

DVS series

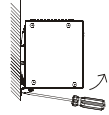
Instruction Sheet

安 裝 說 明 安 裝 說 明

5/8/16-port Unmanaged Industrial Ethernet Switches
5/8/16埠工業級非網管型乙太網路交換器
5/8/16口非网管型工业以太网交换机

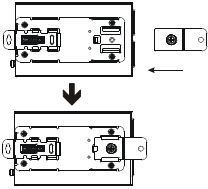
• Removal

- Step 1: Insert the flat-blade screwdriver into the DIN clip and pull the DIN clip downward.
- Step 2: Pull the DVS series switch, and you can remove it from the DIN-Rail.



• Wall Mounting

- Step 1: Insert the wall mounting bracket into the slot on the rear panel of the DVS series switch, and tighten the screw on it, as shown in the diagram below.
- Step 2: Place the wall mounting bracket in an appropriate position, and tighten the two screws on the bracket and the DIN clip.



⑤ Wiring the Redundant Power Input

Except the DVS-005100, the DVS series switches are equipped with two sets of DC input (PWR1 / PWR2). Both sets of DC input can be connected to a wide range of power sources (12~48VDC). If one power source fails, the other live source can work as a backup to ensure that the machine operates normally.

- Step 1 : Insert the negative and positive DC wires into the terminal block, and make sure that the positive DC wire is connected to V1+ or V2+, and that the negative DC wire is connected to 0V.
- Step 2 : To prevent the loose DC wires , tighten the wire clamp screws on the terminal block connector with the flat-blade screwdriver.



⚠ Warning

- This instruction sheet only provides information on electrical specifications, general specifications, installation and wiring.
- The components and the IC on the circuit board can be easily damaged by static electricity, therefore DO NOT touch them before precautions against static electricity are done. To prevent the danger and damage from occurring, people who are not maintenance staff should not operate or accidentally hit the body of the DVS series switch. Besides, DO NOT touch any terminal when the power is switched on.
- This product is equipped with Class 1 LASER/LED components. DO NOT stare directly at the LASER/LED beam to avoid serious injury to your eyes.
- Please read this instruction sheet thoroughly, and follow the instructions to prevent the damage to the device or injury to the staff.

① Introduction

Thank you for purchasing the DVS Unmanaged Industrial Ethernet Switches. The DVS series switches including 5, 8, and 16-port smart switches. Except the DVS-005100, The DVS series switches are equipped with the intelligent alarm function, and allow the wide range of operating temperature (-40 to 75°C). The DVS series switches are designed to support the application in any rugged environment and comply with UL, CE and FCC standards.

② Functions

- 10/100Base-T(X) (RJ-45), 100Base-FX (SC/ST-Type SingleMode/MultiMode)
- IEEE802.3/802.3u/802.3x
- Auto-negotiation speed
- Auto-MDI/MDI-X

③ Package Checklist

- Delta DVS Unmanaged Ethernet Switch
- Instruction Sheet
- Wall Mounting Plate
- Warranty Card

④ Installation

• DIN-Rail Mounting

• Mounting

- Step 1: Hook the upper end of the DIN clip of the DVS series switch on the DIN-Rail.
- Step 2: Lightly push the DVS series switch toward the DIN-Rail until they contact each other closely.

⑦ DIP Switch Setting

ON:	After the corresponding switch of the port is enabled, when the communication is interrupted, the relay will form a "CLOSED" circuit, and the alarm LED will be on.	
OFF:	After the corresponding switch of the port is disabled, when the communication is interrupted, the relay still forms an "OPEN" circuit, and the alarm LED will not be on.	

⑧ LED Indicators

• LED DVS-005100

LED	Color	Status	Description
PWR	Green	ON	The power is supplied normally.
		OFF	The power is not supplied.
100M	Orange	ON	The port is connected at a speed of 100 Mbps.
		OFF	The port is connected at a speed of 10 Mbps or disconnected.
LINK/ACT	Green	ON	The Network communication connection has been established.
		Blinking	The data is being transmitted.
		OFF	The Network communication connection has not been established.

■ DVS-005W01 / DVS-008W01 / DVS-016W01

LED	Color	Status	Description
ALARM	Red	ON	The communication is interrupted, or there is a power failure.
		OFF	The communication is not interrupted, or there is no power failure. The DIP switch is not enabled.
PWR1	Green	ON	The power is supplied normally.
		OFF	The power is not supplied.
PWR2	Green	ON	The power is supplied normally.
		OFF	The power is not supplied.
100M	Orange	ON	The port is connected at a speed of 100 Mbps.
		OFF	The port is connected at a speed of 10 Mbps or disconnected.
LINK/ACT	Green	ON	The Network communication connection has been established.
		Blinking	The data is being transmitted.
		OFF	The Network communication connection has not been established.

■ DVS-005W01-MC01 / DVS-008W01-MC01 / DVS-016W01-MC01

LED	Color	Status	Description
ALARM	Red	ON	The communication is interrupted, or there is a power failure.
		OFF	The communication is not interrupted, or there is no power failure. The DIP switch is not enabled.
PWR1	Green	ON	The power is supplied normally.
		OFF	The power is not supplied.
PWR2	Green	ON	The power is supplied normally.

LED	Color	Status	Description
		OFF	The power is not supplied.
100M	Green	ON	The fiber port is connected at a speed of 100 Mbps.
		OFF	The fiber port is not connected.
100M (on the RJ-45 port)	Orange	ON	The port is connected at a speed of 100 Mbps.
		OFF	The port is connected at a speed of 10 Mbps or disconnected.
LINK/ACT	Green	ON	The Network communication connection has been established.
		Blinking	The data is being transmitted.
		OFF	The Network communication connection has not been established.

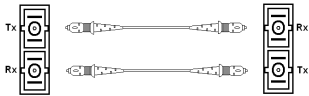
⑨ Ethernet Interface

■ 10/100Base-T(X) Connection

The 10/100Base-T(X) ports of the DVS series switches are used to connect to Ethernet. They can support MDI (NIC-type) and MDI-X (HUB/Switch-type) modes, the pin definition of the Ethernet cable is as follows.

PIN	MDI Mode Definition	MDI-X Mode Definition	
1	Tx+	Rx+	
2	Tx-	Rx-	
3	Rx+	Tx+	
6	Rx-	Tx-	

■ 100Base-FX Connection



⑩ Mechanical Characteristics

	DVS-005	DVS-008	DVS-016
Case	IP30 Aluminum metal case		
Dimension(mm)	145.3 (H) x 45(W) x 108.7(D)	145.3(H) x 75(W) x 108.7(D)	
Weight(g)	300	430	490

• For more information about the product, please visit <http://www.delta.com.tw>.

⚠ 注意事項

- 此安裝手冊只提供電器規格、一般規格、安裝及配線。
- 電路板上的零件與 IC 易受靜電破壞，未做好防靜電措施請勿用手觸摸，防止非維護人員操作或意外衝擊本體，造成危險與損壞，且請勿在上電時觸摸任何端子。
- 本產品可能內建 Class 1 LASER/LED 光收發器，請勿直視光纖埠口，否則將對眼睛構成嚴重的傷害。
- 請務必仔細閱讀本安裝說明，並依照說明指示進行操作，以免造成產品受損，或導致人員受傷。

① 產品簡介

感謝您使用台達DVS工業級非網管型乙太網路交換器。DVS系列包括有5、8、16-port等產品組合，是專為應用於各式嚴苛環境所設計之解決方案，具備電源故障或通訊斷線警報輸出及-40 to 75°C寬溫工作標準（除DVS-005100外），優越工藝技術，通過UL、CE與FCC等工業法規認證。

② 功能特色

- 10/100Base-T(X) (RJ-45)、100Base-FX (SC/ST-Type, 單模/多模)
- IEEE802.3/802.3u/802.3x
- 自動傳輸速率偵測
- MDI/MDI-X自動跳線偵測

③ 產品包裝

- 台達 DVS 工業級非網管型乙太網路交換器
- 安裝說明書
- 壁掛式金屬配件
- 保證卡

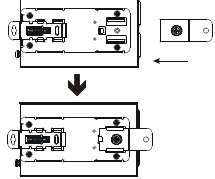
④ 安裝方式

■ 軌道式安裝

<ul style="list-style-type: none"> 安裝 步驟一：將 DVS 再後的金屬安裝配件扣住 DIN-Rail 步驟二：將 DVS 向內推，直到金屬彈簧夾與 DIN-Rail 完全契合 	<ul style="list-style-type: none"> 卸下 步驟一：將一字起子插入金屬彈簧夾下的洞孔並向下拉 步驟二：拉起 DVS 底部即可順勢取出

• 壁掛式安裝

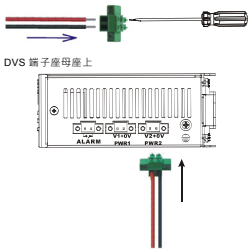
- 步驟一：將附送的壁掛式金屬配件插入 DVS 後的凹槽，並用十字螺絲起子將金屬配件鎖緊於 DVS
- 步驟二：經由 DVS 後金屬配件的兩個螺絲孔，將 DVS 鎖緊於您所需要的位位置。



⑤ 備援式電源輸入

除DVS-005100外，DVS內建兩組12 to 48VDC直流電輸入 (PWR1/PWR2)，當其中一組電源故障時，另一組電源可以馬上啟動，確保機器正常運作。

- 步驟一：將端子座公頭從 DVS 取下，並將 DC 直流電源線端子插入端子座公頭上，並確認正線接入 V1+ 或 V2+ 而負線接入 0V
- 步驟二：利用小一字螺絲起子將電源線鎖緊於端子座公頭上



註：請務必正確接上DVS底部的接地端子，可提高抗EMI雜訊能力。

⑥ 警報接點輸出

