King Pigeon S150L

King Pigeon S150 4G SMS IOT RTU Controller Alarm System User Manual

Model: S150L
Brand: King Pigeon

1. Introduction

The King Pigeon S150 is an industrial-grade, high-reliability, and high-stability Remote Control and Alarm Unit. It integrates a 32-Bit High Performance Microprocessor MCU and an inbuilt industrial Cellular module. This unit provides 2 relay outputs, 8 digital inputs, and a USB Serial Port, enabling monitoring and control via SMS (Short Message Service). Upon any input trigger or recovery, the device can automatically switch on a relay and send an immediate SMS notification. It is designed for demanding industrial applications, making it suitable for various industrial automation, security monitoring, and automatic measurement and control systems.

2. Key Features

- **4G Module Inside:** Enables operation from any location without distance limitations.
- **8 Digital Inputs:** Compatible with both dry and wet contacts, supporting End-of-Line (EOL) connections for enhanced security.
- **SMS and Call Notifications:** Supports up to 3 user phone numbers for alarm and daily report SMS, and up to 5 user phone numbers for alarm calls.
- **2 Relay Outputs (240VAC@3A):** One relay output can be switched ON/OFF via SMS text commands. The other relay can be activated for 4 minutes if any digital input is triggered.
- **APP Support:** Free SMS APP provided for convenient operations.

3. Typical Applications

- Security Alarm System applications
- Supervision and monitoring alarm systems
- Automatic monitoring systems
- Vending Machine security protection
- Pumping Stations, Tanks, Oil or Water level monitoring
- Building and Real Estate management

- Weather Stations
- River Monitoring and Flood Control
- Oil and gas pipeline monitoring
- Corrosion protection systems
- Temperature and water leakage applications
- Wellheads, boat, and vehicle monitoring
- Energy saving and street lights control systems
- Valve controls
- Transformer stations
- Unmanned machine rooms
- Control room applications
- Automation System, M2M (Machine-to-Machine) communications

4. Package Contents



This image displays the complete package contents. It includes the King Pigeon S150 controller unit, a 12VDC wall wart power supply, a magnetic antenna, optional resistors, a USB cable, and green terminal blocks for wiring connections. These components are essential for setting up and operating the device.

- King Pigeon S150 4G SMS IOT RTU Controller Unit
- 12VDC Wall Wart Power Supply
- Magnetic Antenna
- Optional Resistors
- USB Cable
- Removable Terminal Blocks

5. Setup Guide

5.1 Device Overview



This image shows the front of the King Pigeon S150 controller, highlighting the status LEDs (Alarm, Status, Relay), USB port, antenna connector, and the digital input/output terminal block labels. The antenna is connected to the ANT port.



This image provides an internal view of the King Pigeon S150, revealing the circuit board and the embedded cellular module (M35). This illustrates the compact and integrated design of the controller's electronics.



This image shows a side view of the King Pigeon S150, clearly displaying the USB port for programming and the antenna connector. These are key interfaces for device configuration and cellular communication.

5.2 Initial Configuration Steps

1. **Insert SIM Card:** Open the device casing (if necessary, refer to the internal view image for guidance) and carefully insert a compatible 4G SIM card into the designated slot. Ensure the SIM card is properly seated.
2. **Connect Antenna:** Attach the magnetic antenna to the "ANT" port on the device. Ensure a secure connection for optimal signal reception.
3. **Power Connection:** Connect the provided 12VDC wall wart power supply to the DC IN port of the S150 controller.
4. **PC Software Installation:** Download and install the official PC software for the King Pigeon S150 from the manufacturer's website. This software is essential for programming the device.
5. **USB Connection:** Connect the S150 controller to your computer using the supplied USB cable. This connection is used for programming and configuration via the PC software.
6. **Digital Input Wiring:** The digital inputs are 3.3VDC from ground to each input. To trigger an input, run a wire from the ground (GND) terminal through your sensor, switch, or relay, and then to the desired digital input terminal (DI1-DI8).
7. **Relay Output Wiring:** Connect your devices (e.g., sirens, lights) to the relay output terminals. Refer to the device's wiring diagram for specific NO (Normally Open) and NC (Normally Closed) connections.
8. **Software Programming:** Use the PC software to configure alarm numbers, SMS commands, relay behaviors, and other operational parameters. Note that the software communication icon may appear red unless actively reading or writing data.
9. **Apply Settings:** After programming, it is often necessary to power cycle the device (turn it off, then back on) to apply changes.

6. Operating Instructions

The S150 controller can be operated and monitored primarily through SMS commands and its dedicated mobile application.

6.1 SMS Control

- **Relay Control:** Send specific SMS commands to the device's phone number to switch the designated relay output ON or OFF. Refer to the software manual for the exact command syntax.
- **Status Inquiry:** Send an SMS command to request the current status of digital inputs and relay outputs.
- **Alarm Notifications:** When a configured digital input is triggered (e.g., a sensor detects an event), the S150 will automatically send an SMS alert to the pre-programmed phone numbers. It can also initiate an alarm call to designated

numbers.

- **Daily Reports:** Configure the device to send periodic daily reports via SMS, providing a summary of its status and any events.

6.2 Mobile Application (APP)

The free mobile application provides a user-friendly interface for managing the S150 controller. It typically allows for:

- Remote control of relay outputs.
- Viewing the real-time status of digital inputs.
- Receiving push notifications for alarms.
- Configuring basic settings (depending on APP functionality).

7. Maintenance

To ensure the longevity and reliable operation of your King Pigeon S150 controller, follow these maintenance guidelines:

- **Regular Cleaning:** Keep the device free from dust and debris. Use a soft, dry cloth for cleaning. Avoid using liquid cleaners.
- **Connection Checks:** Periodically inspect all wiring connections (power, antenna, digital inputs, relay outputs) to ensure they are secure and free from corrosion.
- **Firmware Updates:** Check the manufacturer's website periodically for any available firmware updates. Applying updates can improve performance, add features, or resolve issues.
- **Environmental Conditions:** Ensure the device operates within its specified temperature and humidity ranges to prevent damage.
- **SIM Card Status:** Verify that the SIM card is active and has sufficient credit/data plan for SMS and call functions.

8. Troubleshooting

This section provides solutions to common issues you might encounter with the S150 controller.

Problem	Possible Cause	Solution
Device not powering on.	No power, faulty power supply, incorrect wiring.	Check power adapter connection and ensure it's plugged into a live outlet. Verify DC IN wiring. Test power supply voltage.
No SMS alerts or calls received.	No SIM card, inactive SIM, poor cellular signal, incorrect alarm numbers configured.	Ensure SIM card is inserted correctly and active. Check cellular signal strength (Status LED). Verify alarm numbers in PC software. Ensure SIM has sufficient credit/plan.
Relay output not activating.	Incorrect SMS command, faulty relay, incorrect wiring, input not triggered.	Verify SMS command syntax. Check relay wiring. Confirm digital input is correctly triggered and configured to activate the relay.
PC software communication icon is red.	Normal state when not actively communicating.	This is expected behavior. The icon will turn green or indicate activity only when reading or writing data to the device.
New settings not taking effect.	Device not reset after programming.	After programming new settings via USB, power cycle the device (turn off, then on) to apply changes.

9. Specifications

Attribute	Value
Model Number	S150L
Control Method	Remote (SMS, APP)
Digital Inputs	8 (compatible with dry/wet contact, EOL support)
Relay Outputs	2 (240VAC@3A)
Communication	4G (for AT&T), SMS, USB
Power Source	DC
Voltage	12 Volts
Product Dimensions	3.46 x 2.76 x 1.18 inches
Item Weight	1.06 pounds
Batteries	1 Lithium Polymer battery required (included)
Manufacturer	King Pigeon Communication Co.,LTD
UPC	687345930607
Date First Available	April 9, 2018

10. Warranty and Support

For warranty information and technical support, please refer to the documentation included with your product or visit the official King Pigeon Communication Co.,LTD website. You may also contact their customer service for assistance with setup, operation, or troubleshooting.

Manufacturer: King Pigeon Communication Co.,LTD

Please retain your purchase receipt for warranty claims.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question