



QNAP

TS-x53D

TS-253D

TS-453D

TS-653D

使用手冊

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1. 前言





關於本手冊

本手冊涵蓋 QNAP TS-x53D NAS 的相關資訊，以及安裝硬體的逐步指示。此外，本手冊也提供基本操作說明與疑難排解資訊。

適用對象

本文件的適用對象為消費者與儲存空間管理員。本手冊預設使用者具有儲存與備份的基本概念。

慣用符號

符號	說明
	注意事項。用於提供預設組態設定與其他補充資訊。
	重要注意事項。用於提供必要組態設定及其他重要資訊。
	提示。用於提供任務執行或組態設定的建議或替代方式。
	警告。忽略此類資訊可能導致潛在損失、受傷甚至死亡。

2. 產品概觀


本章介紹 QNAP TS-x53D NAS 的基本資訊。

關於 TS-x53D


TS-x53D 搭載 Intel®Celeron® 四核心 2.0 GHz 處理器，並具備 2.5 GbE 連接能力，最高可達 2.7 GHz。TS-x53D 除配備兩個 2.5 GbE 內建連接埠外，同時支援 QNAP 網路介面卡。其具有三個 USB 2.0 連接埠和兩個 USB 3.2 Gen 1 連接埠。TS-x53D 提供 2 個硬碟插槽、4 個硬碟插槽和 6 個硬碟插槽機型，支援多雲備份、雲端儲存閘道、4K HDMI 輸出和即時轉檔。

硬體規格

訂購料號	硬碟插槽	記憶體	電源供應器
TS-253D-4G	2	4 GB	單獨
TS-453D-4G	4	4 GB	單獨
TS-453D-8G	4	8 GB	單獨
TS-653D-4G	6	4 GB	單獨
TS-653D-8G	6	8 GB	單獨

元件	TS-253D	TS-453D	TS-653D
訂購資訊			
訂購料號	TS-253D-4G	<ul style="list-style-type: none"> TS-453-4G TS-453-8G 	<ul style="list-style-type: none"> TS-653D-4G TS-653D-8G
處理器			
CPU	Intel® Celeron® J4125		
頻率	4 核心 2.0 GHz/2.7 GHz 超頻		
架構	x86 64 位元		
加密引擎	AES-NI		
記憶體			
預載記憶體	4 GB RAM：1 x 4 GB SODIMM DDR4	<ul style="list-style-type: none"> 4 GB RAM：1 x 4 GB SODIMM DDR4 8 GB RAM：2 x 4 GB SODIMM DDR4 	<ul style="list-style-type: none"> 4 GB RAM：1 x 4 GB SODIMM DDR4 8 GB RAM：2 x 4 GB SODIMM DDR4
記憶體插槽	2 x SODIMM DDR4		
	<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;">  </div> <div> <p>重要</p> <ul style="list-style-type: none"> 僅限使用 QNAP 記憶體模組以維護系統效能和穩定性。若是具有一個以上記憶體插槽的 NAS 硬碟，請使用規格相同的 QNAP 記憶體模組。 使用不支援的記憶體模組會導致效能降級、產生錯誤，或造成作業系統無法啟動。 </div> </div>		
最大記憶體	8 GB RAM：2 x 4 GB		
快閃記憶體	4 GB（雙啟動作業系統防護）		
儲存			

元件	TS-253D	TS-453D	TS-653D
硬碟插槽	2 x 3.5 吋 SATA 6 Gbps	4 x 3.5 吋 SATA 6 Gbps	6 x 3.5 吋 SATA 6 Gbps
	 注意 SATA 6 Gbps 介面與 SATA 3 Gbps 回溯相容。		
硬碟相容性	3.5 吋插槽： <ul style="list-style-type: none"> • 3.5 吋 SATA 硬碟 • 2.5 吋 SATA 硬碟 • 2.5 吋 SATA 固態硬碟 		
SSD 快取加速技術支援	3.5 吋硬碟插槽：1 到 2	3.5 吋硬碟插槽：1 到 4	3.5 吋硬碟插槽：1 到 6
熱抽換	支援		
網路			
2.5 Gigabit 乙太網路埠	2 x 2.5 GbE RJ45		
外接 I/O 埠和擴充插槽			
PCIe 插槽	1 x PCIe Gen 2.0 x4	1 x PCIe Gen 2.0 x2	
	 提示 請前往 https://www.qnap.com/compatibility 查看相容的擴充卡清單。		
USB 連接埠	正面： <ul style="list-style-type: none"> • 1 x USB 3.2 Type-A  注意 此 USB 連接埠支援單鍵備份功能。 背面： <ul style="list-style-type: none"> • 1 x USB 3.2 Type-A • 3 x USB 2.0 Type-A 		
HDMI 連接埠	1 x HDMI 2.0 (最高 4096 x 2160, 60 Hz)		
介面			
紅外線感測器	1  注意 QNAP RM-IR004 遙控器需另外選購。		
按鈕	<ul style="list-style-type: none"> • 電源 • 重設 • USB 單鍵備份 		
尺寸			
外型	直立式		
尺寸 (高 x 寬 x 深)	168 x 105 x 226 mm (6.61 x 4.13 x 8.90 吋)	168 x 170 x 226 mm (6.61 x 6.69 x 8.90 吋)	168 x 235 x 226 mm (6.61 x 9.25 x 8.90 吋)
淨重	1.48 kg (3.26 lbs)	2.37 kg (5.22 lbs)	2.87 kg (6.33 lbs)
其他			

元件	TS-253D	TS-453D	TS-653D
電源供應器	65W, 100-240V AC	90W, 100-240V AC	120W, 100-240V AC
耗電量	12.448 W	25.98 W	35.437 W
系統電池	CR2032 鋰電池 (3V, 225 mAh)		
噪音值	17.1 dB(A)	21.1 dB(A)	21.3 dB(A)
	 注意 從旁觀者位置 (距 NAS 一公尺內) 測試噪音值。在測試用的 NAS 中安裝最多數量的硬碟，並以低速運行。		
風扇	1 x 70mm, 12V DC	1 x 120mm, 12V DC	2 x 90mm, 12V DC
操作溫度	0°C 到 40°C (32°F 到 104°F)		
相對濕度	<ul style="list-style-type: none"> 不凝結相對溼度：5% 至 95% 濕球溫度：27°C (80.6°F) 		
安全鎖	Kensington 安全插槽		



提示

型號規格如有變更，恕不另行通知。若要查看最新規格，請前往 <https://www.qnap.com>。

包裝內容

項目	數量
TS-x53D NAS	1
AC 電源變壓器	1
電源線	1
乙太網路線	2 x Cat5e
3.5 吋硬碟用螺絲	<ul style="list-style-type: none"> TS-253D：8 TS-453D：16 TS-653D：24
2.5 吋硬碟用螺絲	<ul style="list-style-type: none"> TS-253D：6 TS-453D：12 TS-653D：18
快速安裝手冊 (QIG)	1

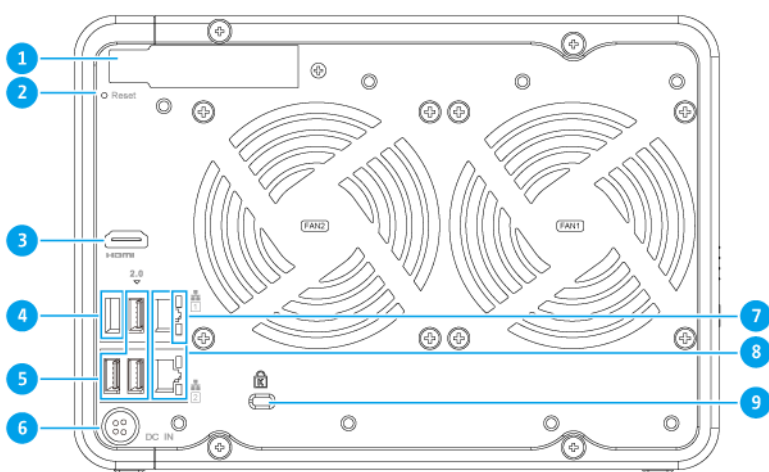
元件

前面板



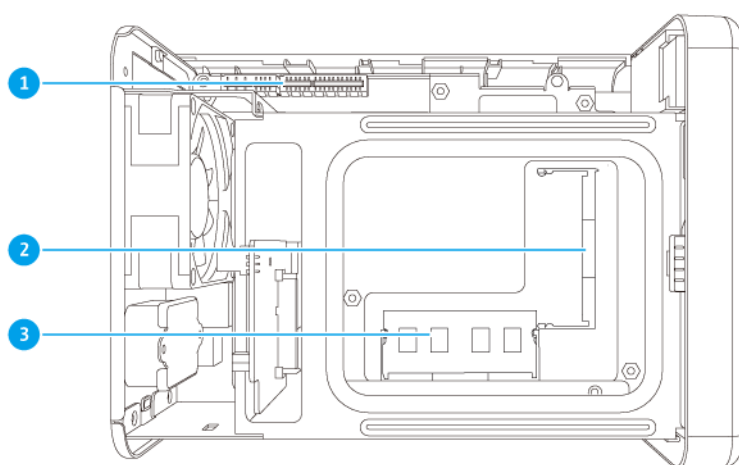
編號	元件	編號	元件
1	電源按鈕	5	硬碟 LED 燈
2	狀態 LED 燈	6	USB 3.2 Gen 1 單鍵備份 Type-A 連接埠
3	LAN LED 燈	7	USB 單鍵備份按鈕
4	USB LED 燈	—	—

後面板




編號	元件	編號	元件
1	PCIe 短蓋	6	電源輸入
2	重設按鈕	7	2.5 Gigabit 乙太網路埠 (RJ45)
3	HDMI 2.0 連接埠	8	2.5 Gigabit 乙太網路 LED 燈
4	USB 3.2 Gen 1 Type-A 連接埠	9	Kensington 安全插槽
5	USB 2.0 Type-A 連接埠	-	-

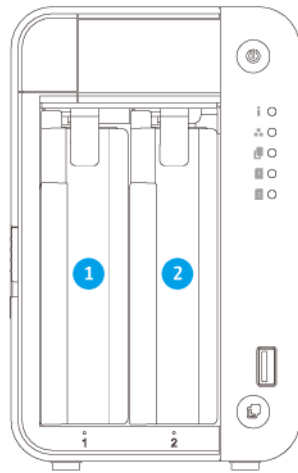
右側面板



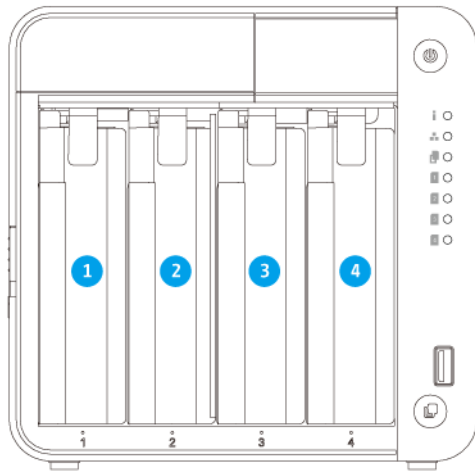
注意
影像不包含機殼。

編號	元件	編號	元件
1	PCIe 2.0 x2  注意 TS-253D 具有 PCIe 2.0 x4 插槽。	3	記憶體插槽 2
2	記憶體插槽 1	-	-

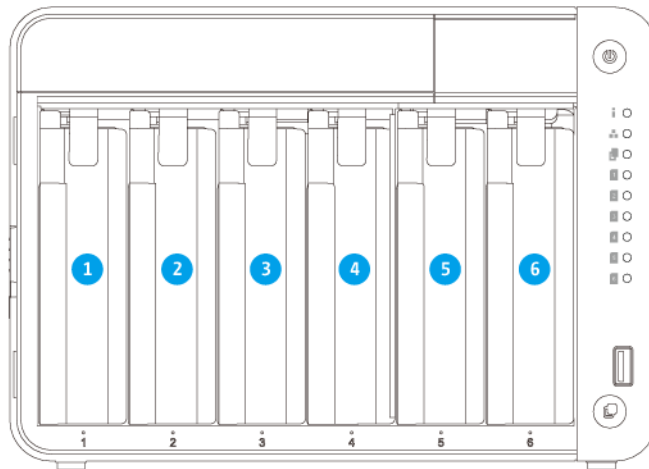
硬碟編號



TS-253D



TS-453D



TS-653D

安全資訊

以下指示幫助確保人身安全及環境安全。執行任何操作前，請仔細閱讀本安全指示。

一般指示

- NAS 應放置在實施進出管制的場所，控管方式包括工具、鎖鑰或其他安全機制。
- 唯有具技能且獲得授權的合格裝置管理員能夠存取 NAS；合格裝置管理員必須熟悉所有管制方法、安全注意事項、安裝及保養程序。
- 為避免受傷或元件損壞，在觸碰硬碟及其他內部系統元件前，請先確認其是否已經冷卻。
- 請遵守靜電放電 (ESD) 程序以防止潛在傷害或元件損壞。

電源

- 為了降低走火或觸電風險，務必只將電源線連接至正確接地的電源插座。



裝置至少配備一條電源供應器 (PSU) 的電源線。為防止嚴重傷害事故發生，在安裝或更換系統元件前，經訓練的維修技術人員必須先拔除所有電源供應器的電源線。

系統電池

- 更換電池時，請務必使用相同類型的電池，以免電池爆炸造成受傷或元件損壞。
- 請遵照當地法規或電池製造商的指示妥善處置廢棄電池。

移動的零件



轉動的風扇葉片：裝置連接至電源時，請使身體部位遠離正在轉動的風扇葉片。



移動的元件：使身體部位遠離正在移動的其他元件。

安裝需求

類別	項目
環境	<ul style="list-style-type: none"> 室溫：0°C 到 40°C (32°F 到 104°F) 不凝結相對溼度：5% 至 95% 濕球溫度：27°C (80.6°F) 平坦且防靜電的表面，不受陽光直射，亦不與液體或化學物質接觸
硬體和週邊設備	<ul style="list-style-type: none"> 儲存硬碟 請前往 https://www.qnap.com/compatibility 以查看相容的硬碟機型清單。 網路線
工具	<ul style="list-style-type: none"> 1 號或 2 號十字螺絲起子 防靜電腕帶

設定 NAS



重要

設定 NAS 或安裝 NAS 元件前，請詳閱[安全資訊](#)中所有安全要求及資訊。

- 將 NAS 裝置放置在符合需求的環境。
如需詳細資訊，請參見：[安裝需求](#)。
- 安裝硬碟。
如需詳細資訊，請參見下列資訊：
 - 在 3.5 吋硬碟插槽上安裝 3.5 吋硬碟
 - 在 3.5 吋硬碟插槽上安裝 2.5 吋硬碟以及固態硬碟
- 選擇性: 更換記憶體模組。
如需詳細資訊，請參見：[更換記憶體模組](#)。
- 選擇性: 安裝擴充卡。
如需詳細資訊，請參見：[安裝擴充卡](#)。
- 連接電源線與所有適用的網路線。

6. 開啟 NAS。
7. 安裝 QTS。
如需詳細資訊，請參見：[QTS 安裝](#)。
8. 登入 QTS。

3. 安裝和配置

本章介紹特定硬體及韌體的安裝與設定步驟。

硬體安裝

本節介紹安裝硬碟、記憶體模組以及擴充卡的相關資訊。

安裝硬碟

TS-x53D 與 3.5 吋硬碟、2.5 吋硬碟，以及 2.5 吋固態硬碟相容。

在 3.5 吋硬碟插槽上安裝 3.5 吋硬碟



警告

- 安裝硬碟會刪除硬碟上的所有資料。
- 請遵守靜電放電 (ESD) 程序以防止元件損壞。

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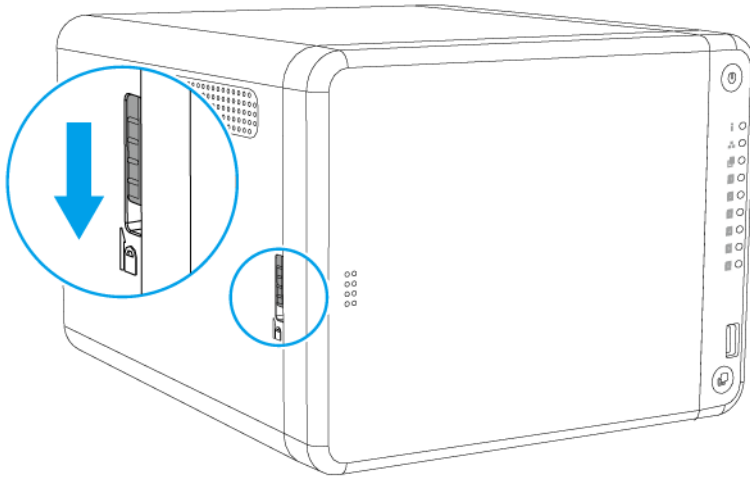
轉動的風扇葉片：使雙手及身體其他部位遠離正在轉動的風扇葉片。

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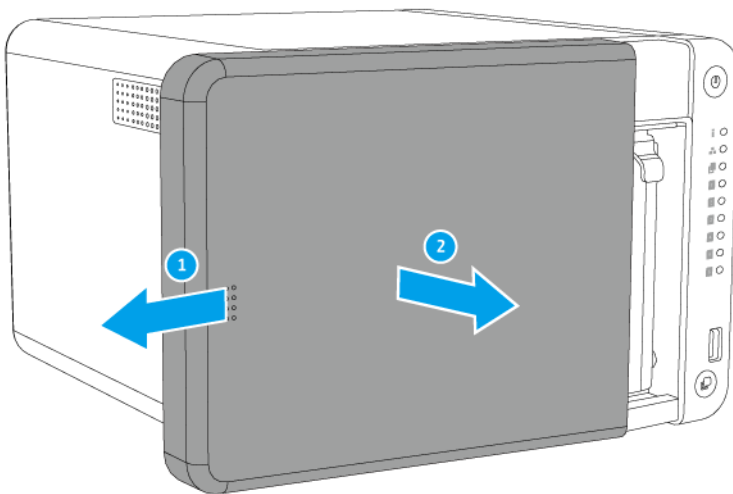


其他移動的元件：使雙手及身體其他部位遠離正在移動的其他元件。

1. 關閉 NAS 電源。
2. 取下正面殼蓋。
 - a. 找到 NAS 左側的固定鎖。
 - b. 將固定鎖向下推，鬆開正面殼蓋。

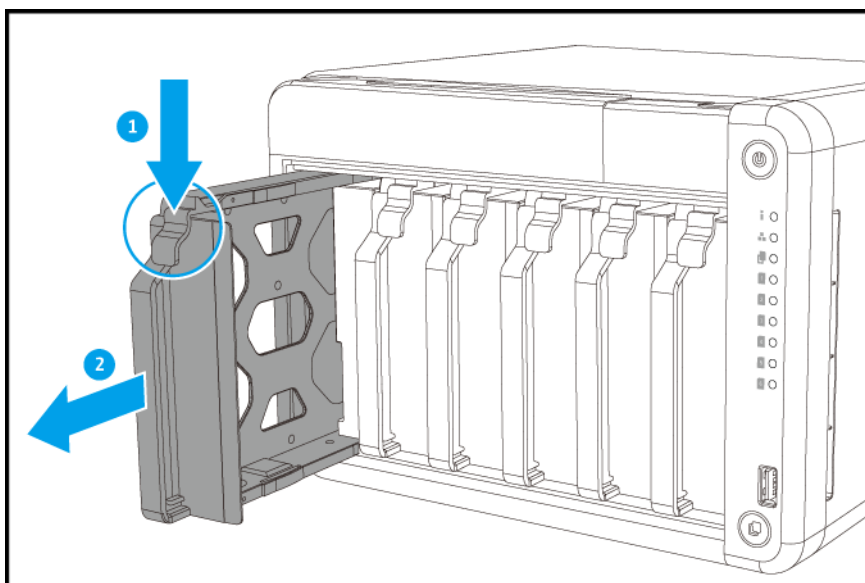


c. 將正面殼蓋向左推，然後往外拉出。



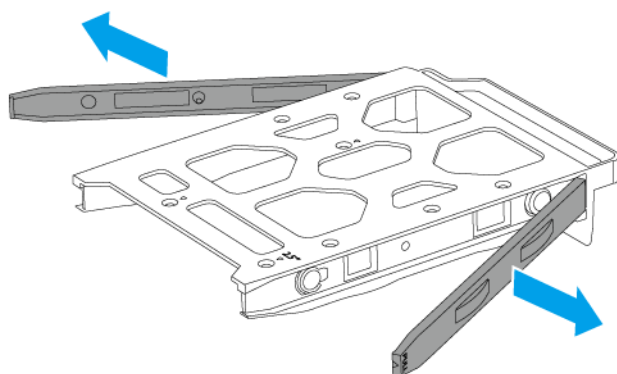
3. 取出硬碟托盤。

a. 同時按下門栓並拉出硬碟托盤，將托盤取下。

**重要**

請記下每個硬碟的編號，之後必須將硬碟托盤放回原本的插槽。

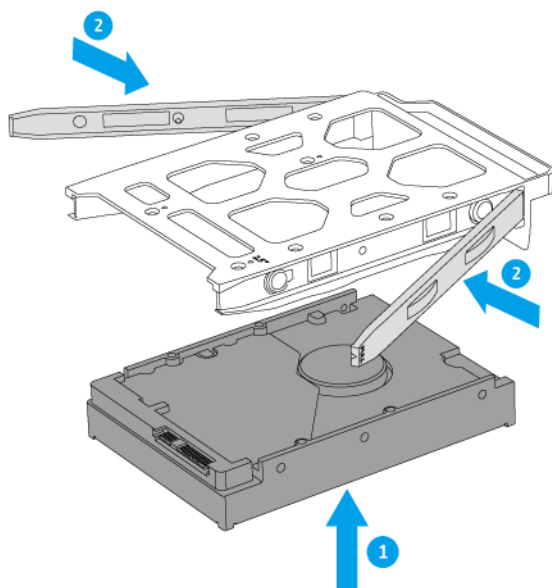
- b. 將托盤把手往外拉。
- c. 將托盤拉出。
4. 在托盤上安裝硬碟。
 - a. 取下硬碟托盤兩側的固定面板。



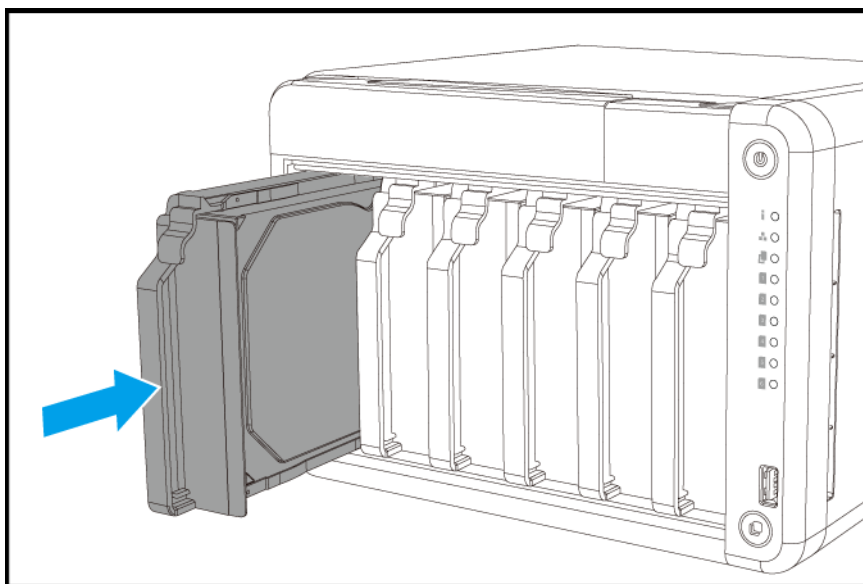
- b. 將硬碟放在托盤上，讓硬碟底部的孔洞與托盤底部的孔洞對齊。
- c. 裝上固定面板，將硬碟鎖定在托盤上。



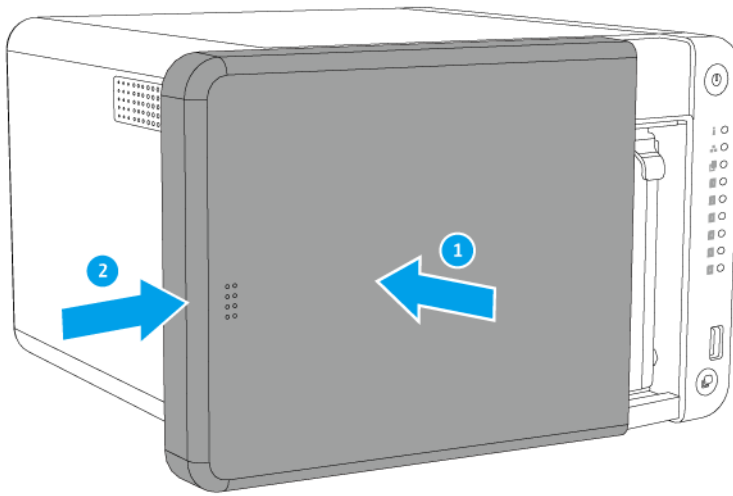
注意
鎖上螺絲以便移動裝有固態硬碟的 NAS。



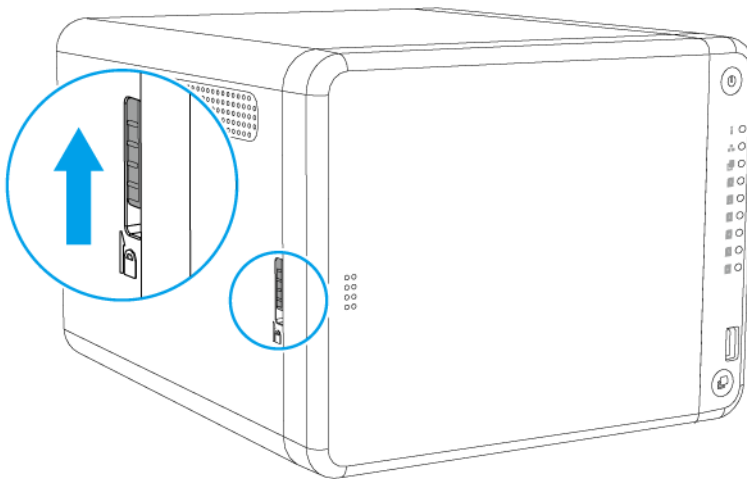
5. 將托盤裝入插槽。
 - a. 將托盤插入插槽。
 - b. 推入把手。



6. 裝上正面殼蓋。
 - a. 將正面殼蓋對齊機殼凹槽，然後向右推。



b. 將固定鎖向上推，鎖住正面殼蓋。



7. 開啟 NAS。

在 3.5 吋硬碟插槽上安裝 2.5 吋硬碟以及固態硬碟



警告

- 安裝硬碟會刪除硬碟上的所有資料。
- 請遵守靜電放電 (ESD) 程序以防止元件損壞。

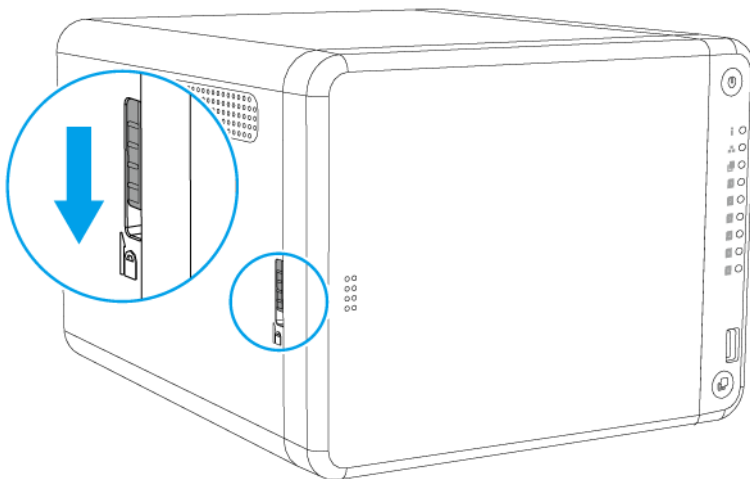


轉動的風扇葉片：使雙手及身體其他部位遠離正在轉動的風扇葉片。

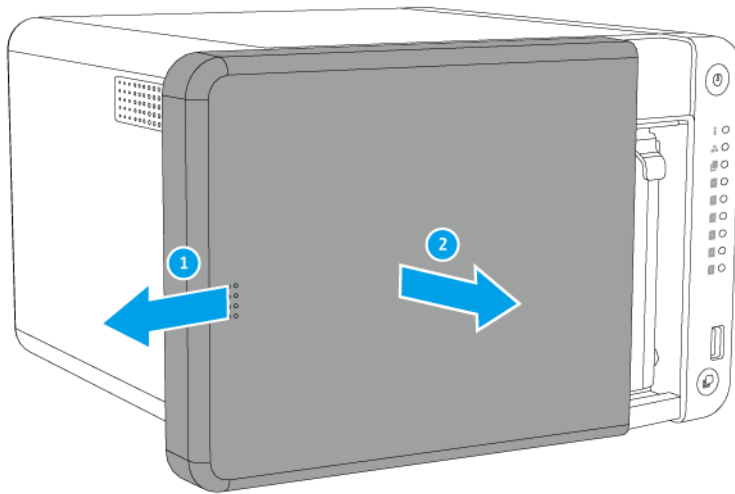


其他移動的元件：使雙手及身體其他部位遠離正在移動的其他元件。

1. 關閉 NAS 電源。
2. 取下正面殼蓋。
 - a. 找到 NAS 左側的固定鎖。
 - b. 將固定鎖向下推，鬆開正面殼蓋。

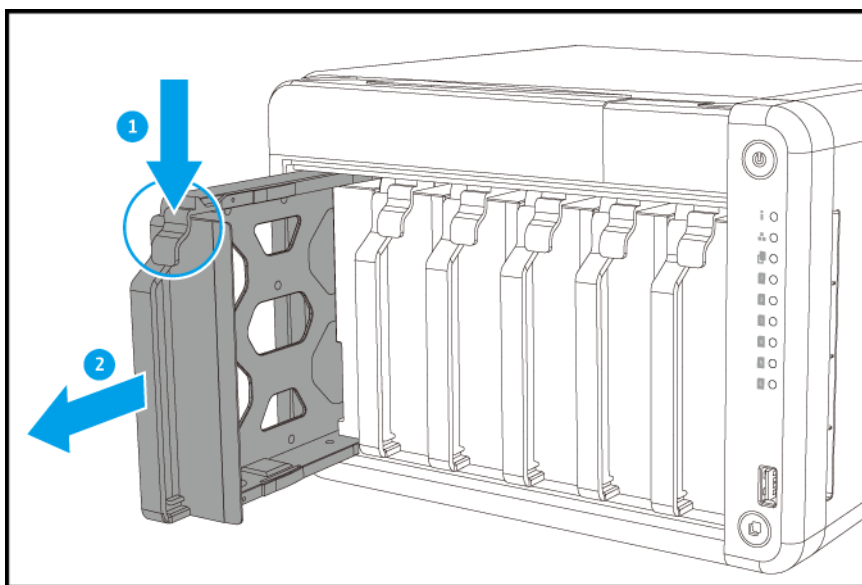


- c. 將正面殼蓋向左推，然後往外拉出。



3. 取出硬碟托盤。

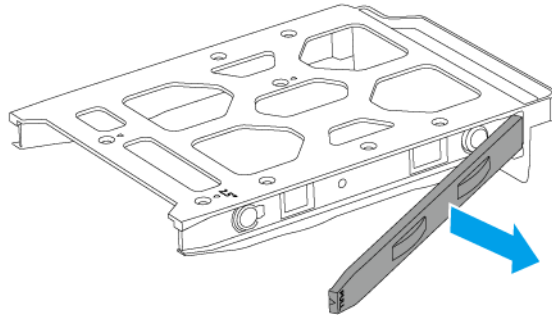
- a. 同時按下門栓並拉出硬碟托盤，將托盤取下。



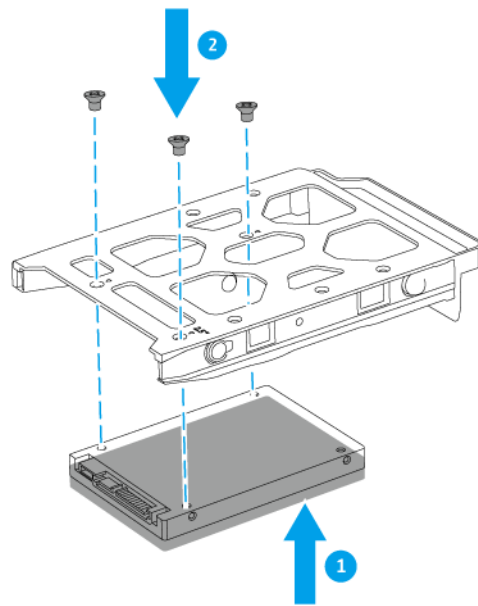
重要

請記下每個硬碟的編號，之後必須將硬碟托盤放回原本的插槽。

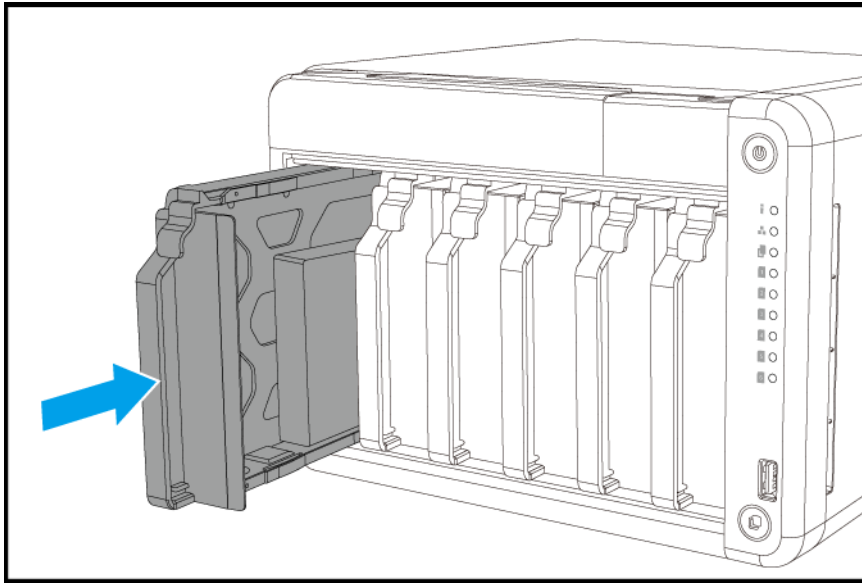
- b. 將托盤把手往外拉。
 - c. 將托盤拉出。
- ### 4. 在托盤上安裝硬碟。
- a. 取下硬碟托盤右側的固定面板。



- b.** 將硬碟放在托盤上，讓硬碟底部的孔洞與托盤底部的孔洞對齊。
- c.** 鎖上螺絲。

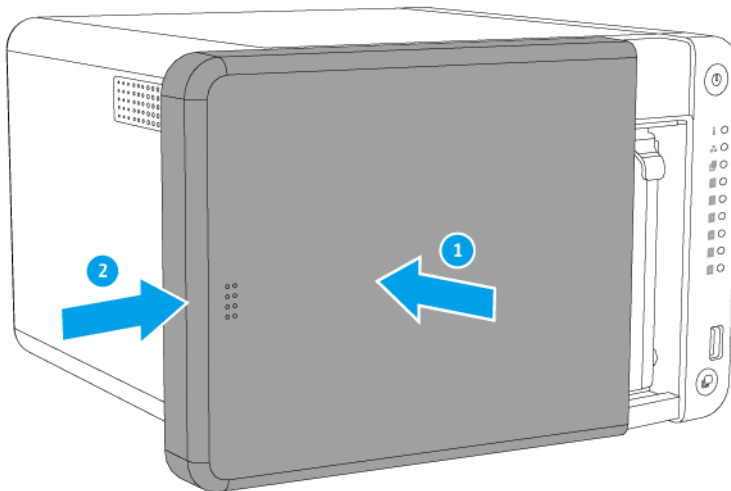


- 5.** 將托盤裝入插槽。
 - a.** 將托盤插入插槽。
 - b.** 推入把手。

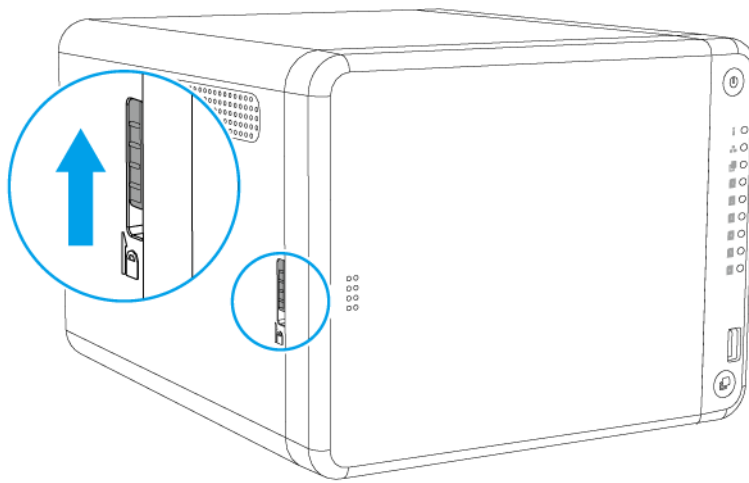


6. 裝上正面殼蓋。

- a. 將正面殼蓋對齊機殼凹槽，然後向右推。**



- b. 將固定鎖向上推，鎖住正面殼蓋。**



7. 開啟 NAS。

更換記憶體模組

NAS 具有兩個記憶體插槽。您可以升級記憶體模組以增加 NAS 的記憶體容量。僅使用相同類型與容量的 QNAP 記憶體模組，以維持系統效能和穩定性。您可向授權經銷商購買 QNAP 記憶體模組。



重要

確認每對皆使用相同的記憶體模組。
如需插槽編號的詳細資訊，請參見：[右側面板](#)。



警告

- 僅限合格人員可執行下列步驟。未遵照指示操作可能導致嚴重傷害或死亡。
- 請遵守靜電放電 (ESD) 程序以防止元件損壞。



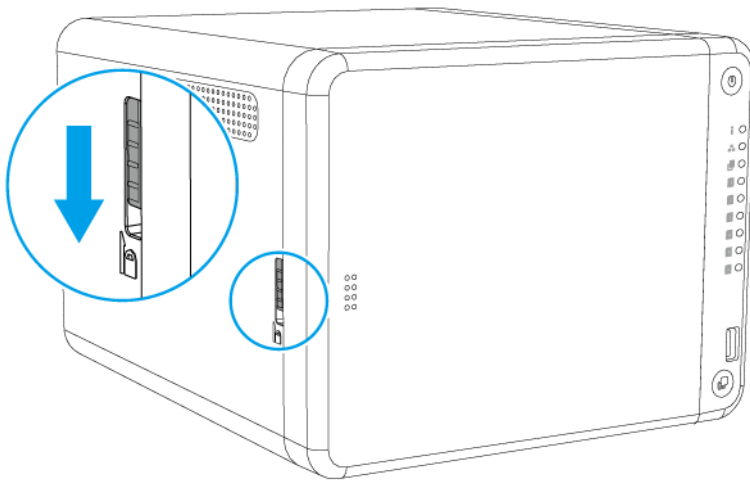
轉動的風扇葉片：使雙手及身體其他部位遠離正在轉動的風扇葉片。



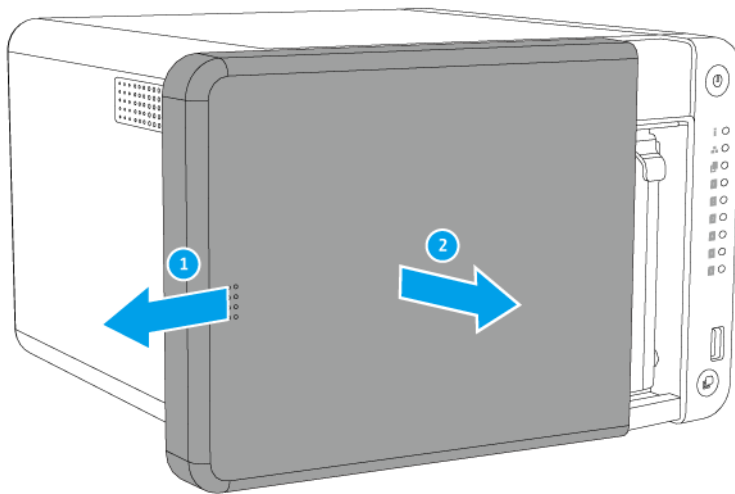
其他移動的元件：使雙手及身體其他部位遠離正在移動的其他元件。

1. 關閉 NAS 電源。
2. 從電源插座拔下電源線。
3. 中斷所有連接線和外接裝置的連線。
4. 取下正面殼蓋。

- a. 找到 NAS 左側的固定鎖。

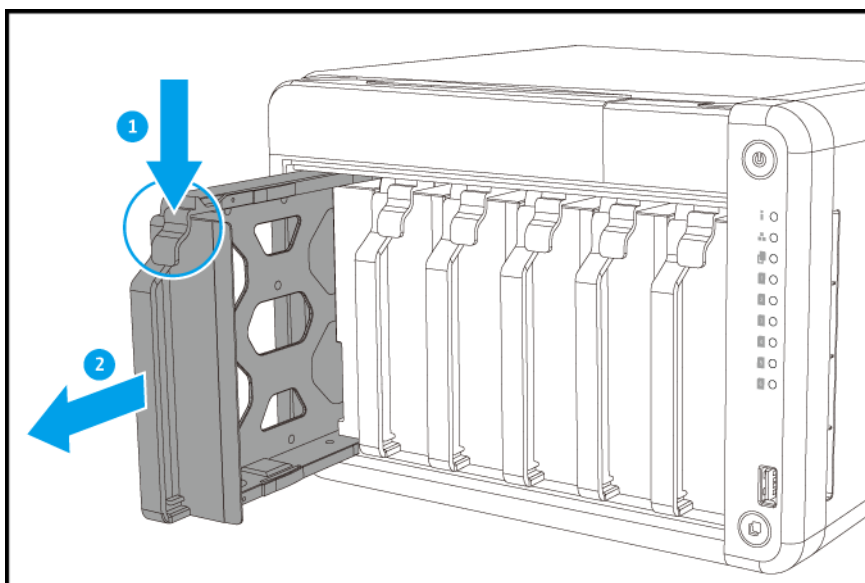


- b. 將固定鎖向下推，解鎖正面殼蓋。



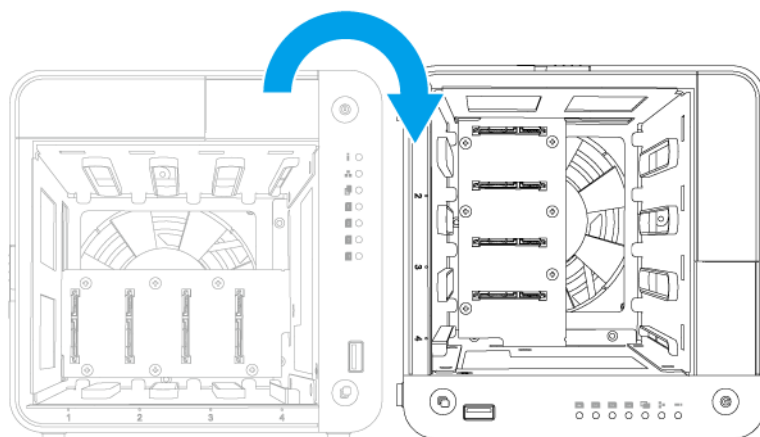
5. 取出硬碟托盤。

- a. 同時按下門栓並拉出硬碟托盤，將托盤取下。

**重要**

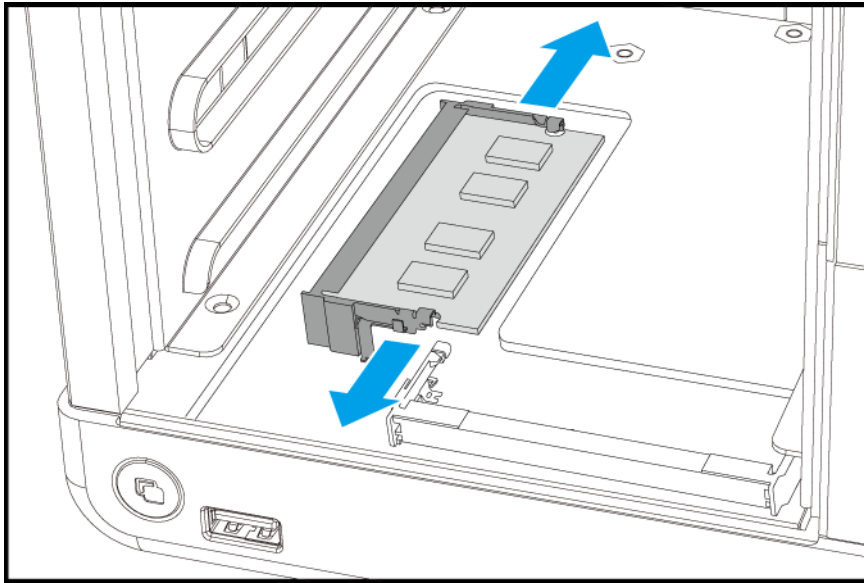
請記下每個硬碟的編號，之後必須將硬碟托盤放回原本的插槽。

- b. 將托盤把手往外拉。
 - c. 將托盤拉出。
6. 將 NAS 右側朝下放置。

**注意**

本圖顯示 TS-453D 型號。

7. 選擇性: 取下現有的記憶體模組。
- a. 將固定夾同時往外推以鬆開記憶體模組。



b. 確認記憶體模組已向上傾斜且完全從插槽鬆脫。

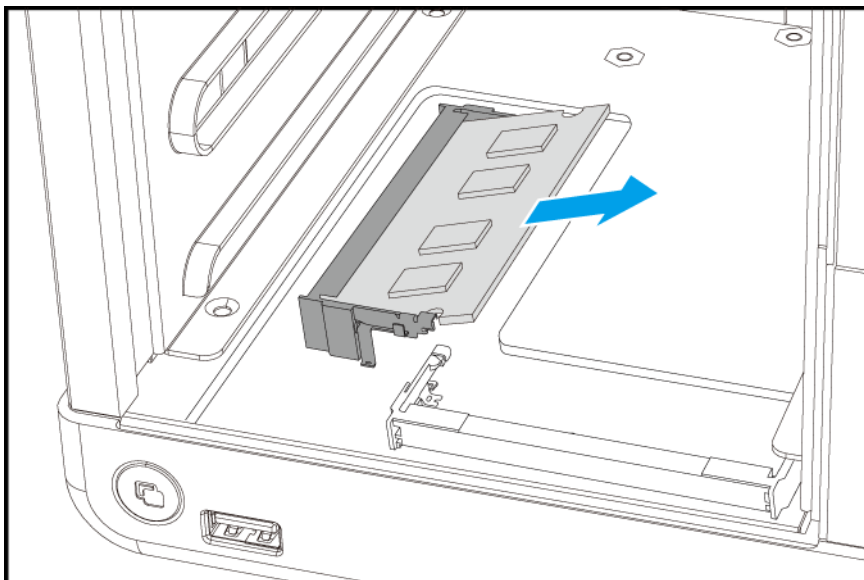


警告

若嘗試取下未完全鬆脫的記憶體模組，可能會損壞記憶體模組與主機板。

c. 握住模組的邊緣。

d. 小心地將模組滑出插槽。

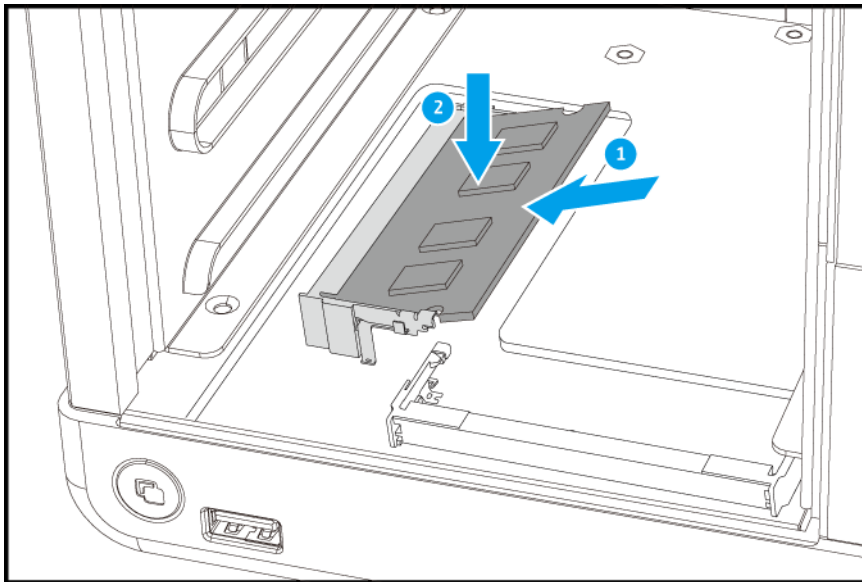


警告

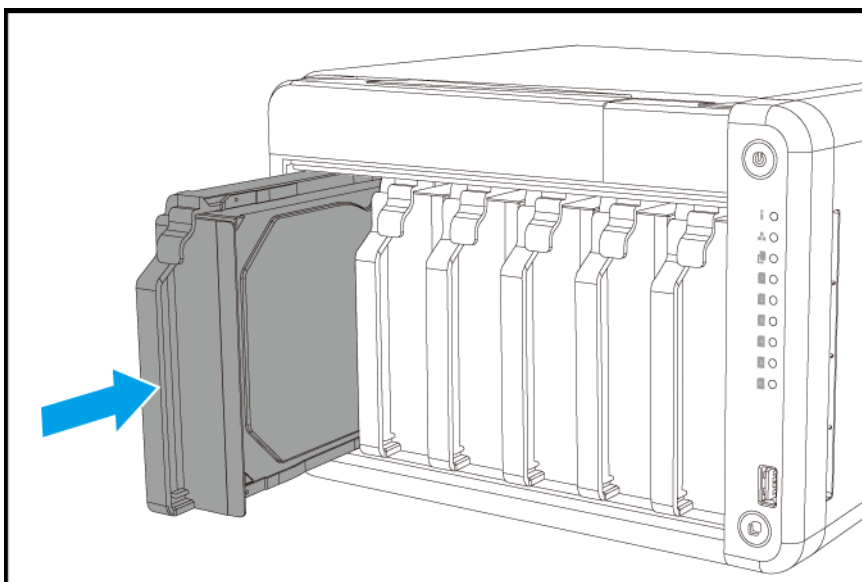
- 請勿觸碰內部元件，尤其是金屬接頭。
- 請勿彎折記憶體模組。

8. 安裝新的記憶體模組。

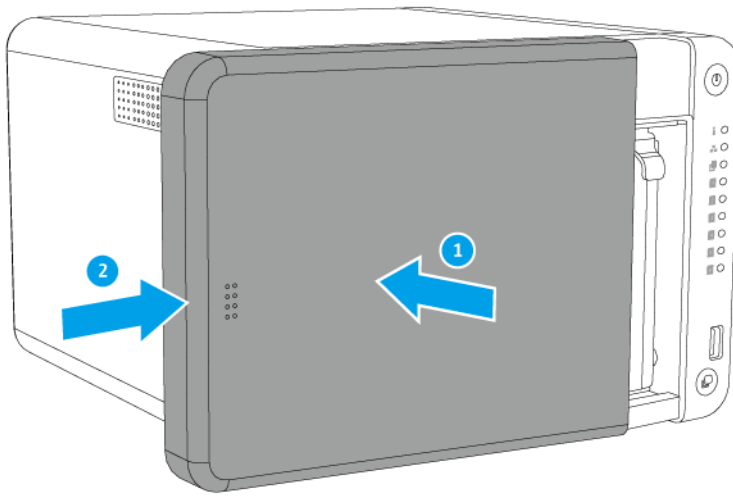
- a. 將接口與插槽的凸出部分對齊。
- b. 將記憶體模組插入插槽。
- c. 確認金屬接頭已完全插入插槽。
- d. 小心按下記憶體模組，直到固定夾正確扣住記憶體模組。



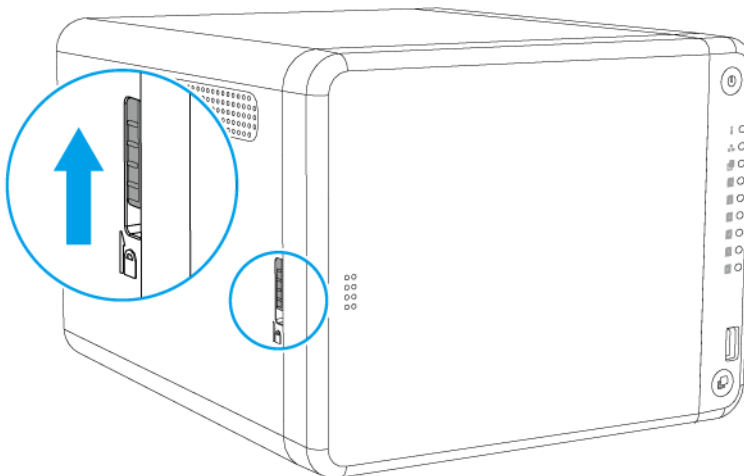
9. 將托盤裝入插槽。
 - a. 將托盤插入插槽。
 - b. 推入把手。



10. 裝上正面殼蓋。
 - a. 將正面殼蓋對齊機殼凹槽，然後向右推。



- b. 將固定鎖向上推，鎖住正面殼蓋。



11. 連上所有連接線和外接裝置。
12. 開啟 NAS。
13. 確認 NAS 可辨識記憶體模組。
 - a. 以管理員身分登入 QTS。
 - b. 前往 [控制台] > [系統] > [系統狀態] > [硬體資訊]。
 - c. 查看 [記憶體總容量] 的值。

安裝擴充卡

TS-x53D 支援特定的擴充卡。在公司網站購買的 QNAP 品牌擴充卡會隨附所有 QNAP NAS 型號適用的必要固定片。TS-x53D 系列使用低座扁型固定片。



注意

如需查看相容網路介面卡的清單，請前往 <https://www.qnap.com/compatibility/>



警告

- 僅限合格人員可執行下列步驟。未遵照指示操作可能導致嚴重傷害或死亡。
- 請遵守靜電放電 (ESD) 程序以防止元件損壞。

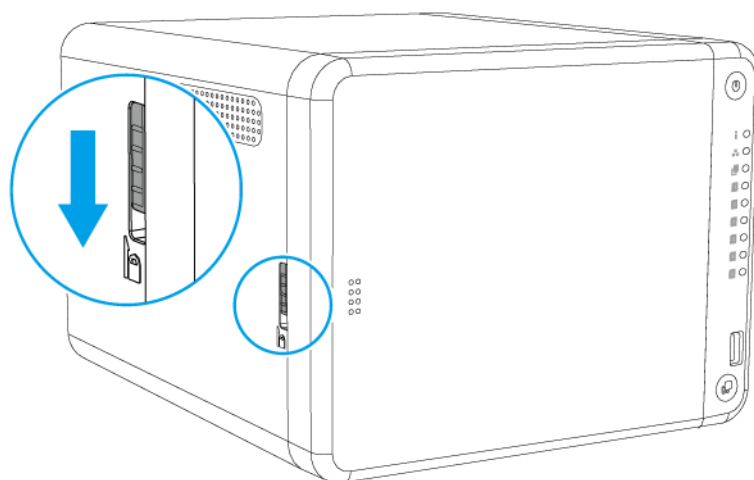


轉動的風扇葉片：使雙手及身體其他部位遠離正在轉動的風扇葉片。

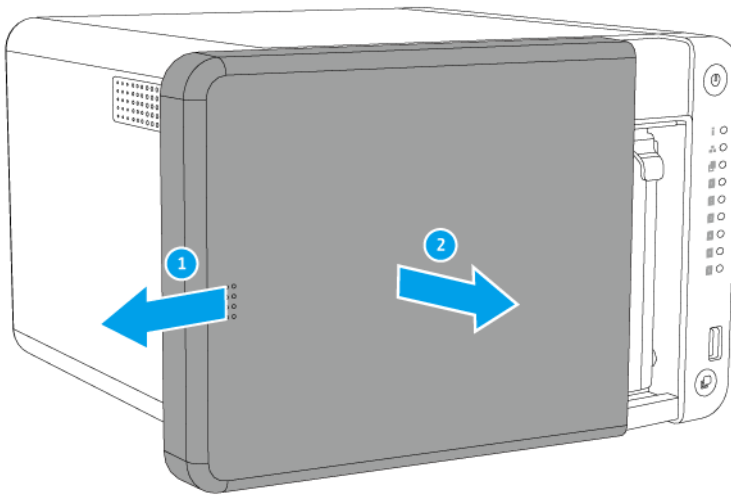


其他移動的元件：使雙手及身體其他部位遠離正在移動的其他元件。

1. 關閉 NAS 電源。
2. 從電源插座拔下電源線。
3. 中斷所有連接線和外接裝置的連線。
4. 取下正面殼蓋。
 - a. 找到 NAS 左側的固定鎖。
 - b. 將固定鎖向下推，解鎖正面殼蓋。

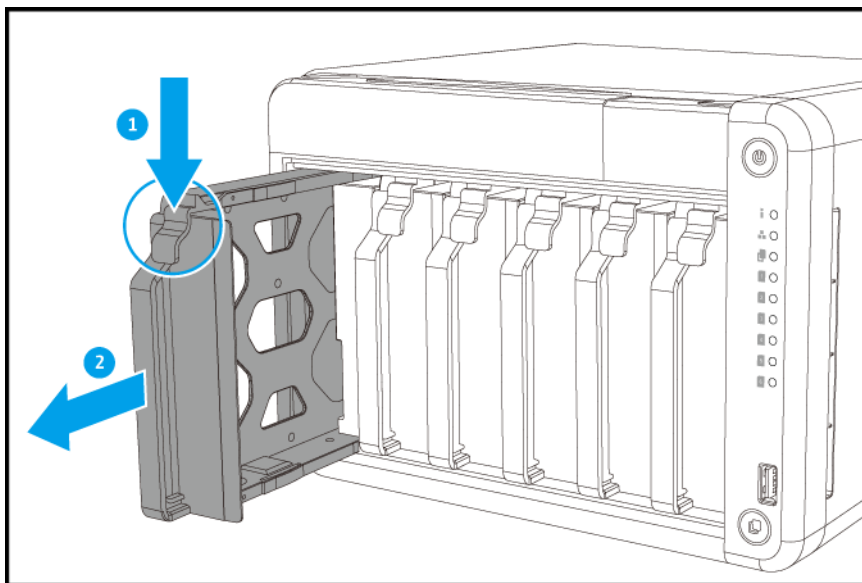


- c. 將正面殼蓋向左推，然後往外拉出。



5. 取出硬碟托盤。

- a. 同時按下門栓並拉出硬碟托盤，將托盤取下。



- b. 將托盤把手往外拉。

- c. 將托盤拉出。

6. 取下機殼蓋。

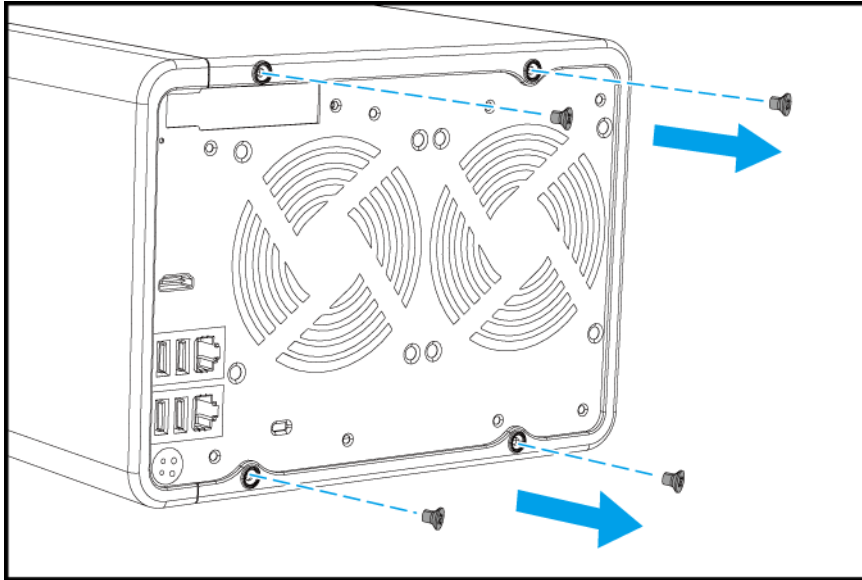
- a. 在 NAS 背面取下用以連接機殼蓋和機殼的螺絲。



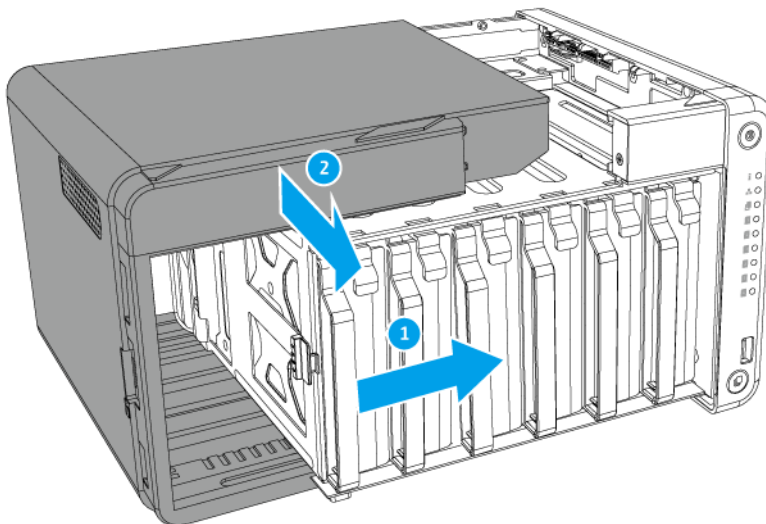
注意

螺絲的數目因型號而異。

- TS-253D：2 x 螺絲
- TS-453D：3 x 螺絲
- TS-653D：4 x 螺絲

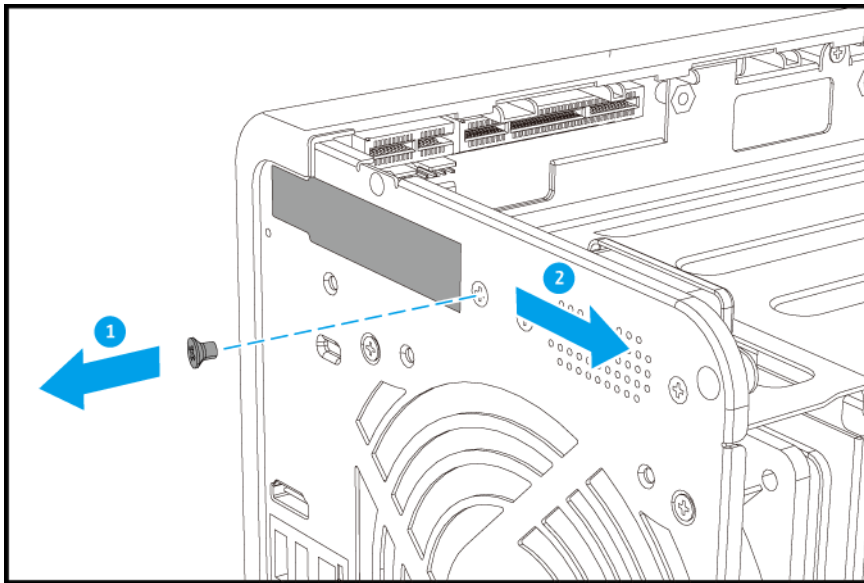


- 從機殼蓋頂部向下推，然後拉出機殼。
- 將機殼向右拉，使它完全脫離機殼蓋。



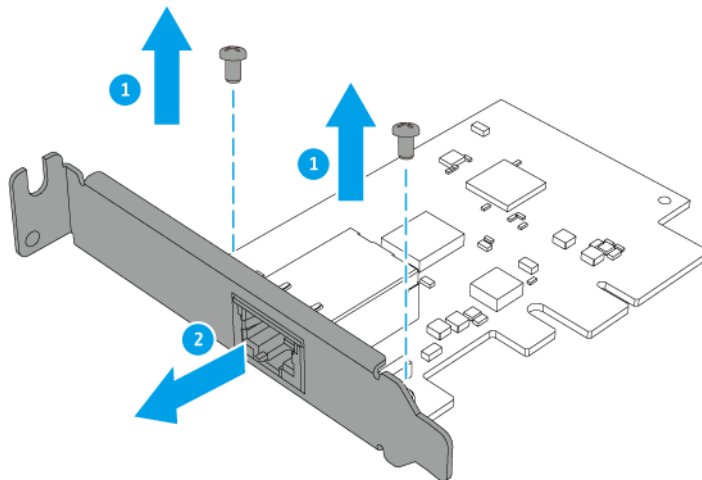
7. 取下 PCIe 蓋。

- 取下用於固定殼蓋和固定片的螺絲。
- 將殼蓋從插槽抽出。



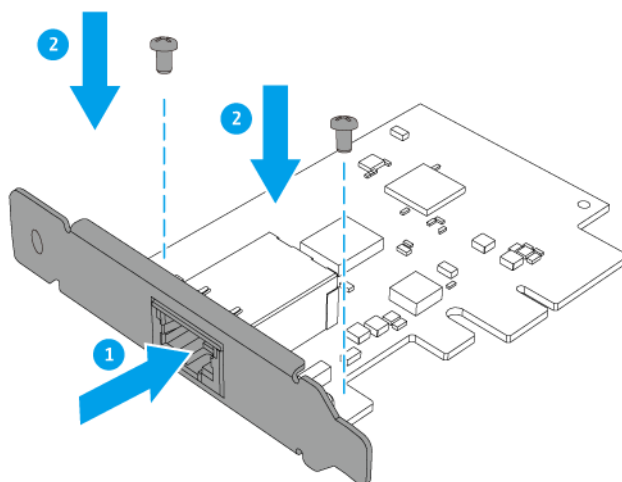
8. 選擇性: 將 QNAP 固定片裝至擴充卡。

- a.** 取下現有固定片的所有螺絲。



- b.** 小心地將固定片與擴充卡分開。

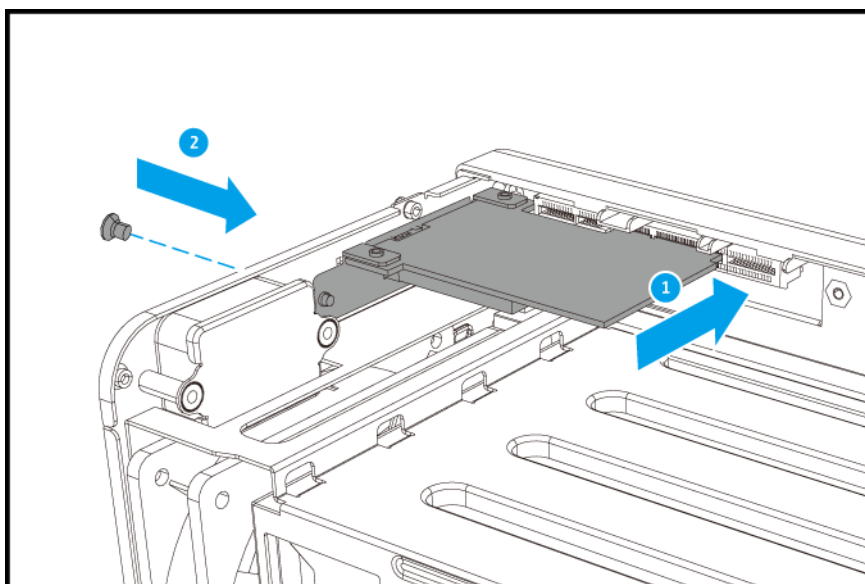
- c.** 利用相同的螺絲將 QNAP 固定片裝至擴充卡。



d. 確認固定片是否牢固不動。

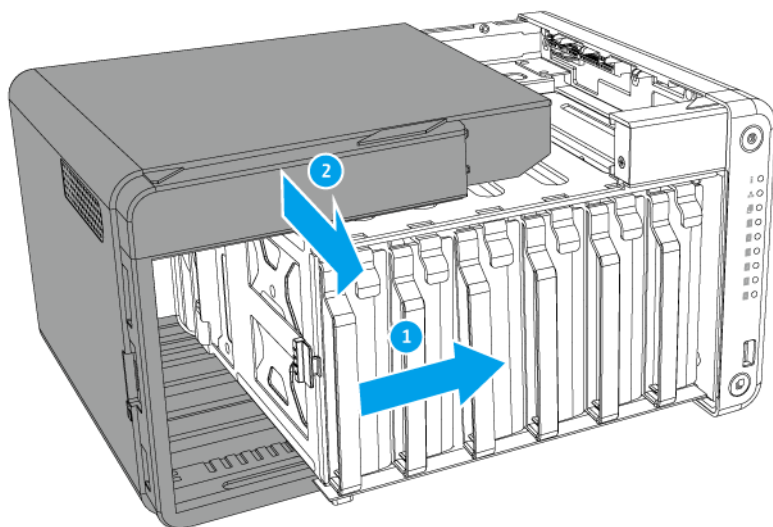
9. 安裝擴充卡。

- a. 握住擴充卡的邊緣。
- b. 將擴充卡插入插槽。
- c. 鎖上螺絲。



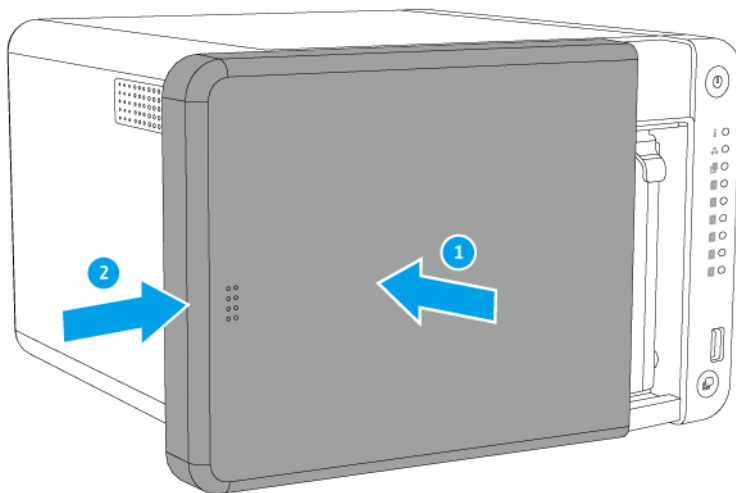
10. 裝上機殼蓋。

- a. 將機殼蓋向右推以連接機殼，然後往外拉。

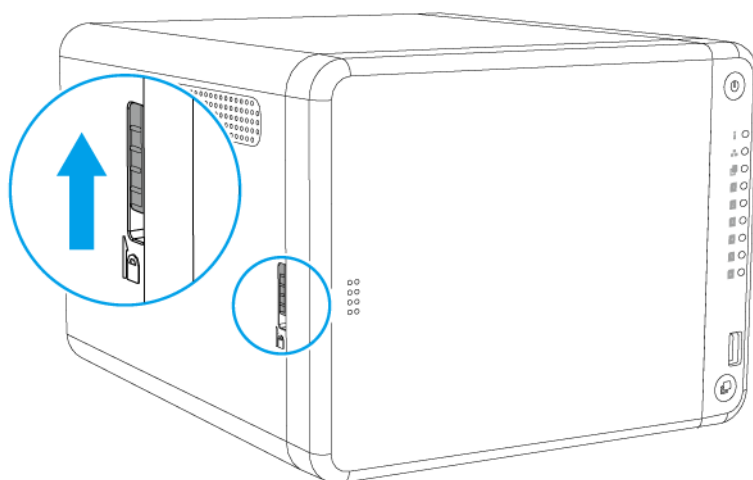


11. 裝上正面殼蓋。

- a. 將正面殼蓋對齊機殼凹槽，然後向右推。



- b. 將固定鎖向上推，鎖住正面殼蓋。



12. 連上所有連接線和外接裝置。

13. 將電源線插入電源插座。

14. 開啟 NAS 電源。

安裝擴充設備

TS-x53D 支援 USB 和 SATA JBOD 擴充設備。如需詳細資訊，請參見下方表格。



注意

有關擴充設備相容性以及擴充設備支援數量上限的詳細資訊，請前往：<https://www.qnap.com/en/compatibility-expansion/>

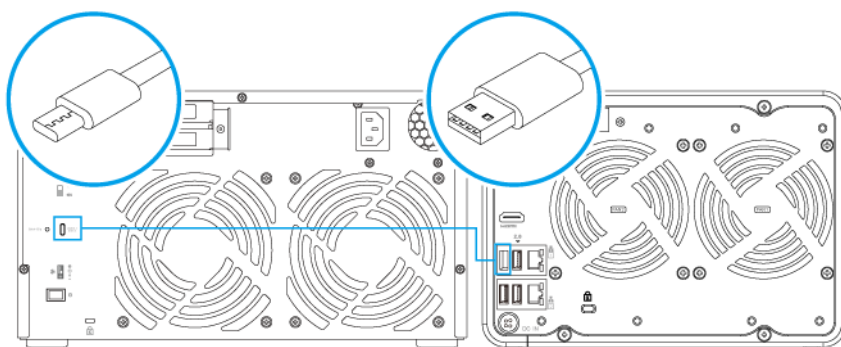
擴充設備型號	描述	必要配件
TR-002	<ul style="list-style-type: none"> • 使用 USB 3.2 Gen 2 Type-C 介面 • 支援 SATA 	USB 3.2 Gen 2 Type-A 轉 Type-C 連接線
TR-004	<ul style="list-style-type: none"> • 使用 USB 3.2 Gen 1 Type-C 介面 • 支援 SATA 	USB 3.2 Gen 1 Type-A 轉 Type-C 連接線
TL-D400S	<ul style="list-style-type: none"> • 使用 SFF-8088 介面 • 支援 SATA HDD/SSD 	<ul style="list-style-type: none"> • 1 x SFF-8088 接頭纜線 • QXP-400eS-A1164 主機匯流排介面卡
TL-D800S	<ul style="list-style-type: none"> • 使用 SFF-8088 介面 • 支援 SATA HDD/SSD 	<ul style="list-style-type: none"> • 2 x SFF-8088 接頭纜線 • QXP-800eS-A1164 主機匯流排介面卡

擴充設備型號	描述	必要配件
TL-D1600S	<ul style="list-style-type: none"> • 使用 SFF-8088 介面 • 支援 SATA HDD/SSD 	<ul style="list-style-type: none"> • 4 x SFF-8088 轉 SFF-8644 接頭纜線 • QXP-1600eS 主機匯流排介面卡

連接 USB 擴充設備

若要將 TS-x53D 連接到 USB 擴充設備，需要使用 USB A 型轉 USB C 型連接線或轉接器。如需必要配件的詳細資訊，請參見：[安裝擴充設備](#)。如需相容擴充設備以及支援的數量上限，請參見：<https://www.qnap.com/go/compatibility-expansion>。

1. 將擴充設備連接至 NAS。
 - a. 將 USB 連接線接至擴充設備上的 USB Type-C 連接埠。
 - b. 將 USB 連接線接至 NAS 上的 USB 3.2 Gen 1 Type-A 連接埠。



2. 開啟擴充設備的電源。
3. 確認 NAS 可辨識所有擴充設備。
 - a. 以管理員身分登入 QTS。
 - b. 前往 [主選單] > [儲存與快照總管] > [總覽] > [系統]。
 - c. 確認畫面列出擴充設備。

連線 SATA JBOD 擴充設備

若要將 TS-x53D 連接至 SATA JBOD 擴充設備，必須先在 NAS 安裝主機匯流排介面卡。如需必要配件的詳細資訊，請參見：[安裝擴充設備](#)。如需相容擴充設備以及支援的數量上限，請參見：<https://www.qnap.com/go/compatibility-expansion>。

1. 關閉 NAS 電源。

- 在 PCIe 插槽安裝主機匯流排介面卡。

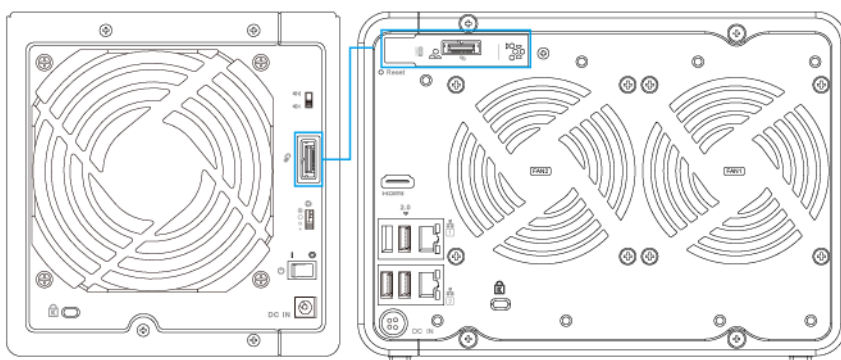


重要

連接 SATA JBOD 擴充裝置至主機裝置需要 QNAP QXP SATA 主機匯流排介面卡。第三方主機匯流排介面卡與 QNAP JBOD 擴充裝置不相容。

如需詳細資訊，請參見：[安裝擴充卡](#)。

- 請按照下列拓樸圖，將擴充設備連接到 NAS。



注意

若要將 TS-x53D 連線至桌上型 NAS，需要使用 SFF-8088 連接線。該連接線隨附於 SATA JBOD 包裝中。

- 開啟 SATA JBOD 擴充設備的電源。
- 開啟 NAS。
- 確認 NAS 可辨識所有擴充設備。
 - 以管理員身分登入 QTS。
 - 前往 [主選單] > [儲存與快照總管] > [總覽] > [系統]。
 - 確認畫面列出擴充設備。

QTS 安裝

方法	描述	需求
Qfinder Pro 安裝 (建議使用)	如果 NAS 已連接您的區域網路，您可以執行下列操作： <ul style="list-style-type: none"> 使用 Qfinder Pro 定位 NAS。 完成 [智慧安裝導引] 精靈中的步驟。 	<ul style="list-style-type: none"> 電腦 網路線 Qfinder Pro 安裝程式

方法	描述	需求
雲端安裝	<p>如果 NAS 已連接網際網路，您可以執行下列操作：</p> <ul style="list-style-type: none"> • 掃描 NAS 上的 QR 碼。 • 指定 Cloud Key。 • 登入 myQNAPcloud 帳號。 • 使用 myQNAPcloud Link 遠端存取您的 NAS。 • 完成 [智慧安裝導引] 精靈中的步驟。 	<ul style="list-style-type: none"> • 電腦或行動裝置。 • myQNAPcloud 帳號 • CloudKey
本機安裝	<p>如果 NAS 支援 HDMI 輸出，您可以執行下列操作：</p> <ul style="list-style-type: none"> • 將 NAS 連接至所需的硬碟。 • 完成 [智慧安裝導引] 精靈中的步驟。 	<ul style="list-style-type: none"> • 監控器 • HDMI 連接線 • USB 鍵盤或遙控器（並非所有型號皆有提供）

使用 Qfinder Pro 安裝 QTS



警告

安裝 QTS 會刪除硬碟上的所有資料。繼續操作前請先備份資料。

1. 打開 NAS 電源。
2. 將 NAS 連接至區域網路。
3. 在連接相同區域網路的電腦上執行 Qfinder Pro。



注意

若要下載 Qfinder Pro，請前往 <https://www.qnap.com/utilities>。

4. 在清單中找到 NAS，然後按兩下它的名稱或 IP 位址。
【智慧安裝導引】隨即在預設的網頁瀏覽器中開啟。
5. 按一下【啟動智慧安裝導引】。
6. 指定下列資訊：
 - **NAS 名稱**：指定 1 到 14 個字元的名稱。名稱支援使用英文字母（A 到 Z、a 到 z）、數字（0 到 9）以及連字號（-），但不能以連字號做結尾。
 - **密碼**：指定 1 到 64 個字元的管理員密碼。密碼支援使用所有 ASCII 字元。
7. 按一下【下一步】。
8. 指定時區、日期和時間。



提示

QNAP 建議連接至 NTP 伺服器，以確保 NAS 符合國際標準時間 (UTC) 的標準。

9. 按一下【下一步】。

10. 選擇 [自動取得 IP 位址 (DHCP)]。
11. 按一下 [下一步]。
12. 選擇將用於存取 NAS 共用資料夾的裝置類型。
13. 按一下 [下一步]。
14. 檢視設定值。
15. 按一下 [套用]。
確認訊息隨即出現。

**警告**

按一下 [確認] 後，系統會在安裝 QTS 前刪除硬碟的所有資料。

16. 按一下 [確認]。
QTS 安裝完成。

使用 Cloud Key 安裝 QTS

**警告**

安裝 QTS 會刪除硬碟上的所有資料。繼續操作前請先備份資料。

1. 打開 NAS 電源。
2. 將 NAS 連接至網際網路。
3. 使用下列其中一種方式前往 QNAP 雲端安裝頁面：
 - 使用電腦前往 <http://install.qnap.com/>。
 - 使用行動裝置掃描 NAS 上的 QR 碼。

該網頁列出區域網路內所有未初始化的 QNAP NAS 裝置。

4. 在清單中找出自己的 NAS，然後按一下 [初始化]。

**注意**

如果未列出您的 NAS，請按照網頁上的指示指定 NAS 的 Cloud Key。

安裝精靈隨即在預設的網頁瀏覽器中開啟。

5. 建立帳號或登入 myQNAPcloud。

**注意**

建立帳號之後，必須返回此頁面完成安裝步驟。

6. 指定 NAS 的 myQNAPcloud 裝置名稱。

**注意**

- 遠端存取 NAS 時，需要用到 myQNAPcloud 裝置名稱。
- 基於安全考量，NAS 將於初始化後停用 myQNAPcloud Link 遠端連線服務。日後若要再度啟用，請透過區域網路連接至 QTS，然後安裝 myQNAPcloud Link。

7. 按一下 [下一步]。
[智慧安裝導引] 隨即在預設的網頁瀏覽器中開啟。

8. 按一下 [**啟動智慧安裝導引**] 。
9. 指定下列資訊：
 - **NAS 名稱**：指定 1 到 14 個字元的名稱。名稱支援使用英文字母 (A 到 Z、a 到 z)、數字 (0 到 9) 以及連字號 (-)，但不能以連字號做結尾。
 - **密碼**：指定 1 到 64 個字元的管理員密碼。密碼支援使用所有 ASCII 字元。
10. 按一下 [**下一步**] 。
11. 指定時區、日期和時間。



提示

QNAP 建議連接至 NTP 伺服器，以確保 NAS 符合國際標準時間 (UTC) 的標準。

12. 按一下 [**下一步**] 。
 13. 選擇 [**自動取得 IP 位址 (DHCP)**] 。
 14. 按一下 [**下一步**] 。
 15. 選擇將用於存取 NAS 共用資料夾的裝置類型。
 16. 按一下 [**下一步**] 。
 17. 檢視設定值。
 18. 按一下 [**套用**] 。
- 確認訊息隨即出現。



警告

按一下 [**確認**] 後，系統會在安裝 QTS 前刪除硬碟的所有資料。

19. 按一下 [**確認**] 。
- QTS 安裝完成。

使用 HDMI 連線安裝 QTS



警告

安裝 QTS 會刪除硬碟上的所有資料。繼續操作前請先備份資料。

1. 將 HDMI 顯示器連接至 NAS。
 2. 將 USB 鍵盤連接到 NAS。
 3. 打開 NAS 電源。
- 智慧安裝導引的 [**歡迎**] 畫面隨即出現。
4. 選擇 [**啟動智慧安裝導引**] 。
 5. 選擇 [**否，略過這個程序**] 。
- 若啟用多媒體功能，您就能在 [**儲存與快照總管**] 中設定硬碟之後，安裝多媒體應用程式。
 - 如需在 QTS 啟用多媒體功能的詳細資訊，請參見《QTS 使用手冊》的〈系統管理〉一節。
6. 選擇 [**稍後設定**] 。
- 如需設定硬碟的詳細資訊，請參見《QTS 使用手冊》的〈儲存與快照總管〉一節。

7. 檢視設定值。
 8. 按一下 [下一步] 。
 9. 檢視設定值。
 10. 按一下 [下一步] 。
- [確認] 畫面隨即出現。

**警告**

按一下 [下一步] 後，系統會在安裝 QTS 前刪除硬碟的所有資料。


11. 按一下 [下一步] 。
- QTS 安裝完成。

4. 基本操作


本章介紹 NAS 的基本操作。

電源按鈕

操作	使用者動作	結果
開啟電源	按一下按鈕。	NAS 電源開啟。
關閉電源	按住按鈕 1.5 秒。	NAS 電源關閉。
強制關機	按住按鈕 5 秒。	NAS 關機。

 **重要**
僅在 NAS 沒有回應時使用此方法。

重設按鈕

操作	使用者動作	結果
系統基本重設	按住按鈕 3 秒。	<p>以下設定將回復至預設值：</p> <ul style="list-style-type: none"> • 系統管理員密碼：無特殊字元的介面卡 1 MAC 位址。例如，若介面卡 1 的 MAC 位址為 11:22:33:44:55:66，則管理員密碼為 112233445566。 <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  提示 您可以透過 Qfinder Pro 找到介面卡 1 MAC 位址。黏貼至裝置的標籤亦將位址列為 MAC1。 </div> <ul style="list-style-type: none"> • TCP/IP 設定： <ul style="list-style-type: none"> • 使用動態 IP 位址 • 停用 Jumbo Frame • 若已啟用 Port Trunking（僅適用於支援多 LAN 的型號），系統將重設為「Active Backup（網路容錯）」模式。 • 系統通訊埠：8080（系統服務埠） • 安全等級：低（接受所有連線） • VLAN：已停用

操作	使用者動作	結果
系統進階重設	按住按鈕 15 秒。	回復為出廠預設值。 <ul style="list-style-type: none"> 若要在系統進階重設後取得舊有資料，請在 NAS 上重建先前的資料夾結構。

USB 單鍵備份按鈕

您可以使用 [USB 單鍵備份] 按鈕，將資料從 USB 裝置備份至 NAS，或從 NAS 備份至 USB 裝置。

本功能支援增量備份。NAS 僅複製上次備份後修改或新增的檔案。

LED 燈號

LED 燈號指示 NAS 開機時的系統狀態與相關資訊。下列 LED 燈號資訊僅適用於已正確安裝硬碟，且 NAS 已連線至網路的狀態下。

如需 LED 燈號的位置資訊，請參見：[元件](#)。

LED	狀態	說明
系統狀態	綠燈與紅燈每 0.5 秒交錯閃爍	<ul style="list-style-type: none"> • 硬碟正在格式化。 • NAS 正在初始化。 • 作業系統正在更新。 • RAID 重建作業正在進行。 • 線上 RAID 容量擴充正在進行。 • 線上 RAID 組態遷移正在進行。
	紅燈	<ul style="list-style-type: none"> • 硬碟無效。 • 磁碟區容量已滿。 • 磁碟區容量將滿。 • 系統風扇異常。 • 資料存取（讀寫）錯誤。 • 硬碟壞軌。 • NAS 處於降階唯讀模式（RAID 5 或 RAID 6 有兩個硬碟故障，但資料仍可讀取）。 • 硬體自我檢查發生錯誤。
	紅燈每 0.5 秒閃爍	NAS 處於降階模式（RAID 1、RAID 5 或 RAID 6 有一個硬碟故障）。
	綠燈每 0.5 秒閃爍	<ul style="list-style-type: none"> • NAS 啟動中。 • NAS 未設定。 • 硬碟未格式化。
	綠燈	NAS 已就緒。
	關閉	所有硬碟處於待命模式。
LAN	橙燈	硬碟存取中並發生讀寫錯誤。
	橙燈閃爍	使用者正從網路存取 NAS。
2.5 Gigabit 網路 (正面)	橙燈	<ul style="list-style-type: none"> • 乙太網路埠已連接至 gigabit 網路。 • 乙太網路埠已連接至 2.5 gigabit 網路。 • 乙太網路埠已連接至 10 megabit 網路。 • 乙太網路埠已連接至 100 megabit 網路。
	關閉	無網路連線。
2.5 Gigabit 高速 網路 (背面)	綠燈	乙太網路埠已連接至 2.5 gigabit 網路。
	橙燈	<ul style="list-style-type: none"> • 乙太網路埠已連接至 gigabit 網路。 • 乙太網路埠已連接至 100 megabit 網路。
	關閉	乙太網路埠已連接至 10 megabit 網路。

LED	狀態	說明
2.5 Gigabit 活動網路 (背面)	橙燈	沒有資料傳輸。
	橙燈閃爍	<ul style="list-style-type: none"> • 乙太網路埠已將進行中的傳輸資料連接至 gigabit 網路。 • 乙太網路埠已將進行中的傳輸資料連接至 2.5 gigabit 網路。 • 乙太網路埠已將進行中的傳輸資料連接至 10 gigabit 網路。 • 乙太網路埠已將進行中的傳輸資料連接至 100 gigabit 網路。
	關閉	無網路連線。
硬碟	紅燈閃爍	硬碟存取中並發生讀寫錯誤。
	紅燈	發生硬碟讀寫錯誤。
	綠燈閃爍	資料存取中。
	綠燈	硬碟可供存取。
硬碟狀態	綠燈	硬碟已就緒。
	綠燈閃爍	正在存取硬碟。
	紅燈	發生硬碟讀寫錯誤。
	紅燈閃爍	QTS 正在尋找硬碟。
	關閉	未偵測到硬碟或硬碟未初始化。
硬碟活動	綠燈	硬碟已就緒。
	綠燈閃爍	正在存取硬碟。
	關閉	未偵測到硬碟。
USB 單鍵備份埠	藍燈每秒閃爍兩次	<ul style="list-style-type: none"> • 正在裝載 USB 裝置 (已連接至 USB 單鍵備份埠)。 • 正在斷開 USB 裝置 (已連接至 USB 單鍵備份埠)。 • 正在存取 USB 裝置 (已連接至 USB 單鍵備份埠)。
	藍燈	已裝載 USB 裝置 (已連接至 USB 單鍵備份埠)。
	關閉	沒有偵測到任何 USB 裝置。

警示音

期間	頻率	描述
短嗶 (0.5 秒)	1 聲	<ul style="list-style-type: none"> • NAS 啟動中。 • NAS 關閉中 (軟體關機)。 • 使用者按下 [重設] 按鈕。 • 作業系統已更新。
	3 聲	使用者嘗試將 NAS 資料複製到正面 USB 埠中的外接儲存裝置，但資料無法複製。

期間	頻率	描述
長嗶 (1.5 秒)	3 聲 (每 5 分鐘)	系統風扇異常。
	2 聲	<ul style="list-style-type: none">• 磁碟區容量將滿。• 磁碟區容量已滿。• 硬碟進入降階模式。• 使用者開始硬碟重建程序。• 插入或抽出硬碟。
	1 聲	<ul style="list-style-type: none">• NAS 強制關機 (硬體關機)。• NAS 成功開機且可供使用。

5. 疑難排解

本章介紹基本的疑難排解資訊。

強制 Qfinder Pro 或 myQNAPcloud 定位 NAS

如果 Qfinder Pro 或 myQNAPcloud 在 QTS 安裝的期間找不到 NAS，表示硬碟或資料發生問題。

1. 關閉 NAS 電源。
2. 移除所有硬碟。
3. 開啟 NAS。
4. 使用 Qfinder Pro 或 myQNAPcloud 定位 NAS。
5. 將硬碟重新插入。
6. 繼續執行 QTS 安裝作業。

熱抽換故障硬碟

NAS 支援熱插拔下列情況的硬碟：

- RAID 1：一個硬碟故障
- RAID 5：一個硬碟故障
- RAID 6：一或兩個硬碟故障

1. 登入 QTS。
2. 前往 **[主選單]** > **[儲存空間總管]** > **[儲存空間]** > **[磁碟/VJBOD]**。
3. 找出故障的硬碟。
4. 準備一個新的硬碟，且容量至少與故障硬碟相同。
5. 將 NAS 的故障硬碟拔出。
6. 等待 20 秒或等到 NAS 發出兩次嗶聲。
7. 將故障硬碟從硬碟托盤取下。
8. 將新的硬碟插入硬碟托盤。
9. 安裝新的硬碟。
NAS 會發出兩次嗶聲。
10. 前往 **[主選單]** > **[儲存空間總管]** > **[儲存空間]**。
11. 找出新硬碟所在的磁碟區，然後確認其狀態為 **[重建中]**。

復原意外移除的正常硬碟

NAS 支援獨家 RAID 復原技術，若有硬碟意外斷線或遭到移除，使用者可以復原失效的 RAID 硬碟磁碟區。使用者可以將失效的 RAID 1、RAID 5 或 RAID 6 磁碟區回復至降階模式，或將失效的 RAID 0 和 JBOD 組態回復至正常模式。

硬碟磁碟區	RAID 復原支援	遭移除的硬碟最大數目
單一	否	N/A
JBOD	是	1
RAID 0	是	1
RAID 1	是	1
RAID 5	是	2
RAID 6	是	3
RAID 10	否	N/A

支援和其他資源

QNAP 提供下列資源：

資源	URL
文件	https://docs.qnap.com
服務入口網站	https://service.qnap.com
下載	https://download.qnap.com
社群論壇	https://forum.qnap.com

6. 詞彙

CloudKey

指定至每個 NAS 裝置的唯一 8 位數代碼

myQNAPcloud

提供各種遠端存取服務，例如 DDNS 與 myQNAPcloud Link

myQNAPcloud ID

用來註冊 myQNAPcloud 帳號的電子郵件地址

Qfinder Pro

QNAP 應用工具可讓您定位和存取區域網路內的 QNAP NAS 裝置

QTS

QNAP NAS 作業系統

7. 聲明

本章介紹擔保、免責聲明、授權以及聯邦法規的相關資訊。

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Version 3, 29 June 2007

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Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

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The “source code” for a work means the preferred form of the work for making modifications to it.

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