



# 使用說明書

## User Manual

產品名稱: 433M 無線遙控器(配備 RS232)  
DESCRIPTION: 433M Wireless Controller (Have RS232)

產品型號: RF-A232 系列  
MODEL: RF-A232 Serials

發行日期: 2011-08  
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## 1 模塊功能 MODULE FUNCTION

RF-A232是一款低成本、低功耗、工作在433M的無線收發產品，主要應用在電動投影幕、電動窗簾、及電動車場等。

HRC101 serials is a wireless transceiver that specially designed for motorized screen controller, motorized curtain controller, electric garage door, home and industrial field with low cost, low power consumption on 433MHz.

### 產品特性 Product Features:

序号 No.	特性 Feature
1	遙控省電，在操作按鍵的情況下功耗幾乎為零。電池壽命大於 10000 次操作。 Save power, power consumption in buttons operation is almost zero. Battery life is more than 10000 times operation.
2	安全保護，在按鍵進行某動作 4 分鐘後自動關閉輸出。 Security protection, buttons in a action after four minutes to shut down output.
3	電源線束卡線專利設計，固定牢固，不鬆動。支持 6mm-7mm 的線束。 The power wire line card patent design, fixation and don't loose. Support 6 mm-7 mm automotive wire harness.
4	支持遙控器配對和清除配對，最多可以同時支持 15 個遙控器。 Support the remote control and clear the pairs, most can also support 15 remote controls.
5	配對時不需拆蓋操作，避免觸電危險。 Pairing doesn't need open cover operation, avoid electrical shock.
6	同時支持線控連接。 Support wire control



## RF-A232 系列無線遙控器

7	外觀新穎獨特，表面高光設計。 The appearance is novel and unique, surface design secular highlights.
8	接收器支持按鍵控制，並採用利于保護和方便操作人員的右方設計。 Receiver support key control, and to the protection and convenient operation personnel right of the design.
9	享有多項專利保護 Many patents protection
10	遙控範圍：50m Control range:50m
11	工作溫度範圍：-30-85℃ Operating temperature range : -30-85℃
12	環保材料設計 ROHS design
13	全球通用設計，支持 220V 和 110V 輸入 Universal, Support 220 V and 110 V input
14	支持中控 RS232 或 RS485 的編程控制 Support RS232 or RS485 programming control



RF-A232由發射器（遙控器）和接收器兩大部分組成。

RF-A232 contains remote control and receiver.



## RF-A232 系列無線遙控器

RF-A232 分三个版本 (Three version) :

序号 NO.	型号 Model	功能 Function	颜色 Color
1	RF-A232	支持線控的無線控制器 Support line control wireless controller	白、黑 white、black
2	RF-A232-1	支持線控并支持 RS232 中控的無線控制器 Support line control and RS232 wireless controller	白、黑 white、black
3	RF-A232-2	支持線控并支持 RS485 中控的無線控制器 Support line control and RS485 wireless controller	白、黑 white、black

## 2 外形尺寸 Outline Dimension

發射器和接收器的尺寸 size of transmitter and receiver:

器件部分 Device	尺寸 (單位 mm) Size(mm)
接收器 transmitter	125x80x44
發射器 receiver	116x44x14

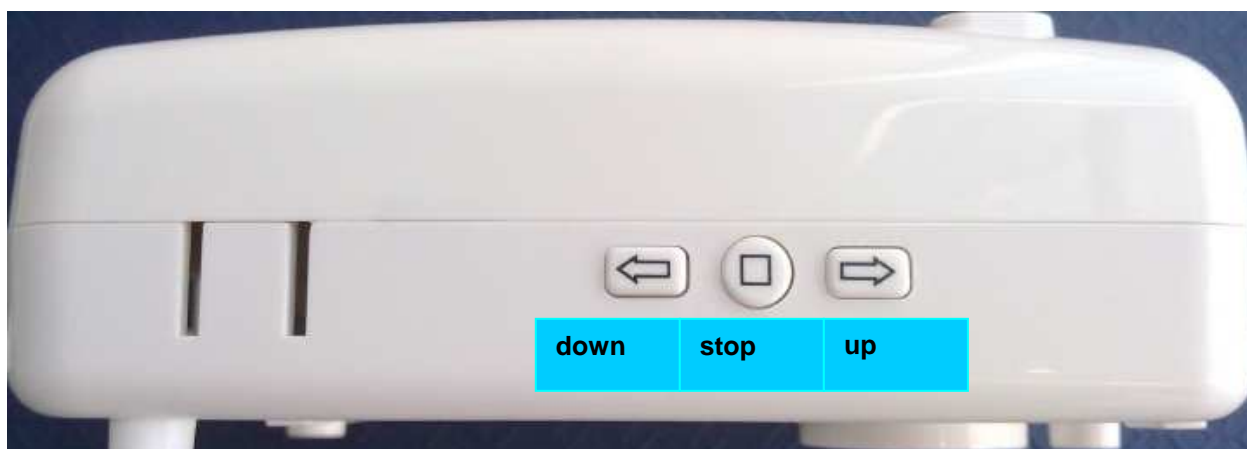
## 3 通訊協議 Communication Protocol

RS232 及 RS485 通訊協議，請參考文檔：RF-A232\_DSG\_001\_CommunicationProtocol.doc

RS232 and RS485 Communication Protocol refer to the document:  
RF-A232\_DSG\_001\_CommunicationProtocol.doc

## 4 使用方法 Usage

接收器部分 Receiver:





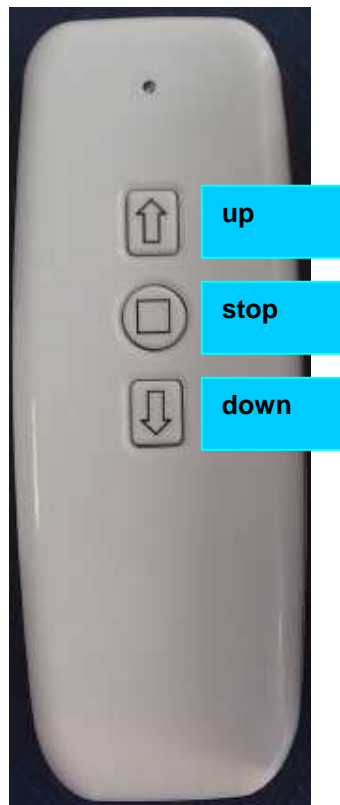
## RF-A232 系列無線遙控器

激活配對模式：長按停止鍵 3 秒后放開，將激活配對模式待接收器上的藍燈開始閃爍，此時按發射器上的任何按鍵將實現此發射器和当前激活的接收器的配對。一个接收器最多可以同時支持 15 個遙控器，當超過 15 個時，將覆盖之前的配對記錄。

清除配對記錄：先按向上鍵 8 秒，然后按向下鍵 8 秒后放開，此時將清除所有的配對記錄。

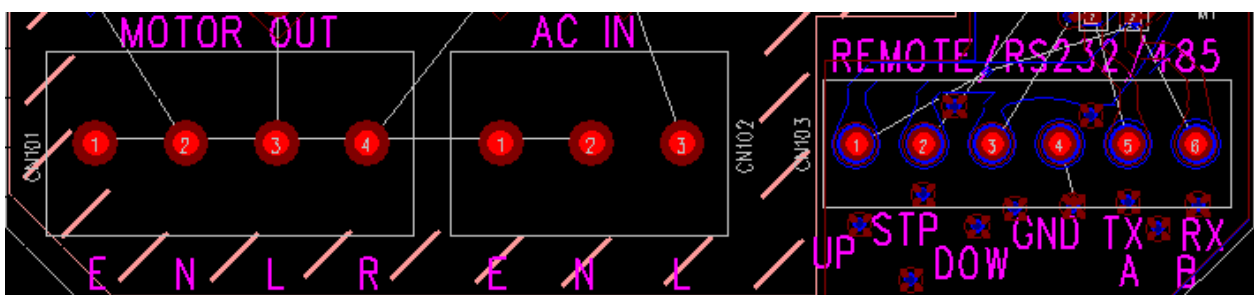
Activate the pairing mode: long press the stop button 3 seconds, then release stop key. The pairing mode will be activated and the blue light will start flashing. At this time press any key of transmitter will finish pairing action. A receiver can also support the most 15 remote control (transmitter). If pairing list is more than 15, receiver will cover the record before pairs.

Clear pairing records: first to press up key 8 seconds, and then press down key 8 seconds, then release down key, after that all pairing records will be cleared.



調換上下輸出控制：當接線柱的上下電源輸出反接時，不需要重新打開接線接收器外殼重新接線。只需按住向下鍵，再按住停止鍵，之后再按住向上鍵。**注意：在此操作按鍵切換時，LED 要保持常亮，即需要按下另外一個按鍵后再釋放前一個按鍵。**

Exchange the up down output control: When changing the up and down at the power supply output, do not need to reopen the receiver shell. Just hold down key, and then hold the stop button and release down key, then hold up key and release up key. **Notice: During this operation switch button, LED has to keep lighting, needs to press next button then release before button.**





## RF-A232 系列無線遙控器

接線柱定義 Terminals definition:

接線柱 Terminals	絲印 SCREEN PRINT	功能接法 Function connection
MOTOR OUT	E	地線 earth line
	N	零線 zero line
	L	向上火線 up power line
	R	向下火線 down power line
AC IN	E	地線 earth line
	N	零線 zero line
	L	火線 power line
REMOTE/RS232/485	UP	線控向上 line control up
	STP	線控停止 line control stop
	DOW	線控向下 line control stop
	GND	地線 earth line
	TX/A	RS232 時連接 RF-A232 的發送, 接中控的接收腳 RS232, RF-A232 TX, connect receiver port of center control RS485 時連接 D+或 RS485+ RS485,connect D+ or RS485+
RX/B	RS232 時連接 RF-A232 的接收, 接中控的發送腳 RS232, RF-A232 RX, connect send port of center control RS485 時連接 D-或 RS485- RS485,connect D- or RS485-	

## 5 環境及電氣參數 Environment and electrical parameters

以下描述了此產品的环境及環境及電氣性能參數。

Describe this product environment and electrical parameters

### 5.1 電氣性能參數 Electrical parameters

序号 No.	電氣環境 Electrical environment	參數 Parameter
1	發射器電池使用寿命 Battery life	大于 10000 次操作 Above 10000 times operation
2	發射器電池規格 Battery specifications	12V 23A
3	接收器輸入電壓 Receiver input voltage	AC220V/AC110V
4	遙控範圍 Control range	50m
5	工作溫度範圍 Operating temperature	-30-85°C