

Kameleon HD

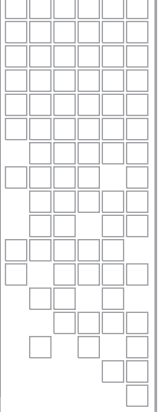
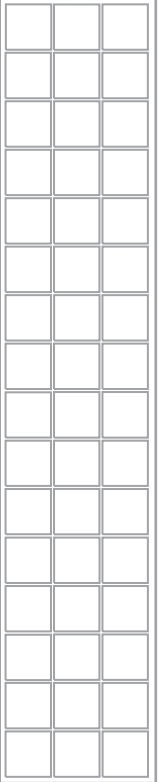
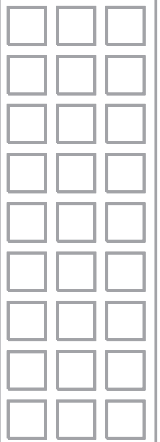
KAM-HD-FS/HDD/HDD-FS/HDD-PA

Release Notes



SOFTWARE VERSION 2.5.0

071836103
DECEMBER 2006



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Grass Valley Web Site

The www.thomsongrassvalley.com web site offers the following:

Online User Documentation — Current versions of product catalogs, brochures, data sheets, ordering guides, planning guides, manuals, and release notes in .pdf format can be downloaded.

FAQ Database — Solutions to problems and troubleshooting efforts can be found by searching our Frequently Asked Questions (FAQ) database.

Software Downloads — Download software updates, drivers, and patches.



END-OF-LIFE PRODUCT RECYCLING NOTICE

Grass Valley's innovation and excellence in product design also extends to the programs we've established to manage the recycling of our products. Grass Valley has developed a comprehensive end-of-life product take back program for recycle or disposal of end-of-life products. Our program meets the requirements of the European Union's WEEE Directive, the United States Environmental Protection Agency, and U.S. state and local agencies.

Grass Valley's end-of-life product take back program assures proper disposal by use of Best Available Technology. This program accepts any Grass Valley branded equipment. Upon request, a Certificate of Recycling or a Certificate of Destruction, depending on the ultimate disposition of the product, can be sent to the requester.

Grass Valley will be responsible for all costs associated with recycling and disposal, including freight. However, you are responsible for the removal of the equipment from your facility and packing the equipment to make it ready for pickup.

For further information on the Grass Valley product take back system please contact Grass Valley at + 800 80 80 20 20 or +33 1 48 25 20 20 from most other countries. In the U.S. and Canada please call 800-547-8949 or 530-478-4148, and ask to be connected to the EH&S Department. Additional information concerning the program can be found at: www.thomsongrassvalley.com/environment



Version **2.5.0**
DECEMBER 2006

Kameleon HD Series Release Notes

Introduction

This document provides information on the latest release of the software for use with the following modules in the Kameleon HD series:

- KAM-HD-FS HD/SD Frame Sync (assembly number 671-6415-02 only)
- KAM-HDD-PA HD/SD Down Converter and Video Processing
- KAM-HDD-FS HD/SD Frame Sync with Down Converter
- KAM-HDD HD/SD Monitoring Down Converter

Read this document completely before attempting to download the latest software.

This document details:

- System requirements ([page 4](#)),
- Software Release Version 2.5.0 Overview ([page 4](#)),
- KAM-HDD and KAM-HDD-PA Timing Considerations, ([page 6](#))
- Installing the latest software ([page 7](#)), and
- Accessing Reference Documents ([page 11](#)).

Software Update Requirements

Software updating and operation of the KAM-HD-FS modules in Kameleon 2000 Series frames have the following requirements:

- Modules must be installed in a 2000T1DNG or 2000T3DNG Kameleon 2000 Series frame containing a 2000GEN module.
- The frame must have a 2000NET module with assembly number 671-5231-01 or later running software version 4.0.0 or later.
- Installation of this latest release of software requires a new Kameleon HD module or a KAM-HD-FS module with assembly number 671-6514-02. Currently released KAM-HD-FS modules with assembly number 671-6415-01 cannot be updated with version 2.0 and later, a new circuit board is required.

Version 2.5.0 Software Release

Version 2.5.0 provides the following new features:

Frame Sync Web Page

The following two controls have been added to the Frame Sync web page ([Figure 1 on page 6](#)):

- **Minimum Delay Mode** – A minimum delay can be enabled to bypass portions of the frame sync memory to allow an absolute minimum amount of delay through the module. To enable this mode, check the **Enabled** checkbox.
- **Delay Wrap Position** – this metering indicator will display with a blue bar, the fraction of the final frame of actual video delay through the frame sync.

For example, with 1080i video and Minimum Delay Mode not selected, if 600 lines is entered by the user, that actual delay through the module will be anywhere from about 1 to 2 frames depending on the following conditions:

- a. If the module is in Input timing mode, the delay through the module will be about 1.5 frames, and the Delay Wrap Position will be at about 50% of full scale.

- b. If the module is in Frame Reference timing mode, the delay through the module will be about 1.5 frames if the input video has zero delay with respect to the genlock reference frame position, and the Delay Wrap Position will be at about 50% of full scale. As this input video delay with respect to the genlock reference frame position is changed from -0.5 to +0.5 frame periods, the delay through the module will change from about 1 to 2 frame periods, with the Delay Wrap Position changing from about 0 to 100% of full scale.

In summary, the Electrical Length of the module can be estimated as the following:

- 1 frame minus 5 lines (Minimum Delay Mode not selected), or
- ~ 300 pixels (Minimum Delay Mode selected) + Delay Wrap Position (% of full scale) X (1 frame period).

EDH Generation in SD Mode

When the input video is set for SD on the KAM-HDD-FS module, there are now three EDH generation choices:

- **Normal EDH** – EDH generated on the module is inserted into the input signal.
- **EDH Disable** – the EDH packet position is overwritten by black video.
- **EDH Bypass** – the EDH packet from the input video is passed to the output.

Resolved and Current Software Issues

Version 2.5.0 provides the following resolved software issues:

- (71354) The throughput and genlock delays have been properly calibrated.
- ()

Version 2.2.0 provided the following resolved software issues:

- Time code embedded in video stream is now properly passed to the output.

Figure 1. Revised Frame Sync Web Page

HD Frame Sync

Model: [KAM-HDD-FS](#) Description: [HD/SD Frame Sync w/ Down Cnvtr](#)
 Frame Location: [Mod Lab - Bay 2](#) , Slot: 11
 Input Video Standard: [1080i/59.94](#) Input Video: [SDI Input : Present](#)
 Output Timing Source: [Frame Reference](#) Split Screen: [Disabled](#)
 Last Recalled E-MEM: [Factory Defaults](#) Down Converter Output Line Rate: [525](#)

Timing Adjustment

H Timing (Pixels)
 << < 0 * > >>
 |< >|

V Timing (Lines)
 << < 10 * > >>
 |< >|

Minimum Delay Mode
 Enabled

Loss of Signal Operation
 Pass
 Auto Freeze
 Auto Blue

Manual Freeze Mode
 None
 Frame
 Field

Delay Wrap Position
 [Progress Bar]

Defaults << Previous Functional View Next >>

KAM-HDD and KAM-HDD-PA Output Timing Considerations

Since the KAM-HDD and KAM-HDD-PA modules do not have a Frame Sync function, some special timing considerations are noted here.

There are two output timing source selections available on the KAM-HDD and KAM-HDD-PA System Config web page, **Input** and **Frame Reference**.

- When the **Input** choice is selected, the video output will be in time with the input video, not in time with any external frame reference or any other modules in the frame. This can result in a delay of up to two pixels, so this mode should only be used when timing to an external reference and amount of total delay is not a consideration.
- When **Frame Reference** is selected, the module is actually in a line sync mode. Instead of locking to an external frame reference, the output signal will lock to the start of the next internal horizontal line. Using this setting will put the timing of the output signal to within a very accurate and predictable delay of approximately one nanosecond. However, it will not put this output signal in time with an external reference.

In order for the KAM-HDD or KAM-HDD-PA output to be in time with an external house reference, the input signal must already be in time with the external reference when it is input to the module and **Frame Reference** must be selected as the Output Timing source.

Acquiring and Updating Software

The KAM-HD software upgrade package for this release is available from the Grass Valley FAQ database or the public FTP site. The method for installing this software is using NetConfig, a networking application option available from Grass Valley. Before performing this upgrade, read the Important Notes below.

Important Notes

- This upgrade will disable the video outputs from the module being upgraded. Make sure your module is off-air before beginning the upgrade process.
- If you do not have the required or most recent version of the NetConfig networking application, a free version of the latest NetConfig software can be downloaded from the Customer Service FAQ database as described in [Acquiring NetConfig on page 9](#). Using the latest version of NetConfig is recommended for best results.

Acquiring Software

To acquire the latest Kameleon HD software, first connect to the Grass Valley Customer Service FAQ database from the following URL:

<http://gvg.custhelp.com>

This will take you to the software download area for Modular products. Follow the prompts to locate the KAM-HD-FS software download.

This software applies to the following Kameleon HD modules:

- KAM-HD-FS
- KAM-HDD
- KAM-HDD-PA
- KAM-HDD-FS

If you cannot find the software you need, go directly to the Grass Valley Customer FTP site at the following URL:

ftp://ftp.thomsongrassvalley.com/pub/modular_

1. Create a temporary folder on your C:\ drive if one does not exist.
2. Download the following files to the C:\temp directory on your PC:
 - KAM-HD_2.5.0.fld
 - KAM-HD_2.5.0.sw2
3. If you have NetConfig running on a PC on the same subnet as the KAM-HD modules you are updating, proceed to *Updating Software With NetConfig* on page 9.
4. If you need to install NetConfig, proceed to the steps below.

Acquiring NetConfig

If you do not have NetConfig or the latest version on your PC (version 2.0.6), you may download a free version from the Grass Valley Customer Service FAQ database from the following URL:

<http://gvg.custhelp.com>

1. This link will take you to the Customer Service FAQ database. From the FAQ web page, select the first FAQ in the list, **Download the Latest Software?**
2. From the first FAQ, go to the **Answer** sections and select the **Software Utilities** selection at the bottom of the list.
3. Click on NetConfig to bring up the utilities available.
4. Click on the NetConfig (v2.0.7) link to access a zipped file for download. Download the zipped file to the C:\temp folder on your PC.
5. Extract the files into the following default location on your local drive:
C:\Program Files\Grass Valley Group
6. Double-click on the NetConfig.exe file to install NetConfig.

Updating Software With NetConfig

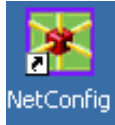
Begin the upgrade procedure by moving the KAM-HD files you have downloaded into your Temp directory into the correct NetConfig directories.

1. Copy all KAM-HD software download files from the C:\temp directory into the main NetConfig directory on your PC. This is normally in the default location in C:\Program Files\Grass Valley Group\NetConfig.

If you have installed NetConfig in another location, find the location of the NetConfig directory by right-clicking on the NetConfig shortcut. Select **Properties** and note the location in the **Start In** field. Download the package to the NetConfig directory.

2. In the main NetConfig directory, locate a folder named **modular**. If this folder does not exist, create a folder called **modular** in the main NetConfig directory.
3. Move the .fld file you copied into the main NetConfig directory into this **modular** directory.
4. Verify that the KAM-HD_2.5.0.sw2 file is somewhere in the main NetConfig directory (not in the **modular** directory).

Note NetConfig reads each .sw2 file in its main directory and navigates to the directory given in these files to find the .fld files available. There may be a number of .sw2 and .fld files in your NetConfig directory for other modular products. These will not interfere with the update.



5. Open NetConfig by double-clicking on the NetConfig icon (shown at left).

Note If you have not used NetConfig before, refer to the *NetConfig Instruction Manual* included during installation in the main NetConfig directory in pdf format (NetConfig.pdf).



6. Click on the **Load SW** button on the top of the NetConfig toolbar.

7. This will bring up the Load Software screen (Figure 2).

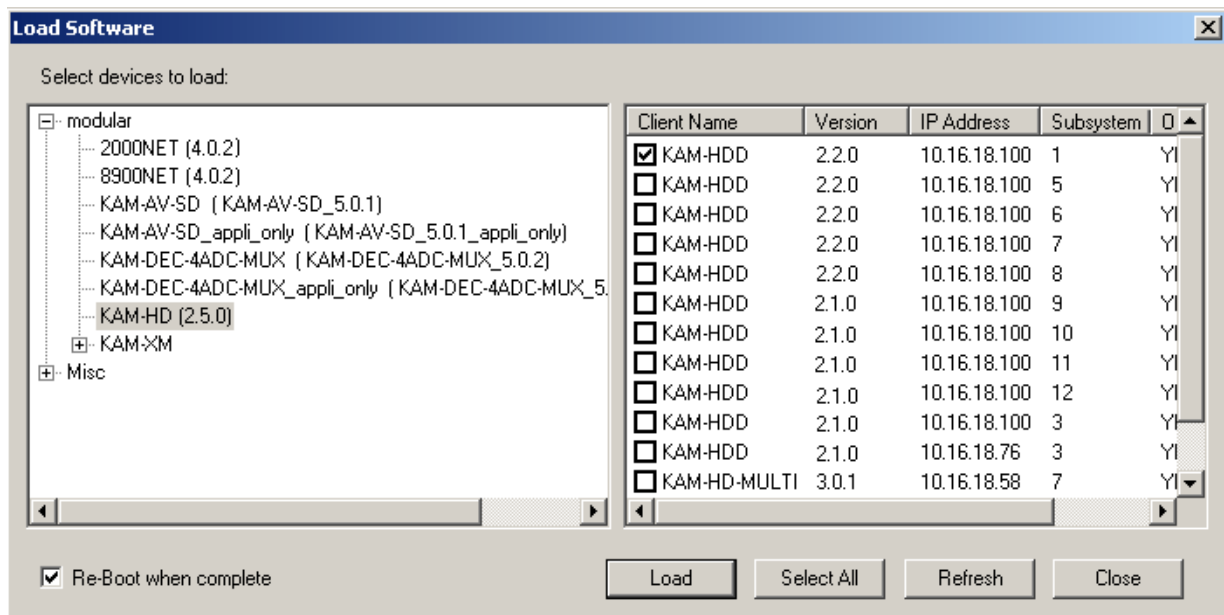
8. Highlight the KAM-HD (2.5.0) Device Type under the **Select devices to load:** on the left of the screen. All KAM-HD modules accessible on this subnet will be displayed in the window on the right with their current software version and frame IP Address.

9. Find the KAM-HD module you are updating in the Client Name list. Check the corresponding checkbox in the window on the right to indicate you wish to update this device.

Note You may upgrade all modules at once with this application by checking all of the Client Name checkboxes as shown in the example.

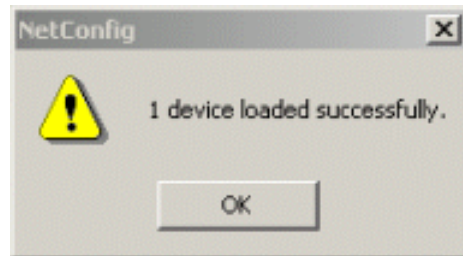
10. Check the **Re-Boot when complete** checkbox in the lower left corner of the screen.

Figure 2. NetConfig Load Software Screen



11. Click on the **Load** button to begin the update.
12. If the load has been successful, a popup will appear as shown in [Figure 3](#). Click the **OK** button.

Figure 3. Load Successful Popup



13. Allow the reboot to complete.
14. Complete the same steps for all of the KAM-HD modules listed if not updating all modules at once, allowing the reboot to complete each time.

Accessing Reference Documents

For on-line access to other reference documents referred to in these Release Notes, navigate to the following URL:

<http://www.thomsongrassvalley.com/docs>

Select the **Modular Products** link and scroll through the available documents. All of the documents referred to may also be ordered in hard copy from any Grass Valley Sales or Customer Service source. Refer to [Contacting Grass Valley](#) at the front of this document.

