Sample acknowledgment

Sample Specification For Approval

Customer Name Customer:

Supplier name Supplier:

Part name PartName: Bluetooth voice remote control

Client Model:

Customer size PartNO: F23G30MNT2

Supplier part number PartNO:

FST-823-BT05 Customer version

REV.:

Customer Acknowledgment No. DocumentNO:

Supplier acknowledgment No. DocumentNO:20240703001

Confirm and stamp Approved Signatures			
Supplier Supplier		Customer Customer	
affirm Check	Approved Approval	engineering ENG	research and development R&D

specification
Name: Remote control

1. Purpose: This product uses infrared and Bluetooth protocol to transmit signals and remotely control the operation of the equipment.
2. Scope of application: This specification is applicable to infrared and Bluetooth voice remote control units of our company.

FCC Caution

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.

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.

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

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

ISED Caution

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
1) L'appareil ne doit pas produire de brouillage;
2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with IC RF radiation exposure limits set forth for an uncontrolled environment.

Cet équipement respecte les limites d'exposition au rayonnement RF IC établies pour un environnement non contrôlé.

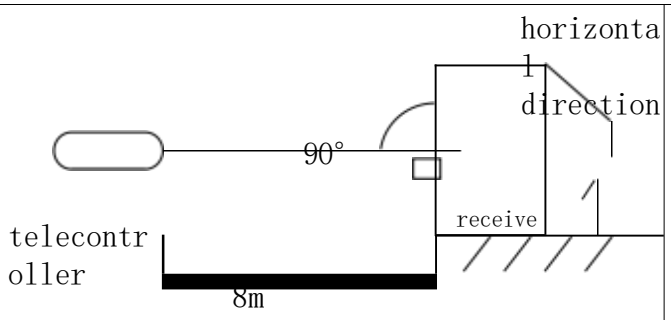
CE Caution

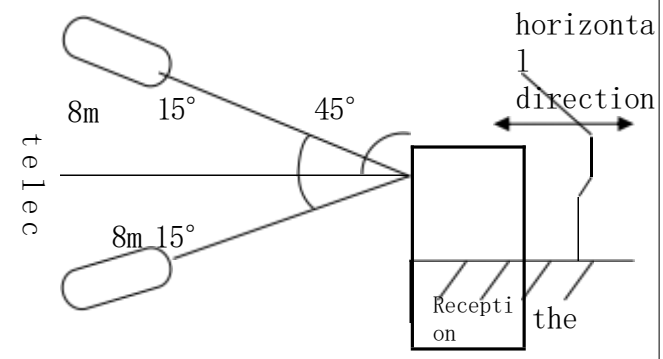
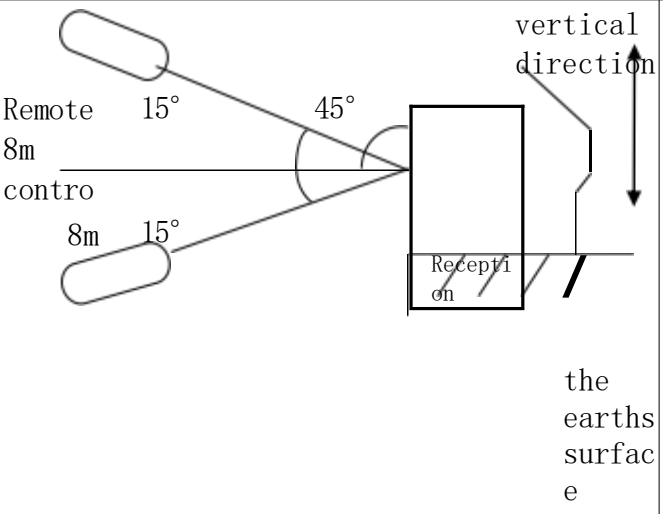
This Bluetooth voice remote control offers the following frequency bands in EU areas only and with the following maximum radio-frequency power:
- Bluetooth V5.2: < 10 dBm

number	project	content	Criteria for determination
1. Appearance structure	1.1 Appearance color	See the attachment "View Figure"	Refer to physical samples
	1.2 Name plate material	/	
	1.3 Plastic material	475 raw materials	
	1.4 Circuit board material	1.2mm thick RF4 fiberglass plate	
	1.5 Appearance	The following items are visually confirmed: ① 1. Scratching, contamination, cutting and deformation ② 2. Print graphics and text 3 Shell fit 4 Surface	There are no of the following phenomena 1. The characters are clear, uniform and neat 2. No warping of the nameplate, no deformation or crack of the shell 3. Uniform material and consistent color
2. Mechanical properties	2.1 Key force	180g±50g (force applied vertically on the button)	The center is used as the reference point for measurement
	2.2 Key travel	0.3mm±0.1mm	
	2.3 Key height	H is the height before the ① button is pressed	① H<1.0mm
		The height H1 at which the ② button is pressed	② H1>0.4mm
	2.4 Reset of the button	Apply 10N force to the left and right ends of the key plane at 1/4 position respectively, and to the left, right, front and rear sides of the key for 2 minutes	The buttons should be fully reset and function properly
	2.5 Button no load life	≥300,000 times	
	2.6 Load life of buttons	Press the button at a frequency of 20-30 times per minute for 200,000 times, with less than or equal to 0.5% of the times not in place	The button function is normal and meets the requirements of 4.1-4.8
	2.7 Overall voltage resistance of the remote control	Install the remote control with the battery, and apply 100N of vertical force to the front and side for 15 seconds	There is no damage and the function of each button is normal
	2.8 Power cover plug and pull	The power cover should be plugged and unplugged at least 100 times at a	NA

	life	frequency of 2-3 times per minute	
3. Usage specifications	3.1 Usage temperature	0℃-40℃(45-85%RH),86-106Kpa	Batteries with the same temperature range must be used
	3.2 Storage temperature	High temperature--55℃ low temperature--10℃	The battery needs to be removed after a long time of use
	3.3 Battery specification	UM4(AAA)	Compliant with national standard battery
	3.4 Transportation and storage conditions	The packaged remote control should be transported by general means of transportation, and the direct invasion of rain and snow or strong impact vibration and compression should be avoided during transportation. The remote control should be stored in a warehouse with ambient temperature of-10℃~+55℃, relative humidity not more than 80%, no strong magnetic field, corrosive substances and other harmful gases around.	

specification

4, Electrical parameters			
	4.3 Peak current	Power supply voltage DC3V	/
	4.4 Working voltage	Power supply voltage DC 3V (-20% + 10%)	2.4V-3.3V
	4.5 Carrier frequency	Infrared: 38KHZ±2% power supply voltage DC3V	At room temperature: 25℃ at room humidity: 65%RH
		Bluetooth: 2400-2483.5MHz power voltage DC3V	
	4.6 Test environment	Temperature 5-35℃, relative humidity 45-85%, atmospheric pressure 86-106Kpa	
	4.7 Function code value	See the attachment "Code Table"	
	4.8 Infrared emission distance	The power supply voltage is ≥DC3V and the receiving device is our standard decoder	See the attached table for distance and Angle
	4.9 Remote control range and directionality		
	4.9.1 The receiving device of the equipment is horizontally or vertically on the optical axis line of the remote control		1. Ambient temperature : 25℃ and ambient humidity: 65%RH 2. The battery voltage at measurement is 1.5V*2 or more 3. The receiving device is our companys standard decoder

	4.9.2 The receiving device of the equipment is taken as the reference, and the horizontal deviation (left and right) reaches the distance (receiver fixed)		1. Ambient temperature : 25℃ and ambient humidity: 65%RH 2. The battery voltage is more than 1.5V*2 during measurement 3. The receiving device is our companys standard decoder
	4.9.3 The receiving device of the equipment is taken as the reference, and the vertical offset (up and down) reaches the distance (the receiver is fixed)		1. Ambient temperature : 25℃ and ambient humidity: 65%RH 2. The battery voltage is measured at more than 1.5V*2 3. The receiving device is our companys standard decoder

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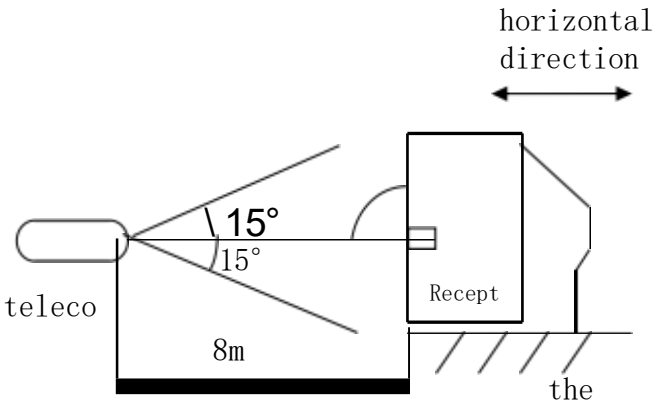
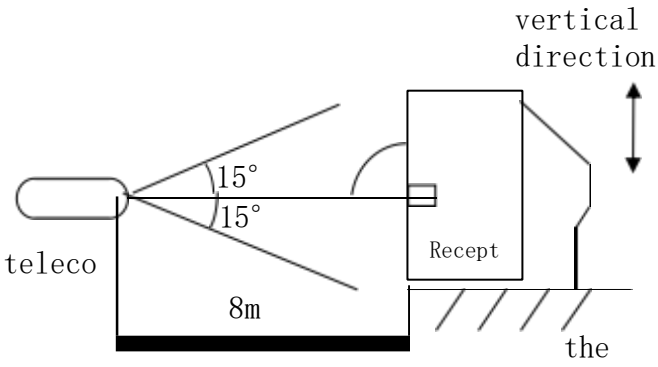
	4.9.4 Remote control as the reference, horizontal offset (left and right) to the distance (receiver fixed)		1. Ambient temperature : 25℃ and ambient humidity: 65%RH 2. The battery voltage is more than 1.5V*2 during measurement 3. The receiving device is our companys standard decoder
	4.9.5 Remote control as the standard, vertical offset (up and down) to reach the distance (receiver fixed)		1. Ambient temperature : 25℃ Ambient humidity: 65%RH 2. The battery voltage is more than 1.5V*2 during measurement 3. The receiving device is our companys standard decoder
	4.9.6 Bluetooth range	Voice action distance: 8 meters; button action distance 10 meters.	1. Measure the battery voltage 1.5V * 2 2. Our companys receiving device

Maximum working distance of the key	≥10M

5. Bluetooth electric specification	5.2 Operating current	Maximum working distance of voice	≥8M
		Maximum pickup distance	30 cm
	5.3 Response time (ms)	Automatic reconnection	<200 ms
		Button response	<20 ms
	5.4 Transmission protocol	Bluetooth 5.2	
	5.5 Frequency range	2.402 Ghz-2.480 GHz	
	5.6 Working voltage	2.3~3.6V	
	5.7 Rated operating voltage	DC 3.0V	
	5.8 Maximum transmission rate	1.0 M Kbps	

	project	condition of experiment	Criteria for determination
6. Weather resistance	6-1 High temperature storage	The remote control should be placed in an unpackaged and battery-free state in a test chamber at room temperature. After being left undisturbed for 2 hours and then restored for another 2 hours, the functions should be tested to ensure they are normal (if condensation or water droplets appear on the remote control after high-temperature testing, the device should be left undisturbed until they disappear before conducting further tests).	The following specifications must be met: A: Meet specification 1.5 B: Meet specification 2.1 C: Meet specification 2.2 D: Meet specification 2.3 E: Meet 4 specifications F: There shall be no shell fracture or crack during the fall. If the clasp is cracked without any tool, it can be manually restored to determine that it is qualified. Note: This test refers to GB/T14960-94 standard
	6-2 Low temperature storage	The remote control should be placed in a test chamber at room temperature without packaging or batteries (to prevent condensation, the remote control can be sealed with plastic film before testing, and a desiccant can be placed inside the sealed cover if necessary). The temperature inside the test chamber is-20° ℃, and after being left undisturbed for 2 hours, it should be restored to room temperature for testing each function to ensure normal operation.	
	6-3 Constant temperature and humidity	Put the remote control into the 40±2℃ humidity 90-95%RH box and leave it for 96H, then take it out and place it in the normal temperature and humidity environment to recover for 4H, then test whether all functions are normal (if there is condensation or water droplets on the remote control after high temperature test, it should be waited until they disappear before testing).	

	6-4 drop test	Under the condition that the remote control is equipped with a battery and without packaging, it should fall freely from an 80 cm height onto a wooden floor no less than 3 cm thick, with the drop surface parallel to the impact surface, which should be level, flat, sturdy, and hard enough not to move or deform during the test, and the function of the remote control should be tested for normal operation after falling. Note: If the battery door separates from the casing during the drop, it is considered normal.	
	6-5 Vibration test	A. Horizontal vibration: frequency 10-20-10Hz displacement 0.15mm, axis line sweep frequency 5 cycles	
		B. Vertical vibration: frequency 30-50-30Hz displacement 0.75mm, axis line frequency 5 cycles	

specification

Name: Remote control appearance, code value table

Model: F23G30MNT2, BT Name:F23G30MNT2
(BT+IR+Voice-google protocol, Pairing launch combination: HOME+BACK)
RCU Chipset:RTL8762ERF

Button Nomber	Button function	Icon	Usage page	HID Usage ID	NEC IR (Custom code:0x8877)	Corresponding scan code (veryfied by system)
1	Power		//	//	0x21	
2	Mute		0x0c	0x00E2	0x25	
3	PROFILE_SWITCH		0x0c	0x19C	0X59	
4	Google Assistant		0x0c	0x0221	0X46	
5	NOTIFICATION (Dashboard)		0x0c	0x009F	0X10	
6	Up		0x0c	0x0042	0x15	
7	Left		0x0c	0x0044	0X17	
8	OK	OK	0x0c	0x0041	0X19	
9	Right		0x0c	0x0045	0X18	
10	Down		0x0c	0x0043	0X16	
11	Back		0x0c	0x0224	0X48	
12	HOME		0x0C	0x0223	0x47	
13	Source		0x0c	0x01BB	0x60	
14	Volume up		0x07	0x0080	0X23	
15	Volume down		0x07	0x0081	0X24	
16	SHORTCUT		0x0C	0x02F2	0xC2	快捷菜单
17	ALL APPs		0x0c	0x01A2	0x57	
18	MENU	MENU	0x0c	0x0040	0xD4	
19	USB	USB	0x0C	0x01B4	0x5C	
20	Youtube hot key		//	//	0x64	
21	Netflix hot key	NETFLIX	//	//	0x63	
22	Prime Video		0x0c	0x0076	0x1F	
23	Disney Plus		0x0C	0x079	0x67	
24	(OK+BACK)combine bug report	//	0x0c	NA	0x96	
25	BACK+DOWN(Talkback)	//	0x0c	NA	0xD0	

A、在未配对(或未连接)情况下所有键值全部发红外码。。

B、在未配对(或未连接)情况下按Voice键时，电视端要有RC pairing提示界面:

"Please press HOME and BACK at the same time"，此时电视端可以起动配对搜索务服。

蓝牙名称为F23G30MNT2

C、上报google错误信息功能：OK+BACK组合键，

D、两个指示灯，蓝牙未连接时按键亮红灯(发红外),蓝牙连接时按键亮绿灯(发蓝牙)，

进入配对状态时绿灯闪. 按Voice键起动语音功能等待说话时绿灯快闪

Dimensions: 145.3 x 41.3 x 20mm

★★★ Precautions ★★★

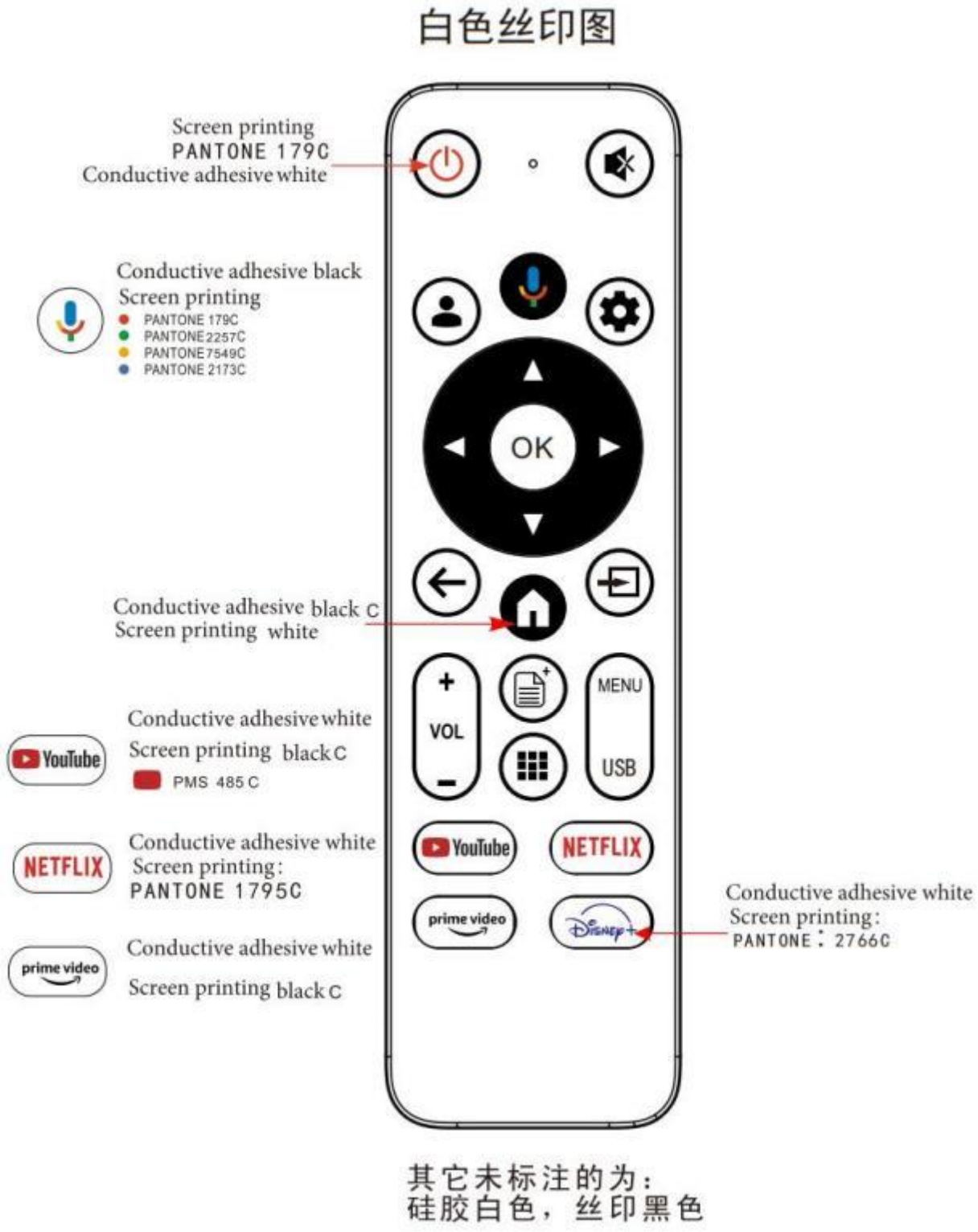
1. All colors, fonts and characters after recognition shall be based on the recognized samples.
2. Remote control single packaging: remote control + environmental protection sign PE bag, sealed with transparent tape.

specification

Name: Remote control appearance picture

specification

Name: Silk printing picture



specification

Name: Remote control size chart