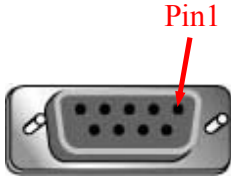
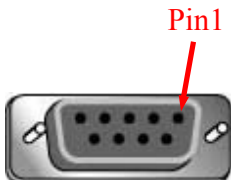


## Delta HMI A-Series DOP Serial Com Port pin assign

### COM1

	Pin	Contact
	1	N.C.
	2	RXD
	3	TXD
	4	N.C.
	5	GND
	6	N.C.
	7	RTS
	8	CTS
9	N.C.	

### COM2

	Pin	MODE1	MODE2	MODE3
		RS-232	RS-422	RS-485
	1	N.C.	RXD-	D-
	2	RXD	RXD+	D+
	3	TXD	TXD+	D+
	4	N.C.	TXD-	D-
	5	GND	GND	GND
	6	N.C.	RTS-	N.C.
	7	RTS	RTS+	N.C.
	8	CTS	CTS+	N.C.
9	N.C.	CTS-	N.C.	

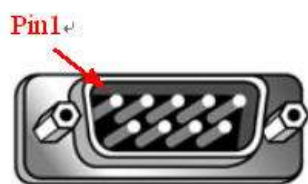
#### 附註..

- ⚙ Mode3 之 RS-485 接法為 2&3 對接成 D+, 1&4 對接成 D-。
- ⚙ RS-485 & RS-422 長距離傳輸時, 建議提供良好的接地系統。
- ⚙ 不要將電纜包覆之 FGND 與 GND 接在一起, FGND 請焊接在 Connector 的外殼上。
- ⚙ 傳輸(成功)率與距離及速率有關。

## Cable 線製作

Cable 連接 HMI DOP 的接頭採用

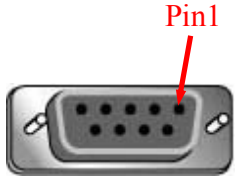
### 9-pin D-SUB male 接頭



以下說明 cable 連接各 Device 所需接頭及跳線方式：

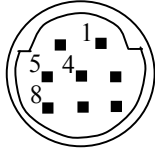
■ PC Down Load (編輯器下載應用)

**RS-232**

DOP 接線端 9 pin D-SUB male (RS-232)	PC 接線端 9 pin D-SUB female (RS-232)	PC 接線端 示意圖
RXD (2)	(3) TXD	
TXD (3)	(2) RXD	
GND (5)	(5) GND	
RTS (7)	(8) CTS	
CTS (8)	(7) RTS	

■ Delta DVP PLC

RS-232

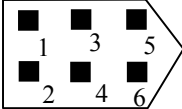
DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 8 pin Mini DIN male (RS-232)	Controller 接線端 示意圖
RXD (2) _____ (5) TXD TXD (3) _____ (4) RXD GND (5) _____ (8) GND		 <p>上視圖</p>

RS-485

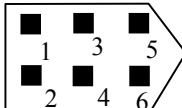
DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 RS-485 接線端子	Controller 接線端 示意圖
RXD+ (2) _____ D+ TXD+ (3) _____ RXD- (1) _____ D- RXD- (4) _____		

■ Delta Servo

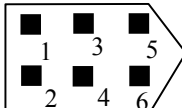
**RS-232**

DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 CN3 接頭 (RS-232)	Controller 接線端 示意圖
RXD (2) ————— (2) TX		 <p>上視圖</p>
TXD (3) ————— (4) RX		
GND (5) ————— (1) GND		

**RS-422**

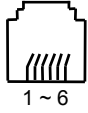
DOP 接線端 9 pin D-SUB male (RS-422)	Controller 接線端 CN3 接頭 (RS-422)	Controller 接線端 示意圖
RXD+ (2) ————— (5) TX+		 <p>上視圖</p>
RXD- (1) ————— (6) TX-		
TXD+ (3) ————— (3) RX+		
TXD- (4) ————— (4) RX-		

**RS-485**

DOP 接線端 9 pin D-SUB male (RS-485)	Controller 接線端 CN3 接頭 (RS-485)	Controller 接線端 示意圖
RXD+ (2) ———— (3) 485+		 <p>上視圖</p>
TXD+ (3) ———— (5) 485+		
RXD- (1) ———— (4) 485-		
TXD- (4) ———— (6) 485-		

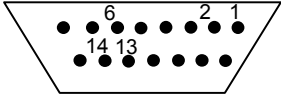
■ Delta Inverter

RS-485

DOP 接線端 9 pin D-SUB male (RS-485)	Controller 接線端 RJ-11 (RS-485)	Controller 接線端 示意圖
<p>RXD+ (2)    ┌───┐</p> <p>TXD+ (3)    └───┘</p> <p>RXD- (1)    ┌───┐</p> <p>TXD- (4)    └───┘</p> <p>(4) SG+</p> <p>(3) SG-</p>		 <p>上視圖</p> <p>1 +EV 2 GND 3 SG- 4 SG+</p> <p>1, 2 pin 為參數設定器操作盤之電源，做 RS-485 通訊時，請勿使用！</p>

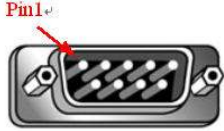
■ Facon FB PLC

RS-232

DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 15 pin male 接頭 (RS-232)	Controller 接線端 示意圖
RXD (2) ————— TXD (3) ————— GND (5) —————	(2) TXD (1) RXD (6) SG (3) RTS (4) CTS	 <p style="text-align: center;">上視圖</p>

■ HUST (億圖) CNC

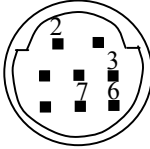
RS-232

DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 示意圖
RXD (2) ————— TXD (3) ————— GND (5) —————	(2) TXD (3) RXD (5) SG (8) RTS (7) CTS	 <p>上視圖</p>



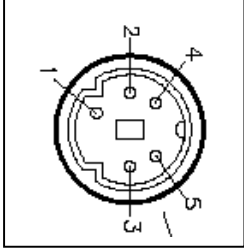
■ LIYAN (力揚) LYPLC EX

RS-232

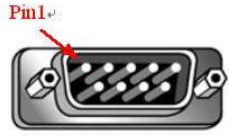
DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 8 pin Mini DIN male (RS-232)	Controller 接線端 示意圖
RXD (2) _____ TXD (3) _____ GND (5) _____	(2) TXD (7) RXD (3) GND (6) GND	 <p>上視圖</p>

■ Matsushita FP

**RS-232**

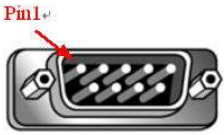
DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 5 pin Mini DIN male (RS-232 for FP0)	Controller 接線端 示意圖
RXD (2) ————— (2) TXD TXD (3) ————— (3) RXD GND (5) ————— (1) SG		 <p style="text-align: center;">上視圖</p>

**RS-232**

DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 9 pin D-SUB male (RS-232 for FP1)	Controller 接線端 示意圖
RXD (2) ————— (2) TXD TXD (3) ————— (3) RXD GND (5) ————— (7) GND (4) RTS (5) CTS		 <p style="text-align: center;">上視圖</p>

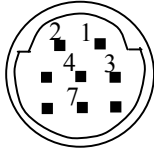
■ Mirle (盟立)FAMA SC

RS-232

DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 示意圖
RXD (2) —————	(2) TXD	 <p>Pin1</p>
TXD (3) —————	(3) RXD	
GND (5) —————	(5) SG	
		上視圖

■ Mitsubishi FX, FX2N

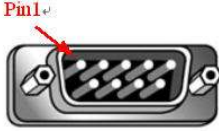
RS-422

DOP 接線端 9 pin D-SUB male (RS-422)	Controller 接線端 8pin Mini DIN male (RS-422)	Controller 接線端 示意圖
RXD+ (2) —————	(2) RXD+	 <p data-bbox="1236 801 1332 840">上視圖</p>
RXD- (1) —————	(1) RXD-	
TXD+ (3) —————	(7) TXD+	
TXD- (4) —————	(4) TXD-	
GND (5) —————	(3) SG	

■ Omron C Series

**RS-232**

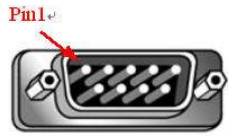
1:1 Host Link via RS-232C 轉接器

DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 示意圖
RXD (2) —————	(2) TXD	 <p>Pin1</p> <p>上視圖</p>
TXD (3) —————	(3) RXD	
GND (5) —————	(9) SG	
	┌ (4) RS	
	└ (5) CS	

■ Siemens S7 200


**RS-232**

via RS232 / PPI Multi-Master Cable

DOP 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 9 pin D-SUB male (RS-232)	Controller 接線端 示意圖
RXD (2) ————— (2) RD		 <p>上視圖</p>
TXD (3) ————— (3) TD		
GND (5) ————— (5) GND		

**RS-485**

via PLC Program Port (RS-485):

DOP 接線端 9 pin D-SUB male (RS-485)	Controller 接線端 RJ-11 (RS-485)	Controller 接線端 示意圖
RXD+ (2) ———— (3) TXD/RXD+		 <p>上視圖</p>
TXD+ (3) ————		
RXD- (1) ———— (8) TXD/RXD-		
TXD- (4) ————		
GND (5) ————— (5) SG		