



**QNAP**

# **QVP-x1C**

**QVP-21C**  
**QVP-41C**

**User Guide**

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# 1. Product Overview

This chapter provides basic information about the QNAP device.

## About the QVP-x1C

The QVP-x1C NVR network surveillance server series supports real-time video/audio monitoring, high-resolution recording, and playback from multiple IP cameras. With two or four 3.5-inch SATA drive bays, two M.2 drives, two HDMI 1.4b ports, and two 2.5 GbE host management ports, the QVP-x1C series provides great storage space and high-speed networking capability to meet the requirements of small/medium monitoring environments.

## Hardware specifications



### Warning

If your QNAP product has hardware defects, return the product to QNAP or a QNAP-authorized service center for maintenance or replacement. Any attempt to repair or perform maintenance procedures on the product by you or an unauthorized third party invalidates the warranty.

QNAP is not responsible for any damage or data loss caused by unauthorized modifications and installation of unsupported third-party applications.

For details, see the [QNAP Warranty Terms and Conditions](#).



### Tip

Model specifications are subject to change without prior notice. To see the latest specifications, go to <https://www.qnap.com>.




Ordering P/N	Drive bays	Embedded channels	Maximum channels
QVP-21C	2	8	16
QVP-41C	4	8	24






### Tip


QVP-x1C series devices come with a specified amount of free channels. To purchase additional channels, go to **Control Panel > System > License Center** for more details.

Component	QVP-21C	QVP-41C
Processor		
CPU	Intel® Celeron® J6412	
Frequency	4-core/4-thread 2.00 GHz base/2.60 GHz burst	
Architecture	x86 64-bit	
Encryption engine	AES-NI	
Memory		
Pre-installed memory	8 GB RAM (non-expandable)	
Maximum memory	8 GB RAM (non-expandable)	
Flash memory	4 GB (dual-boot OS protection)	
Storage		

Component	QVP-21C	QVP-41C
Drive bays	2 x 3.5-inch SATA 6 Gbps	4 x 3.5-inch SATA 6 Gbps
	 <b>Tip</b> The drive bays are backward compatible with SATA 3 Gbps drives.	
Drive compatibility	3.5-inch bays: <ul style="list-style-type: none"> <li>• 3.5-inch SATA hard disk drives</li> <li>• 2.5-inch SATA solid-state drives</li> </ul>	
Drive tray type	Key lock	
M.2 SSD slots	2 x PCIe Gen 3 x2	
M.2 SSD form factor	2280	
SSD cache acceleration support	This device supports SSD cache acceleration for all drives.	
Hot-swapping	The device supports hot-swapping drives except for the following: <ul style="list-style-type: none"> <li>• M.2 SSDs</li> </ul>	
Network		
2.5 Gigabit network interface	2 x 2.5 GbE RJ45   <b>Note</b> The 2.5 Gigabit Ethernet RJ45 port supports the following network connectivity speeds: 2.5 GbE, 1 GbE, 100 Mb, and 10 Mb.	
Wake-on-LAN	2 x 2.5 GbE RJ45 ports	
External I/O Ports & Expansion Slots		
USB ports	Front: <ul style="list-style-type: none"> <li>• 1 x USB 3.2 Gen 2 Type-A</li> </ul>  <b>Note</b> This USB port supports One Touch Copy.  Rear: <ul style="list-style-type: none"> <li>• 1 x USB 3.2 Gen 2 Type-A</li> <li>• 2 x USB 2.0</li> </ul>	
HDMI ports	2 x HDMI 1.4b	
Interface		
Buttons	<ul style="list-style-type: none"> <li>• Power</li> <li>• Reset</li> <li>• USB One Touch Copy</li> </ul>	
Dimensions		
Form factor	Tower	
Dimensions (H x W x D)	169.2 x 102 x 220.5 mm (6.66 x 4.01 x 8.68 in)	168.5 x 160.2 x 220.5 mm (6.63 x 6.3 x 8.68 in)

Component	QVP-21C	QVP-41C
Net weight	1.57 kg (3.46 lbs)	2.21 kg (4.87 lbs)
Others		
Power supply unit	External 60W/65W Adapter, 100-240V AC, 50/60 Hz	External 90W Adapter, 100-240V AC, 50/60 Hz
System battery	CR2032 lithium battery (3V, 220 mAh) <div style="border-left: 2px solid red; padding-left: 10px; margin-top: 10px;">  <p><b>Warning</b></p> <ul style="list-style-type: none"> <li>• This battery is a button battery. If swallowed, a lithium button battery can cause severe or fatal injuries within 2 hours. Keep batteries out of reach of children.</li> <li>• To avoid potential battery explosion, causing injury or damage to components, ensure that you replace the existing battery with a battery of the same type.</li> </ul> </div>	
Fans	System: 1 x 70mm, 12V DC fan	System: 1 x 120mm, 12V DC fan
	<div style="border-left: 2px solid red; padding-left: 10px; margin-top: 10px;">  <p><b>Warning</b></p>  <p>To avoid potential injury or damage to components, do not touch the fans while the device is connected to a power source.</p> </div>	
Operating temperature	0°C to 40°C (32°F to 104°F)	
Relative humidity	<ul style="list-style-type: none"> <li>• Non-condensing relative humidity: 5% to 95%</li> <li>• Wet-bulb temperature: 27°C (80.6°F)</li> </ul>	
Security slot	Kensington security slot	

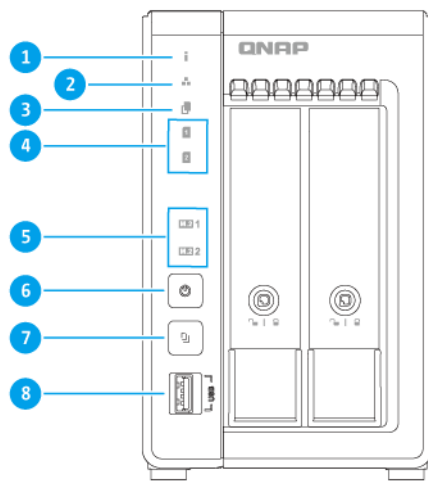
## Package contents

Item	Quantity
QVP-21C / QVP-41C	1
AC power adapter	1
Power cord	1
Ethernet cable	1 x Cat5e <div style="border-left: 2px solid blue; padding-left: 10px; margin-top: 10px;">  <p><b>Note</b> The Cat5e Ethernet cable supports transfer speeds of up to 2.5 Gbps.</p> </div>
Drive trays	<ul style="list-style-type: none"> <li>• QVP-21C: 2</li> <li>• QVP-41C: 4</li> </ul>
Drive tray keys	2
Screws for 3.5-inch drives	<ul style="list-style-type: none"> <li>• QVP-21C: 8</li> <li>• QVP-41C: 16</li> </ul>

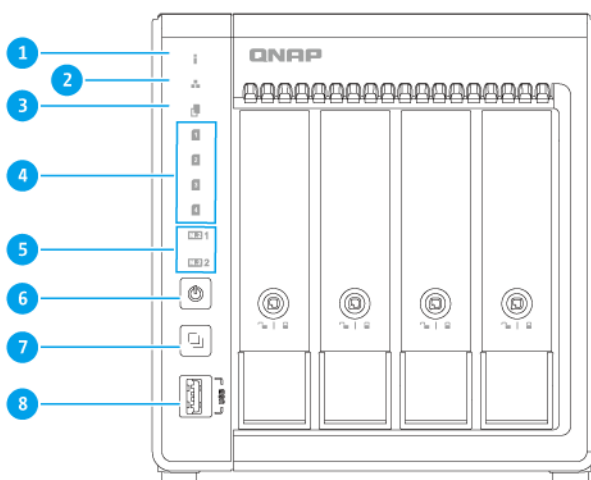
Item	Quantity
Screws for 2.5-inch drives	<ul style="list-style-type: none"> <li>• QVP-21C: 6</li> <li>• QVP-41C: 12</li> </ul>
Screws for M.2 SSDs	2
Quick Installation Guide (QIG)	1

## Components

### Front panel



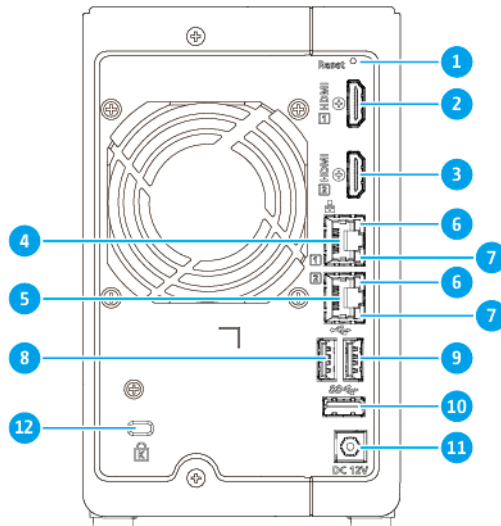
### QVP-21C



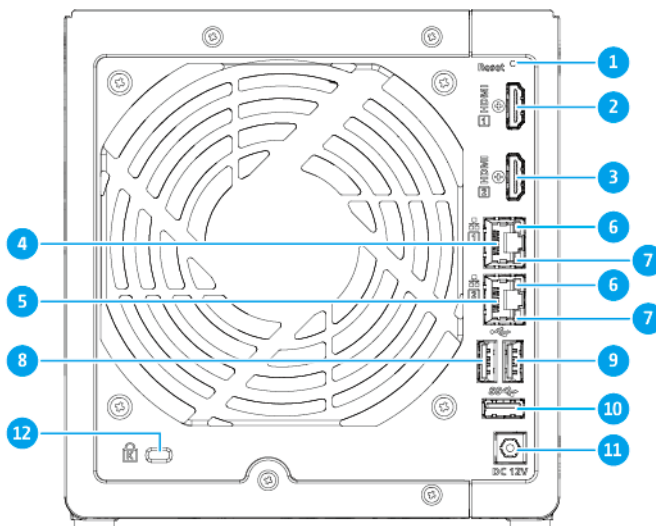
### QVP-41C

No.	Component	No.	Component
1	System status and power LED	5	M.2 SSD LEDs
2	LAN LED	6	Power button
3	USB One Touch Copy LED	7	USB One Touch Copy button
4	Drive LEDs	8	USB 3.2 Gen 2 One Touch Copy Type-A port

## Rear panel



### QVP-21C

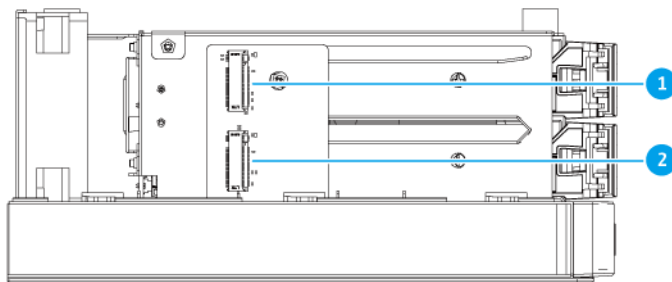


### QVP-41C

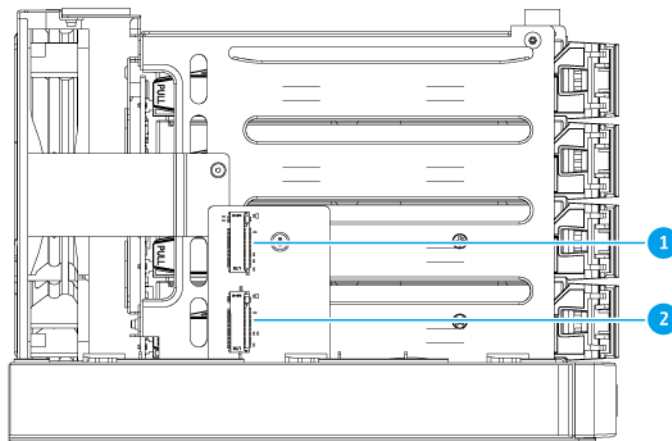
No.	Component	No.	Component
1	Reset button	7	2.5 Gigabit Ethernet speed LED
2	HDMI 1.4b port 1	8	USB 2.0 Type-A port 1

No.	Component	No.	Component
3	HDMI 1.4b port 2	9	USB 2.0 Type-A port 2
4	2.5 Gigabit Ethernet port 1 (RJ45)	10	USB 3.2 Gen 2 Type-A port
5	2.5 Gigabit Ethernet port 2 (RJ45)	11	Power input
6	2.5 Gigabit Ethernet activity LED	12	Kensington security slot

## Top panel



### QVP-21C

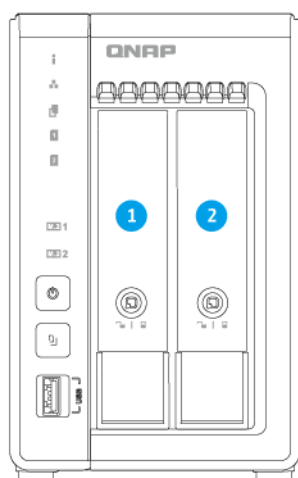


### QVP-41C

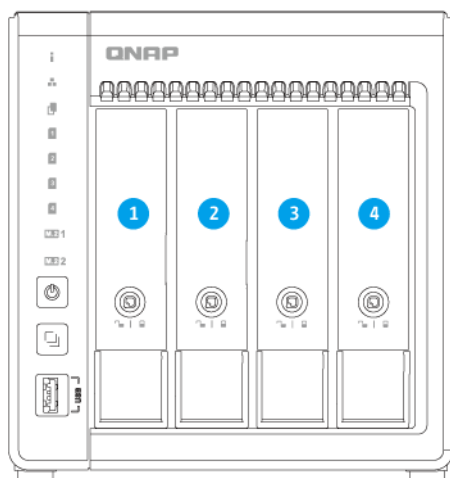
No.	Component	No.	Component
1	M.2 SSD slot 1	2	M.2 SSD slot 2



## Drive numbering



### QVP-21C



### QVP-41C

## Safety information

The following instructions help ensure personal safety and environmental safety. Read these instructions carefully before performing any operation.

### General Instructions

- The device should be stored in a secure location with restricted access, controlled through the use of a tool, lock and key, or any means of security.
- Only qualified, skilled, and authorized persons with knowledge of all restrictions, safety precautions, and installation and maintenance procedures should have physical access to the device.

- To avoid potential injury or damage to components, ensure that the drives and other internal system components have cooled before touching them.
- Observe electrostatic discharge (ESD) procedures to avoid potential injury or damage to components.

### Power

- To reduce the risk of fire or electric shock, ensure that you only connect the power cord to a properly grounded electrical outlet.
- To avoid serious injuries, a trained service technician must disconnect all PSU cords from the device before installing or replacing system components.

### System Battery

- This product contains a button battery.
- If swallowed, a lithium button battery can cause severe or fatal injuries within 2 hours.
- Keep batteries out of reach of children.
- If you think batteries may have been swallowed or placed inside any part of the body, seek immediate medical attention.
- To avoid potential battery explosion, causing injury or damage to components, ensure that you replace the existing battery with a battery of the same type.
- Dispose of used batteries properly according to local regulations or the instructions of the battery manufacturer.

### Moving Parts

- 



**Moving fan blades:** Keep your body parts away from moving fan blades while the device is connected to a power source.

- 



**Moving components:** Keep your body parts away from other moving components.

- The device is not suitable for use in locations where children are likely to be present.

## Installation requirements

Category	Item
Environment	<ul style="list-style-type: none"> <li>Room temperature: 0°C to 40°C (32°F to 104°F)</li> <li>Non-condensing relative humidity: 5% to 95%</li> <li>Wet-bulb temperature: 27°C (80.6°F)</li> <li>Flat, anti-static surface without exposure to direct sunlight, liquids, or chemicals</li> <li>Free from objects that may obstruct device ventilation or apply pressure to the device or power cord</li> </ul>
Hardware and peripherals	<ul style="list-style-type: none"> <li>Storage drives For the list of compatible drive models, go to <a href="https://www.qnap.com/compatibility">https://www.qnap.com/compatibility</a>.</li> </ul> <p>If installing QVP using Qfinder Pro, the following are also required:</p> <ul style="list-style-type: none"> <li>Computer</li> <li>Network cable</li> <li>Qfinder Pro installer</li> </ul> <p>If installing QVP using an HDMI connection, the following are also required:</p> <ul style="list-style-type: none"> <li>Monitor</li> <li>HDMI cable</li> <li>USB keyboard or Remote control (not available on all models)</li> </ul>
Tools	<ul style="list-style-type: none"> <li>Phillips #1 or #2 screwdriver</li> <li>Flat head screwdriver</li> <li>Anti-static wrist strap</li> </ul>

## Setting up the surveillance server



### Important

Read all safety requirements and information carefully before setting up the device or installing device components.

- Place your device in an environment that meets the requirements.  
For details, see [Installation requirements](#).
- Install drives.  
For details, see the following topics:
  - [Installing 2.5-inch solid-state drives on 3.5-inch trays](#)
  - [Installing 3.5-inch hard drives on 3.5-inch trays](#)
  - [Installing M.2 solid-state drives](#)

For a list of compatible drives, go to <http://www.qnap.com/compatibility>.

- 3.** Power on the device.  
For details, see [Front panel](#).
- 4.** Connect the device to a computer or network.  
For details, see [Connecting the device to a computer or network](#).
- 5.** Install QVP.  
For details, see [QVP installation](#).
- 6.** Log on to QVP.

## 2. Installation and Configuration

This chapter provides specific hardware and firmware installation and configuration steps.

### Hardware installation

This section provides information on installing drives.

### Drive installation

QVP-x1C series devices are compatible with 3.5-inch SATA hard drives, 2.5-inch solid-state drives, and M.2 solid-state drives.

### Installing 2.5-inch solid-state drives on 3.5-inch trays



#### Warning

- Installing a drive deletes all data on the drive.
- Observe electrostatic discharge (ESD) procedures to avoid damage to components.

•



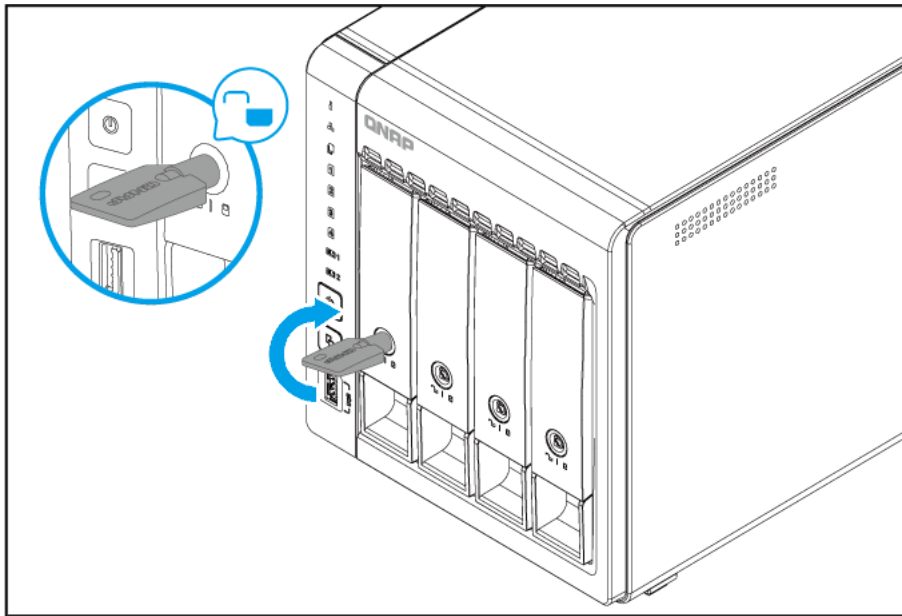
**Moving fan blades:** Keep your hands and other body parts away from moving fan blades.

•



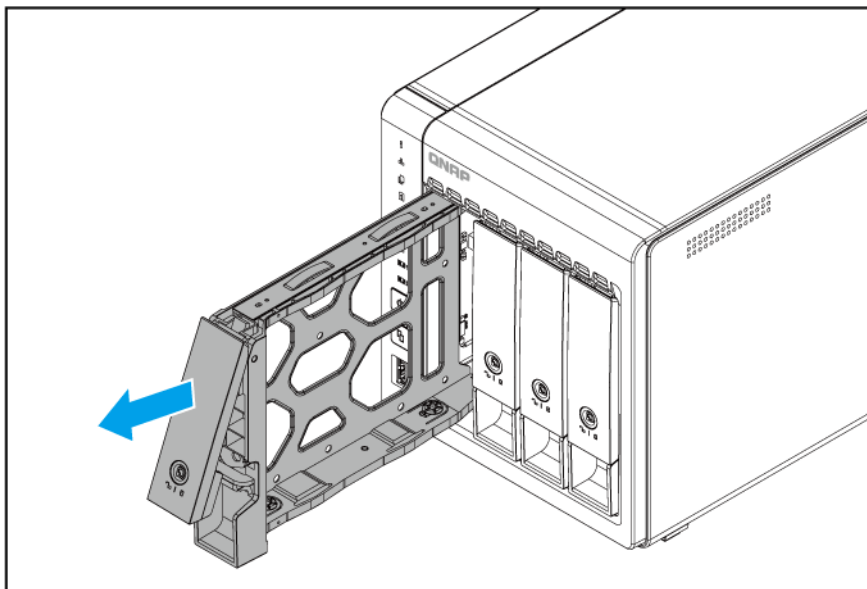
**Other moving components:** Keep your hands and other body parts away from other moving components.

1. Power off the device.
2. Remove the drive tray.
  - a. Optional: Unlock the tray.

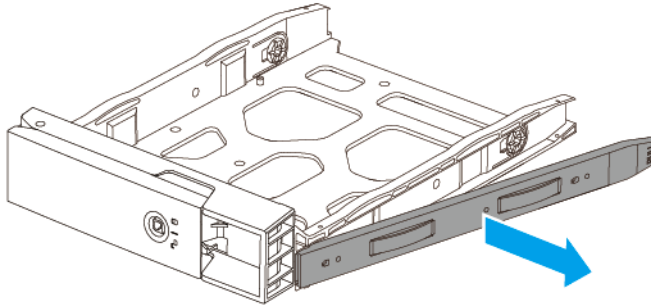
**Note**

The preinstalled drive trays come unlocked.

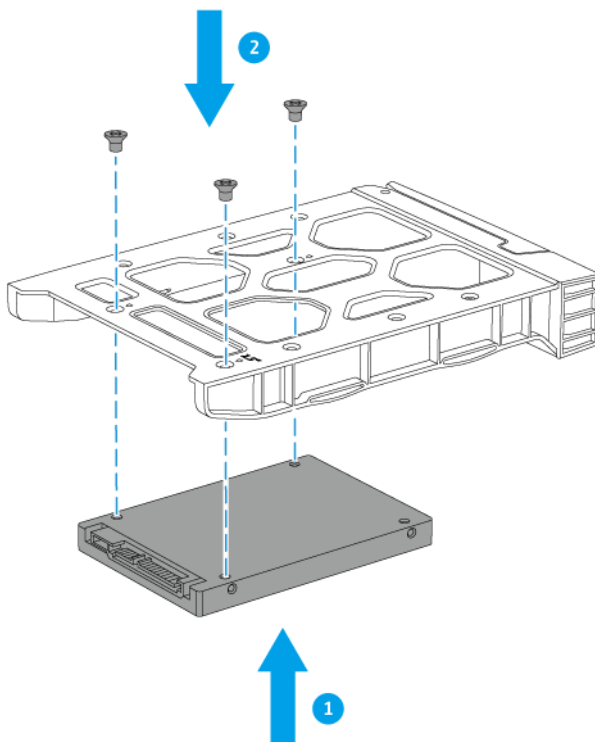
- b. Pull the handle to release the tray.
- c. Pull the tray out.



3. Install a drive on the tray.
  - a. Remove the right fastening panel from the drive tray.

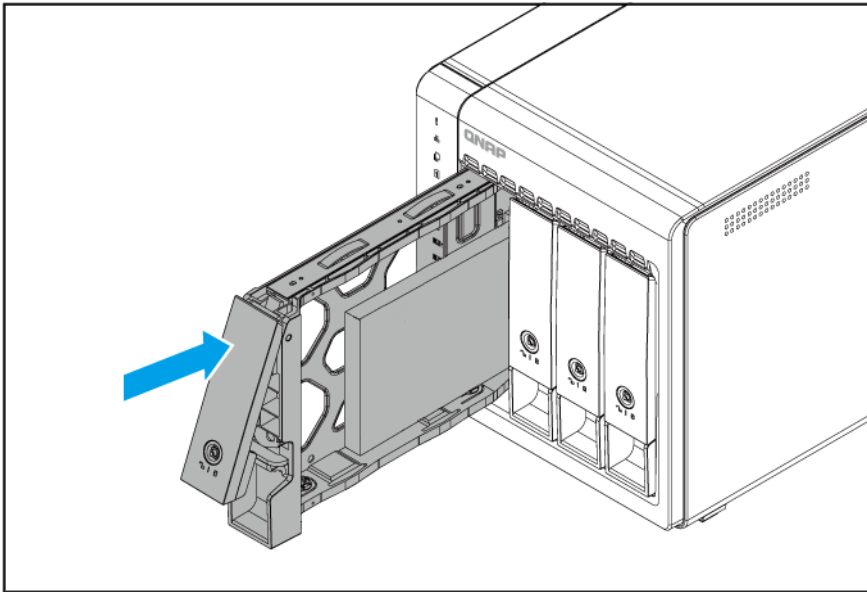


- b.** Place the drive on the tray so that the holes on the sides of the drive are aligned with the holes on the sides of the tray.
- c.** Attach the screws.

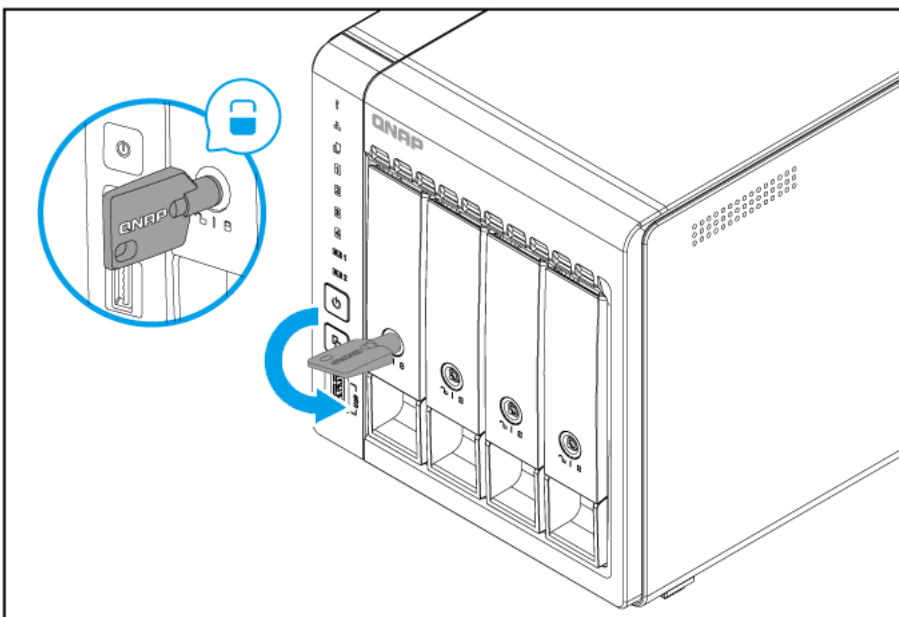


- 4.** Load the tray into the bay.
  - a.** Insert the tray into the bay.

b. Push the handle.



c. Lock the tray.



5. Power on the device.

### Installing 3.5-inch hard drives on 3.5-inch trays



#### Warning

- Installing a drive deletes all data on the drive.
- Observe electrostatic discharge (ESD) procedures to avoid damage to components.



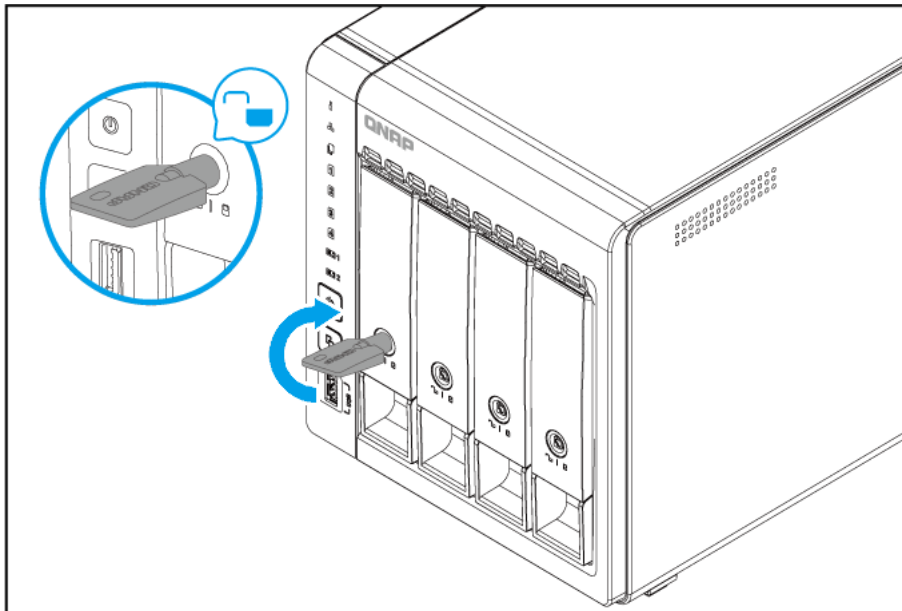


**Moving fan blades:** Keep your hands and other body parts away from moving fan blades.



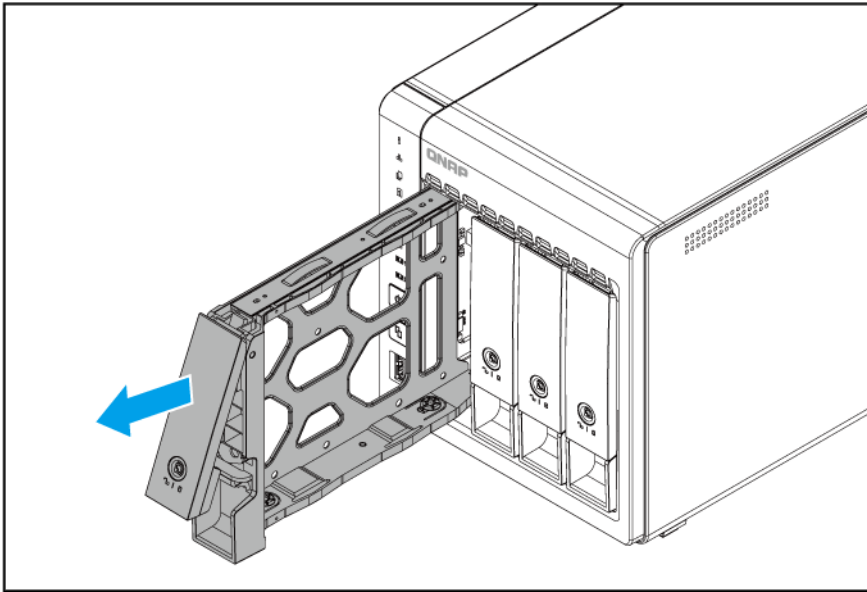
**Other moving components:** Keep your hands and other body parts away from other moving components.

1. Power off the device.
2. Remove the drive tray.
  - a. Optional: Unlock the tray.

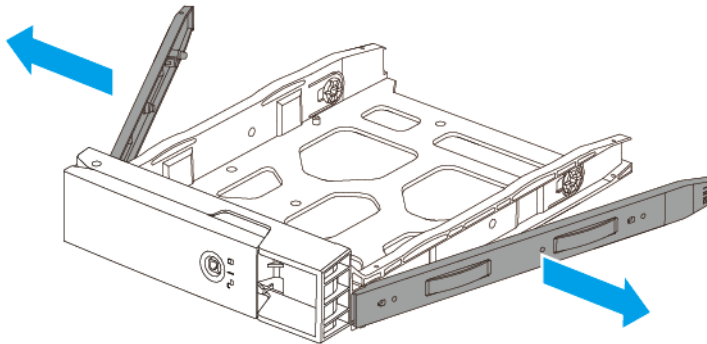
**Note**

The preinstalled drive trays come unlocked.

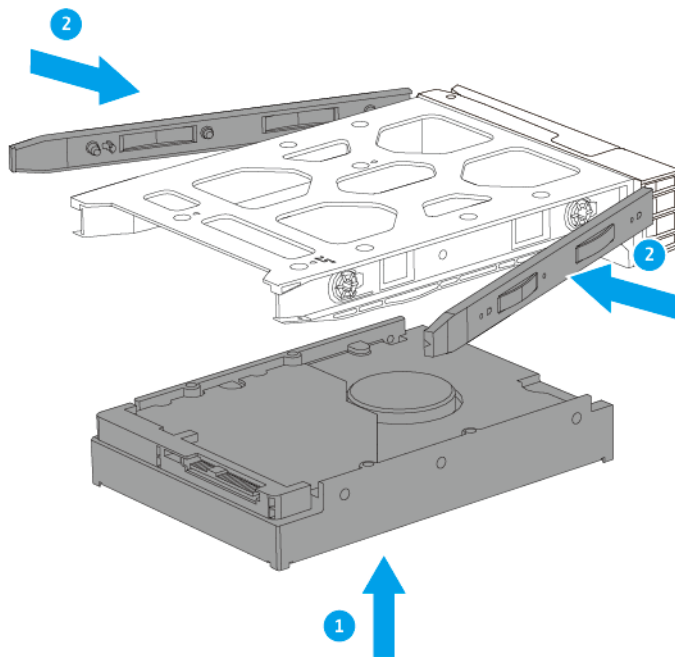
- b. Pull the handle to release the tray.
- c. Pull the tray out.



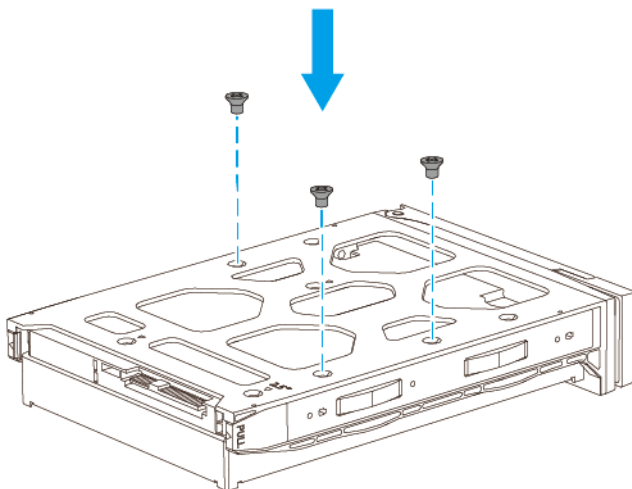
3. Install a drive on the tray.
  - a. Remove the fastening panels from the sides of the drive tray.



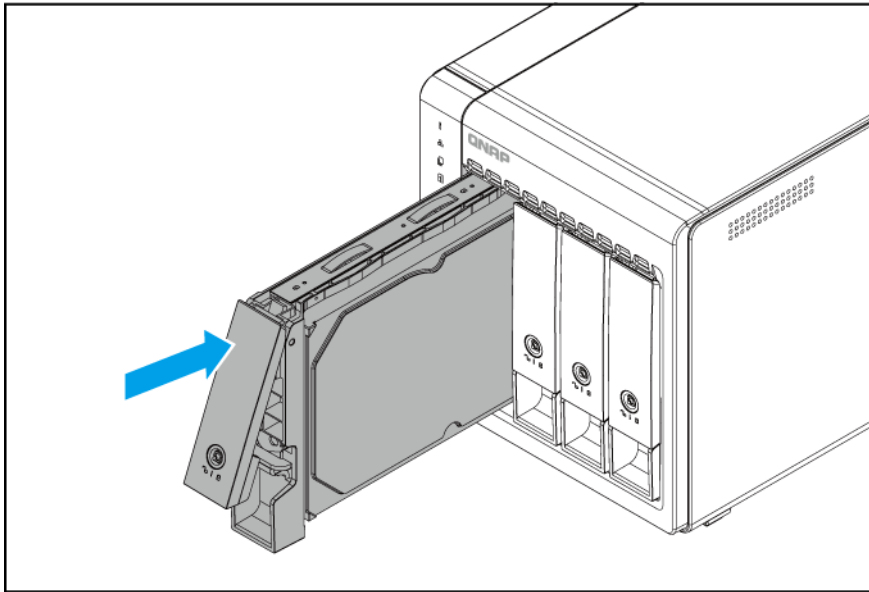
- b. Place the drive on the tray so that the holes on the sides of the drive are aligned with the holes on the sides of the tray.
    - c. Attach the fastening panels to lock the drive to the tray.



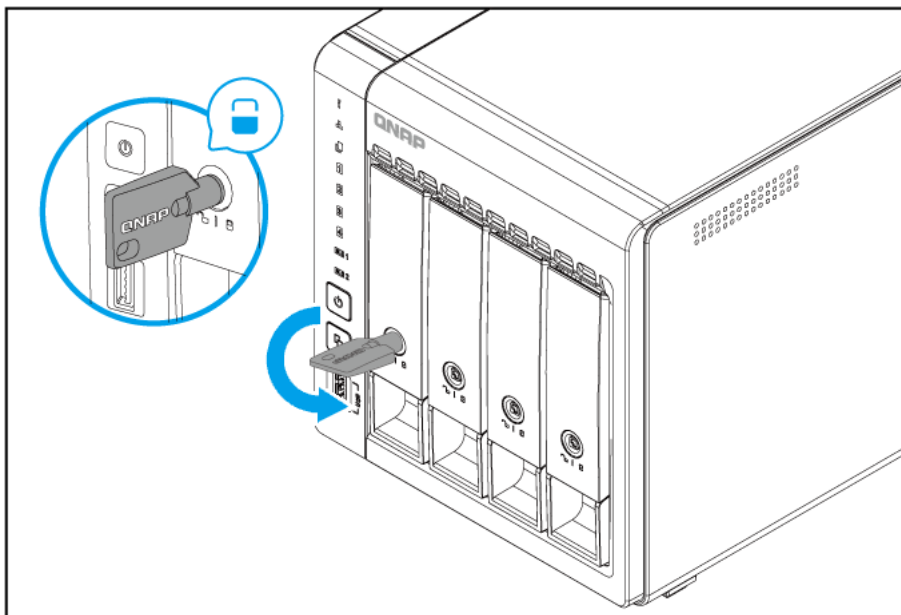
**d.** Optional: Attach the screws to further secure the drive.



- 4.** Load the tray into the bay.
  - a.** Insert the tray into the bay.
  - b.** Push the handle.



c. Lock the tray.



5. Power on the device.

### Installing M.2 solid-state drives

The QVP-x1C has two M.2 SSD slots on the top panel.

For details, see [Top panel](#).



#### Warning

- Installing a drive deletes all data on the drive.

- Observe electrostatic discharge (ESD) procedures to avoid damage to components.

- 



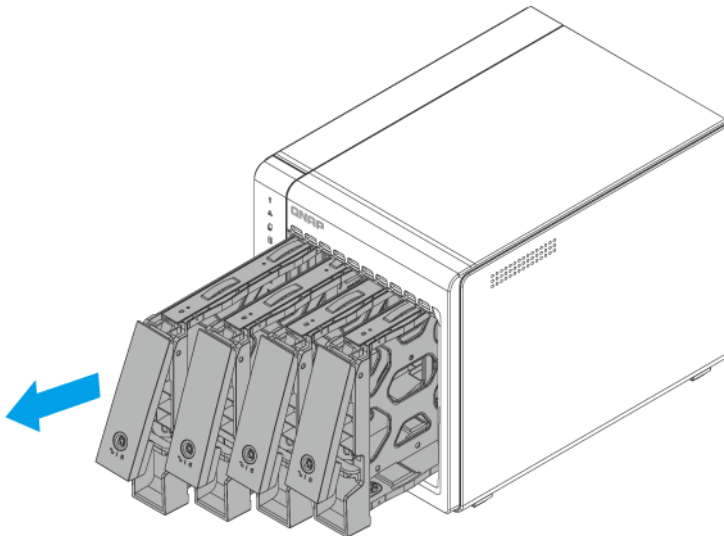
**Moving fan blades:** Keep your hands and other body parts away from moving fan blades.

- 

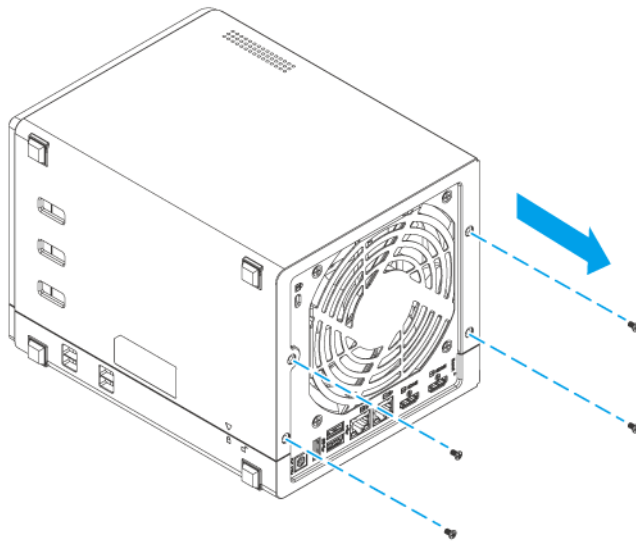


**Other moving components:** Keep your hands and other body parts away from other moving components.

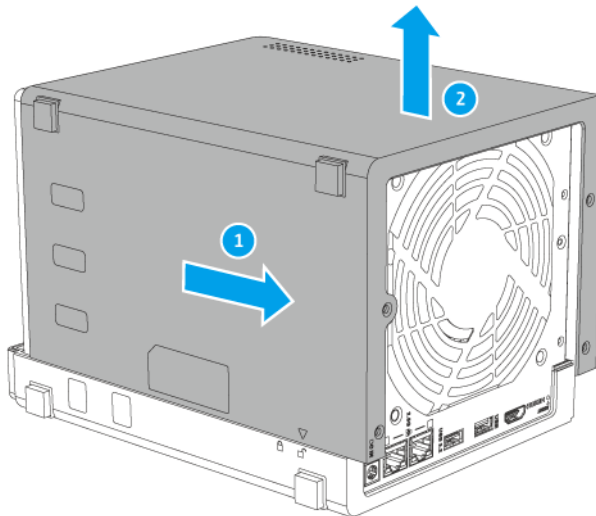
1. Power off the device.
2. Disconnect the power cord from the electrical outlet.
3. Disconnect all cables and external attachments.
4. Remove the case cover.
  - a. Remove all drive trays.



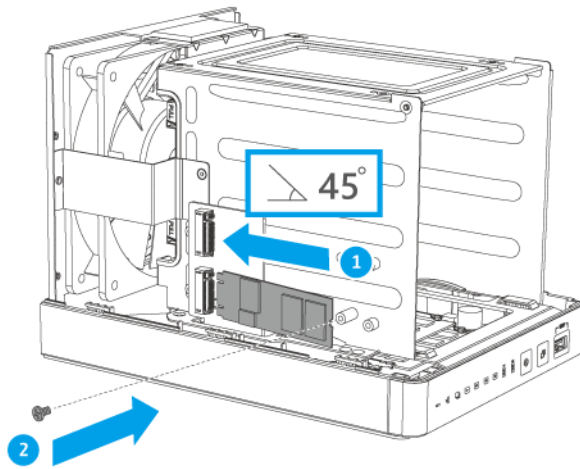
- b. Position the device on its left side.
- c. Remove the screws on the rear panel.



- d.** Slide the cover back.
- e.** Lift the cover until it is completely detached from the chassis.



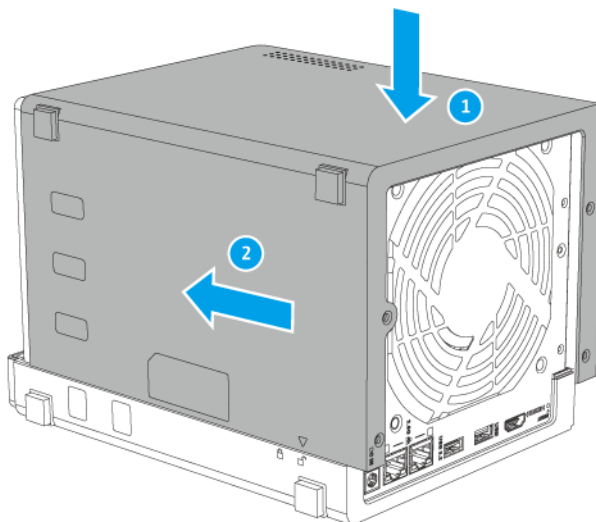
- 5.** Install the M.2 SSD.
  - a.** Insert the M.2 SSD into the slot.
  - b.** Attach the screw.



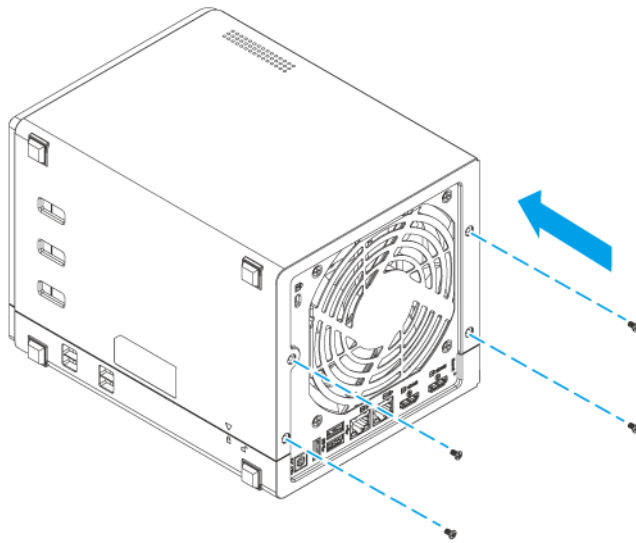
6. Optional: Install an additional M.2 SSD.

7. Attach the case cover.

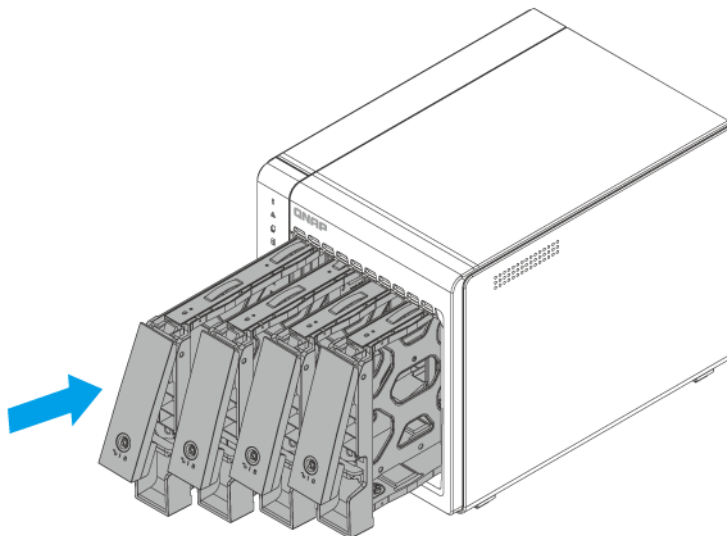
- a. Place the cover on the device.
- b. Slide the cover forward.



c. Attach the screws on the rear panel.



- d. Place the device in its normal upright position.
- e. Slide each drive tray back into the device.



- 8. Connect all cables and external attachments.
- 9. Connect the power cord to the electrical outlet.
- 10. Power on the device.

### Connecting the device to a computer or network

QVP-x1C series devices can be connected to a computer or local area network. For details, see the following topics:

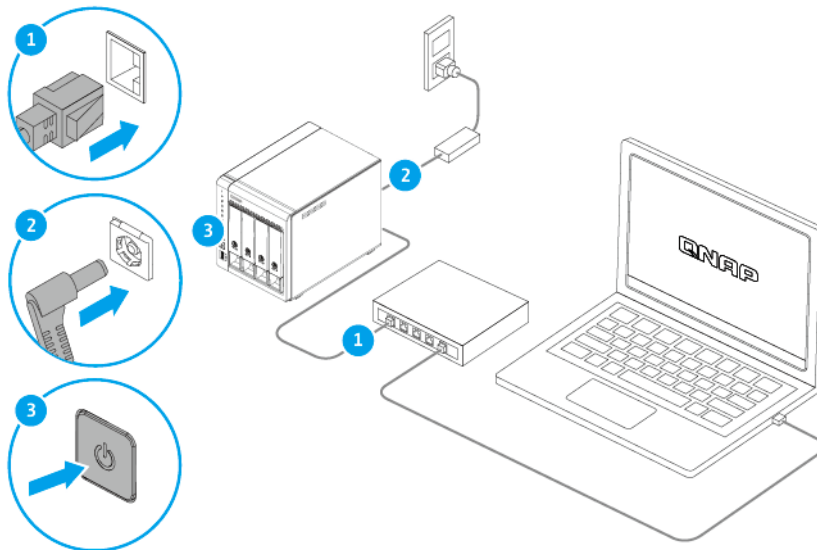


- [Connecting the device to a computer](#)
- [Connecting the device to a network](#)

## Connecting the device to a computer

Connecting QVP-x1C series devices to a QNAP NAS allows you to expand storage capacity and back up data to the NAS through Ethernet cable connections on the device. However, you must connect the QVP-x1C series device to a computer to configure device settings.

1. Power on the device.
2. Connect the device to a computer.
  - a. Connect an Ethernet cable to the device.
  - b. Connect the Ethernet cable to a Gigabit Ethernet port on the computer.



3. Verify that the device is recognized by the computer.
  - a. Open Qfinder Pro on the host computer.



### Note

To download Qfinder Pro, go to <https://www.qnap.com/utilities>.

- b. Locate the device on the list.

## Connecting the device to a network

You can connect QVP-x1C series devices to a local area network through the host port.

1. Power on the device.
2. Connect the device to your local area network.
3. Run Qfinder Pro on a computer that is connected to the same local area network.

**Note**

To download Qfinder Pro, go to <https://www.qnap.com/utilities>.

4. Locate the device in the list and then double-click the name or IP address. The QVP login screen appears.
5. Enter your QVP login information.
6. Click **Log In**.

## QVP installation

QVP-x1C series devices use the QNAP QVP operating system. You can install QVP using any of the following methods.

Method	Description	Requirements
Qfinder Pro installation (Recommended)	<p>If your device is connected to your local area network, you can do the following:</p> <ul style="list-style-type: none"> <li>• Locate the device using Qfinder Pro.</li> <li>• Complete the steps in the Smart Installation Guide wizard.</li> </ul>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Network cable</li> <li>• Qfinder Pro installer</li> </ul>
Local installation	<p>If the device supports HDMI output, you can do the following:</p> <ul style="list-style-type: none"> <li>• Connect the device to the required hardware.</li> <li>• Complete the steps in the Smart Installation Guide wizard.</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor</li> <li>• HDMI cable</li> <li>• USB keyboard or Remote control (not available on all models)</li> </ul>

## Installing QVP using Qfinder Pro

**Warning**

Installing QVP deletes all data on the drives. Back up your data before proceeding.

1. Power off the device.
2. Connect the device to your camera's local area network.

**Note**

For details, see "Adding Cameras" in the [QVP User Guide](#).

3. Run Qfinder Pro on a computer that is connected to the same local area network.

**Note**

To download Qfinder Pro, go to <https://www.qnap.com/utilities>.

4. Locate the device on the list and then double-click the name or IP address. The **Smart Installation Guide** opens in the default web browser.
5. Click **Start Smart Installation Guide**.
6. Specify the following information.

- **NAS name:** Specify a name with 1 to 14 characters. The NAS name can contain the following characters:
  - Letters (A to Z, a to z)
  - Numbers (0 to 9)
  - Hyphens (-)

**Note**

The NAS name cannot end with a hyphen.

- **Password:** Specify an administrator password with 1 to 64 characters. The password supports all ASCII characters.

7. Click **Next**.
8. Specify the time zone, date, and time.

**Tip**

QNAP recommends connecting to an NTP server to ensure that the device follows the Coordinated Universal Time (UTC) standard.

9. Click **Next**.
10. Select **Obtain an IP address automatically (DHCP)**.
11. Click **Next**.
12. Select the types of devices that you will use to access shared folders on the device.
13. Click **Next**.
14. Configure the disk settings.
  - a. Select disks for creating a volume.
  - b. Select a RAID type.
15. Click **Next**.
16. Review the settings.
17. Click **Apply**.  
A confirmation message appears.

**Warning**

Clicking **Confirm** deletes all data on the drive before starting the installation.

18. Click **Confirm**.

QVP is installed.

**Note**

The QVP installation may take up to 20 minutes to complete.

## Installing QVP using an HDMI connection



### Warning

Installing QVP deletes all data on the drives. Back up your data before proceeding.

1. Connect an HDMI display to the device.
2. Connect a USB keyboard to the device.
3. Connect the device to the network switch or router that your cameras are connected to.



### Note

For more details, see "Adding Cameras" in the [QVP User Guide](#).

4. Power on the device.  
The **Welcome** screen of the **Smart Installation Guide** appears.
5. Select **Start Smart Installation Guide**.  
The disk configuration screen appears.
6. Select disks for creating a storage pool.
7. Click **Next**.
8. Select the RAID type.
9. Click **Next**.
10. Review the settings.
11. Click **Next**.  
The **Confirm** screen appears.



### Warning

Clicking **Next** deletes all data on the drive before installation starts.

12. Click **Next**.

QVP is installed.



### Note

The QVP installation may take up to 20 minutes to complete.

## 3. Basic Operations

This chapter describes basic device operations.

### Audio alerts


Duration	Frequency	Description
Short beep (0.5 seconds)	1	<ul style="list-style-type: none"> <li>The device is starting up.</li> <li>When the reset button is pressed for 3 seconds, the device resets configuration.</li> <li>When the reset button is pressed for 10 seconds, the device resets configuration and reboots.</li> <li>The operating system was updated.</li> </ul>
	3	Cannot detect installed disk.
Long beep (1.5 seconds)	3 (every 5 minutes)	<ul style="list-style-type: none"> <li>A power error occurred.</li> <li>A system fan is not functioning.</li> <li>A fan module has been removed.</li> <li>The device data cannot be copied to the external storage device connected to the USB One Touch Copy port.</li> </ul>
	2	<ul style="list-style-type: none"> <li>A disk volume is about to reach its full capacity.</li> <li>A disk volume has reached its full capacity.</li> <li>A volume status error occurred.</li> <li>A drive is plugged in or out.</li> </ul>
	1	<ul style="list-style-type: none"> <li>The device was powered off by force shutdown (hardware shutdown).</li> <li>The device was powered on successfully and is ready.</li> </ul>
Long beep (5 seconds)	1	QVP is restarting.

### LEDs

LEDs indicate the system status and related information when the device is powered on. The following LED information applies only when the drive is correctly installed and when the device is connected to the network or to a host.

For details on the location of the LEDs, see [Components](#).

## System Status LED

Status	Description
Flashes green and red alternately every 0.5 seconds	<ul style="list-style-type: none"> <li>• A drive is being formatted.</li> <li>• The device is being initialized.</li> <li>• The operating system is being updated.</li> <li>• RAID rebuilding is in progress.</li> <li>• Online RAID Capacity Expansion is in progress.</li> <li>• Online RAID Level Migration is in progress.</li> <li>• The firmware is being updated.</li> </ul> <p> <b>Important</b> When updating the firmware, do not remove the power cord or USB cable, and do not force-exit the application.</p>
Red	<ul style="list-style-type: none"> <li>• A drive is invalid.</li> <li>• A disk volume has reached its full capacity.</li> <li>• A disk volume is about to reach its full capacity.</li> <li>• A system fan is not functioning.</li> <li>• An error occurred when accessing (read/write) the data.</li> <li>• A bad sector is detected on the hard drive.</li> <li>• The device is in degraded read-only mode (two member drives failed in RAID 5 or RAID 6 but the data can still be read).</li> <li>• A hardware self-test error occurred.</li> </ul>
Flashes red every 0.5 seconds	The device is in degraded mode (one member drive failed in RAID 1, RAID 5, or RAID 6).
Green	The device is ready.
Flashes green every 0.5 seconds	<ul style="list-style-type: none"> <li>• The device is starting up.</li> <li>• The device is not configured.</li> <li>• A drive is not formatted.</li> </ul>
Off	<ul style="list-style-type: none"> <li>• All drives are in standby mode.</li> <li>• The device is powered off.</li> </ul>

## Drive LED

Status	Description
Flashes red	Data is being accessed, and during the process a drive read/write error occurred.
Red	A drive read/write error occurred.
Flashes green	Data is being accessed.

Status	Description
Green	The drive is ready.
Off	No drive was detected.

## M.2 SSD LED

Status	Description
Flashes red	Data is being accessed, and during the process a drive read/write error occurred.
Red	A drive read/write error occurred.
Flashes green	Data is being accessed.
Green	The drive is ready.
Off	No drive was detected.

## Drive Status LED

Status	Description
Green	The drive is ready.
Red	A drive read/write error occurred.
Flashes red 5 times per second	The drive is being located in the operating system.
Off	No drive was detected.

## Drive Activity LED

Status	Description
Green	The drive is ready.
Flashes green	The drive is being accessed.
Off	No drive was detected.

## LAN LED

Status	Description
Orange	The network connection is operating.
Flashes orange	The device is being accessed from the network.
Off	The device is not connected to a network.

## 2.5 Gigabit Ethernet Speed LED

Status	Description
Green	The network connection is operating at 2.5 Gbps.
Orange	The network connection is operating at 1 Gbps. The network connection is operating at 1 Gbps or 100 Mbps.
Off	<ul style="list-style-type: none"> <li>The network connection is operating at 100 Mbps. The network connection is operating at 10 Mbps.</li> <li>There is no network connection.</li> </ul>

## 2.5 Gigabit Ethernet Activity LED

Status	Description
Orange	A network connection has been established.
Flashes orange	The device is being accessed from the network.
Off	There is no network connection.


## USB LED

Status	Description
Blue	A USB device connected to the front USB port is detected.
Off	No USB expansion unit has been detected.

## USB One Touch Copy LED

Status	Description
Flashes blue every 0.5 seconds	<ul style="list-style-type: none"> <li>A USB device connected to the USB One Touch Copy port is detected.</li> <li>A USB device connected to the front USB port is being removed from the device.</li> <li>A USB device connected to the front USB port is being accessed.</li> </ul>
Blue	A USB device is detected in the front USB port.
Off	<ul style="list-style-type: none"> <li>No USB device is detected.</li> <li>The host device has finished copying data to or from the USB device connected to the front USB port.</li> </ul>

## Power button

Operation	User Action	Result
Power on	Press the button once.	The device powers on.
Power off	Press and hold the button for 1.5 seconds.	The device powers off.
Force power off	Press and hold the button for 5 seconds.	The device powers off. <div style="display: flex; align-items: center; margin-top: 10px;">  <div> <p><b>Important</b></p> <p>Use this method only when the device is unresponsive.</p> </div> </div>



## Reset button



### Important

- The default "admin" account is automatically enabled after the system reset.
- To protect your device from brute force attacks, QNAP recommends disabling the default "admin" account after a system reset. To disable the account, change the default admin password, log out of QVP, and then log in to QVP with another admin account.



Operation	User Action	Result
Basic system reset	Press and hold the button for 3 seconds.	<p>The following settings are reset to default:</p> <ul style="list-style-type: none"> <li>• System administrator password: The default password is the first MAC address in uppercase letters without special characters. For example, if the first MAC address is 00-08-9B-F6-15-75, then the admin password would be 00089BF61575.</li> </ul> <p> <b>Tip</b> You can find the first MAC address with Qfinder Pro or attached to a label on the device listed as MAC1.</p> <ul style="list-style-type: none"> <li>• The admin account is automatically enabled.</li> <li>• TCP/IP configuration: <ul style="list-style-type: none"> <li>• Obtain IP address settings automatically via DHCP</li> <li>• Disable jumbo frames</li> <li>• If port trunking is enabled (multi-LAN models only), the port trunking mode is reset to "Active Backup (Failover)".</li> </ul> </li> <li>• System port: 8080 (system service port)</li> <li>• Security level: Low (Allow all connections)</li> <li>• VLAN: Disabled</li> </ul>
Advanced system reset	Press and hold the button for 15 seconds.	<p>The default factory settings are restored.</p> <p> <b>Tip</b> To retrieve old data after an advanced system reset, recreate the previous folder structure on the device.</p>

## USB One Touch Copy button

The USB One Touch Copy button allows you to copy data backups from a USB device to the QNAP device or from the QNAP device to a USB device.

This feature supports incremental backups. The QNAP device only copies files that were modified or added after the last backup.

To configure the behavior of the button when an external device is connected to the button's USB port, install and use Hybrid Backup Sync on your QNAP operating system. For details, see the [Hybrid Backup Sync](#) documentation.

## 4. Troubleshooting

This chapter describes basic troubleshooting information.

### Forcing Qfinder Pro or myQNAPcloud to locate the device

If Qfinder Pro is unable to locate the device during QVP installation, the drives or data may be faulty.

1. Power off the device.
2. Remove all drives.
3. Power on the device.
4. Locate the device using Qfinder Pro or myQNAPcloud.
5. Reinsert the drives.
6. Continue with the QVP installation.

### Hot-swapping failed drives

The device supports hot-swapping of drives in the following situations:

RAID Type	Number of Disks	Situation
RAID 1	2	One member drive fails.
RAID 5	$\geq 3$	One member drive fails.
RAID 6	$\geq 4$	One or two member drives fail.
RAID 10	$\geq 4$ (Must be an even number)	One or two member drives in two different pairs fail.

1. Log on to QVP.
2. Go to **Main Menu > Storage Manager > Disks** .
3. Locate the failed drive.
4. Prepare a new hard drive with a capacity that is the same as or larger than the failed hard drive.
5. Remove the failed drive from the device.
6. Wait for 20 seconds or until the device beeps twice.
7. Remove the failed drive from the drive tray.
8. Insert the new drive into the drive tray.
9. Install the new drive.  
The device beeps twice
10. Go to **Main Menu > Storage Manager > Storage Space** .
11. Locate the volume that contains the new drive and then verify that the status is `Rebuilding`.

## Recovering unintentionally removed healthy drives

The device supports exclusive RAID recovery technology to recover failed RAID disk volumes from unintentional disconnection or removal of drives. Users can recover an inactive RAID 0, RAID 1, RAID 5, RAID 6, or RAID 10 volume from degraded mode.

RAID Type	RAID Recovery Support	Number of Disks	Disk Failure Tolerance
Single	No	1	N/A
JBOD	Yes	$\geq 2$	N/A
RAID 0	Yes	$\geq 2$	N/A
RAID 1	Yes	2	1
RAID 5	Yes	$\geq 3$	1
RAID 6	Yes	$\geq 4$	2
RAID 10	Yes	$\geq 4$ (Must be an even number)	One disk per subgroup fails.

## Support and other resources

QNAP provides the following resources:

Resource	URL
Documentation	<a href="https://download.qnap.com">https://download.qnap.com</a>
Compatibility List	<a href="https://www.qnap.com/compatibility">https://www.qnap.com/compatibility</a>
NAS Migration Compatibility	<a href="https://www.qnap.com/go/nas-migration">https://www.qnap.com/go/nas-migration</a>
Expansion Unit Compatibility	<a href="https://www.qnap.com/go/compatibility-expansion">https://www.qnap.com/go/compatibility-expansion</a>
Service Portal	<a href="https://service.qnap.com">https://service.qnap.com</a>
Product Support Status	<a href="https://www.qnap.com/go/product/eol.php">https://www.qnap.com/go/product/eol.php</a>
Downloads	<a href="https://download.qnap.com">https://download.qnap.com</a>
Community Forum	<a href="https://forum.qnap.com">https://forum.qnap.com</a>
QNAP Accessories Store	<a href="https://shop.qnap.com">https://shop.qnap.com</a>

## 5. Glossary

### **myQNAPcloud**

Provides various remote access services such as DDNS and myQNAPcloud Link

### **Qfinder Pro**

QNAP utility that lets you locate and access QNAP devices in your local area network

### **QVP**

Operating system dedicated for QNAP surveillance services

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Version 3, 29 June 2007

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**UKCA notice**



This device complies with the UKCA requirements for products sold in Great Britain.

**FCC notice**

**FCC Class B Notice**



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

**Note**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

**Important**

Any modifications made to this device that are not approved by QNAP Systems, Inc. may void the authority granted to the user by the FCC to operate this equipment.

**VCCI notice**

VCCI-B

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## SJ/T 11364-2006



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显示	0	0	0	0	0	0
印刷电路板	0	0	0	0	0	0
金属螺帽	0	0	0	0	0	0
电缆组装	0	0	0	0	0	0
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