










遙控渲染 Remote control rendering




遙控器功能需求說明 Remote control physical function

requirements description

1.Button function description

N0.	Button		Features
1		POWER	Perform sleep/wake on the box
2		apps	Application List
3		UP	Move focus/volume up +
4		DOWN	Move focus/volume down -
5		LEFT	Move focus to / left / rewind / switch to previous channel
6		RIGHT	Move focus / fast forward / switch to the next channel
7		ENTER	Enter the currently selected focus page / pause play / execute button prompt command
8		BACK	Return to the previous or previous page
9		HOME	Return to the system level home page on any interface
10		VOICE	(It works only after Bluetooth pairing is connected)
11		VOL+	Increase the volume (global applies, this button has only one operation)
12		VOL-	Decrease the volume (global applies, this button has only one operation)
13		YouTube	
14		NETFLIX	

15		Google play	
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2.Remote control key value

System code 系統碼:0x007f

Code format 碼結構: NEC

鍵碼值 Key code value:

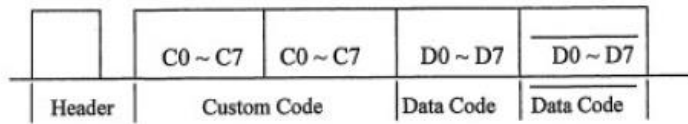
	Usage Page	Usage ID	IR CODE
Power	0x0C	0x0030	0x1e
Back	0x0C	0x0224	0x4c
Home	0x0C	0x0223	0x42
Voice search	0x0C	0x0221	0x79
enter (select)	0x0C	0x0041	0x5f
Up	0x0C	0x0042	0x03
Down	0x0C	0x0043	0x5e
Left	0x0C	0x0044	0x02
Right	0x0C	0x0045	0x40
Voice+	0x0C	0x00E9	0x5b
Voice-	0x0C	0x00EA	0x18
APPS	0x0C	0x01A2	0x7a
	0x0C	0x0078	0x7c
	0x0C	0x0077	0x77
	0x0C	0x0079	0x7b

8. Infrared control

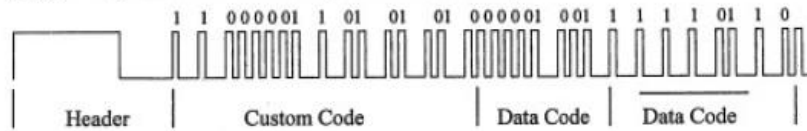
8.1 Format

NEC format

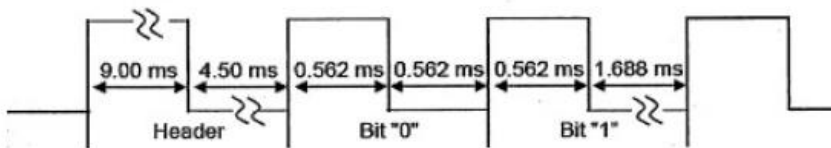
1. Structure



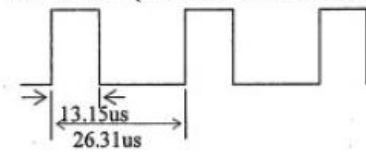
(eg.) ☺ (Custom Code:8355H, Data Code:90H)



2. Theory (tolerance of time:Less than $\pm 3\%$)

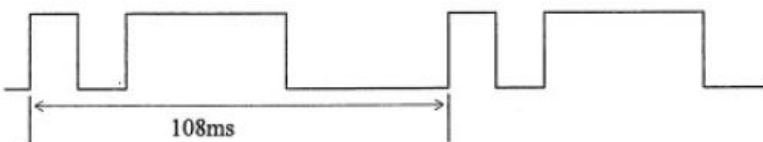


3. Carrier(tolerance of time:Less than $\pm 3\%$)



$f_c = 38\text{kHz}$
1/2 duty

4. Cycle(tolerance of time:Less than $\pm 0.5\text{ms}$)



Remote control instructions

1. 遙控器的特殊要求

1. Special requirements for remote control

- 1) 藍牙連接時，遙控器發送藍牙鍵值； 如果未連接藍牙，則發送紅外鍵值。
1) When Bluetooth is connected, the remote control sends the Bluetooth key value; if Bluetooth is not connected, the infrared key value is sent.
- 2) 指示燈：紅色，每按一次按鍵，指示燈閃爍
2) 低電壓提醒：當電池電量低時，指示燈快速閃爍。 只要它還在運行，它就會一直保持在閃爍狀態。 當不再被遙控器操作時，它會閃爍 5 次或閃爍 3 秒，然後停止並熄滅。
2) Indicator light: red, each time the button is pressed, the indicator light flashes. Low voltage reminder: When the battery is low, the indicator light flashes quickly. As long as it is still in operation, it will remain in the flashing state. When it is no longer operated by the remote controller, it will flash 5 times or flash 3 seconds, then stop and go out.
- 3) 支持藍牙遙控線上升級，通過 HOST 觸發升級。
3) Support Bluetooth remote control online upgrade, and trigger upgrade through HOST.
- 4) 配對方式：
 - a) 同時按住“ENTER”+“VOL-”鍵 3 秒，指示燈閃爍，配對成功指示燈亮 3 秒後熄滅。
 - b) 配對不成功時，仍按 ENTER+VOL- 鍵，將一直發送配對廣播，以便用戶配對。
 - c) 按 ENTER +VOL- 按鈕一次，匹配成功。 不要清除配對然後重新配對。

金鑰配對成功後，直到下次按鍵時才能發送配對廣播。

4) Pairing method:

- a) Press and hold the "ENTER" + "VOL-" button for 3 seconds at the same time, the indicator light flashes, and the pairing success indicator light is on for 3 seconds and then off.
- b) When the pairing is not successful, if you still press the ENTER +VOL- button, the pairing broadcast will be sent all the time so that the user can pair.
- c) Press the ENTER +VOL- button once to match successfully. Do not clear the pairing and then pair again. After a key pairing is successful, the pairing broadcast can no longer be sent until the next time the button is pressed.

連接間隔 < 12ms

Connection interval < 12ms

5) 遙控距離：≥10m

5) Remote control distance：≥10m

6) 藍牙設備名稱：EPSON ATV REMOTE

6) Bluetooth device name: EPSON ATV REMOTE

7) 支持 "ENTER" + "返回" 上傳 bug 報告功能

7) Support " ENTER " + "back" to upload bug report function

8) "返回" + "向下" 打開附件頁面

8) "back" + "down" to open the Accessory page

2. 遙控器其他要求

1). 配對功能要求：不得存在掃描不到藍牙設備或配對不上（包括短時間內連續按配對鍵）的問題，請驗證 50 次確保無問題；

1). Pairing function requirements: there must be no problems that the Bluetooth device cannot be scanned or paired (including continuous pressing of the pairing key within a short period of time), please verify 50 times to ensure that there is no problem;

2). 回連功能要求:不得存在回連不上的問題，包括盒子斷電回連，遙控器斷電回連，靜

置 2 小時回連等，請驗證 50 次確保無問題；

2). Reconnection function requirements: there must be no problems with the connection failure, including the box power failure and the connection, the remote control power failure and the connection, stand for 2 hours to reconnect, etc., please verify 50 times to ensure that there is no problem;

3). 抗干擾功能要求：不得存在非常影響主機 WIFI 輸送量的問題，請確保連接遙控器時主機端 WIFI 輸送量正常；

3). Anti-interference function requirements: there must be no problems that greatly affect the host's WIFI throughput, please ensure that the host's WIFI throughput is normal when connecting the remote control;

4). 性能要求：要求支援 $\geq 10\text{m}$ ，不得存在語音通話卡頓，丟失以及遙控器按鍵卡頓、丟碼或連鍵等問題；

4). Performance requirements: It is required to support $\geq 10\text{m}$, and there must be no voice call jams, loss, and remote control button jams, missing codes, or continuous keys;

5). 功耗要求：遙控器可持續使用至少 6 個月以上

5). Power consumption requirements: the remote control can be used continuously for at least 6 months

6). 語音：16Khz voice sample with 16-bit sampling，短按語音鍵（彩色鍵）可以開始錄音，遙控器收到語音引擎下發的停止錄音指令後停止錄音。語音超時 30s 保護，強制退出錄音。

6). Voice: 16Khz voice sample with 16-bit sampling, short press the voice button (color button) to start recording, and the remote control will stop recording after receiving the stop recording command from the voice engine. The voice timeout is protected for 30s, and the recording is forced to exit.

7). 盒子軟體可以控制 MIC 打開及關閉。

7). The box software can control the opening and closing of the MIC.

8). 支持遙控器 MIC 和其他 MIC（如手機 apk 上的錄音鍵）交替、切換語音輸入。

8). Support the remote control MIC and other MIC (such as the recording key on the phone apk) to alternate and switch voice input.

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.

IC Warning

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux CNR exemptes de licence d'Industrie Canada .
Son fonctionnement est soumis aux deux conditions suivantes :

- (1) Ce dispositif ne peut causer d'interférences ; et
- (2) Ce dispositif doit accepter toute interférence , y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

The device has been evaluated to meet general RF exposure requirement.
The device can be used in portable exposure condition without restriction.