

Avigilon Video Archive Expansion Enclosure Installation and Setup

AVA-EXP1-XXXTB

All documents referred to in this guide are available from [avigilon.com/video-archive](https://www.avigilon.com/video-archive).

1. Before you begin

The Avigilon Video Archive expansion unit provides additional storage capacity for your Avigilon Video Archive solution. It is shipped with all the necessary parts to add the unit to your Video Archive head unit.

If you received an expansion unit as part of the initial delivery of the Avigilon Video Archive solution, refer to the *Avigilon Video Archive Installation and Setup* guide and the *Avigilon Video Archive Initialization Guide*.

This guide provides the information you need to add an expansion unit to an already deployed Avigilon Video Archive head unit. It is recommended that you perform a manual archive to preserve all data stored on the Video Archive head unit before you add additional storage capacity.

The expansion unit requires 220V power and C20 or NEMA power plugs.

2. Unpack the Video Archive expansion unit

Warning: Before you set up and operate your Video Archive expansion unit, review the safety instructions that came with the hardware.

The Video Archive expansion unit includes:

- Documentation QR card (used to access the equipment documentation online)
- 5U expansion unit
- 2 × power cables
- 2 × SAS cables
- Separately packaged disk drives in carriers (DDICs)
- Rackmount kit for the unit

Installing an expansion unit does not require any downtime of the Video Archive controller unit. The SAS cables used to connect th two units are hot pluggable.

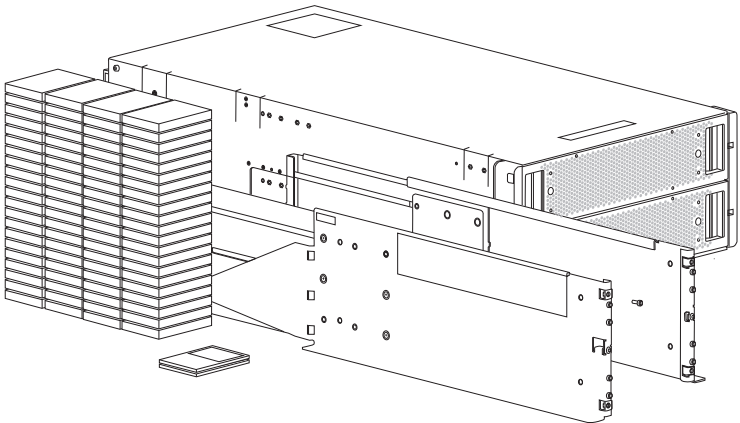


Figure 1. Video Archive expansion unit

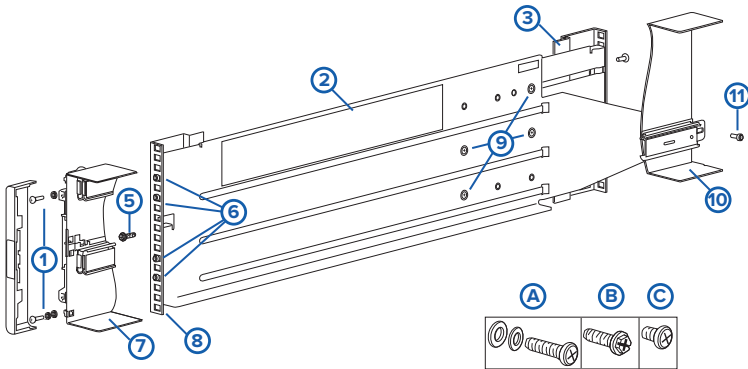


Figure 2. Video Archive rack mount

Item	Description	Item	Description
1	Fastening screws (A)	8	Front rack post (square hole)
2	Left rail	9	Middle slide locking screws
3	Rear rack post - square hole	10	Front left portion of 5U chassis shown for reference
4, 5	Clamping screw (B)	11	Fastening screw (C)
6	Rail location pins	A, B, C	Rail kit fasteners used in rack-mount installation
7	Rear left portion of 5U chassis shown for reference		

Video Archive expansion units are shipped without the DDICs installed.

3. Mount the expansion unit

- Before mounting, remove the rear panel modules
- Use a mechanical lift to mount a unit.
- The rack may fall over if allowed to become top-heavy. Load the rack from the bottom up with the heaviest chassis at the bottom.
- Secure the expansion unit to the rack using the mounting screws located in the plastic bag.

Warning: Potential injury — the chassis is heavy.

1. With the preassembled rails at their shortest length, locate the rail location pins inside the front of the rack, and extend the length of the rail assembly to position the rear location pins. Ensure the pins are fully inserted in the square or round holes in the rack posts.
2. Fully tighten all clamping screws and middle side locking screws.
3. Ensure the four rear space clips (not shown) are fitted to the edge of the rack post.
4. Slide the unit until it is fully seated on its rails.
5. Fasten the front and rear of the unit using the unit fastening screws.
6. Reinsert the rear panel modules.

4. Install the DDICs

The Video Archive expansion unit is shipped without the DDICs installed. The DDICs are shipped in packages of 28, ready to be installed in the expansion unit. You must install all the DDICs supplied.

The DDICs are installed in two disk drawers that are accessed from the front of the unit. You must install a minumum of 14 DDICs (one row) in each drawer for a total of 28 DDICs.

The top of each DDIC has a latch button in the center, an orange arrow label at one end, and a single Drive Fault LED at the other end. The yellow indicator next to the center latch button indicates the latch is unlocked

1. Use the recessed handles at the side to slide a drawer open.
2. Beginning at the front of each drawer:
 - a. Add the DDICs to the disk slots in the drawer in complete rows (14 disks at a time).
 - b. Alternate between the top and bottom drawers. Install first 14 DDICs in slots 0 through 13 in the top drawer and the next 14 DDICs in slots 42 through 55 in the bottom drawer. After that, install slots 14 through 27, and so on, working from back to front in each drawer.
3. Insert each drive cartridge into its slot with the orange arrow pointed to the back of the unit:
 - a. Push the DDIC down into the slot.
 - b. Firmly push the DDIC in the direction of the arrow until the center latch locks into place.
5. Check that the yellow unlocked indicator is no longer showing.

6. Cable together the controller and expansion unit

Use the SAS cables to connect the controller unit to the expansion unit.

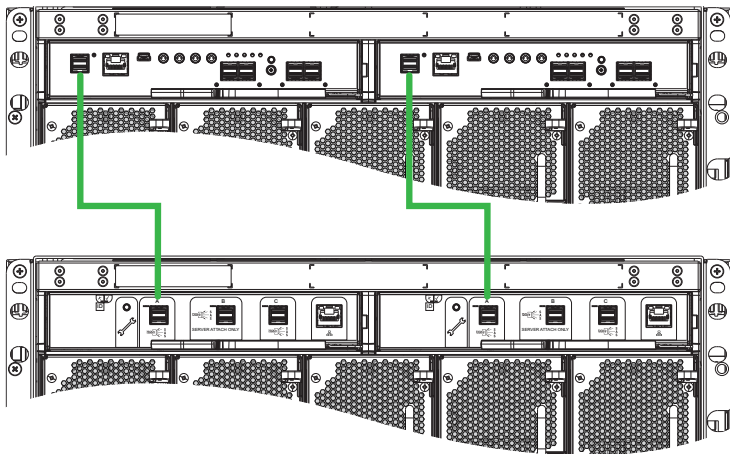


Figure 3. Controller to expansion unit cabling

7. Connect power cables and power on the storage system

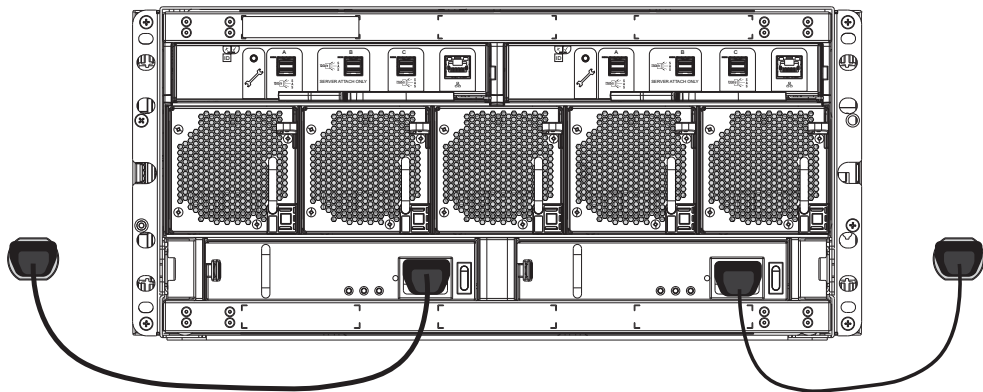


Figure 4. Controller unit AC connections

After the controller unit is powered on the Power on/Standby LED on the expansion unit Ops panel turns green.

8. Initialize the new storage

NVRs can be connected to the head unit only. A maximum of 4 NVRs can be connected to a head unit.

Access the Video Archive head unit from the laptop connected to the **Controller A management port** to perform system initialization.

The ACC client connected to the **Controller B management port** must be disconnected before initializing new storage.

There are two basic use cases for initializing the storage (adding more DDICs in the disk drawer of an unit):

- Adding new partitions for additional NVR(s).**

The original partitions created for the NVRs connected to the Video Archive when the DDICs in the head unit were initialized are preserved and new partitions using the new DDICs in the expansion unit are initialized for the new NVR(s) that you are adding.

Use the Create Archives utility documented in the *Avigilon Video Archive Initialization Guide*. Increment the number of connected NVRs as appropriate (up to the maximum of 4). The newly added non-partitioned space is initialized and allocated to the new NVR(s).

No archiving of video from the already connected NVRs is done while the new storage is being initialized. There will be a gap in the video storage in the existing partition(s) for the duration of the initialization process, which is less than 10 minutes.
- Adjusting the partition sizes for NVRs already connected to the head unit.**

WARNING: All archived video in the existing partitions will be erased and all the space reallocated to the resized partitions. Back up and save the video of all existing archive partitions to another data repository before increasing the size of existing partitons.

Use the procedure for resizing partitions in the *Avigilon Video Archive Advanced Deployment Guide*.

Archiving of video will start after all the available storage capacity is reinitialized and repartitioned. This process can take much more time than initializing new partitions for additional NVRs.

After the repartitioning, you may copy the backed up archived video from the previous partitions into the appropriate partitions. However, you will have a permanent gap in the archive from between the time the backup was made and the repartioned Video Archive starts archiving again.