



# Lyve Mobile Array User Manual

---



**Hier klicken, um eine aktuelle Online-Version** dieses Dokuments aufzurufen. Auch finden Sie hier die aktuellsten Inhalte sowie erweiterbare Illustrationen, eine übersichtlichere Navigation sowie Suchfunktionen.

# Contents


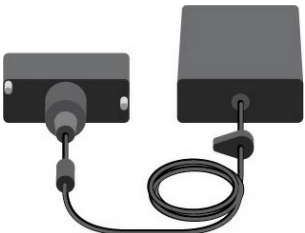




<b>1</b>	<b>Welcome</b>	<b>4</b>
	Box content	4
	Minimum system requirements	5
	• Computer	5
	• Operating system	5
	Specifications	5
	• Dimensions	6
	• Weight	6
	• Electrical	6
	Ports	6
	• Direct attached storage (DAS) ports	6
	• Seagate Lyve Rackmount Receiver ports	7
<b>2</b>	<b>Setup Requirements</b>	<b>8</b>
	Lyve Mobile security	8
	Download Lyve Client	8
	Authorize host computers	8
<b>3</b>	<b>Connection Options</b>	<b>10</b>
<b>4</b>	<b>Direct-Attached Storage (DAS) Connections</b>	<b>11</b>
	Connect power	11
	Connect to host computer	11
	• Windows Prompt: Approve Thunderbolt Device	12
	Unlock the device	13
	Power button	13
	Cycle power when switching connection types	14
<b>5</b>	<b>Lyve Rackmount Receiver Connections</b>	<b>15</b>
	Connect Ethernet port	15
	Connect Lyve Mobile Array	15
	Turn on power	17
	Unlock the device	17
<b>6</b>	<b>Status LED</b>	<b>19</b>
	Key	19
<b>7</b>	<b>Lyve Mobile Shipper</b>	<b>21</b>
<b>8</b>	<b>Magnetic Labels</b>	<b>22</b>
<b>9</b>	<b>Regulatory Compliance</b>	<b>23</b>



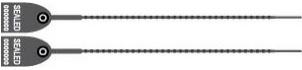
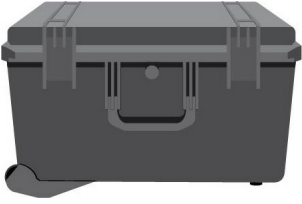
FCC DECLARATION OF CONFORMANCE .....	23
CLASS B .....	23
VCCI-B .....	23
China RoHS .....	23
Taiwan RoHS .....	24

# Welcome

Seagate® Lyve™ Mobile Array is a portable, rackable data storage solution designed to quickly and securely store data at the edge or move data across your enterprise. Both the full-flash and hard drive versions enable universal data compatibility, versatile connectivity, secure encryption, and ruggedized data transportation.

## Box content

Part	Description
	Lyve Mobile Array
	Power adapter
	US power cord
	EU power cord
	UK power cord
	AU/NZ power cord

	Thunderbolt™ 3 cable (up to 40Gb/s)
	SuperSpeed USB-C to USB-C cable (USB 3.1 Gen 2, up to 10Gb/s)
	SuperSpeed USB-C to USB-A cable (USB3.1 Gen 1, up to 5Gb/s and compatible with USB 3.0 ports)
	Magnetic labels (x3)
	Security ties (x2)
	Shipping case
	Quick start guide

## Minimum system requirements

### Computer

Computer with one of the following:

- Thunderbolt 3 port
- USB-C port
- USB-A port (USB 3.0)



Lyve Mobile Array does not support HighSpeed USB (USB 2.0) cables or interfaces.

### Operating system

- Windows® 10, version 1909 or Windows 10, version 20H2 (latest build)
- macOS® 10.15.x or macOS 11.x

## Specifications

## Dimensions

Side	Dimensions (in/mm)
Length	16.417 in/417 mm
Width	8.267 in/210 mm
Depth	5.787 in/147 mm

## Weight

Model	Weight (lb/kg)
SSD	21.164 lb/9.6 kg
HDD	27.7782 lb/12.6 kg

## Electrical

Power adapter 260W (20V/13A)

**!** When charging the device using the power supply port, use only the power supply provided with your device. Power supplies from other Seagate and third-party devices can damage your Lyve Mobile Array.

## Ports



## Direct attached storage (DAS) ports

Use the following ports when connecting Lyve Mobile Array to a computer:

A	<b>Thunderbolt™ 3 (host) port</b> —Connect to Windows and macOS computers.
B	<b>Thunderbolt™ 3 (peripheral) port</b> —Connect to peripheral devices.
D	<b>Power input</b> —Connect the power adapter (20V/13A).
E	<b>Power button</b> —See <a href="#">Direct-Attached Storage (DAS) Connections</a> .

## Seagate Lyve Rackmount Receiver ports

The following ports are used when Lyve Mobile Array is mounted in a Lyve Rackmount Receiver:

C	<b>Lyve USM™ Connector (High Performance PCIe gen 3.0)</b> —Transfer large amounts of data to your private or public cloud for efficient throughput up to 6GB/s on supported fabrics and networks.
D	<b>Power input</b> —Receive power when mounted in Rackmount Receiver.

# Setup Requirements

## Lyve Mobile security

Lyve Mobile offers two ways for project admins to manage how end users securely access Lyve Mobile storage devices:

**Lyve Portal Identity**—End users authorize client computers to access Lyve Mobile devices using their Lyve Management Portal credentials. Requires an internet connection for initial setup and periodic reauthorization through Lyve Management Portal.

**Lyve Token Security**—End users are provided with Lyve Token files that can be installed on certified client computers and Lyve Mobile Padlock devices. Once configured, computers/Padlock devices unlocking Lyve Mobile devices do not require continual access to Lyve Management Portal or the internet.



For details on setting up security, go to [www.seagate.com/lyve-security](http://www.seagate.com/lyve-security).

## Download Lyve Client

To unlock and access Lyve devices connected to your computer, you must enter your username and password in the Lyve Client app. You can also use it to manage Lyve projects and data operations. Install Lyve Client on any computer intended to connect to Lyve Mobile Array. Download the Lyve Client installer for Windows® or macOS® at [www.seagate.com/support/lyve-client](http://www.seagate.com/support/lyve-client)

## Authorize host computers

An internet connection is required when authorizing a host computer.

1. Open Lyve Client on a computer intended to host Lyve Mobile Array.
2. When prompted, enter your Lyve Management Portal username and password.

Lyve Client authorizes the host computer to unlock and access Lyve devices and manage projects on the Lyve Management Portal.

The host computer remains authorized for up to 30 days, during which you can unlock and access connected devices even without an internet connection. After 30 days, you'll need to open Lyve Client on the computer and re-enter your credentials.





Lyve Mobile Array locks when powered off, ejected or unplugged from the host computer, or if the host computer goes to sleep. Use Lyve Client to unlock Lyve Mobile Array when it is reconnected to the host or the host has awakened from sleep. Note that Lyve Client must be open and the user must be signed in to use Lyve Mobile Array.

# Connection Options



Lyve Mobile Array can be used as direct-attached storage. See [Direct-Attached Storage \(DAS\) Connections](#).



Lyve Mobile Array can also support connections via Fibre Channel, iSCSI and Serial Attached SCSI (SAS) connections using the Lyve Rackmount Receiver. For details, see the [Lyve Rackmount Receiver user manual](#).



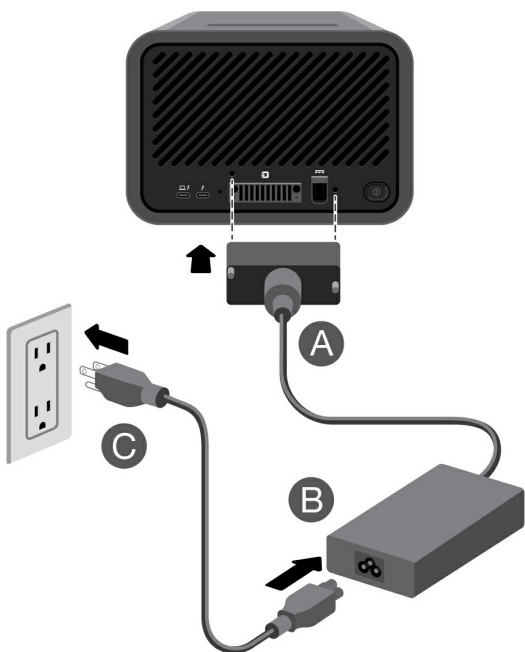
For high-speed mobile data transfers, connect Lyve Mobile Array using the Lyve Mobile PCIe Adapter. See the [Lyve Mobile Mount and PCIe Adapter user manual](#) or [Lyve Mobile Mount and PCIe Adapter - Front Loader user manual](#).

# Direct-Attached Storage (DAS) Connections

## Connect power

Connect the included power supply in the following order:

- Connect the power supply to Lyve Mobile Array's power input.
- Connect the power cord to the power supply.
- Connect the power cord to a live power outlet.



Use only the power supply provided with your device. Power supplies from other Seagate and third-party devices can damage Lyve Mobile Array.

## Connect to host computer

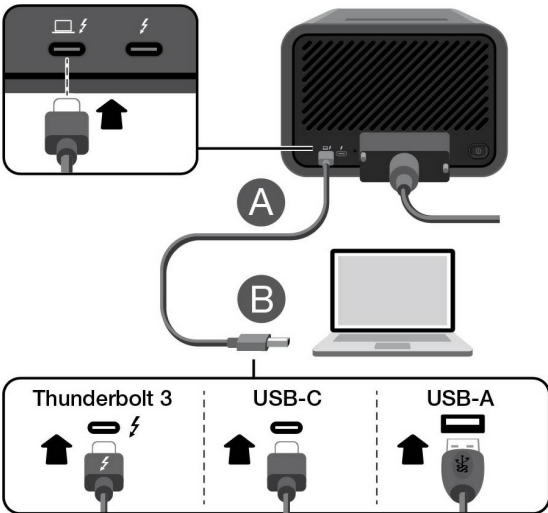
Lyve Mobile Array is shipped with three types of cables to connect to host computers. Review the following table for cable and host port options.

Cables	Host port
Thunderbolt 3	Thunderbolt 3, Thunderbolt 4

USB-C to USB-C	USB 3.1 Gen 1 or higher
USB-C to USB-A	USB 3.0 or higher

Connect Lyve Mobile Array to a computer in the following order:

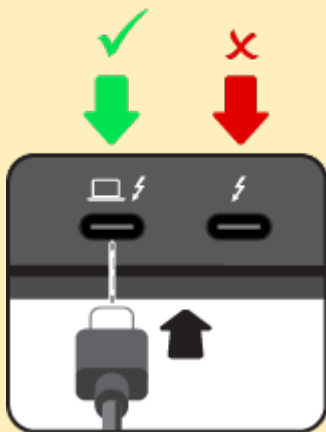
- A. Connect the Thunderbolt 3 cable to Lyve Mobile Array's Thunderbolt 3 host port located on the left side of the back panel.
- B. Connect the other end to an appropriate port on the host computer.



### Windows Prompt: Approve Thunderbolt Device

When you first connect Lyve Mobile Array to a Windows PC that supports Thunderbolt 3, you may see a prompt requesting to authenticate the recently connected device. Follow the onscreen prompts to approve the Thunderbolt connection to Lyve Mobile Array. For more details on Thunderbolt connectivity to your Windows PC, see the following [knowledge base article](#).

- ! If you are using a USB host and the Lyve Mobile Array status LED is illuminated with an amber chase pattern, make sure the cable is connected to Lyve Mobile Array's Thunderbolt 3/USB-C host port. **The host port is the USB-C port with the computer icon.** An amber chase pattern indicates that the computer is connected to the peripheral port.



## Unlock the device

The LED on the device blinks white during the boot process and turns solid orange. The solid orange LED color indicates the device is ready to be unlocked.



Once the device has been unlocked by a valid Lyve Portal Identity or Lyve Token file, the LED on the device turns solid green. The device is unlocked and ready for use.

## Power button

**Power on**—A direct connection to a computer is not required to power on Lyve Mobile Array. It automatically powers on when connected to a power outlet.

**Power off**—Before powering off Lyve Mobile Array, make certain to safely eject its volumes from the host computer. Apply a long press (3 seconds) to the power button to turn off Lyve Mobile Array.



If Lyve Mobile Array is off but still connected to power, you can turn Lyve Mobile Array back on by applying a short press (1 second) to the power button.

## Cycle power when switching connection types

Switching from one DAS connection type (Thunderbolt, USB, or PCIe Adapter) to another can result in missing volumes. Windows users can also experience a blue screen error.

To avoid these issues, use the following procedure when changing connection types:

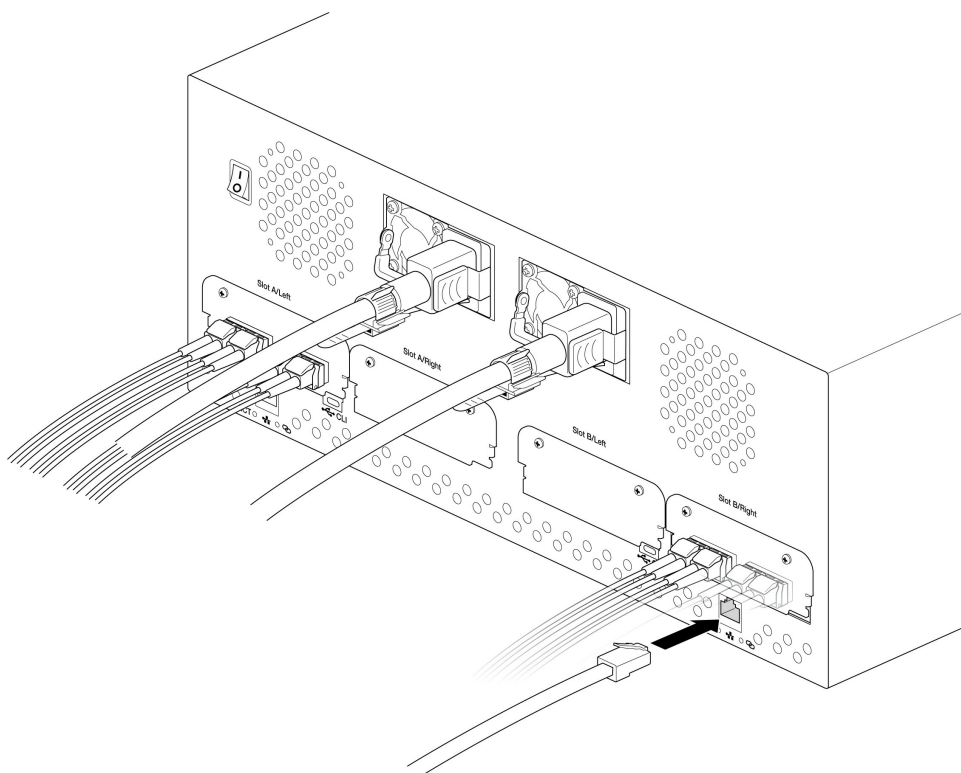
1. Safely eject the volume.
2. Power off Lyve Mobile Array.
3. Change the connection as needed.
4. Power on Lyve Mobile Array.

# Lyve Rackmount Receiver Connections

For details on configuring Seagate Lyve Rackmount Receiver for use with Lyve Mobile Array and other compatible devices, see the [Lyve Rackmount Receiver user manual](#).

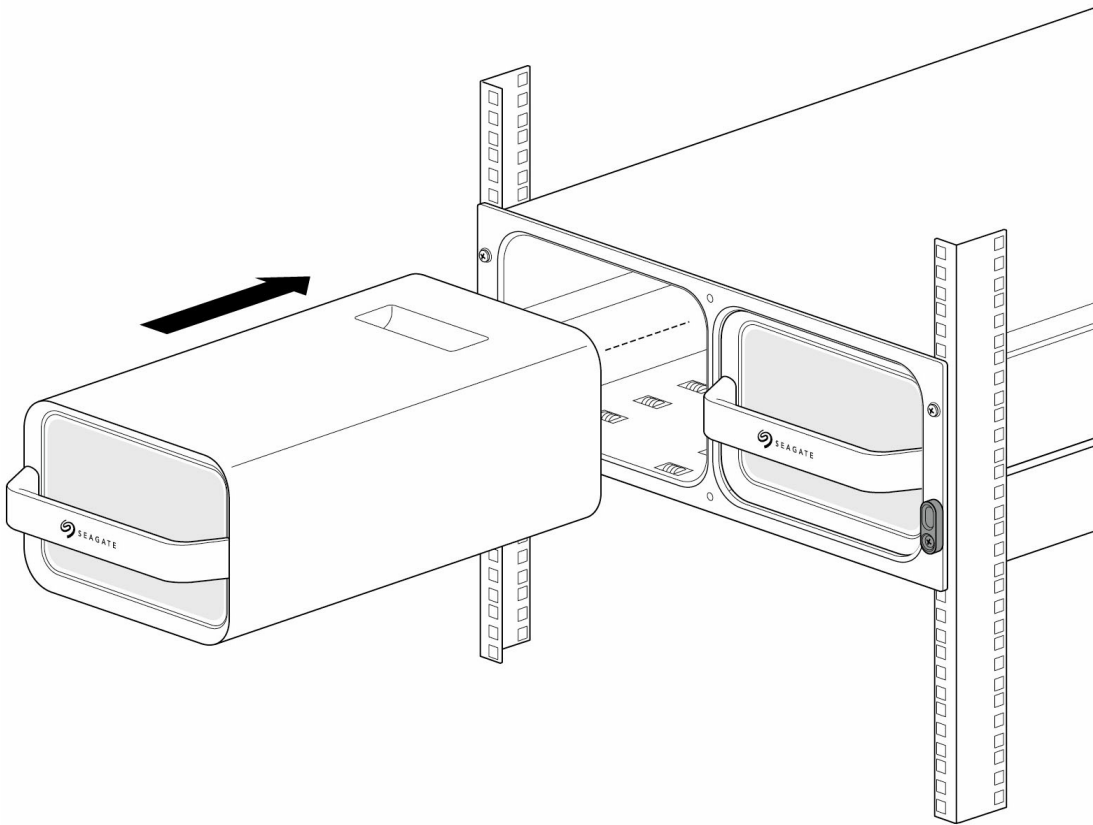
## Connect Ethernet port

Lyve Client communicates with devices inserted in Lyve Rackmount Receiver via the Ethernet management ports. Ensure that the Ethernet management ports are connected to the same network as the host devices running Lyve Client. If no device is inserted in a slot, there's no need to connect its corresponding Ethernet management port to the network.



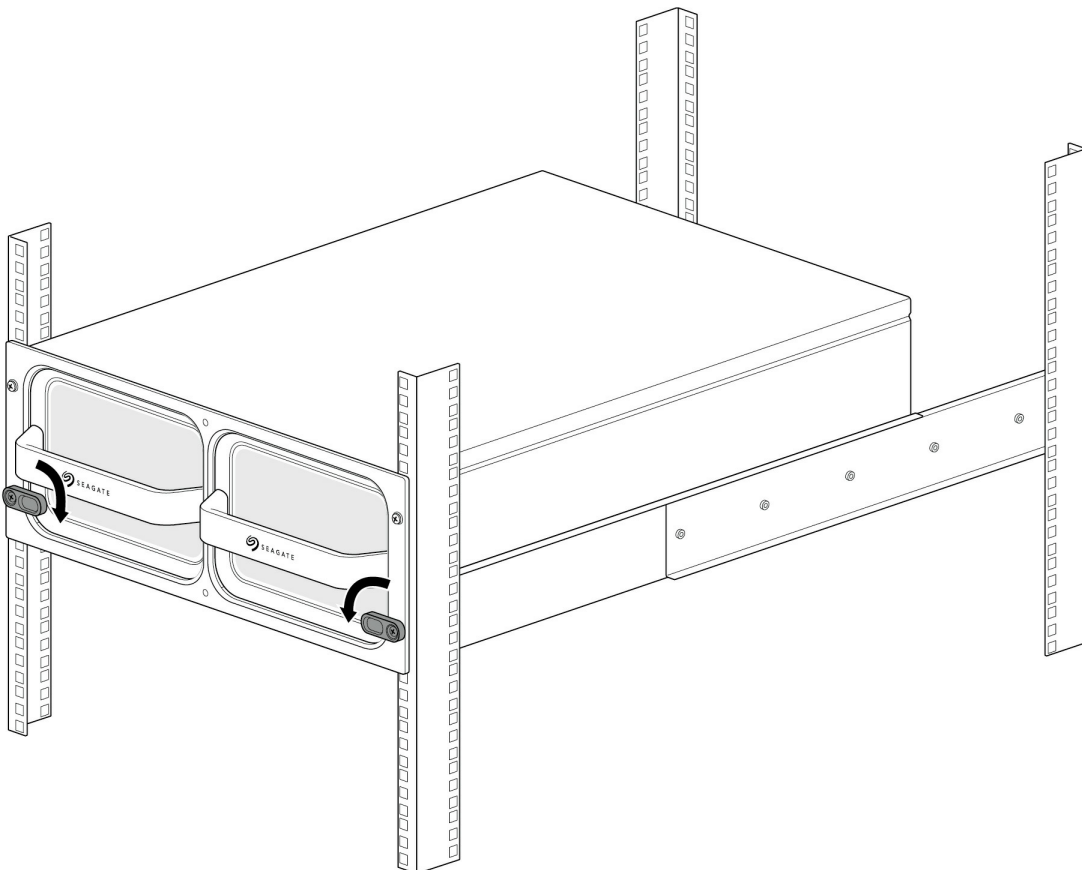
## Connect Lyve Mobile Array

Insert Lyve Mobile Array into slot A or B on Rackmount Receiver.



Slide device in until it's fully inserted and firmly connected to Rackmount Receiver's data and power.

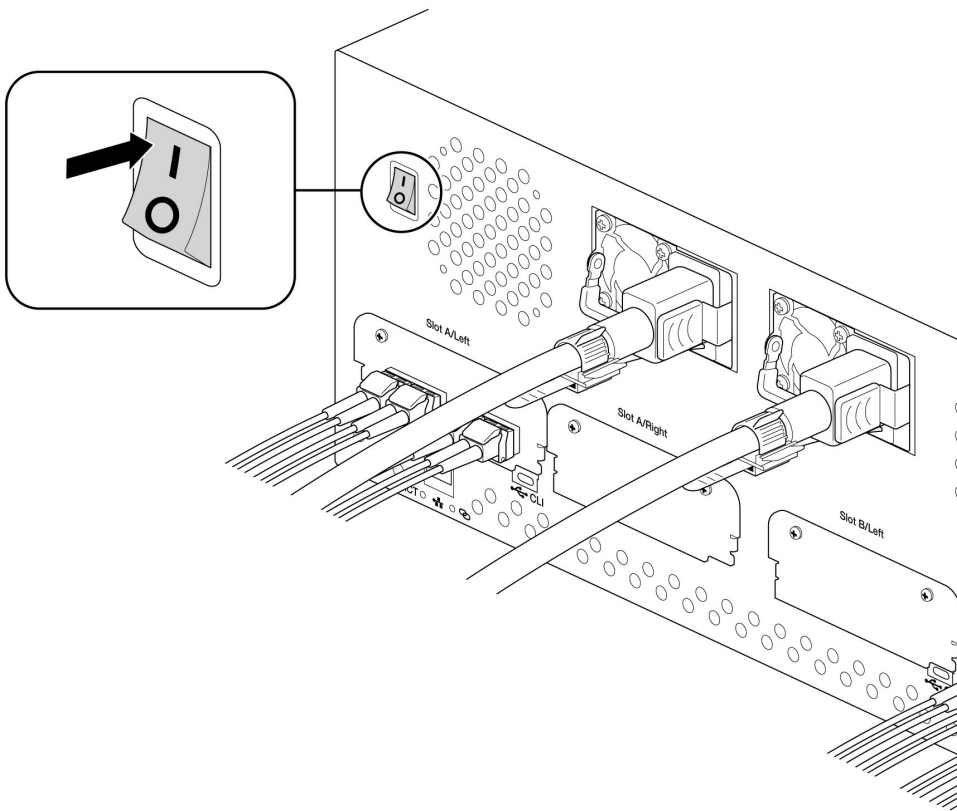
Close latches.





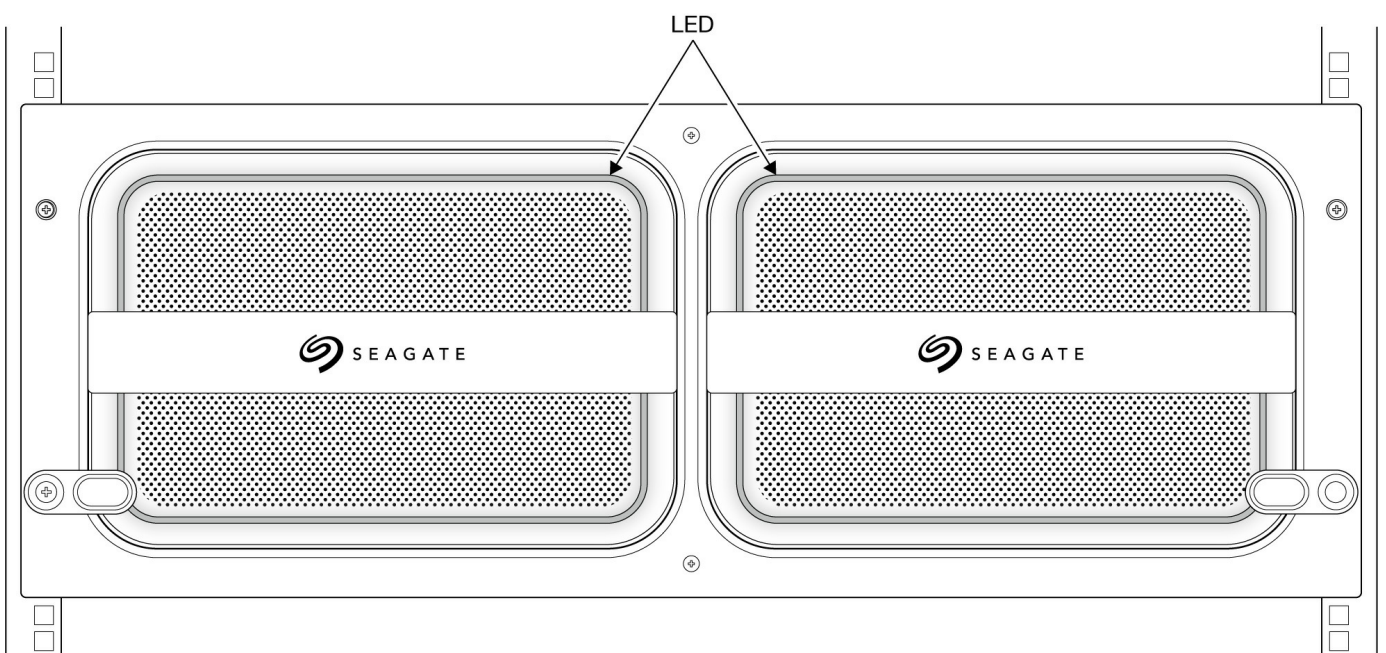
# Turn on power

Set the power switch on Lyve Mobile Rackmount Receiver to ON.



# Unlock the device

The LED on the device blinks white during the boot process and turns solid orange. The solid orange LED color indicates the device is ready to be unlocked.



Once the device has been unlocked by a valid Lyve Portal Identity or Lyve Token file, the LED on the device turns solid green. The device is unlocked and ready for use.

# Status LED

The LED on the front of the enclosure indicates the device's status. See the key below for the color and animations associated with each status.



## Key

Status	Color 1	Color 2	Animation	Description
Off	Black	N/A	Steady	Device is powered off.
Identification	Purple	Black	Breathe	A Lyve Client user has sent a prompt to identify the device.
Error	Red	N/A	Steady	Error reported.
Warning	Olive Green	Gold	Blink	Warning reported.
Manual power off	Bright Green	Black	Fade out	A user initiated a manual power off.
Drive locked	Orange	N/A	Circular	Drive is locked.
Configuration	Blue	N/A	Steady	Lyve Client is configuring the device.
Ingest	Bright Green	N/A	Circular	Lyve Client is copying/moving data.
I/O	Bright Green	Black	Breathe	Input/output activity.
Ready	Bright Green	N/A	Steady	Device is ready.
Booting	White	Black	Blink	Device is starting up.



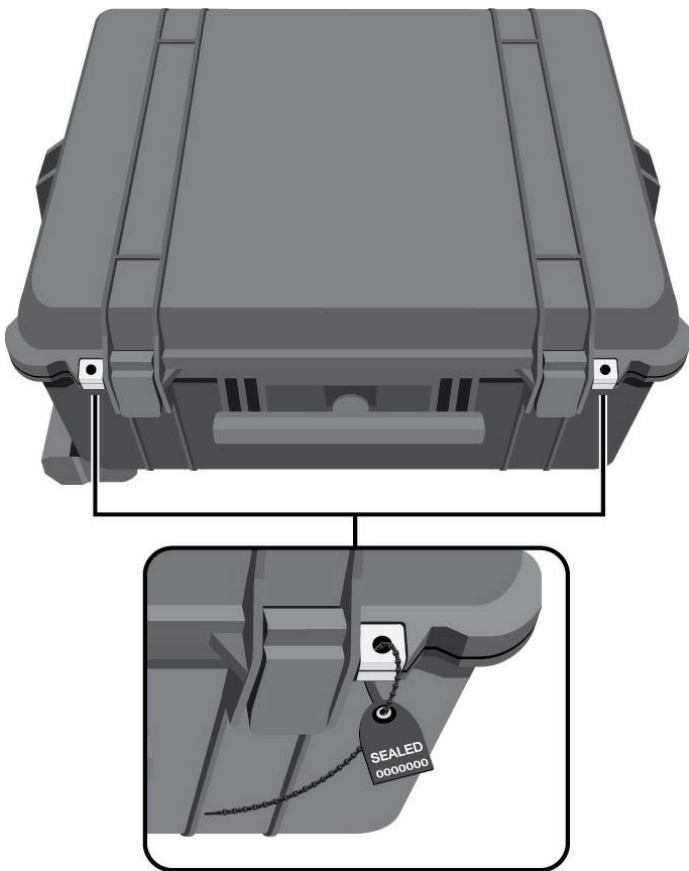
# Lyve Mobile Shipper

A shipping case is included with Lyve Mobile Array.



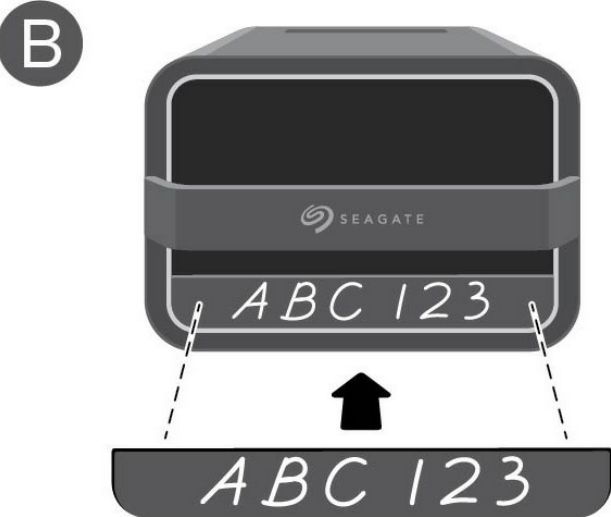
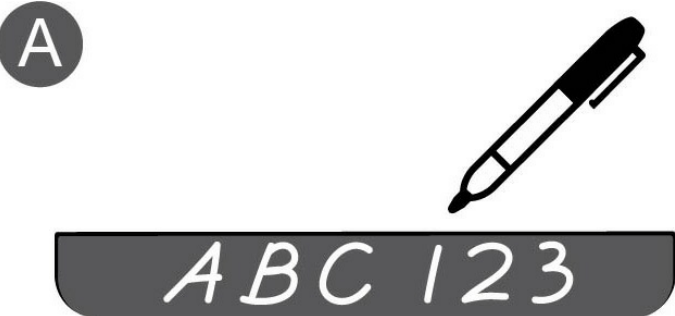
**Always use the case when transporting and shipping Lyve Mobile Array.**

For additional security, fasten the included beaded security tie to Lyve Mobile Shipper. The recipient knows the case was not tampered with in transit if the tie remains intact.



# Magnetic Labels

Magnetic labels can be placed on the front of Lyve Mobile Array to help identify individual devices. Use a marker or grease pencil to customize the labels.



# Regulatory Compliance

Product Name	Regulatory Model Number
Seagate Lyve Mobile Array	SMMA001

## FCC DECLARATION OF CONFORMANCE

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## CLASS B

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 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:

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

**CAUTION:** Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

## VCCI-B

この装置は、クラスB機器です。この装置は、住宅環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをして下さい。VCCI-B

## China RoHS



China RoHS 2 refers to the Ministry of Industry and Information Technology Order No. 32, effective July 1, 2016, titled Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products. To comply with China RoHS 2, we determined this product's Environmental Protection Use Period (EPUP) to be 20 years in accordance with the Marking for the Restricted Use of Hazardous Substances in Electronic and Electrical Products, SJT 11364-2014.

中国 RoHS 2 是指 2016 年 7 月 1 日起施行的工业和信息化部令第 32 号“电力电子产品限制使用有害物质管理办法”。为了符合中国 RoHS 2 的要求，我们根据“电子电气产品有害物质限制使用标识”(SJT 11364-2014) 确定本产品的环保使用期 (EPUP) 为 20 年。

部件名称 Part Name	有害物质 Hazardous Substances					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr <sup>6+</sup> )	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
硬盘驱动器/固态驱动器 HDD/SSD	X	O	O	O	O	O
外接硬盘印刷电路板 Bridge PCBA	X	O	O	O	O	O
电源 (如果提供) Power Supply (if provided)	X	O	O	O	O	O
接口电缆 (如果提供) Interface cable (if provided)	X	O	O	O	O	O
其他外壳组件 Other enclosure components	O	O	O	O	O	O

本表格依据 SJ/T 11364 的规定编制。  
This table is prepared in accordance with the provisions of SJ/T 11364-2014

O: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。  
O: Indicates that the hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T26572.

X: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。  
X: Indicates that the hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T26572.

## Taiwan RoHS

Taiwan RoHS refers to the Taiwan Bureau of Standards, Metrology and Inspection's (BSMI's) requirements in standard CNS 15663, Guidance to reduction of the restricted chemical substances in electrical and electronic equipment. Beginning on January 1, 2018, Seagate products must comply with the "Marking of presence" requirements in Section 5 of CNS 15663. This product is Taiwan RoHS compliant. The following table meets the Section 5 "Marking of presence" requirements.

台灣RoHS是指台灣標準局計量檢驗局(BSMI)對標準CNS15663要求的減排電子電氣設備限用化學物質指引。從2018年1月1日起，Seagate產品必須符合CNS15663第5節「含有標示」要求。本產品符合台灣RoHS。下表符合第5節「含有標示」要求。



產品名稱:磁盤陣列,型號:SMMA001		Product Name: Lyve Mobile Array, Model: SMMA001					
單元 Unit		限用物質及其化學符號			Restricted Substance and its chemical symbol		
		鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr <sup>6+</sup> )	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
硬盤驅動器/固態驅動器	HDD/SSD	—	0	0	0	0	0
外接硬盤印刷電路板	Bridge PCBA	—	0	0	0	0	0
電源 (如果提供)	Power Supply (if provided)	—	0	0	0	0	0
傳輸線材 (如果提供)	Interface cable (if provided)	—	0	0	0	0	0
其他外殼組件	Other enclosure components	0	0	0	0	0	0
備考 1. “0” 係指該項限用物質之百分比含量未超出百分比含量基準值。 Note 1. “0” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.							
備考 2. “—” 係指該項限用物質為排除項目。 Note 2. “—” indicates that the restricted substance corresponds to the exemption.							

額定電壓/額定電流: 20VDC = 13A 操作溫度: 5 - 40 °C

本設備勿置於潮濕處。 請將產品置於手冊規定的環境使用溫度,以避免過熱。 連接至電源前,請先檢查電壓。	當設備不用時,請將所有電源線拔除,避免電壓不穩而造成傷害。 勿將任何液體濺入設備中,避免線路短路。 請勿自行調整或修理已通電的設備,以確保您的安全。
--	--