

Model No.	RF485B
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1. General Information

ATransmitter	Customer no.	TBD
	Model NO	RF485B
	Frequency	433.92MHz±50kHz
	Number of buttons	5key
	Colour upper part	Black
	Colour lower part	Black
	painting	N
	Backlight	No
	Logo	Yes
	Certification	FCC/ID
	Software version	TBD
	Testing instruction PCBA	TBD
	Size	116*42*14mm
	Label product	35*5mm
	Label white box	No
	Manual/Issue date	No
	Magnet or Metal plate	No
	Key press force	160g±20g

2、ID

RF485A 工艺图 Process description



NO.	A1	A2	A3	A4
Component 组件	Keypad 按键	Top cover 面壳	Bottom cover 底壳	Battery cover 电池门
Material 材质	半透ABS	ABS	ABS	ABS
Process 处理	Injection 注塑	Injection 注塑	Injection 注塑	Injection 注塑
Surface effect 表面处理	Matte+Silk screen 火花纹VDI-24+丝印	Matte+Silk screen 火花纹VDI-24+丝印	Matte 火花纹VDI-24	Matte 火花纹VDI-24
Color 颜色	Injection: Pantone Black C Silk screen: Pantone 烫银3C Pantone Red 032C Pantone Red 803C Pantone Red 0821C	Injection: Pantone Black C Silk screen: Pantone 烫银3C	Injection: Pantone Black C	Injection: Pantone Black C

C&D 深圳创采发电子有限公司 SHENZHEN C&D ELECTRONICS CO., LTD.			
Client model No. 客户型号		Version No. 版本	
C&D Model No. 内部型号	RF485A	Scale 比例	1:1
Design by. 设计师	邱剑豪	Date 日期	2022.04.27

3.Electrical parameter

SN	Test Item	Requirement
3.1	Control Distance(RF)	≥10m for Key operation ≥10m for Voice Control
3.2	Operation Power Supply Range	DC 3.0V ~ 3.3V
3.3	Current Consumption in Power models	♦ 40uA (typical) @ Connected Idle (TV Session) ♦ 7mA (typical) @ Voice Operation
3.4	Current Consumption in Sleep Standby with host off	≤5uA
3.5	IR Operating Distance: Transmission Level	Follow Amazon's Spec.: 1. ≥35μW/cm ³ OR>10m 3. ≥15μW/cm ³ OR >3.0m 3. ≥15μW/cm ³ >3.0 m
3.6	Contact Resistance	≤3KΩ (between Input and Output ports of MCU.)
3.7	Battery type / Battery Life time	3 AAA alkaline (replaceable) / More than 13months
3.8	Calibrated Tx Power from SoC Conducted Tx power Radiated Tx power	4,143dBm
3.9	Initial Frequency error tolerance (f0)	-75KHz≤ f0≤75KHz
3.10	Conducted RX Sensitivity / Radiated RX sensitivity	≤-90dBm @BER=0.1%
3.12	Voice Sensitivity@1KHz	≥ -30dB
3.13	Voice S/N@1KHz	≥ -30dB
3.14	HD@1kHz	≤ 5%
3.16	Device control	Yes
3.17	RGB Tricolor LED	Yes (one)
3.18	DC-DC Booster	Yes
3.19	Voice	Single Analog Mic + Nearfield (push to talk)
3.20	Certification	CE, BT sig, FCA, WPS, CA Prop 65 (WW certification is needed)

4, Operating instruction

4.1 The master switch of transmitter realizes fan and light control (Mark 1) :

- the factory default state for fan status. When the lights are turned on again, the brightness and color temperature are the state before the lights are turned off.
- boot 30 seconds, long press this button for 3 seconds, to complete the remote control code. When the code is successfully matched, the light flashes. Before the code is matched, the light is on: light off for 1 second -> light on for 1 second -> light off; Before code alignment, light off state: light on for 1 second, light off.
- in fan respectively in high/medium/low, light work mode. Press key once. Within 30 seconds, the fan stops running and shuts down. How to press the key twice in succession, the fan should run in high speed gear within 30 seconds while the light shines.
- the fan at the stop, light work mode. Press key once. Within 30 seconds, the fan stops running and shuts down. Press the button twice in a row, the fan needs to run in high speed within 30 seconds, and the light will glow.
- in fan stops, the lights work mode. At this time, press the key once. Within 30 seconds, the fan should be running at the high level and the lamp should glow white. Press the key twice. Within 30 seconds, the fan stops running and the lamp must be turned off.
- in fan respectively in high/medium/low-grade, working mode, the lights went out at this point according to the national health 1, 30 seconds, fan stop running and lights. Press the key 3 times continuously, the fan runs in high speed, and the light shines.

Note: The color temperature may change if the light switch is too fast.

3.3 Fan Gear Control (Mark 3) :

- is divided into high, medium and low third gear, could wind speed buttons on the transmitter. After receiving the transmitting signal, the receiver controls the output of the AC motor to realize the fan speed of different gears.
- each file conversion time in less than 6 S.
- ask fan speed in the range of 10% of the set speed. Speed can overshoot.
- hold can be directly to the keys can directly control the fan fan gear, and don't need to push the fan switch must first.

(Speed/current/power matrix table)

Fan level 风扇档位	slow 低	medium 中	High 高
Rotate speed 转速 (RPM)	39	95	160
Drive current 驱动电流 (A)	0.17	0.33	0.53
Power 功率 (W)	6.6	33.7	63.4

3.3 Lighting Control (Mark 3) :

- only under the conditions of open LED lamp, can adjust the brightness.
- from the dark to the light or the brightest to the dark, need long keys 7 seconds.
- long key defines the longest (the remote control can be 10 seconds), brightness will change,
- control law:
 - ◆ Gradually change light -> Brightest -> Gradually change dark -> darkest -> Gradually change light ->... During the gradient process, press the main switch for 10 seconds and no longer adjust the brightness.
- can also many times short key, brightness will gradually change according to the rule.
- power 3.6 W when minimum brightness, high power 30 W + A1 brightness. (Power of the board when the fan is not turned on) The minimum brightness power is 3.0W, and the maximum brightness power is 33.1W.
- the factory default brightness is the brightest (power 31.1 W).

3.4 Color temperature adjustment (Mark 4) :

- six color temperature, color temperature adjustment by the launch button.
- only open the LED lights, that can adjust the color temperature.
- each press buttons, color temperature will change again.

Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (3) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE 3: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.