MONITOREAL

USER MANUAL

Monitoreal Archive Station

External storage that extends the archive of your Monitoreal device



See what matters.

monitoreal.com

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1. Purpose and requirements

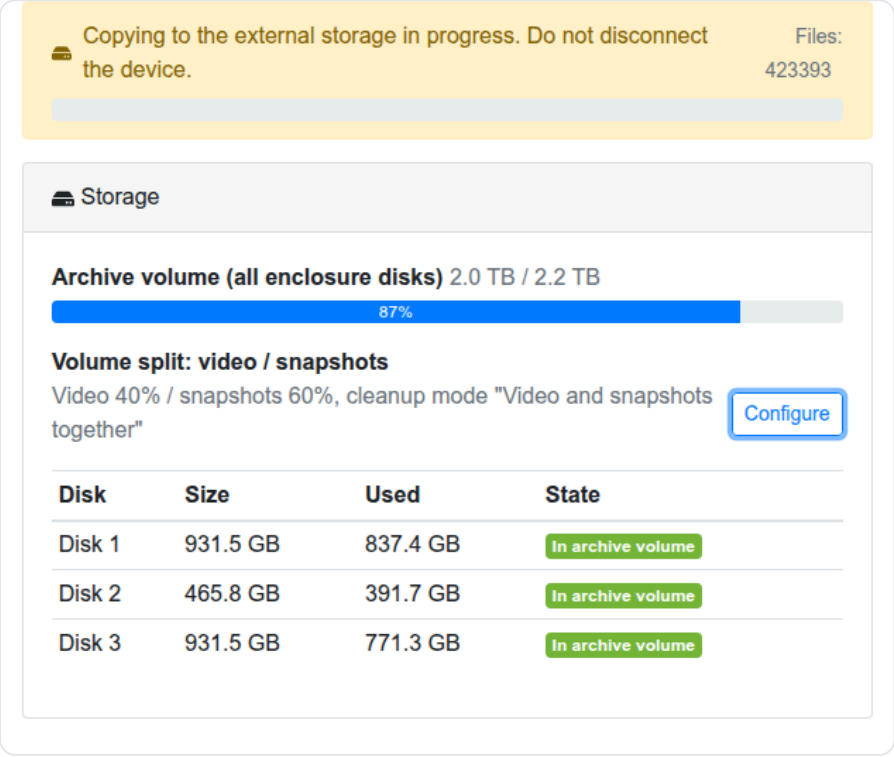
The Monitoreal Archive Station extends the archive of a Monitoreal device: all its disks and the internal drive are merged into one archive volume, and video recordings and snapshots are written to it as to a single storage. Connecting takes about a minute and needs no configuration. The device checks the Archive Station, prepares the disks and moves the existing archive on its own.

ITEM	REQUIREMENT
Archive Station	Monitoreal Archive Station with a serial number issued by Monitoreal (the licence is tied to the Archive Station, not to the device)
Port	USB 3.0 on the device. On USB 2.0 the volume is not assembled and recording to the Archive Station is disabled
Disks	SATA HDD or SSD, any size, any number of bays. Empty disks are formatted automatically
Disks with foreign data	Not used until formatted with the button in the web interface (the data is erased)
Disks from another Monitoreal device	Accepted as they are; their recordings appear in the archive at once
Web interface rights	Viewing: “View system information”. Formatting: “Archive actions”. Volume split: “Change settings”

2. Connecting the Archive Station

The Archive Station is hot-pluggable; the device does not need to be powered off.

1. Install the disks in the Archive Station. Empty disks, disks from another Monitoreal Archive Station and disks with foreign data are all accepted (the last kind must be formatted, step 6).
2. Connect the Archive Station to a USB 3.0 port of the device with the supplied cable and switch the Archive Station on.
3. Wait about a minute. The device verifies the Archive Station serial number and the port speed, prepares the disks and assembles the archive volume.
4. Open the web interface: menu “Archive” → “Archive actions”. The “Storage” card shows the line “Archive volume (all enclosure disks)” with the used space and a table of disks in the state “In archive volume”.
5. The event feed shows the notification “Monitoreal drive connected”.
6. If a disk shows the state “Foreign data”, press “Format” in its row and confirm. Within a few minutes the state changes to “In archive volume”.



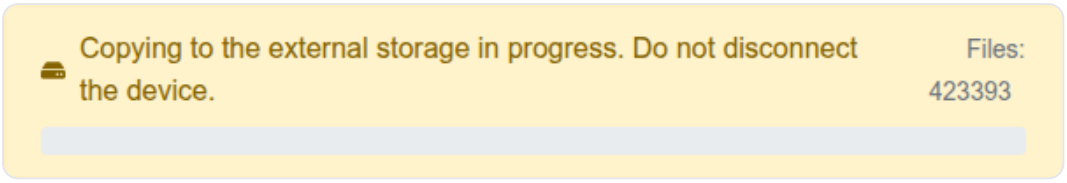
Archive → Archive actions: Storage card

3. What the device does automatically

Everything after connection happens without the user; intervention is needed only for disks with foreign data.

STEP	WHAT HAPPENS	IF THE CHECK FAILS
Licence	The Archive Station serial number is checked against the Monitoreal format	An unlicensed Archive Station is ignored and never appears in the “Storage” card
Port	The USB link speed is measured	On USB 2.0 the volume is not assembled and the banner “USB 2.0 — reconnect to USB 3.0” stays at the top of the page
Empty disk	Formatted into one partition with a Monitoreal label (a few minutes)	—
Disk with a Monitoreal archive	The file system is checked; errors left by an abrupt unplug are repaired automatically	If the repair fails, the disk does not join the volume
Disk with foreign data	Rejected, state “Foreign data”	Waits for formatting from the web interface
Volume assembly	The internal drive and all Archive Station disks are merged into one archive volume	—
Archive migration	If the internal drive is more than 80 % full, older recordings are moved to the Archive Station in the background	—
Notification	“Monitoreal drive connected” appears in the event feed	—

New recordings land on the internal drive first and move to the Archive Station as it fills up. During the move the page shows the banner “Copying to the external storage in progress. Do not disconnect the device.” with a percentage, the number of files left and a time estimate. Moving hundreds of gigabytes to an HDD over USB takes several hours; recording and archive playback keep working meanwhile.



Copy banner

4. Web interface

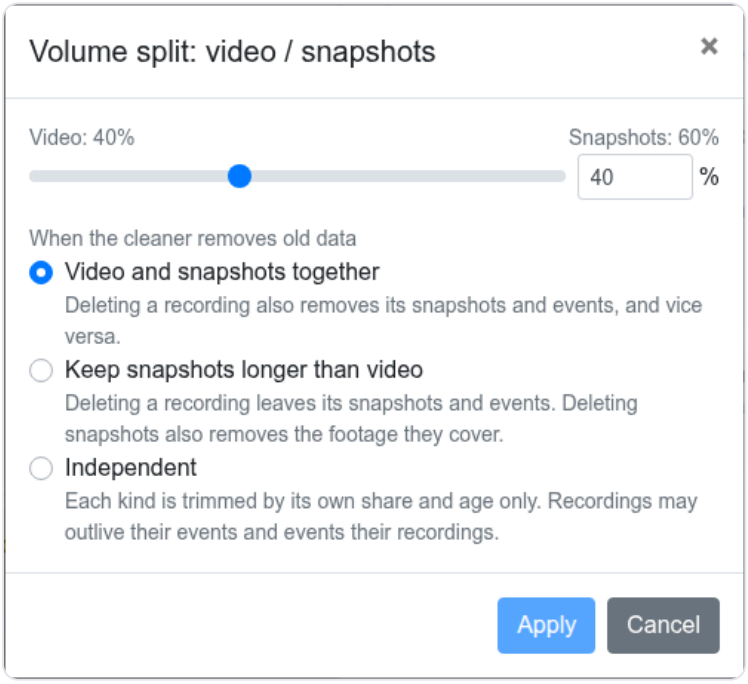
Everything about the Archive Station is managed from the “Storage” card on the page “Archive → Archive actions”. The card appears only while an Archive Station is connected and refreshes every 10 seconds.

ELEMENT	WHAT IT SHOWS	ACTIONS AND RIGHTS
Archive volume (all enclosure disks)	Used / total and the fill bar of the merged volume	View only
Volume split: video / snapshots	The share of the volume for video and for snapshots, and the cleanup mode. Default: video 70 % / snapshots 30 %, mode “Video and snapshots together”	“Configure” button, right “Change settings”
Disk table	Disk 1, 2…: size, used, state	“Format” button on disks in state “Foreign data”, right “Archive actions”
Copy banner	Percentage, file count and time estimate of the archive move to the Archive Station	Disappears on its own when done
Banner “USB 2.0 — reconnect to USB 3.0”	The Archive Station is on a slow port; shown on every page	Reconnect the Archive Station
Event feed	“Monitoreal drive connected” / “disconnected”	—

Disk states. “In archive volume” — the disk is in use; “Formatting…” — preparation in progress, with a progress bar below; “Foreign data” — waiting to be formatted; “USB 2.0 — reconnect to USB 3.0” — slow port. When formatting ends, the message “Disk N has been formatted and added to the archive volume” or “Formatting of disk N failed” appears.

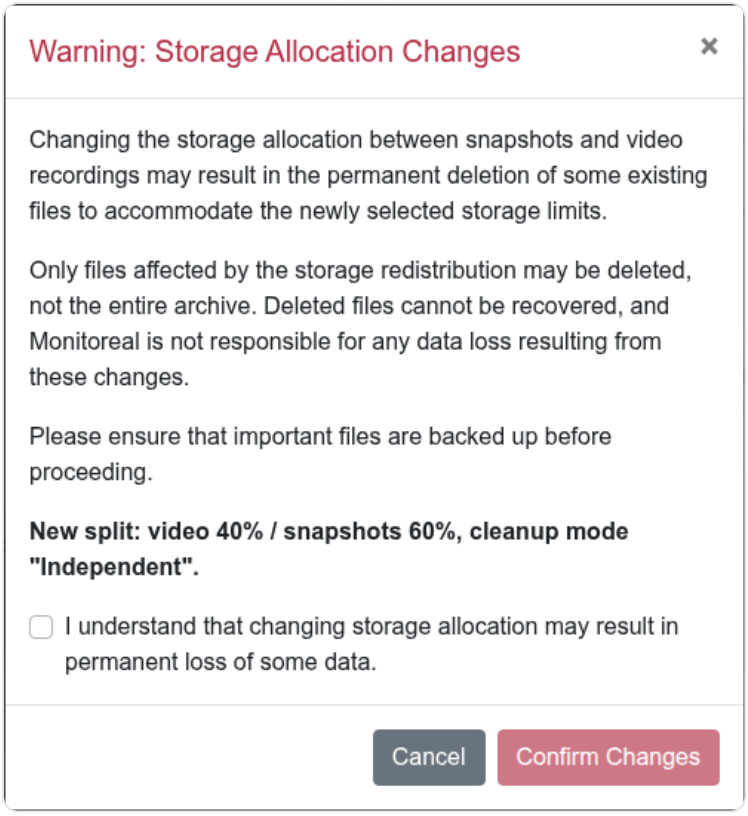
Volume split. In the “Configure” window the slider sets the video share from 5 to 95 %; the rest goes to snapshots, and the current usage is shown next to it. The cleanup mode defines what is deleted together:

- “Video and snapshots together” — deleting a recording also removes its snapshots and events, and vice versa (default);
- “Keep snapshots longer than video” — deleting a recording leaves its snapshots and events; deleting snapshots also removes the footage they cover;
- “Independent” — each kind is trimmed by its own share and age only.



Volume split: video / snapshots

Pressing “Apply” opens a warning: lowering a share may permanently delete some files to fit the new limit. The change takes effect only after ticking “I understand…” and pressing “Confirm Changes”.



Warning: Storage Allocation Changes

A disk in the “Foreign data” state shows a red badge and a “Format” button in the last column of the same table.

5. Disconnecting, replacing disks, moving the Archive Station

IMPORTANT

The Archive Station can be disconnected at any time, but not while the copy banner is shown: an interrupted move leaves file system errors on the disk, which the device will repair at the next connection.

Disconnecting. Switch the Archive Station off or unplug the USB cable. The device dismantles the volume and keeps recording to the internal drive; the feed shows “Monitoreal drive disconnected”. Recordings and snapshots stored on the Archive Station disappear from the archive until it returns, but they are not deleted. On return the volume is assembled again and an interrupted move continues from where it stopped.

Adding a disk. Insert the disk into a free bay of the running Archive Station. It passes the same checks as at the first connection and appears in the table within a minute; the volume size grows at once.

Removing a disk. Recordings from that disk disappear from the archive; the other disks keep working. Remove disks only while the copy banner is not shown.

Moving the Archive Station to another Monitoreal device. The licence is tied to the Archive Station, so another device accepts it at once and shows all recordings from it in its archive. Two consequences:

- cleanup does not distinguish which device made a recording: when space runs out or the retention period expires, the oldest recordings are deleted, foreign ones included;
- if camera numbers coincide on the two devices, their recordings are mixed in the archive.

If the old recordings are not needed, format the disks on the new device with the “Format” button (it is available only for disks in state “Foreign data”; a Monitoreal disk has to be wiped on a computer first).

6. Troubleshooting

SYMPTOM	CAUSE	WHAT TO DO
The “Storage” card does not appear after 2 minutes	No power or cable; Archive Station without a Monitoreal licence; the user lacks the “View system information” right	Check power and cable, log in as an administrator; if that does not help, send the Archive Station serial number to support
Banner “USB 2.0 — reconnect to USB 3.0”	The Archive Station is on a USB 2.0 port or a USB 2.0 cable	Move it to a USB 3.0 port (blue) with the supplied cable. The volume assembles on its own
Disk state “Foreign data”	The disk carries another file system or foreign files	Press “Format”. All data on the disk is erased
State “Formatting…” for more than 10 minutes	Large or slow disk	Wait. If the message “Formatting of disk failed” appears, the disk is faulty: replace it
A disk is in the Archive Station but missing from the table	The file system is damaged and could not be repaired automatically	Reseat the disk. If that does not help, check the disk on a computer or replace it
The copy banner stays for many hours	A large archive is moving to an HDD over USB at about 25 MB/s	This is normal. Do not disconnect the Archive Station; recording and playback keep working
Recordings vanished from the archive after disconnecting the Archive Station	They are stored on the Archive Station disks	Reconnect the Archive Station and the recordings come back
Recordings are deleted before the retention period ends	The archive volume is full, so space is freed for new recordings	Add a disk to the Archive Station or shorten the retention period

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Support and contacts

TECHNICAL SUPPORT FORM

Monitoreal Support

WEBSITE

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See what matters.

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