

HELO Plus

Approved Media Guide

Overview

This article provides essential recommendations for selecting, formatting, and configuring media and network storage to ensure reliable operation and optimal performance with your AJA Helo Plus device. Following these guidelines will help you avoid common recording issues and maximize the reliability of your workflow.

Media & Configuration Guidelines for Optimal Performance

Understanding HELO Plus Media Requirements

Although HELO Plus encodes at relatively low bitrates (up to 20 Mbps), it requires high instantaneous performance from its media—especially at the start of each recording file. If your media cannot keep up, you may see a "**Media Too Slow**" alarm in the WebUI, and recordings may be aborted.

Approved USB Thumb Drives

For best results, use only AJA-verified USB drives:

- **Transcend JetFlash 780:** 64GB, 128GB, 256GB
- **Transcend JetFlash 910:** 128GB, 256GB
- **Transcend JetFlash 920:** 128GB, 256GB, 512GB
- **Transcend JetFlash 930C:** 128GB, 256GB, 512GB
- **OWC Envoy Pro Mini:** 240GB, 480GB, 1TB, 2TB

IMPORTANT: All drives must be formatted as exFAT before use. OWC drives ship as APFS and must be reformatted to exFAT using Mac Disk Utility or the OWC Drive Guide for Windows.

NOTE: Some of the above drives are also available in 32GB, 16GB and/or smaller sizes. We did not list those, because such low drive capacities are simply impractical.

Approved Solid State Media

SD Cards: Use class U3 or faster. AJA-tested cards include:

- **SanDisk Extreme:** 64GB, 128GB, 256GB, 512GB
- **SanDisk Extreme Pro:** 64GB, 128GB, 256GB, 512GB, 1TB, 2TB

Magnetic Hard Drives: Not recommended for use with HELO Plus.

Media Formatting Requirements

Preferred File System: exFAT (strongly recommended)

- HELO Plus internally formats media as exFAT.
- FAT can be used if formatted externally, but performance is not guaranteed.
- FAT file systems have a 4 GB file size limit; exFAT does not.

Unsupported File Systems: APFS and NTFS are not supported and will cause warnings and/or improper operation.

Partition Scheme: Use Master Boot Record (MBR), not GUID.

No EFI System Partition: Delete any EFI partitions, as they are not recognized by HELO Plus.

Formatting Instructions

There are three possible methods of formatting media for use on the HELO Plus:

- On HELO Plus
- On macOS
- On Windows

IMPORTANT: AJA strongly recommends formatting your media using the HELO Plus device itself whenever possible.

WARNING: *Formatting will erase all data on the selected media. Always back up important files before formatting.*

Formatting on HELO Plus

Inserted USB and SD media can be formatted as exFAT directly by HELO Plus. This is the preferred and most reliable method.

1. On the HELO Plus WebUI go to the **Record Output** Screen.
2. Look for either **Format USB Media** or **Format SD Media** depending on your media type.
3. Choose from:
 - **Keep Media** – No formatting occurs; data on the media is retained (factory default).
 - **Format** – Immediately formats the inserted media as exFAT.

Formatting on macOS

1. Insert media.
2. Launch the macOS **Disk Utility** application.
3. Select "**Show All Devices.**"
4. Choose the correct device.
5. Click **Erase.**
6. Set Format to "**exFAT**"
7. Set Scheme to "**Master Boot Record.**"
8. Click **Erase.**

Formatting On Windows

1. Insert media.

2. Open the Windows **File Explorer**.
3. Right-click the volume.
4. Select "**Format**."
5. Choose "**exFAT**" as the file system.
6. Use default allocation size.
7. Enter a volume label.
8. Ensure "**Quick Format**" is checked.
9. Click Start.

CAUTION: *If you must format media using a computer, ensure it is formatted as a single exFAT partition that uses the entire capacity of the storage device. Using multiple partitions can cause unintended consequences with HELO Plus.*

WARNING: *Use extreme caution when deleting EFI partitions. Selecting the wrong disk may render your system inoperable.*

Network Attached Storage (NAS) Guidelines

NFS Servers: Configure for a 1 MB block size (1,048,576 bytes).

- 16 GB RAM is typically sufficient for this setting on Linux.
- Recommended Linux distributions: CentOS 7, Ubuntu 12.04 LTS through 22.04 LTS.
- Avoid older NFS servers (e.g. CentOS 6) with smaller block sizes.
- Use NFSv3 or higher (NFSv2 is not recommended).

Ethernet Speed: The speed of your NAS Ethernet connection does not guarantee recording performance; actual media read/write speed is what is most critical.

Contacting AJA Technical Support or Sales

Please have all pertinent information at hand prior to contacting AJA support or sales.

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