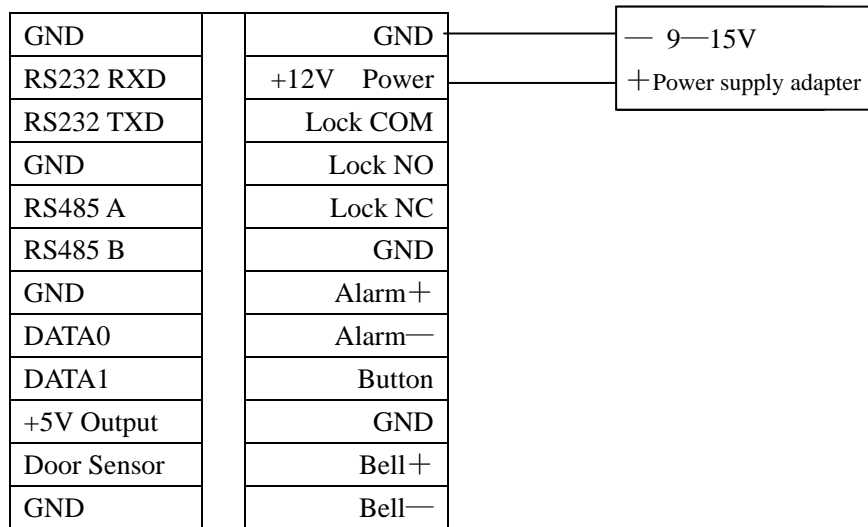




F7 Quick Connection Guide

1、 Connection between F7 terminal and power supply

F7 terminal is shown in above figure. It supports DC power supply of 9-15V as input, and can work immediately through the direct connection between GND and +12V. If lock-control uses the individual power supply, the current of F7's power supply adapter applies matching current of 500mA or over; if lock-control uses the same power supply with F7, the nominal output current of the power adapter will exceed the working current by over 1000mA.

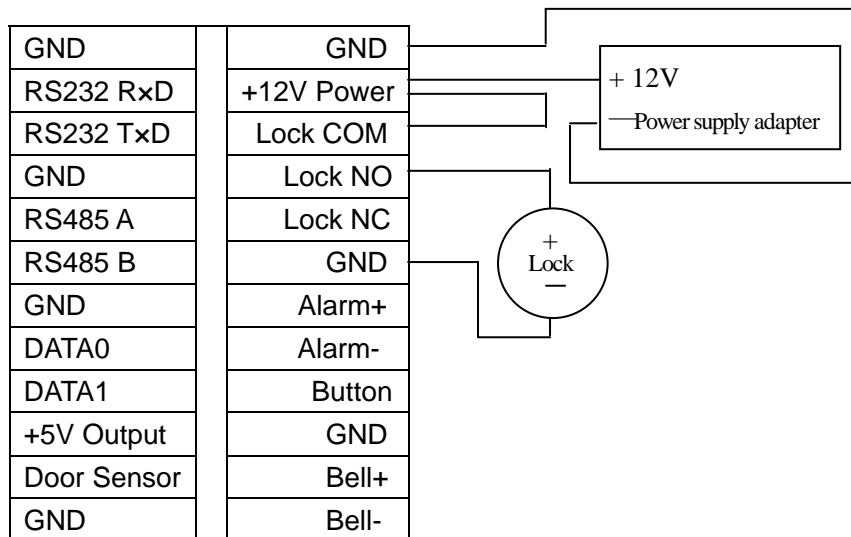


2、 Connection with door lock

F7 can support normal-open and normal-closed door lock simultaneously, so long as it is connected with the different terminals respectively. Usually, lock NO terminal disconnects with COM terminal, and they connect when F7 outputs the unlocking signal and recover to disconnection when the signal ends. The connection and disconnection between Lock NC terminal and COM terminal is opposite to above situation, they connect usually and disconnect when the unlocking signal is output.

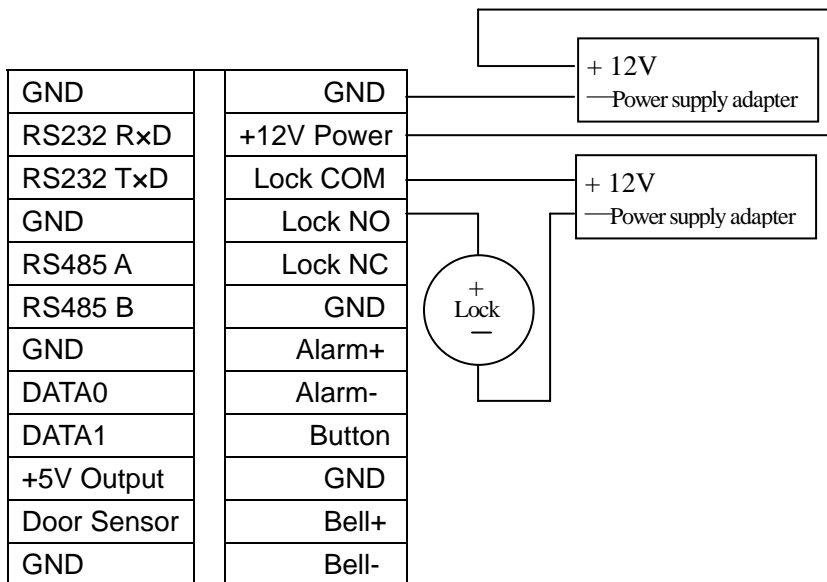
Due to the existence of varied electric-control door locks, the correct connection method must be confirmed in accordance with the door lock specification: Lock NO terminal should be used for the locks, which unlock when the power is on and lock when power is off; otherwise, the Lock NC terminal should be used.

Take the electric-control lock, which locks usually when power is off, for example herein, to show the connection method between F7 and locks. Use Lock NC terminal when F7 is connected with the lock, which locks usually when power is on.



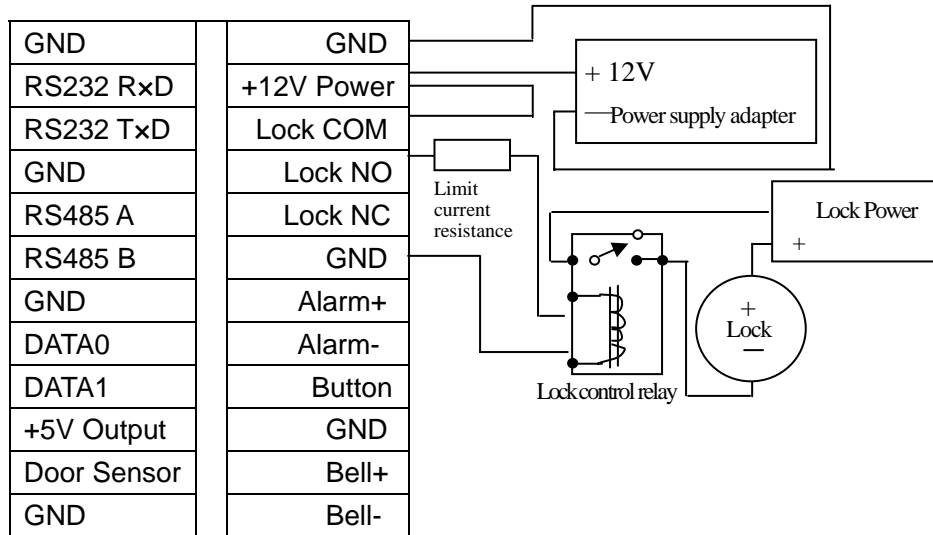
1) Connecting method for power supply adapter serving for both F7 and door lock contemporarily.

1. Matching voltage of lock must be 9 to 5V
2. Matching voltage of adapter must be accordant with that of lock.
3. Matching output current of adapter must exceed the working current by over 1000mA.



2) Connecting method for power supply adapter serving for both F7 and door lock contemporarily.

1. Matching voltage of lock is 120V or less
2. Matching voltage of lock's power supply adapter must be accordant with that of lock, and the output current must exceed the working current of the lock.
3. Working current of the lock must less than 3000mA



3) Connection between F7 and locks, which control the high current

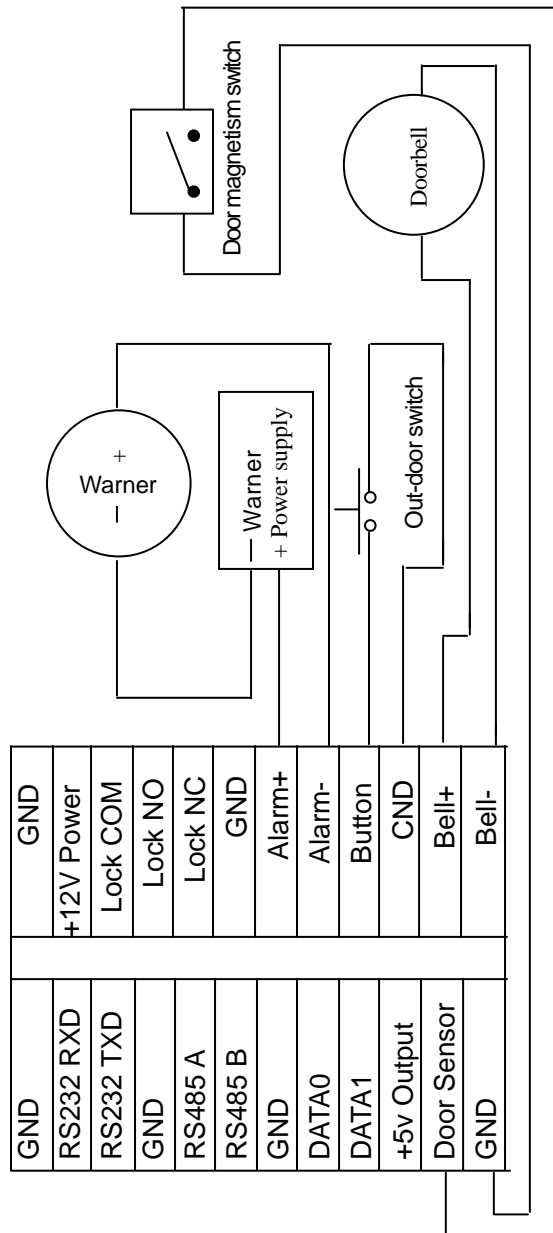
1. Matching voltage of lock's power supply adapter must be accordant with that of lock, and the output current must exceed the working current of the lock.
2. Matching voltage and current of relay must exceed those of the lock.

3、 Connection with out-door switch, door magnetism, doorbell and warner

Door switch is installed in the room, and you can open the door when the out-door switch is closed. The door magnetism is used to induce the opening and closing state of the door, and F7 can detect the state when the door is opened illegally, and hence output the alarming signal. Furthermore, F7 will also output the alert signal if the door is not closed well within the specified time.

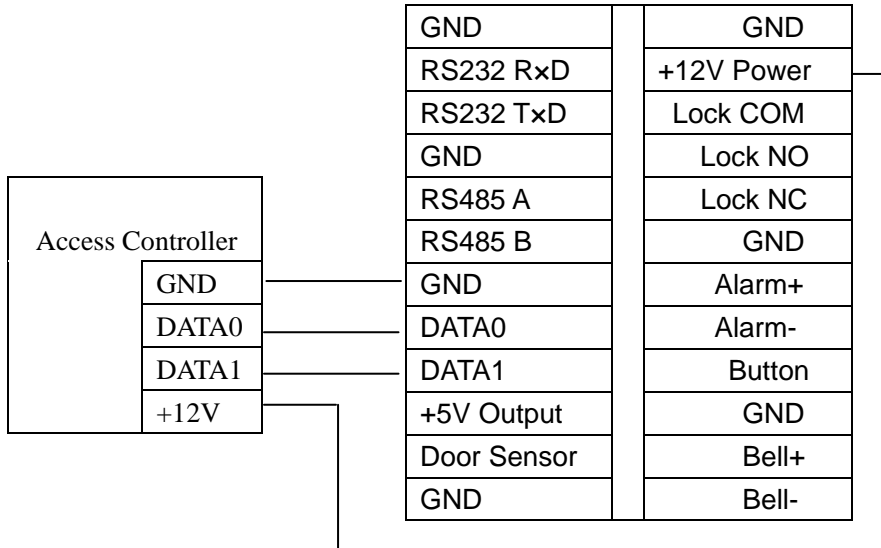
Alarming output of F7 is a switch signal, and can be connected in series into the power loop of warner. Of course it can be used as the trigger signal of advanced alarming/monitoring system.

Doorbell terminal of F7 is connected directly with the doorbell button of panel, so what you need to do is to connect the existing doorbell switch to these two terminals.



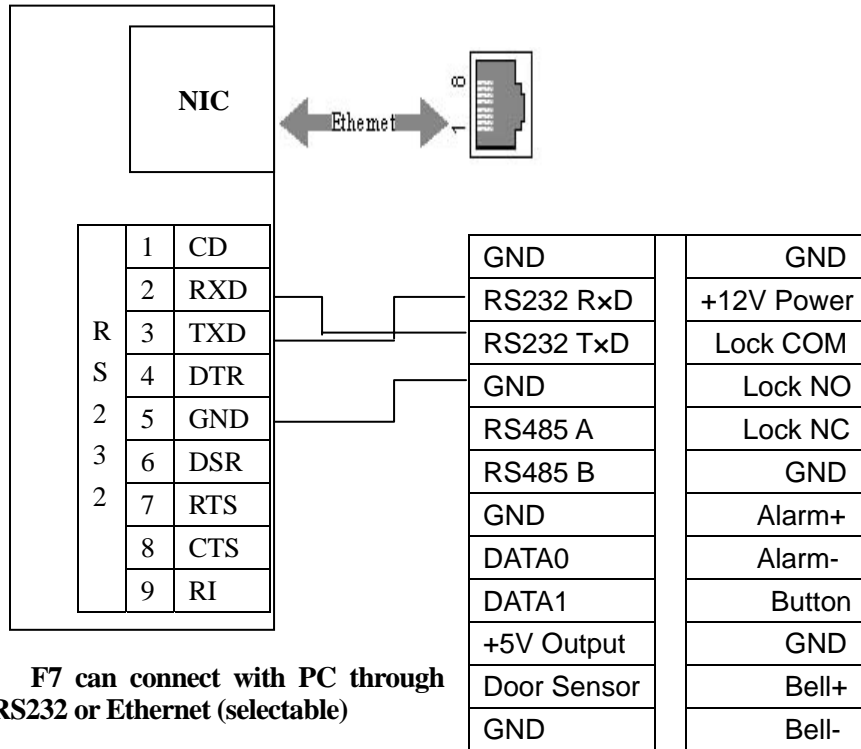
4、 Connection with controller

F7 offers the standard Wiegand26 output, and can be connected with existing most Access Controller as connection with an IC card reading head or password keyboard.



5、 Connect with network or computer

F7 offers RS232 and RS485 interface, and selectable Ethernet interface to connect with PC or to build network.



F7 Quick Connection Guide

RS485 Network

GND A B



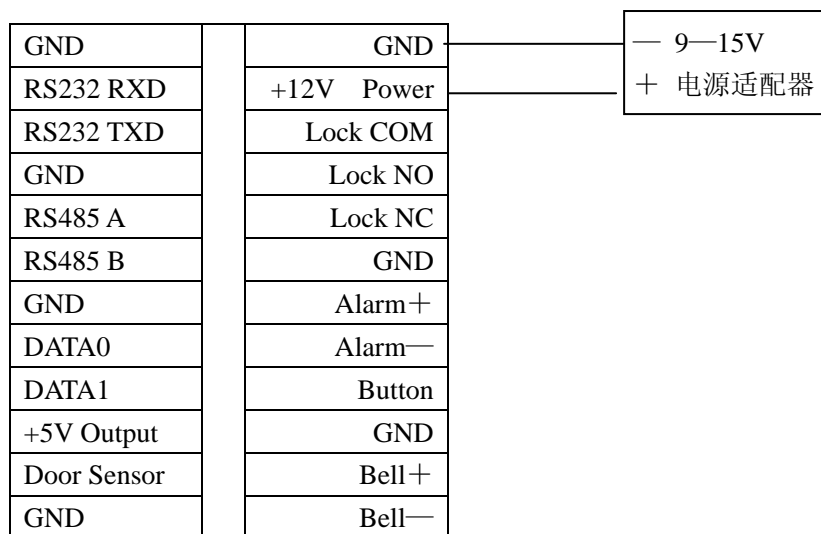
F7 is connected with
RS485 network

GND	GND
RS232 RxD	+12V Power
RS232 TxD	Lock COM
GND	Lock NO
RS485 A	Lock NC
RS485 B	GND
GND	Alarm+
DATA0	Alarm-
DATA1	Button
+5V Output	GND
Door Sensor	Bell+
GND	Bell-

F7 快速接线指南

6、F7 接线端子与电源连接

F7 的接线端子如上所示。它支持 9—15V 直流电源作为输入，直接连接在 GND 和 +12V 之间即可工作。如果锁控制使用单独的电源，那么 F7 的工作电源适配器只需要标称 500mA 以上即可；如果锁控制与 F7 使用相同的电源，那么该电源适配器的标称输出电流需要超过锁的工作电流 1000mA 以上。

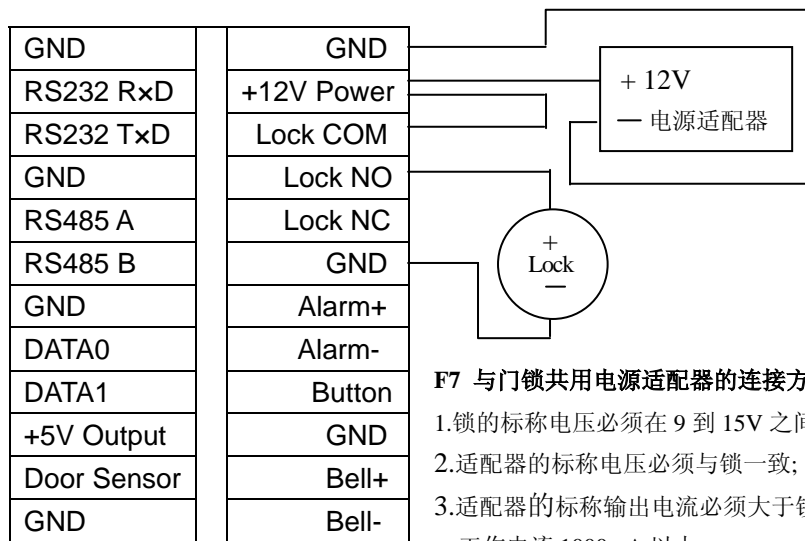


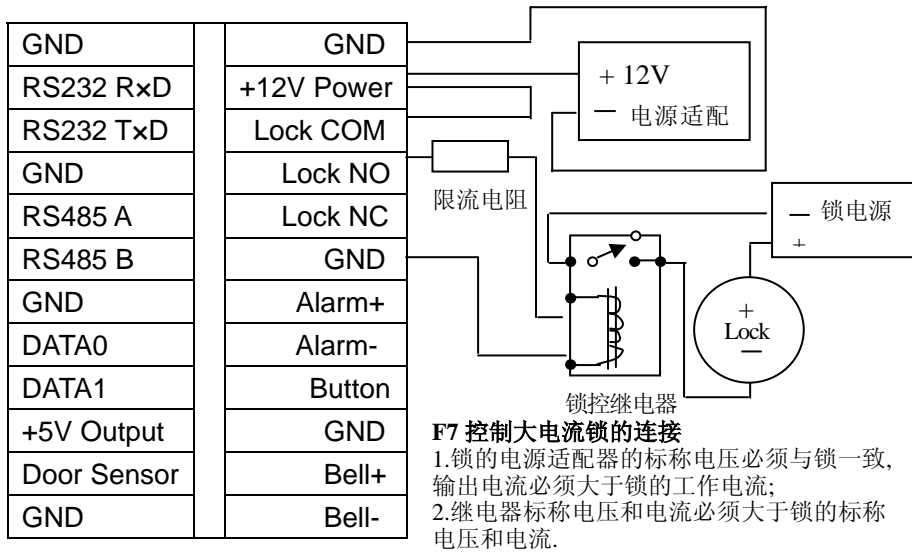
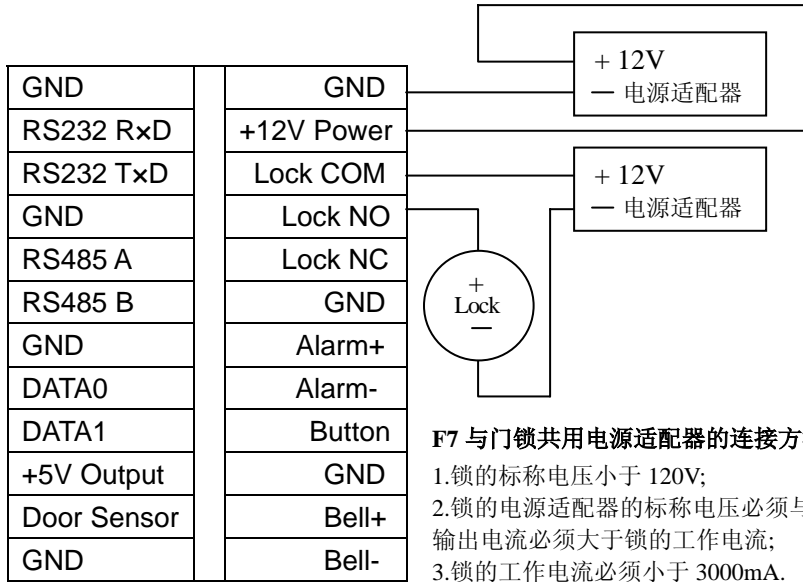
7、门锁的连接

F7 可以同时支持常开型和常闭型门锁，只要分别连结在不同的端子上即可。 Lock NO 端子通常与 COM 端子保持断开状态，在 F7 输出开锁信号时，Lock NO 与 COM 端子连通，开锁信号结束后，Lock NO 与 COM 恢复断开状态；Lock NC 端子与 COM 端子之间的通断状态与此刚好相反，平时连通而开锁时断开。

由于实际使用中存在着各种电控门锁，由此必须根据门锁的规格来确定正确的连接方法：对通电时打开、断电时锁闭的锁，应该使用 Lock NO 端子，对通电时锁闭、断电时打开的锁，应该使用 Lock NC 端子。

下面以断电常闭的电控锁为例，示意 F7 与锁的连接方法。通电常闭型的电控锁连接时只需改用 Lock NC 端子即可。



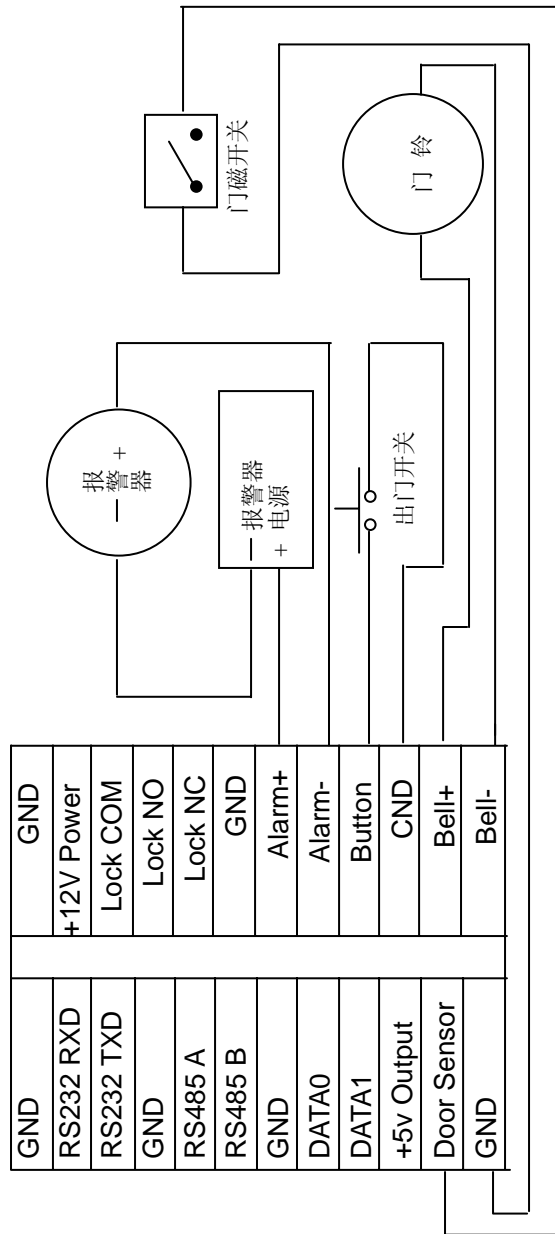


8、出门开关、门磁、门铃和报警器的连接

出门开关是安装在房间内部的开门开关装置，出门开关闭合就可以把门打开。门磁用于感应门的开关状态，F7 通过门磁开关可以侦测到门被非法打开，此时会输出报警，另外，打开门后在超过规定的时间内没有关好门，F7 也会产生提示警告。

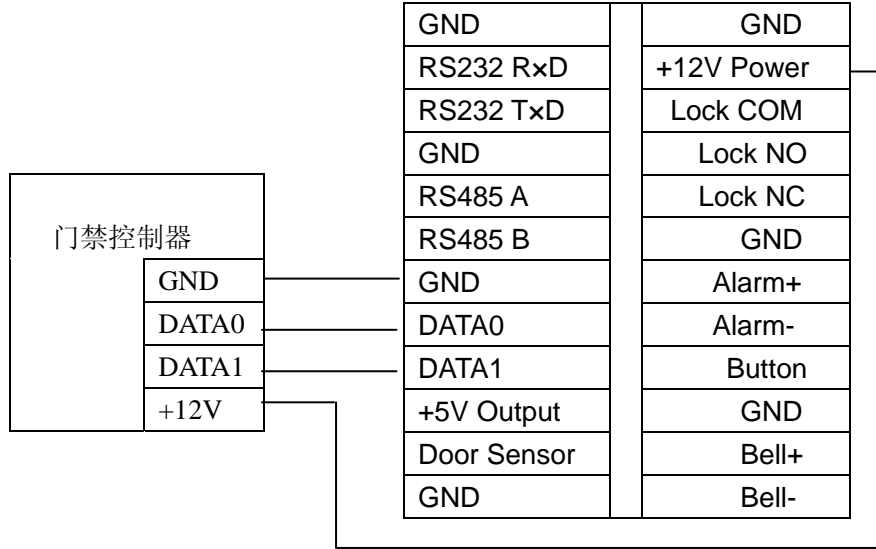
F7 的报警输出是一个开关信号，可以把它串联到简单报警器的电源回路中。当然也可以用来作为高级报警/监控系统的触发信号。

F7 的门铃接口端子是直通面板上的门铃按钮的，因此只需要把现存的门铃的按钮开关改接到这两个端子上即可。



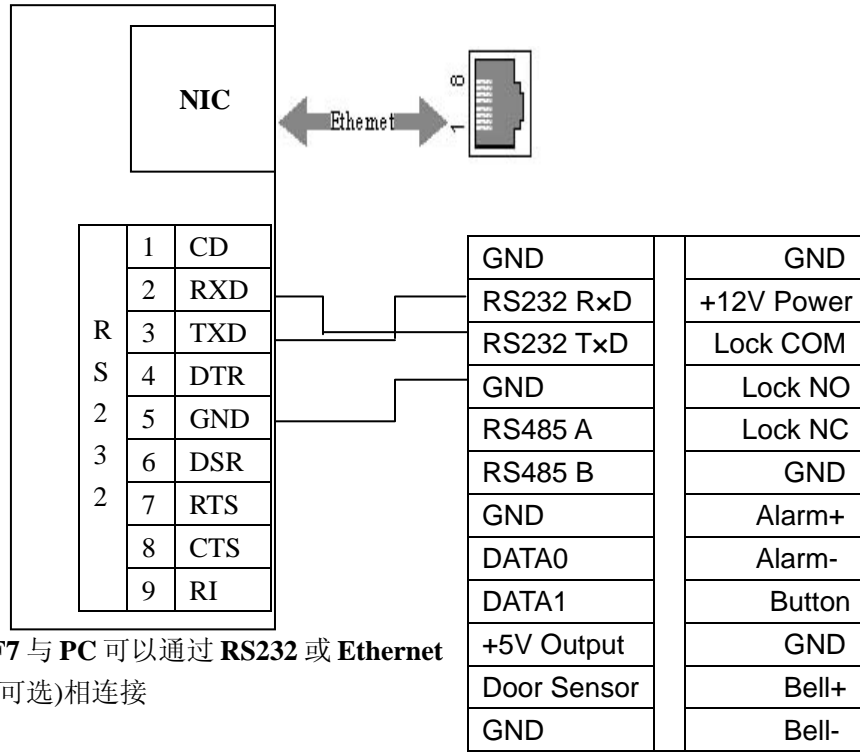
9、与控制器连接

F7 提供标准的 Wiegand26 输出，可以很方便的连接到现在的大多数门禁控制器上，就像连接一个 IC 卡读头或密码键盘一样。



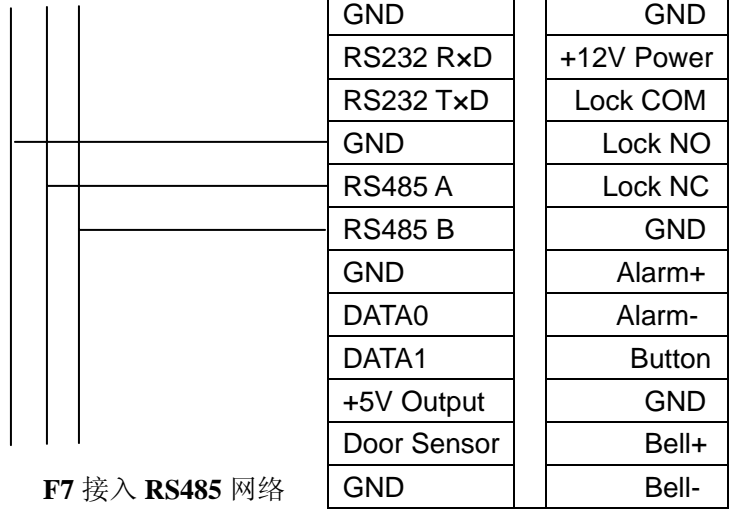
10、 组网或与电脑连接

F7 提供 RS232, RS485 接口，并可选 Ethernet 接口，用于同 PC 连接或组织成网络。



RS485 网络

GND A B

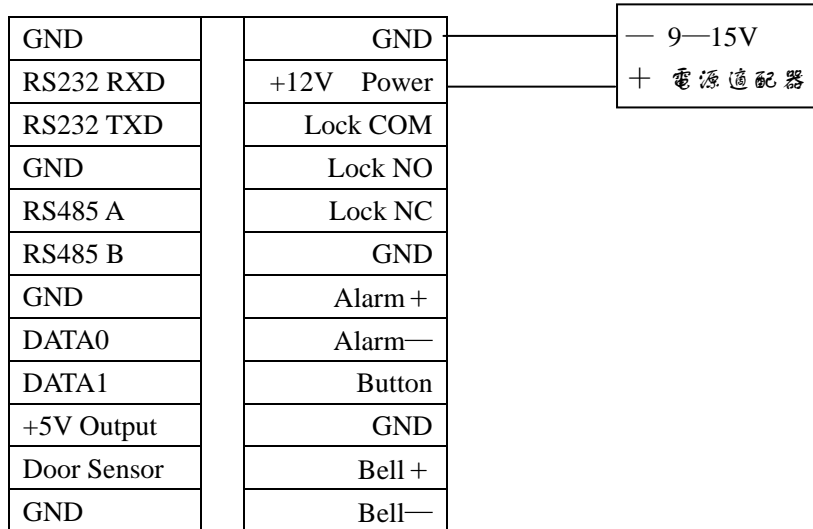


F7 接入 RS485 网络

F7 快速接線指南

1、F7 接線端子與電源連接

F7 的接線端子如上所示。它支持 9—15V 直流電源作為輸入，直接連接在 GND 和 +12V 之間即可工作。如果鎖控制使用單獨的電源，那麼 F7 的工作電源適配器只需要標稱 500mA 以上即可；如果鎖控制與 F7 使用相同的電源，那麼該電源適配器的標稱輸出電流需要超過鎖的工作電流 1000mA 以上。

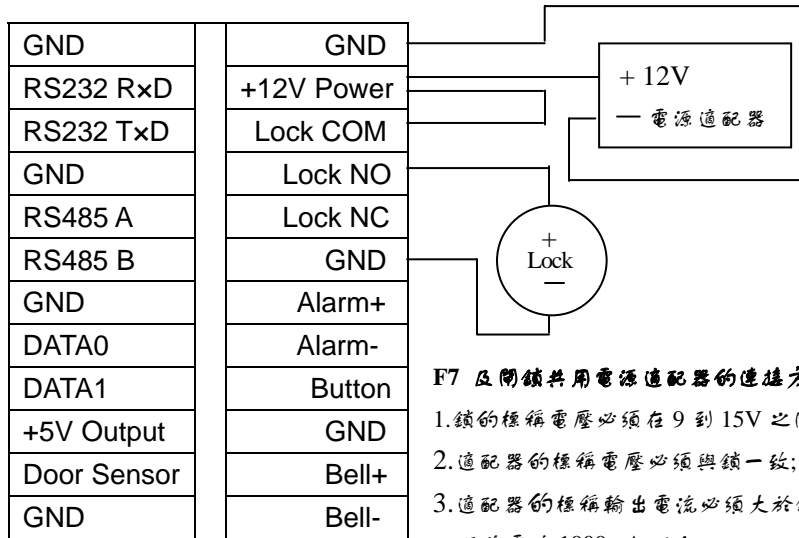


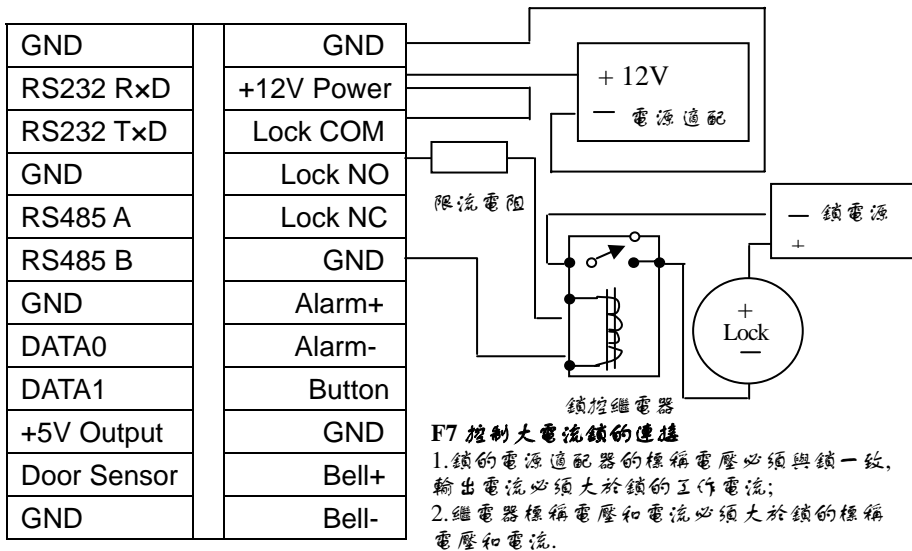
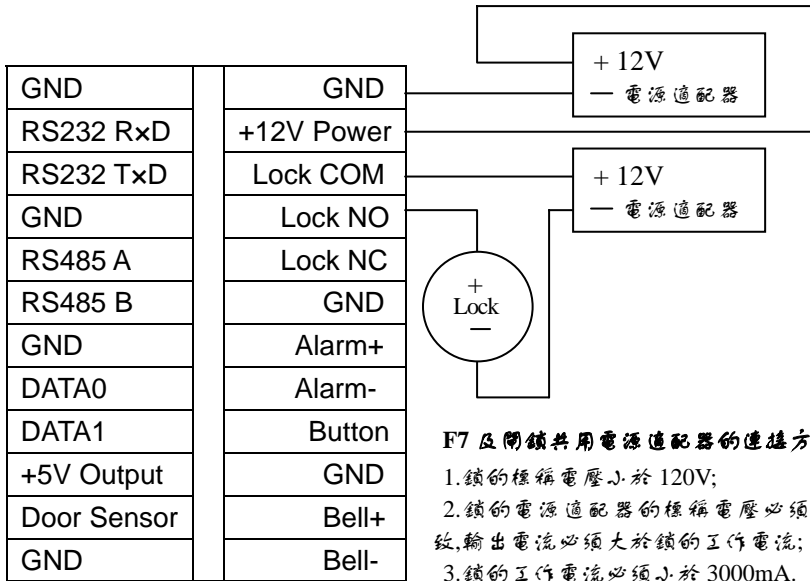
2、門鎖的連接

F7 可以同時支援常開型和常閉型門鎖，只要分別連結在不同的端子上即可。Lock NO 端子通常與 COM 端子保持斷開狀態，在 F7 輸出開鎖信號時，Lock NO 與 COM 端子連通，開鎖信號結束後，Lock NO 與 COM 恢復斷開狀態；Lock NC 端子與 COM 端子之間的通斷狀態與此剛好相反，平時連通而開鎖時斷開。

由於實際使用中存在著各種電控門鎖，由此必須根據門鎖的規格來確定正確的連接方法：對通電時打開、斷電時鎖閉的鎖，應該使用 Lock NO 端子，對通電時鎖閉、斷電時打開的鎖，應該使用 Lock NC 端子。

下面以斷電常閉的電控鎖為例，示意 F7 與鎖的連接方法。通電常閉型的電控鎖連接時只需改用 Lock NC 端子即可。



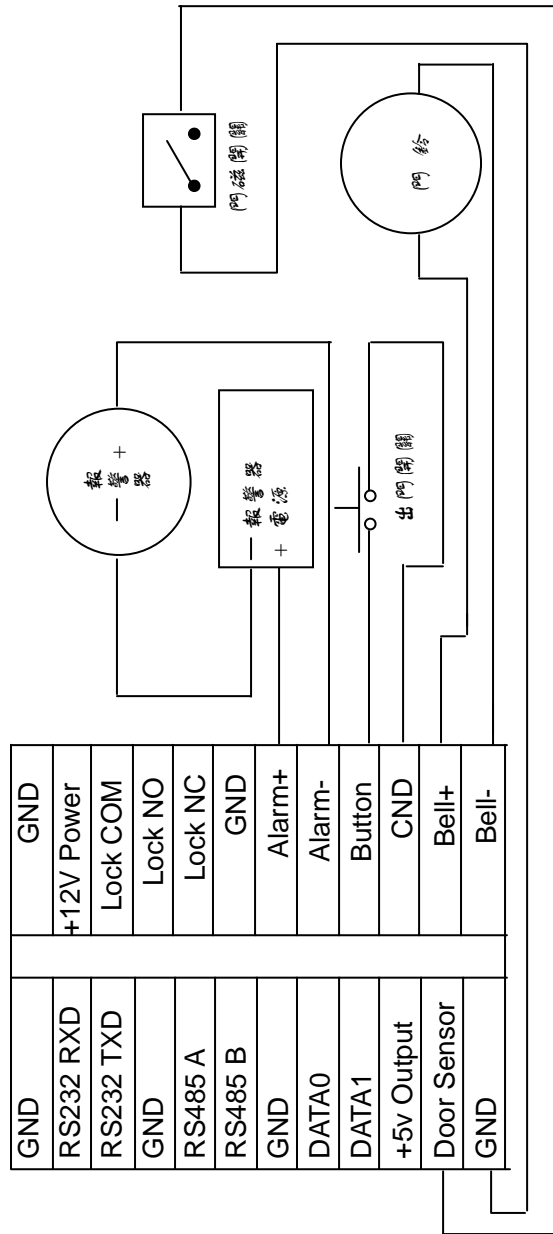


3、出門開關、門磁、門鈴和報警器的連接

出門開關是安裝在房間 部的開門開關裝置，出門開關閉合就可以把門打開。門磁用於感應門的開關狀態，F7 通過門磁開關可以偵測到門被非法打開，此時會輸出報警，另外，打開門後在超過規定的時間有關好門，F7 也會產生提示警告。

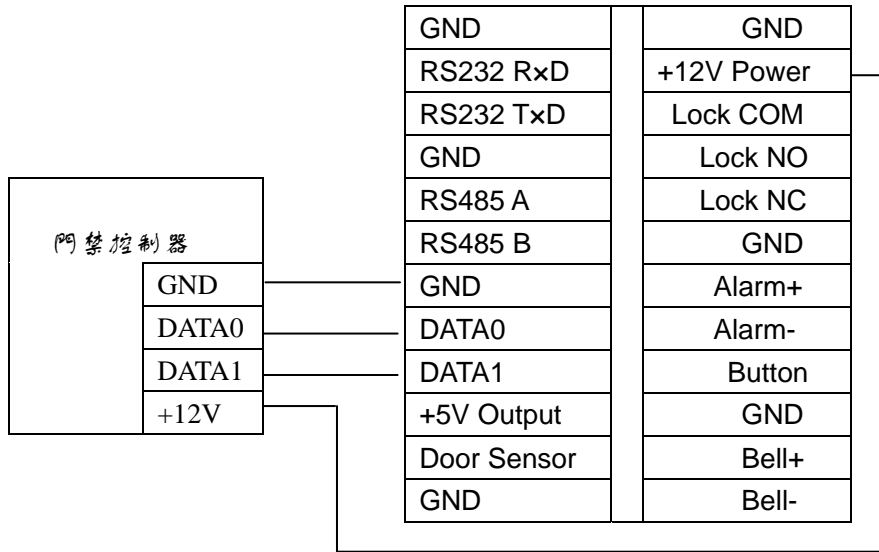
F7 的報警輸出是一個開關信號，可以把它串聯到簡單報警器的電源回路中。當然也可以用來作為高級報警/監控系統的觸發信號。

F7 的門鈴介面端子是直通面板上的門鈴按鈕的，因此只需要把現存的門鈴的按鈕開關改接到這兩個端子上即可。



4、與控制器連接

F7 提供標準的 Wiegand26 輸出，可以很方便的連接到現在的大多數門禁控制器上，就像連接一個 IC 卡讀頭或密碼鍵盤一樣。



5、組網或與電腦連接

F7 提供 RS232, RS485 介面, 並可選 Ethernet 介面, 用於同 PC 連接或組織成網路。

