FLIR P301-D SIRAS Remote Controller User Manual

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FLIR P301-D SIRAS Remote Controller

Product Information

The SIRAS CONTROLLER is a product of Coretronic Intelligent Robotics Corporation. It contains an RF module, FLIR/P301-D FCC ID: 2A735-SIRASF1E, and is designed based on the principle of TDD. The controller uses key technologies such as OFDM and MIMO to improve frequency band utilization and supports 64QAM, 16QAM, QPSK, and BPSK modulation modes with independent dynamic adjustment of multiple code rates.

It supports AES encryption and a variety of security policies to prevent illegal monitoring and interception. The controller adopts a frequency hopping scheme, monitors the interference situation in real time, and automatically selects the frequency hopping range. It can quickly change the frequency point and adjust the modulation and coding strategy (MCS) according to the interference situation of the current channel. The controller also has a built-in H.265 encoder that uses an advanced encoder rate control algorithm and seamless connection with baseband automatic MCS adjustment, making it more suitable for wireless link transmission under the condition of ensuring image quality.

Product Usage Instructions

The SIRAS CONTROLLER comes with a 5.5-inch display screen with a resolution of 1920 x 1080 and a brightness of 1000 cd/m2. It requires an Android version 9.0 or above and has 2G running memory and 16G storage space. The body size of the controller (excluding the antenna and handle) is approximately 180 x 130 x 40 mm. The weight, battery ambient temperature, battery capacity, type, charging (fast charging protocol), and charging time are not specified in the user manual. To use the SIRAS CONTROLLER, ensure that it is fully charged and powered on. Connect the controller to the device or system you wish to control using the RF module. The controller supports various modulation modes, and you can adjust the modulation and coding strategy (MCS) according to the interference situation of the current channel. It also supports AES encryption and a variety of security policies to prevent illegal monitoring and interception.

Product Feature

- Based on the principle of TDD, key technologies such as OFDM and MIMO are used to improve frequency

band utilization

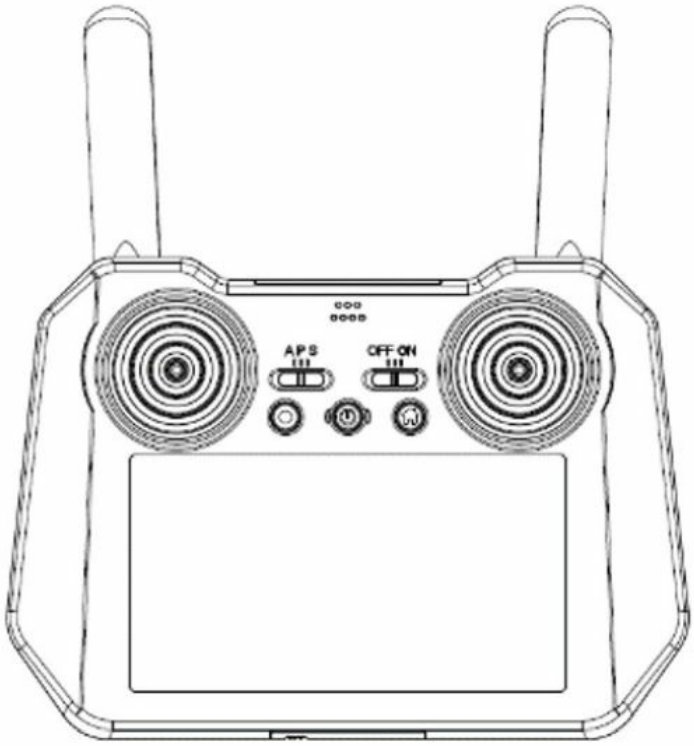
- Support 64QAM, 16QAM, QPSK, BPSK modulation modes and independent dynamic adjustment of multiple code rates
- Support AES encryption, support a variety of security policies to prevent illegal monitoring and interception
- Adopt frequency hopping scheme, monitor the interference situation in real time, and automatically select the frequency hopping range; automatically and quickly change the frequency point and adjust the modulation and coding strategy (MCS) according to the interference situation of the current channel
- Built-in H.265 encoder, using advanced encoder rate control algorithm, and seamless connection with baseband automatic MCS adjustment, it is more suitable for wireless link transmission under the condition of ensuring image quality

SIRAS CONTROLLER Specifications

Display screen	5.5 inch1920*1080 1000 cd/m2
System Configuration	Android version 9.0 or above 2G running memory, 16G storage space
Body size (excluding antenna, handle)	Approx. 180 x 130 x 40 mm
weight	<800g
Battery ambient temperature	0C ~55C
Battery capacity and type	10400 mAh, 7.4V, 2S, Li Po
Charging (fast charging protocol)	PD30W
charging time	3 H (30W fast charge)
Work time	6H
Waterproof level	IP53
Channel	16 CH
Maximum communication distance (no interference, no blocking)	10 KM (FCC)
Communication frequency band	2.4/5.8GHz automatic switching without interruption
Data transmission supports flight control (Mavlink protocol)	Open source flight control PIX, APM, etc.
Video transmission supports ground station (standard RTSP stream)	QGroundControl
	MissionPlanner
Functional interface	Charging: Type-C
	Firmware upgrade: DATA (4-Pin)
	Mobile network: SIM card slot
	External storage: TF card slot
	Tripod mount: 1/4 threaded hole
	Video output: Standard HDMI

Install the Hardware

- The location of P301-D on SIRAS CONTROLLER



- **Step1.** Put P301-D in the slot after opening the housing of remote.
- **Step2.** Press down into the slot
- **Step3.** locking screw
- **Step.4** Installing the Antenna IPEX Connector
- **Step.5** Installing the heat sink and locking screw
- **Step.6** Install the heat shield
- **Step.7** Combine the upper and lower covers of the remote with four screws.

ANTENNA LIST

This radio transmitter FCC ID: 2A735-SIRASF1E has been approved by FCC to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	CIROCOMM	43N15C6V0W0010T	Dipole	4.0dBi / 2400~2500MHz 5.0dBi / 5150~5925MHz

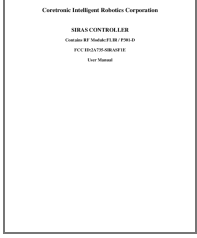
FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part

15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION:
Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

RF Exposure warning
This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. The exposure standard employs a unit of measurement known as the Specific Absorption Rate or SAR. The Limb SAR limit set by the FCC is 4.0 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels. The FCC has granted Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm after searching on FCC ID: 2A735-SIRASF1E.To ensure that RF exposure levels remain at or below the tested levels, use a belt-clip, holster, or similar accessory that maintains a minimum separation distance of 0 mm between your body and the device.

Documents / Resources

	FLIR P301-D SIRAS Remote Controller [pdf] User Manual 2A735-SIRASF1E, 2A735SIRASF1E, P301-D, P301-D SIRAS Remote Controller, SIRAS Remote Controller, Remote Controller

References

- FCC OET Authorization Search