

## AKK BA3

# AKK BA3 FPV Camera and Transmitter User Manual

Model: BA3

## 1. INTRODUCTION

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The AKK BA3 is an all-in-one (AIO) FPV camera and video transmitter (VTX) designed for micro RC aircraft and FPV drones. It integrates a 600TVL 1/3 CMOS camera, a 5.8GHz 40-channel VTX, and a brass dipole antenna into a compact and lightweight unit. This manual provides essential information for the proper setup, operation, and maintenance of your AKK BA3 unit.

### Key Features:

- AIO FPV camera, transmitter, and brass dipole antenna in one compact unit.
- Switchable output power: 25mW, 50mW, and 200mW.
- Compatible with 5.8GHz FPV goggles and monitors.
- Requires 1S LiPo battery for operation.
- Upgraded low-light condition performance for improved visibility in dim environments.
- Designed for both indoor and outdoor flying applications.

## 2. PRODUCT OVERVIEW AND COMPONENTS

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Familiarize yourself with the components of your AKK BA3 FPV camera and transmitter.



Figure 2.1: AKK BA3 FPV Camera and Transmitter general view.



Figure 2.2: Labeled components of the AKK BA3 unit, including the button, power input, antenna, and camera lens.



Figure 2.3: Close-up view of the AKK BA3's LED display, which indicates current settings.

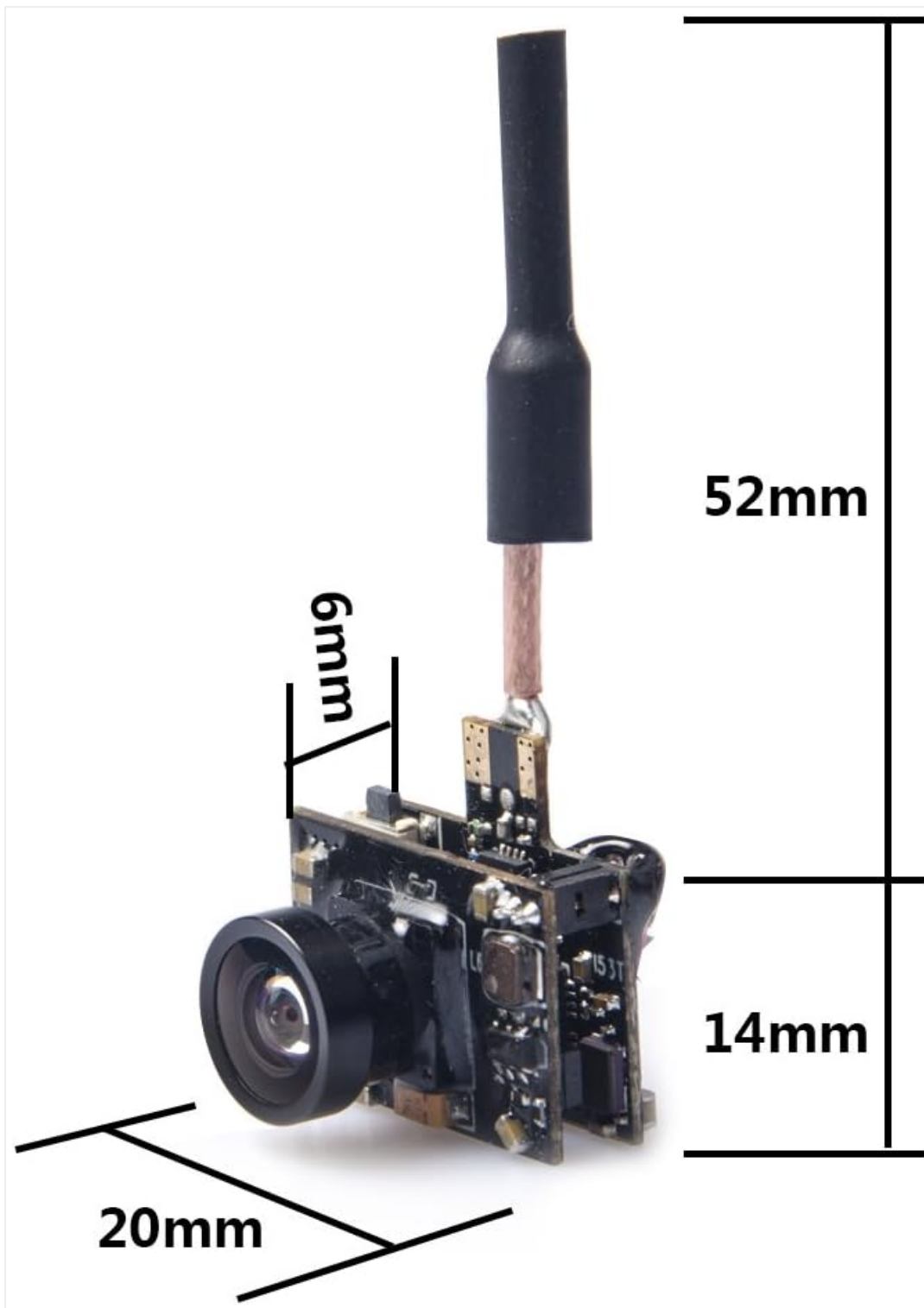


Figure 2.4: Dimensions of the AKK BA3 FPV Camera and Transmitter.

### Package Contents:

- 1x AKK BA3 AIO FPV Camera
- 1x Cable

## 3. SETUP INSTRUCTIONS

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### 3.1 Wiring

Connect the AKK BA3 to your drone's power source. Refer to Figure 2.2 for connection points.

- **GND:** Connect the black wire to the ground (negative) terminal of your power source.

- **3.3-5.5V:** Connect the red wire to the positive terminal of your power source. The unit requires a 1S LiPo battery (3.3V to 5.5V DC input).

Ensure correct polarity to prevent damage to the unit.

## 3.2 Initial Power-On

After connecting the power, the unit will power on. The LED display (Figure 2.3) will illuminate, showing the current channel and band settings.

## 4. OPERATING INSTRUCTIONS

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### 4.1 Changing Channels and Bands

The AKK BA3 features a single button for controlling channel, band, and power output. Refer to Figure 2.2 for the button location.

- **Short Press:** A short press of the button will cycle through the available channels (CH1-CH8) within the current band. The LED display will update to show the new channel.
- **Long Press (2 seconds):** A long press of the button will cycle through the available frequency bands (A, B, E, F, R). The LED display will update to show the new band.

### 4.2 Changing Power Output

To change the video transmitter's power output (25mW, 50mW, 200mW):

- **Very Long Press (5 seconds):** Press and hold the button for approximately 5 seconds. The LED display will briefly show 'P1', 'P2', or 'P3' indicating 25mW, 50mW, or 200mW respectively. Release the button when the desired power level is displayed.

Ensure your FPV receiver (goggles or monitor) is set to the same frequency and band as the AKK BA3 for proper video reception.

## 5. MAINTENANCE

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Proper maintenance ensures the longevity and optimal performance of your AKK BA3 unit.

- **Cleaning:** Gently clean the camera lens with a soft, lint-free cloth. Avoid using harsh chemicals.
- **Storage:** Store the unit in a dry, cool environment away from direct sunlight and extreme temperatures.
- **Handling:** Handle the unit with care to avoid damaging the delicate electronic components and the antenna.
- **Power:** Always disconnect power when not in use or during maintenance.

## 6. TROUBLESHOOTING

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If you encounter issues with your AKK BA3, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No video signal	Incorrect frequency/band on receiver; Power issue; Damaged antenna	Verify receiver frequency/band matches VTX; Check power connections; Inspect antenna for damage.

Problem	Possible Cause	Solution
Poor video quality (static, lines)	Interference; Low power output; Weak signal; Damaged camera lens	Change VTX channel/band; Increase power output; Reduce distance to receiver; Clean camera lens.
Unit does not power on	No power; Incorrect wiring; Faulty unit	Check battery connection and charge; Verify wiring polarity; Contact support if unit is faulty.

## 7. SPECIFICATIONS

Detailed technical specifications for the AKK BA3 FPV Camera and Transmitter.

Feature	Detail
Brand	AKK
Model Name	BA3 5.8G
Special Feature	Compact AIO FPV camera and transmitter, switchable power level, upgraded low-light condition
Color	Black
Video Capture Resolution	900x504
Connectivity Technology	5.8GHz
Included Components	BA3 AIO FPV Camera, Cable
Skill Level	Intermediate
Item Weight	0.03 Kilograms
Video Capture Format	NTSC
Remote Control Technology	Radio Frequency
Control Type	Remote Control
Wireless Communication Technology	5.8GHz
Battery Cell Composition	Lithium Polymer
Are batteries included?	No
Supported Image Format	JPEG
Video Output Resolution	525 pixels
Includes Remote?	No
Optical Sensor Technology	CMOS
Includes Rechargeable Battery	No

Feature	Detail
Media Type	Micro SD
UPC	649762389994
Model Number	4332024466
Part Number	K-BA3
ASIN	B06Y5D8SPZ
Material	Plastic
GTIN	649762389994

## 8. WARRANTY AND SUPPORT

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This product is covered by a standard manufacturer's warranty. For specific warranty terms, duration, and support inquiries, please refer to the official AKK website or contact your retailer.

For technical assistance or further questions, please visit the AKK support page or contact their customer service directly.