AKK TS832+RC832

AKK TS832+RC832 5.8GHz FPV Audio Video Transmitter and Receiver User Manual

1. Introduction

This manual provides detailed instructions for the AKK TS832+RC832 5.8GHz FPV Audio Video Transmitter and Receiver set. This system is designed for wireless video transmission in FPV (First Person View) applications, particularly for drones, offering a reliable solution for transmitting video and audio signals over a significant range.

The set supports 5 bands and 40 channels, allowing for easy frequency and channel changes via push buttons. It features a double-screen display for clear indication of selected channels and bands, making it a plug-and-play solution for aerial filming and FPV racing.

2. Package Contents

- 1 x RC832 FPV Receiver
- 1 x TS832 FPV Transmitter
- 2 x Antenna (RP-SMA)
- 2 x Power cable
- 1 x AV cable
- 1 x User manual

3. Specifications

3.1. TS832 Transmitter

- **Frequency:** 5.8GHz, 40 channels (Cover A, b, E, F, r bands)
- **Output Power:** 600mW
- **Video Format:** NTSC/PAL
- **Output Impedance:** 50 Ohm
- **Transmitting Distance:** > 3000m (open area)
- **Antenna Connector:** RP-SMA connector
- **Operating Voltage:** 7-16V
- **Supply Current:** 220 mA

- **Operating Temperature:** -10 to +85 ℃
- **Video Band Width:** 0-8.0 MHz
- **Audio Carrier Frequency:** 6.5 MHz
- **Video Input Level:** 0.8, 1.0, 1.2 Vp-p
- **Video Input Impedance:** 75 Ohm
- **Audio Input Level:** 0.5, 2.0 Vp-p
- **Audio Input Impedance:** 10K Ohm

3.2. RC832 Receiver

- **Power Supply:** DC 12V
- **Antenna Impedance:** 50 Ohm
- **Video Impedance:** 75 Ohm
- **Working Frequency:** 5.8GHz
- **Available Channels:** 40CH
- **Consumption Current:** 200mA, Max
- **Antenna Gain:** 2dBi
- **Antenna Connector:** RP-SMA
- **Audio Carrier:** 6.5MHz
- **Video Format:** NTSC/PAL
- **Dimension:** 80x65x15mm
- **Weight:** 85g

4. Setup

4.1. Antenna Connection

Carefully screw the provided RP-SMA antennas onto the corresponding connectors on both the TS832 Transmitter and RC832 Receiver. Ensure a secure connection to optimize signal transmission and reception.

Figure 1: AKK TS832 Transmitter and RC832 Receiver with antennas attached.

Figure 2: Close-up view of the TS832 Transmitter with its RP-SMA antenna connected.

Figure 3: Close-up view of the RC832 Receiver with its RP-SMA antenna connected.

4.2. Power and AV Cable Connection

Connect the provided power cables to the respective power input ports on the TS832 Transmitter (7-16V) and RC832 Receiver (DC 12V). Use the AV cable to connect the RC832 Receiver's AV OUT port to your display device (e.g., FPV monitor, goggles, or TV).

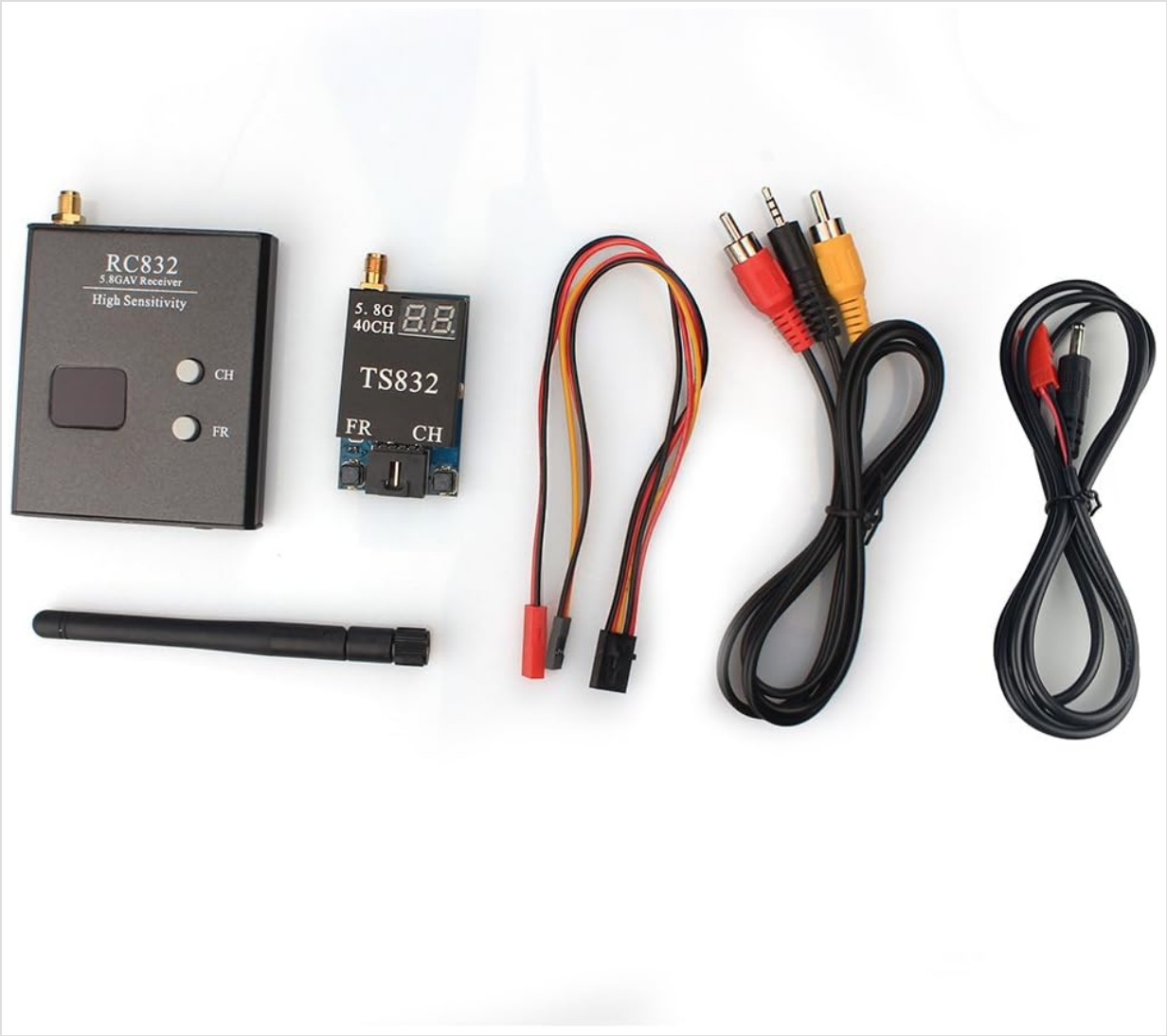

Figure 4: The AKK TS832 Transmitter and RC832 Receiver shown with their respective power and AV cables for connection.

4.3. FPV Camera Connection (to Transmitter)

Connect your FPV camera's video output and power input to the corresponding wires on the TS832 Transmitter's input cable. Ensure correct polarity for power connections (red to positive, black to negative) and proper video signal wire connection.

Figure 5: The TS832 Transmitter showing its wiring harness for connecting to an FPV camera and power source.

Notice: Please ensure correct connections before powering on the devices to prevent damage.

5. Operating Instructions

5.1. Power On

Once all connections are secure, apply power to both the TS832 Transmitter and RC832 Receiver. The double-screen displays on both units will light up, indicating their current channel and band settings.

5.2. Changing Channels and Frequencies

Both the TS832 Transmitter and RC832 Receiver feature push buttons for easy adjustment of channels (CH) and frequencies (FR).

- **CH Button:** Press the 'CH' button to cycle through the available channels within the selected frequency band.

- **FR Button:** Press the 'FR' button to cycle through the available frequency bands (A, b, E, F, r).

Ensure that both the transmitter and receiver are set to the same channel and frequency band for proper video transmission. The double-screen display will show the current selection.

Figure 6: RC832 Receiver showing the 'CH' and 'FR' buttons for channel and frequency selection.

For a visual guide on FPV setup and frequency pairing, you may find the following videos helpful:

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Video 1: How to Set up FPV on Radiolink RC8X? (General FPV setup guidance)

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Video 2: RC8X FPV Setup (Including Frequency Pairing Instructions) (General FPV setup and pairing guidance)

Your browser does not support the video tag.

Video 3: FPV Camera Razer Mini (Demonstrates a compatible FPV camera)

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Video 4: SoloGood 4.3inch FPV Monitor (Demonstrates a compatible FPV monitor)

6. Maintenance

The TS832 Transmitter may generate heat during operation. Ensure adequate ventilation around the unit, especially if enclosed, to prevent overheating and maintain optimal performance and longevity. Avoid operating the transmitter without an antenna connected, as this can damage the unit.

7. Troubleshooting

- **No Video Signal:**
  - Verify all power and AV cable connections are correct and secure.
  - Ensure both the transmitter and receiver are powered on.
  - Check that the transmitter and receiver are set to the exact same channel and frequency band.
  - Confirm the FPV camera is powered and functioning correctly.
- **Poor Video Quality/Interference:**
  - Try changing to a different channel and frequency band to avoid interference from other 5.8GHz devices.
  - Ensure antennas are securely attached and not obstructed.
  - Maintain a clear line of sight between the transmitter and receiver.
  - Check for potential sources of electromagnetic interference near the setup.
- **Transmitter Overheating:**
  - Ensure the transmitter has sufficient airflow for cooling. Avoid enclosing it in tight spaces without ventilation.
  - Verify the input voltage is within the specified 7-16V range.

8. Warranty and Support

Specific warranty information for the AKK TS832+RC832 FPV Audio Video Transmitter and Receiver is not provided in this manual. Please refer to the product packaging or contact AKK customer support directly for warranty details and technical assistance.