

- HAC-2100/HAC-2100N must work with Hundure’s RS-485 or Wiegand reader.
- For more detail information kindly refer to Hundure product’s brochares.

- 請為HAC-2100/HAC-2100N 選用漢軍RS-485或Wiegand格式讀卡機.
- 詳細資訊內容請參閱產品手冊.

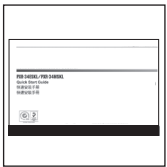
1 Package Contents 包裝內容

Kindly ensure the product's contents upon unpacking; please refer to the hardware manual within the CD regarding the product 's specifications and important notices.

打開包裝確認產品包裝內容,並請詳細閱讀讀光碟內的硬體手冊,認識產品規格特性與注意事項。

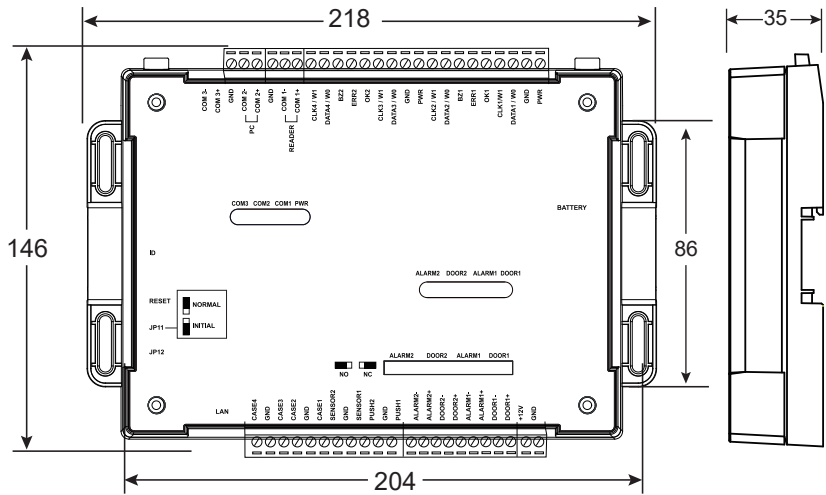


Controller x 1
主機



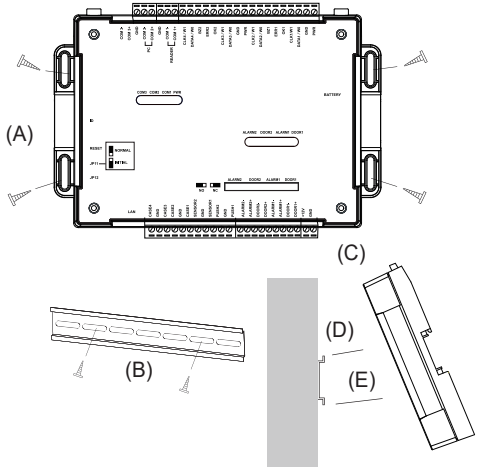
Quick Start Guide x 1
快速安裝手冊

2 Physical Dimension 外觀尺寸



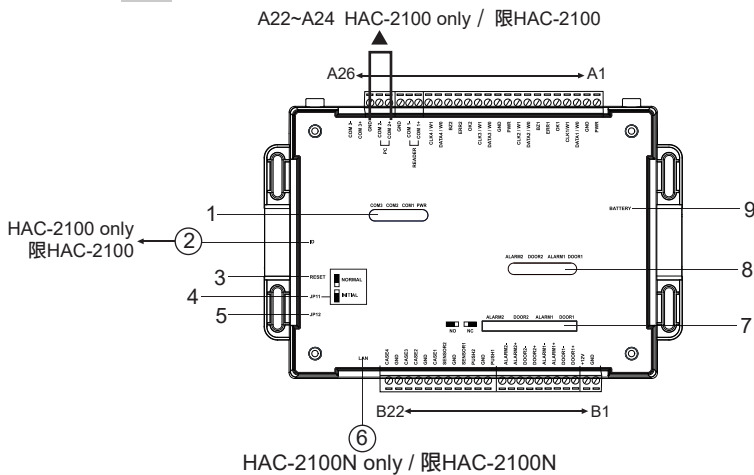
Scale:mm

3 Installation 安裝



- There are two installation ways:
- (A). 1. Install the control panel on the wall or suitable locations with screws.
 - 2. Install the control panel on the metal rail.
 - (B). Fix metal rail on the wall with screws. (Optional)
 - (C). Press the orange button on top of control panel
 - (D). (E) Put control panel on the metal rail
- Please remove the plastic cover of battery.

- 安裝方法有二種如下:
- (A). 使用螺絲將主機固定在牆上或其他位置。不使用上述方法,可使用滑軌方式。
 - (B). 以螺絲固定滑軌(選配)。
 - (C). 壓下二邊的凸起的卡榫裝置
 - (D)(E).將主機對準滑軌扣上。
- 使用前請將電池的塑膠墊片拿掉。



•Description 外觀說明

1	COM1~COM3,PWR LED	COM3 Reserved,COM1~2 is indication for connecting with RS-485 reader and PC,Power LED	COM3功能保留，COM1~COM2為連接RS-485讀卡機及PC指示燈，電源指示燈
2	ID	NODE ID (HAC-2100 only)	裝置ID (僅供HAC-2100)
3	RESET	Reset Button	主機重置(RESET)按鈕
4	JP11	Hardware initiation or Normal mode	硬體初始動作或一般工作選擇
5	JP12	Reserved	功能保留
6	LAN	LAN Network Communication Port(HAC-2100N only)	LAN網路通訊埠(僅供HAC-2100N)
7	ALARM2 /DOOR2/ALARM1/DOOR1 (NC/NO)	(NC/NO) Selection	繼電器輸出狀態(NC/NO)選擇
8	ALARM2 /DOOR2/ALARM1/DOOR1 LED	Relay Status LED	繼電器動作指示燈
9	BATTERY	Please remove the plastic cover of battery.	使用前請將電池的塑膠墊片拿掉。

- System initiation all authorizations and event logs, setting all parameters return to default.
- The controller's power is supplied to readers installed within 30m. For readers installed beyond the maximum distance, it is recommended to provide a separately direct linear power supply.

- 硬體初始化將會清除主機內得所有權限資料與讀卡記錄,並將所有設定值恢復初始值。
- PWR 的電源輸出僅供30公尺距離內的讀卡機使用,超過30公尺距離的讀卡機建議使用獨立的線性直流電源。

A1	PWR	Reader power output(12V or 5V)	讀卡機電源輸出(12V or 5V)
A2	**GND	Ground Connection	接地端
A3	DATA1/W0	Reader 1 Data 0(data) input	讀卡機1數據輸入Data0 (data)
A4	CLK1/W1	Reader 1 Data 1 (clock) input	讀卡機1數據輸入Data1 (clock)
A5	*OK1	Reader LED output for valid card	讀卡機燈號控制輸出(有效卡輸出)
A6	*ERR1	Reader LED output for invalid card	讀卡機燈號控制輸出(無效卡輸出)
A7	*BZ1	Reader Buzzer output	讀卡機蜂鳴器控制輸出
A8	DATA2/W0	Reader 2 Data 0 (data) input	讀卡機2信息輸入Data 0 (data)
A9	CLK2/W1	Reader 2 Data 1 (clock) input	讀卡機2信息輸入Data 1 (clock)
A10	PWR	Reader power output (12V or 5V)	讀卡機電源輸出(12V or 5V)
A11	**GND	Ground Connection	接地端
A12	DATA3/W0	Reader 3 Data 0 (data) input	讀卡機3數據輸入Data 0 (data)
A13	CLK3/W1	Reader 3 Data 1(clock) input	讀卡機3數據輸入Data 1 (clock)
A14	*OK2	Reader LED output for valid card	讀卡機燈號控制輸出(有效卡輸出)
A15	*ERR2	Reader LED output for invalid card	讀卡機燈號控制輸出(無效卡輸出)
A16	*BZ2	Reader Buzzer output	讀卡機蜂鳴器控制輸出
A17	DATA4/W0	Reader 4 Data 0 (data) input	讀卡機4數據輸入Data 0 (data)
A18	CLK4/W1	Reader 4 Data 1 (clock) input	讀卡機4數據輸入Data 1 (clock)
A19	COM 1+	TO RS-485+(Reader)	到讀卡機 RS-485+端
A20	COM 1-	TO RS-485-(Reader)	到讀卡機 RS-485-端
A21	GND	Ground Connection	接地端
A22	COM 2+	RS-485+ TO PC (HAC-2100 only)	RS-485+端 到電腦 (僅供HAC-2100)
A23	COM 2-	RS-485- TO PC (HAC-2100 only)	RS-485-端 到電腦 (僅供HAC-2100)
A24	GND	Ground Connection	接地端
A25	COM 3+	Reserved	功能保留
A26	COM 3-		

*Optional connections

**When the reader uses a separate power supply, please make sure that the ground wire is connected with the control panel.

*可選用連接

**當讀卡機使用獨立電源時,務必將接地端與主機連接

Important Notice:

1. Please provide a separate power supply for the readers. A long transmission distance could cause power degradation.
2. It is recommended to use a linear direct current (not switching power) to avoid signal interference and shortened read range.
3. If the reader is installed upon metallic object, add proper thickly plastic separator on back of reader for isolation and avoid interference.
4. The distance between two readers should be 1.5 times of the read range to prevent radio frequency interference from each other.
5. COM1+, COM1- are designated for HAC-2100 compatible readers; kindly use 22AWG aluminum foiled-double shielded twisted pair cable.
6. Readers ID can be set from 1 to 4. ID 1 (Out) & 2 (In) is assigned for Door 1, and ID 3 (Out) & 4 (In) is assigned for Door 2.

注意事項

1. 讀卡機請使用獨立電源,以避免因傳輸距離的電流衰減而影響讀卡機的正常運作。
2. 讀卡機感應距離容易受到電源漣波的影響,建議使用線性直流電源。
3. 讀卡機感應距離容易受到金屬等物質的影響,安裝位置如為金屬材質,建議在讀卡機背部加裝適當厚度的塑膠隔離墊片。
4. 2個讀卡機如果距離太近將會互相干擾而影響感應距離甚至無法感應,建議 2 個讀卡機的相互距離最少為感應距離的1.5倍。
5. COM1+, COM1- 通訊端口只能連接HAC-2100專用的讀卡機,傳輸線請使用 22AWG 以上的鋁箔雙隔離對絞線。
6. 讀卡機 ID 請設定成 1 到 4,門一為ID 1(外)、2(內),門二為ID 3(外)、4(內)。

•Description 外觀說明

B1	GND	Ground	接地端
B2	+12V	DC +12V input	DC +12V輸入
B3	DOOR1+	Door 1 DOOR RELAY output (Dry contact)	門 1 門鎖控制輸出(乾接點)
B4	DOOR1-	Door 1 DOOR RELAY output (Dry contact)	門 1 門鎖控制輸出(乾接點)
B5	ALARM1+	Door 1 ALARM RELAY output (Dry contact)	門 1 警報控制輸出(乾接點)
B6	ALARM1-	Door 1 ALARM RELAY output (Dry contact)	門 1 警報控制輸出(乾接點)
B7	DOOR2+	Door 2 DOOR RELAY output (Dry contact)	門 2 門鎖控制輸出(乾接點)
B8	DOOR2-	Door 2 DOOR RELAY output (Dry contact)	門 2 門鎖控制輸出(乾接點)
B9	ALARM2+	Door 2 ALARM RELAY output (Dry contact)	門 2 警報控制輸出(乾接點)
B10	ALARM2-	Door 2 ALARM RELAY output (Dry contact)	門 2 警報控制輸出(乾接點)
B11	PUSH1	Door 1 Exit Button	門 1 開門按鈕輸入
B12	Ground connection	Ground Connection for Exit Button 1 & 2	接地端
B13	PUSH2	Door 2 Exit Button	門 2 開門按鈕輸入
B14	SENSOR1	Door 1 DOOR SENSOR input	門 1 門位偵測輸入
B15	Ground connection	Ground Connection for Sensor 1 & 2	接地端
B16	SENSOR2	Door 2 DOOR SENSOR input	門 2 門位偵測輸入
B17	CASE1	Reader 1 CASE SENSOR input	讀卡機 1 防拆偵測輸入
B18	GND	Ground Connection for Case Sensor 1 & 2	接地端
B19	CASE2	Reader 2 CASE SENSOR input	讀卡機 2 防拆偵測輸入
B20	CASE3	Reader 3 CASE SENSOR input	讀卡機 3 防拆偵測輸入
B21	GND	Ground Connection for Case Sensor 3 & 4	接地端
B22	CASE4	Reader 4 CASE SENSOR input	讀卡機 4 防拆偵測輸入

One Year Limited Warranty 產品保固證明書

We warrants this product against defect in material or workmanship for 1 year from the date of purchase. If such a defect is discovered within this warranty limitation, contact your direct vendor for repair or replacement of your unit. When returning the product, you must ship the product in its original packaging or packaging that gives an equal degree of protection. This warranty becomes invalid if the factory-supplied serial number has been removed or altered on the product. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence or modification of any part of the product. This warranty does not cover damage due to improper operation or maintenance, connection to improper equipment, or attempted repair by anyone other than We. In no event shall We liability exceed the price paid for the product from direct, indirect, special, incidental, or consequential, damages resulting from the use of the product the product, its accompanying software, or it's documentation. We makes no warranty or representation expressed, implied, or statutory, with respect to its products,contents of use of this documentation and all accompanying software, and specially disclaims its qualti , performance, merchantability or fitness for any particular purpose. We reserves the right to revise or update its product, software or documentation without obligation to notify any individual or entity.

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Model 型號	Serial no.序號	Date of Purchase 購買日期	Reseller stamp 經銷商

Warranty will be valid only after filling out this form and stamped or signed by reseller!
此保固書必須填妥各項內容,並且蓋有經銷商印鑑始為有效。

4 Connection 接線

JP11: Jumper setting for hardware initialization. Please be reminded to turn the setting back to normal after initialization

JP11: 硬體初始化設定, 初始化完畢, 請務必將JP11移回到Normal位置。

1. Electric Strikes
2. Apartment Lock

We suggest to set relay to "NC" mode for the connection of

1. Electric Bolt Lock
2. Electromagnetic Lock

• Under normal situation we suggest to set ALARM relay to "NO" mode.

斷電開門的電子鎖應調整為NC狀態, 如陽極鎖、磁力鎖等。
通電開門的電子鎖應調整為NO狀態, 如陰極鎖、公寓電鎖等。
• 一般警報器都屬於通電啟動的方式, 建議將狀態調整成NO。

Set NODE ID (Controller ID). Unique individual ID for each controller is a must. Below is the setting of ID 1 to ID 32.

調整 NODE ID (主機識別號)。請對每一台控制主機做獨立且不重複的識別號設定, 如下調整範例。

1=ON 0=OFF

Node ID	SW 1~8	Node ID	SW 1~8	Node ID	SW 1~8	Node ID	SW 1~8
001	10000000	009	10010000	017	10001000	025	10011000
002	01000000	010	01010000	018	01001000	026	01011000
003	11000000	011	11010000	019	11001000	027	11011000
004	00100000	012	00110000	020	00101000	028	00111000
005	10100000	013	10110000	021	10101000	029	10111000
006	01100000	014	01110000	022	01101000	030	01111000
007	11100000	015	11110000	023	11101000	031	11111000
008	00010000	016	00001000	024	00011000	032	00000100

ON=1, OFF=0

1 2 3 4 5 6 7 8

ON

- Controller uses binary number system. For NODE ID setting after ID 32, please refer to HAC-2100 hardware manual.
- 主機採二進制計算方式, ID 32以後的調整方式, 請參考光碟內的硬體手冊。

Step 1 Power Connections 電源接線

• Use only Hundure's official DC12V power supply to control panel. The min. input ampere is 1A.

• 主機工作電壓請使用 DC12V 的專用電源, 輸入電流最少1安培。

Step 2 Communication 通訊接線

• HAC-2100N

Place the Software CD on the CD ROM. Execute 830Tool.exe and the window on the left will appear:

- Click on "Search" button to locate the control panels over the network. Returned results will be shown in the device list area.
- Select a device to modify settings.
- Enter new IP, Submask, Gateway and Port No..
- Press "Broadcast Setup" button to complete the settings.
- Kindly wait for 10-20 sec before searching the device again. Check if the parameters are correct and successfully modified.

- 將光碟片放入光碟機, 搜尋830Tool.exe並且執行程式, 執行後畫面如右:
- 按"Search"按鈕搜尋網路上相容的裝置設備, 搜尋結果會顯示在視窗上。
 - 點選所要修改的裝置設備將其項目反藍。
 - 輸入新的 IP、Submask、Gateway以及通訊埠號。
 - 按下"Broadcast Setup"按鈕完成設定。
 - 請稍後10~20秒後再重新搜尋一次, 確認修改後的設定值是否正確。

• HAC-2100

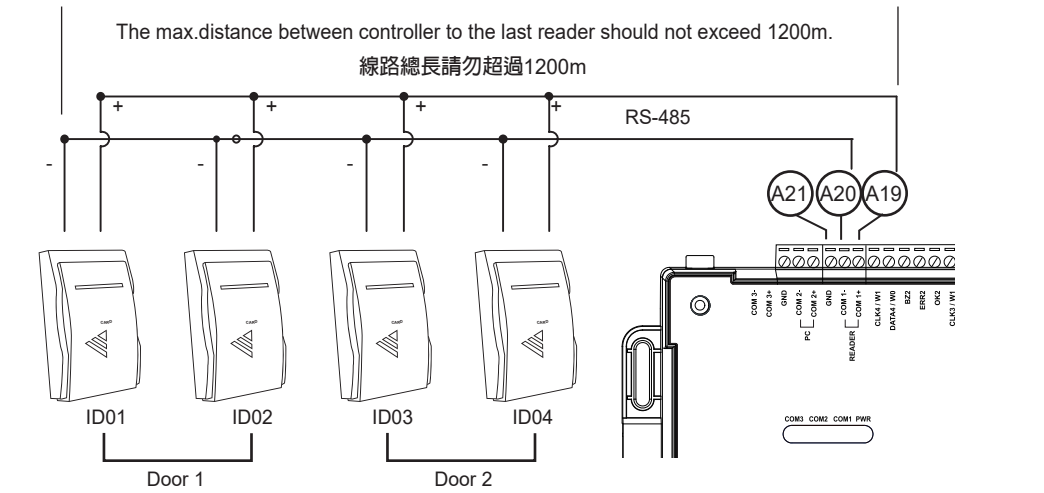
PC RS-485 - RS-485 - 22 AWG / 1200M

PC RS-485 + RS-485 +

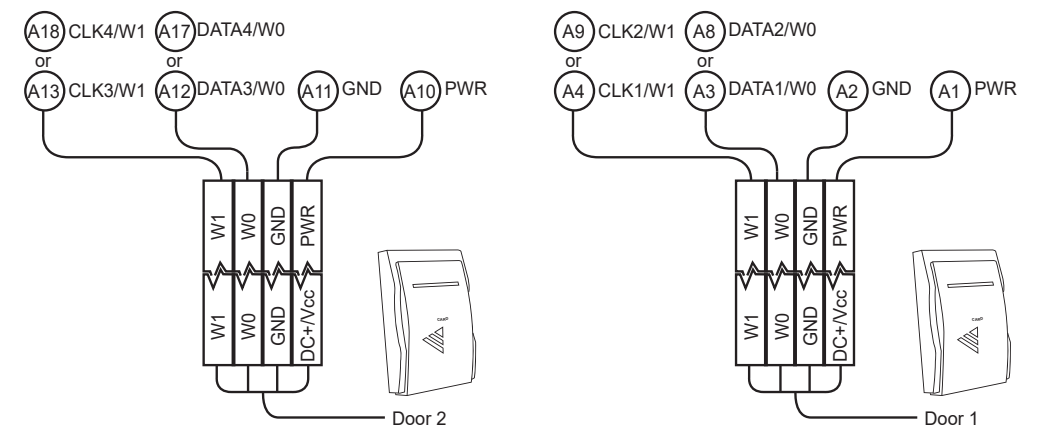
HOST: Pin 1: RS-485 - Pin 2: RS-485 + Pin 3: Pin 4:

- EPC-406 converter can be replaced with eP132 converter for TCP/IP connection, where controller connects with TCP/IP converter via RS-485 and TCP/IP converter connects to the network.
- For more information of eP132 converter, kindly inquire from your dealer.
- 通訊轉換器EPC-406可以依需求變更為TCP/IP通訊轉換器, 主機端以RS-485接入TCP/IP通訊轉換器, 然後將TCP/IP通訊轉換器的網路端口接入網路。
- 通訊轉換器的適用型號請就近向您的經銷商洽詢。

- RS-485



- Wiegand



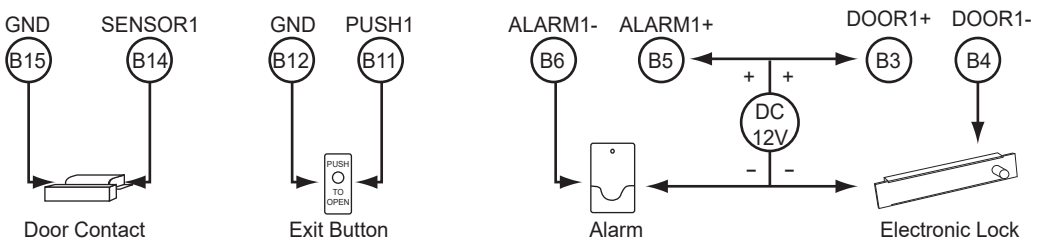
- If the distance between the reader and the controller exceeds 30m, it is recommended to use a separate DC 12V/1A direct linear power supply. Supply of power should increase with respect to transmission distance.
- If the reader is installed upon metallic object, add proper thickly plastic separator on back of reader for isolation and avoid interference.
- The distance between two readers should be 1.5 times of the read range to prevent radio frequency interference from each other.

- 讀卡機與主機距離超過30公尺時, 建議使用外部線性直流獨立電源, 建議最少應提供 DC 12V/1A 的電流, 電源供給應視傳輸距離適當的增加。
- 讀卡機感應距離容易受到金屬等物質的影響, 安裝位置如為金屬材質, 建議在讀卡機背部加裝適當厚度的塑膠隔離墊片。
- 2個讀卡機如果距離太近將會互相干擾而影響感應距離甚至無法感應, 建議 2 個讀卡機的相互距離最少為感應距離的1.5倍。

Step 3 Others 其他

Please separate power supply of control panel, electric locks and security alarms.

電子鎖、警報器等外部裝置, 請勿與控制主機共用直流電源。



See the wire connections illustrated above are for Door 1; for Door 2 wire connections, kindly refer to the Layout section on the front page.

上圖接線以DOOR 1為範例, DOOR 2請自行參考前頁配置表的功能定義。

5 Testing 測試

