversity Receiver ((3.5mm): Link)
    or
  - ♦ Video receiver 5,8 GHz Iftrontech Yellow Jacket Pro AV-Diversity Receiver ((5.5mm): Link)
- Lipo (Link})

4.3 Example: Video receiver at Laptop

The video receiver can be also connected to a Laptop.
For that reason that most of the Laptops do not have a video input a video-converter (Video-Grabber) must be connected in between.
For those converters you will get direct the appropriate software for the image view.



(To enlarge -> Click on the image)

Bill of material (BOM):

Should be available:

- Laptop with video input or with additional video-converter

Is required:

- Video receiver:
  - ♦ Video receiver 5,8 GHz Iftrontech Nano AV-Receiver ((5.5mm): Link)
    or
  - ♦ Video receiver 5,8 GHz Iftrontech Passport AV-Diversity Receiver ((3.5mm): Link)
    or
  - ♦ Video receiver 5,8 GHz Iftrontech Yellow Jacket Pro AV-Diversity Receiver ((5.5mm): Link)
- Lipo (Link})