



RAYTALK COMMUNICATIONS LTD

SPECIFICATION FOR APPROVAL

(CUSTOMER) : \_\_\_\_\_  
(Part NO.) : \_\_\_\_\_  
(MODEL) : \_\_\_\_\_  
(NAME) : \_\_\_\_\_

(Customer Approval Status):

(Signature):

(Product Information)

(Part NO.) :  
(MODEL) : PH-400-AC/CO  
(NAME) : Aviation headset  
(DATE) : 2023. 07. 18

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Issue/Amendment Records



Version	Content	Revised	Date
A0	New edition issue	杨超	2023-07-18



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Others : Any matters that this specification doesn't cover should be conferred between the customer and Phenix New Energy(Hui Zhou)Co.,Ltd

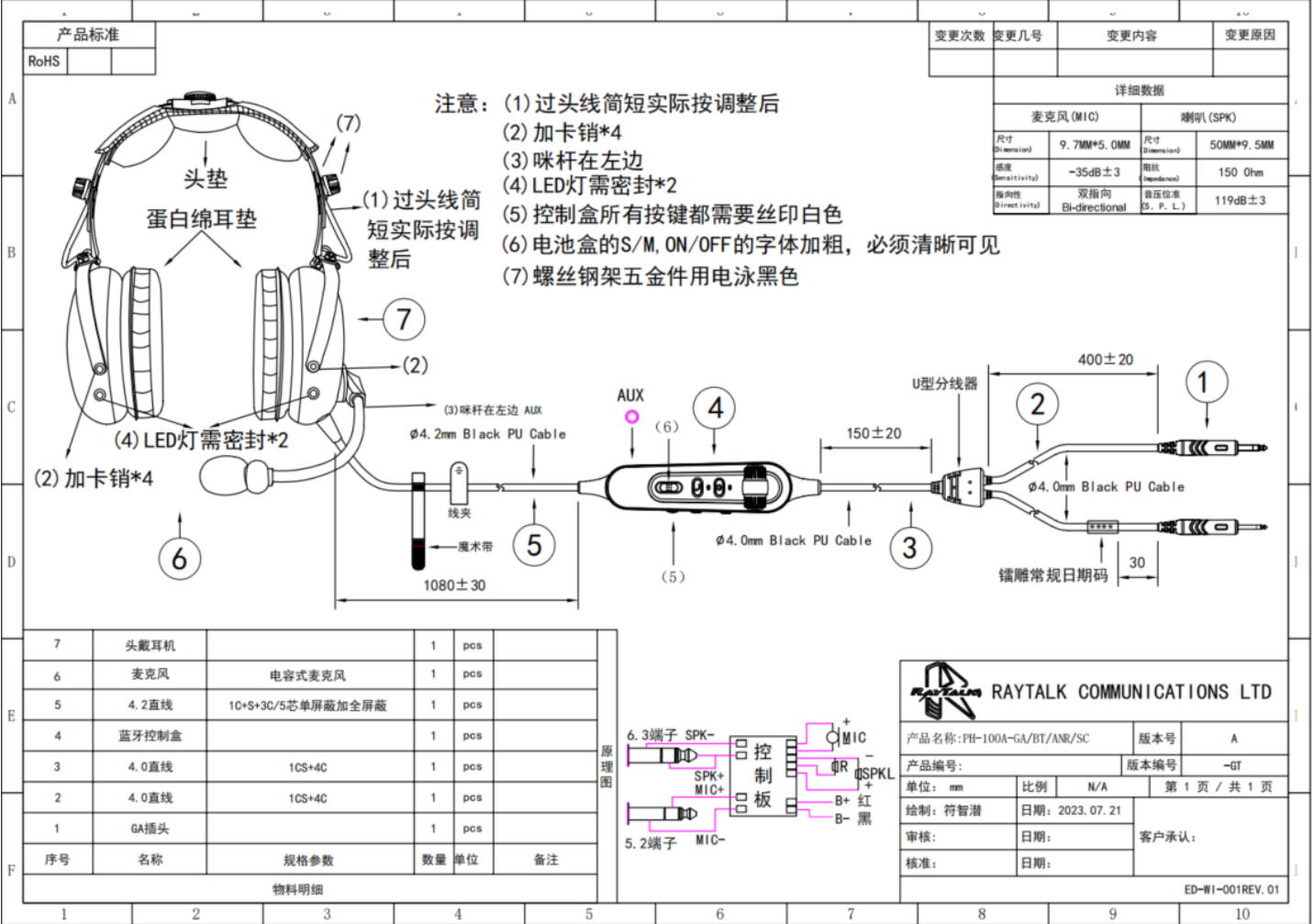


## 1、Product appearance drawing





2、Product size diagram



3、Product overview

Product specification sheet

Operating temperature	-20° C~55° C
Storage temperature	-25° C~65° C
Use environment	Planes

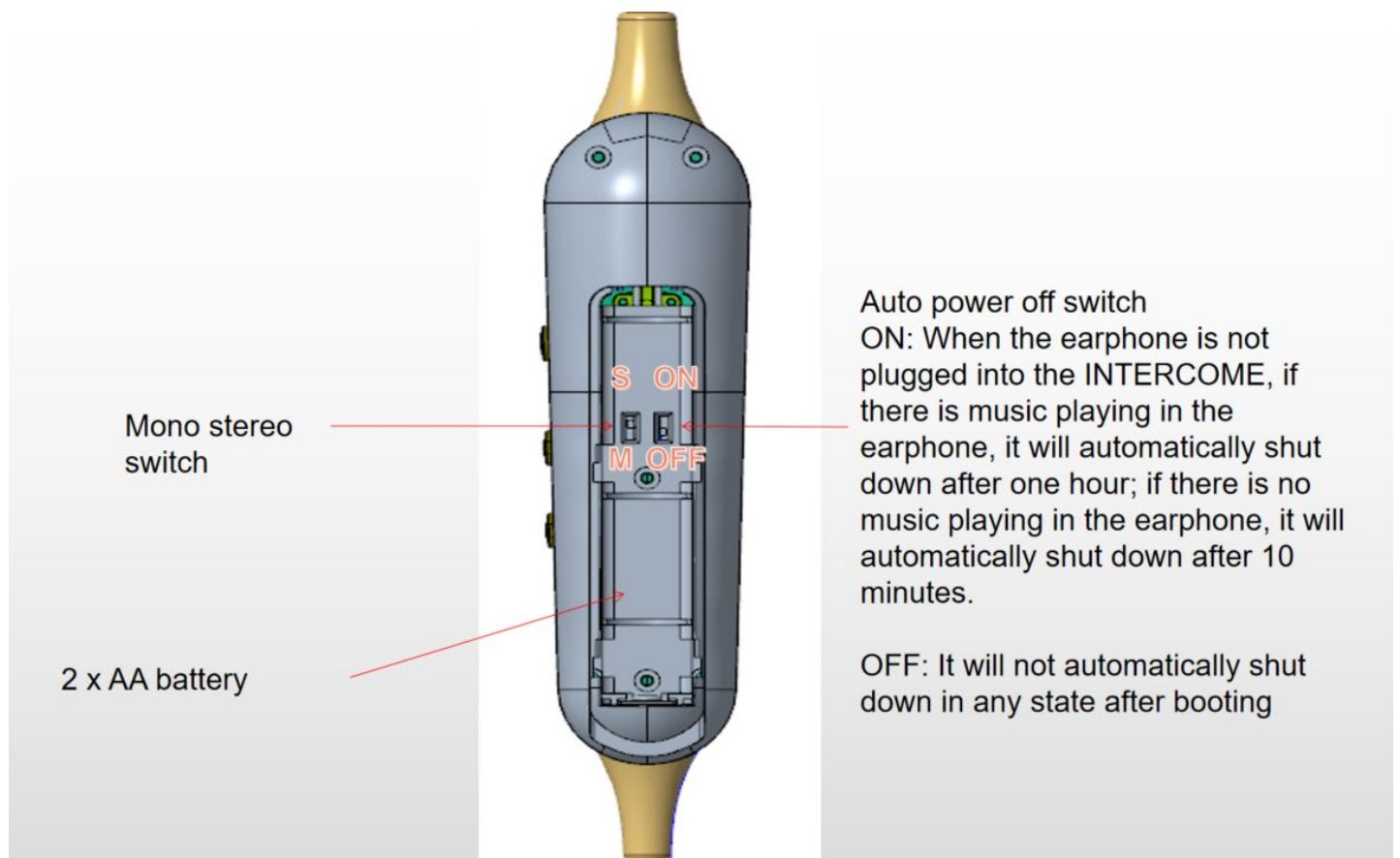
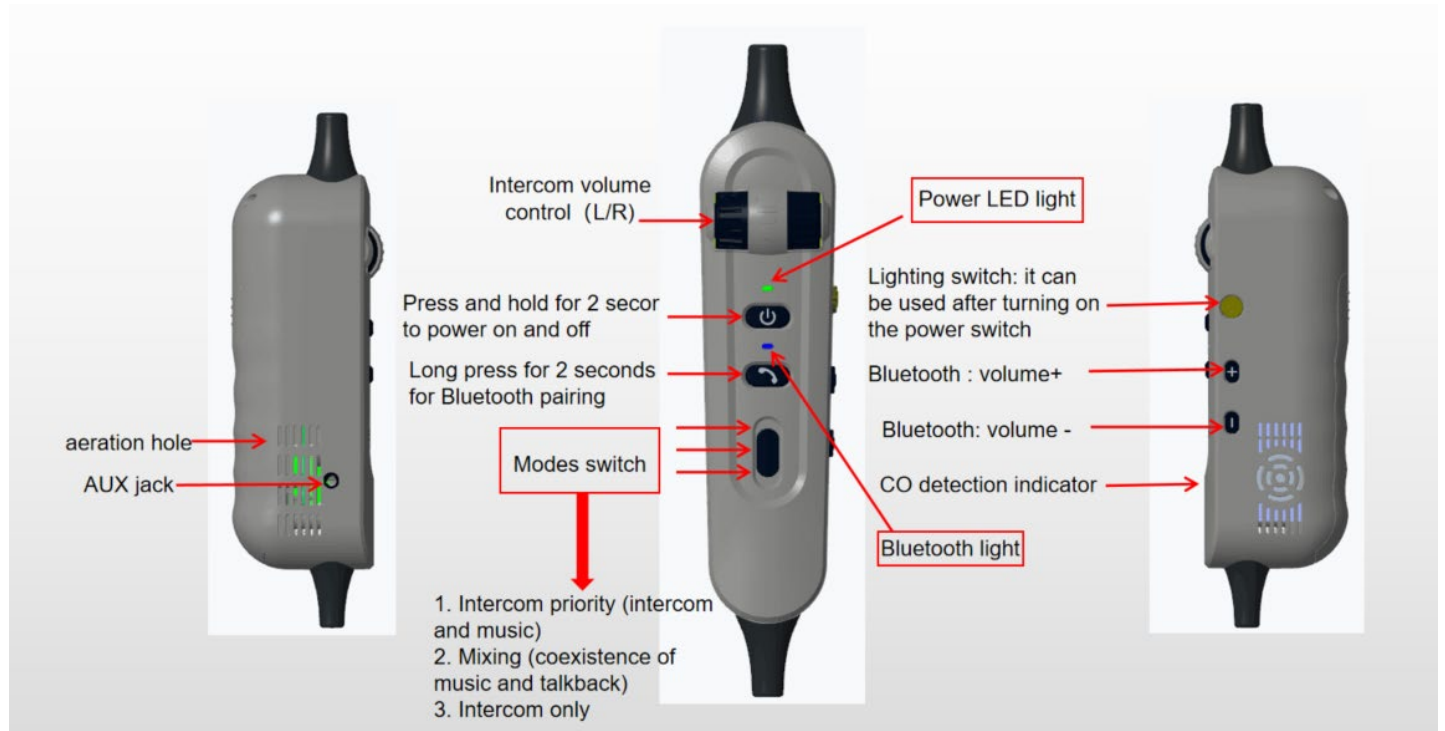
This product is an aviation headset with active noise reduction function, in addition, it also has carbon monoxide detection function. The safety decibel control system used can effectively protect the ears. Headphone volume  $\geq 70$  dB is the main risk factor for noise-induced hearing loss, and unscientific use of headphones is the main influencing factor for noise-induced hearing loss. This



product has an active noise reduction function, which can effectively prevent hearing nerve damage. The material is made of toy-grade skin-friendly materials, and there will be no allergic reactions in contact with the skin for a long time, ensuring comfortable wearing.



## 4、Operating instructions







## **Bluetooth Control module functions and instructions**

### **Power display**

- .Full power, green light flashes
- .Medium power, orange light flashes
- .Low power, red light flashes

### **HOME page operation:**

Bluetooth on: Long press Bluetooth for more than 1 second to turn on the Bluetooth function, and automatically enter the pairing state after turning on

Bluetooth off: Long press Bluetooth for more than 3 seconds to turn off the Bluetooth function

When a call comes in, short press Bluetooth to answer the call;

When talking, short press the Bluetooth button to hang up the phone; when calling, press and hold the Bluetooth button for more than 1 second to reject the call;

Press the Bluetooth key twice to call back the last outgoing call

### **AUX jack:**

When the AUX external audio input is plugged in, the Bluetooth music will be turned off ;

During a Bluetooth call, turn off the AUX function, and the Bluetooth call has the highest priority

The function description of the three gears of the function switch:

1: Flight priority mode: When the intercom has communication sound, turn off the Bluetooth or AUX music volume (when the Bluetooth is in a call, the call voice will not decrease); after the intercom communication is over, the Bluetooth or AUX volume will gradually return to the original level after 3 seconds

2: Mixed mode, intercom and Bluetooth or AUX sound exist at the same time

3: Music off mode: only the intercom sound exists, and the Bluetooth and AUX sounds are off; when the Bluetooth is in a call, the other party's voice cannot be heard locally, but the other party can hear the local voice

### **Carbon monoxide detection function**

After power on, the sensor starts self-test, the red LED of the CO indicator lights up, and the red LED turns off after 15 seconds of self-test. If not, there is something wrong with the sensor, and it will be indicated by a steady red LED. When the measured CO value is higher than the threshold of 50ppm, the earphone will start play alarm voice message. The alarm voice will alarm every 30 seconds, and the red LED of the control box will be on.





## 5、Product basic parameter

Name	规格参数/Specifications	
SPK	Size	29.6*2.7mm
	Impedance	100 $\Omega$ $\pm$ 10%
	Rated power	1W
	Frequency response characteristics	104 $\pm$ 3db
SPK	Size	40*7.5mm
	Impedance	32 $\Omega$ $\pm$ 10%
	Rated power	15mW
	Frequency response characteristics	110 $\pm$ 3db
Microphone	Size	13.8*4.3mm
	Sensitivity	-69 $\pm$ 3db
	Operating Voltage:	1.5V
	Type	Super heart direction
Headphones	Active Noise Canceling	-20dB
	Battery capacity	Two 5V dry batteries
	Working current	14mA
	Continuous working period	24H



## 6、Testing requirements

Item	NO.	Item name	Test Conditions	Test requirement
Exterior	4.1	Exterior inspection	Visually	There is no obvious shrinkage on the surface of the shell, the edge is less than 0.1mm, and there is no damage or wrinkle on the surface of the wire
	4.2	Structure size	Use calipers and rulers to measure related control dimensions of drawings	Meet drawing requirements
Reliability	4.3	Wire swing test	4.0 wire: 10000 times, 200g R10 60 times per minute	No deformation, damage, normal function
	4.4	Plug insertion cycle test	Plug and unplug test with the female socket at a speed of 40~60 times/minute, and the number of plugs and unplugs is >1000 times	No damage, slight shedding of coating, normal use
	4.5	Rotary switch life test	Operate 10,000 times at a speed of 30 times per minute under the condition of action force 220~280GF	No abnormal phenomenon, normal use
	4.6	High temperature storage test	Store the product in a high-temperature test box at 60° C for 24 hours, take it out and place it in a standard environment for recovery for 2 hours	No damage in appearance, normal function
	4.7	Low temperature storage test	Place the product in a low-temperature test chamber at -20° C for 24 hours, take it out and place it in a standard environment for recovery for 2 hours	No deterioration in appearance, normal function
	4.8	Constant Damp Heat Test	Expose the product to the environment at 60° C with a relative humidity of 95% for 24 hours, take it out and place it in a standard environment for recovery for 2 hours	No deterioration in appearance, normal function
	4.9	Vibration test	Fix the product on a mechanical vibration table, set the vibration frequency to 10Hz~60Hz cycle sweep, the vibration amplitude to 4MM, and vibrate for 1 hour in each of the X, Y, and Z axes.	No deterioration in appearance, normal function
	4.10	Drop test	1.5m free fall, fall ground: steel plate ground, number of drops: 10 times.	No deterioration in appearance, normal function



## 7、FCC 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 (2) this device must accept any interference received, including interference that may cause undesired operation.

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

NOTE: 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.

The device has been evaluated to meet general RF exposure requirement.

The device can be used in portable exposure condition without restriction.