

# ***K2 Summit/Solo Field Kit Upgrade Instructions***

Copyright © Grass Valley USA, LLC. All rights reserved. Printed in the United States of America. Portions of software © 2000 – 2010, Microsoft Corporation. All rights reserved. This document may not be copied in whole or in part, or otherwise reproduced except as specifically permitted under U.S. copyright law, without the prior written consent of Grass Valley USA, LLC., P.O. Box 59900, Nevada City, California 95959-7900. This product may be covered by one or more U.S. and foreign patents.

Product options and specifications subject to change without notice. The information in this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Grass Valley USA, LLC. Grass Valley USA, LLC. assumes no responsibility or liability for any errors or inaccuracies that may appear in this publication.

Grass Valley, STRATUS, K2, Aurora, Summit, ChannelFlex, Dyno, Solo, ClipStore, Infinity, Turbo, Profile, Profile XP, NetCentral, NewsBrowse, NewsEdit, NewsQ, NewsShare, NewsQ Pro, and Media Manager are either registered trademarks or trademarks of Grass Valley USA, LLC. in the United States and/or other countries. Grass Valley USA, LLC. products are covered by U.S. and foreign patents, issued and pending. Additional information regarding Grass Valley USA, LLC. trademarks and other proprietary rights may be found at [www.grassvalley.com](http://www.grassvalley.com). Other trademarks and logos used in this document are either registered trademarks or trademarks of the manufacturers or vendors of the associated products, such as Microsoft® Windows® operating system, Windows Media® player, Internet Explorer® internet browser, and SQL Server™. QuickTime and the QuickTime logo are trademarks or registered trademarks of Apple Computer, Inc., used under license therefrom.

# Contents

Grass Valley Product Support.....	3
Upgrade instructions.....	5
Safety Summaries.....	5
Installing a two channel upgrade.....	5
Installing the two channel HD license.....	7
Requesting a license.....	8
Adding a license.....	9
Installing a MPEG/AVC-Intra codec option upgrade.....	9
Installing 8.x software, CPU carrier module, and codec module upgrades.....	12
Saving settings.....	13
Replace CPU carrier module.....	14
Replace codec module and power supplies.....	14
Replace CompactFlash boot media.....	15
Reimage K2 Summit/Solo system.....	16
Restoring settings after generic reimage.....	17
Restoring network configuration.....	18
Install software.....	27
Install Multi-Path I/O software.....	27
Installing the Fibre Channel card driver.....	28
Installing the Discovery Agent on a K2 Summit system.....	31
Restore licensing.....	32
Final steps.....	32
K2 Summit system procedures.....	33
Carrier module removal.....	33
Power supply module removal.....	34
Front bezel assembly removal K2 Summit.....	35
CompactFlash boot media removal K2 Summit.....	35
Disable write filter.....	36
Enable write filter.....	36
K2 Solo Media Server procedures.....	36
Front bezel removal K2 Solo.....	37
CompactFlash boot media removal K2 Solo.....	37

---

# Grass Valley Product Support

To get technical assistance, check on the status of a question, or to report a new issue, contact Grass Valley Product Support via e-mail, the Web, or by phone or fax.

## Web Technical Support

To access support information on the Web, visit the product support Web page on the Grass Valley Web site. You can download software or find solutions to problems.

**World Wide Web:** <http://www.grassvalley.com/support/>

**Technical Support E-mail Address:** [gvgtechsupport@grassvalley.com](mailto:gvgtechsupport@grassvalley.com)

**Grass Valley Knowledge Base:** <http://grassvalley.novosolutions.net/>

In the Knowledge Base you can search by topic, search by product, or browse the Table of Contents to find Frequently Asked Questions (FAQ).

## Telephone Support

Use the following information to contact Product Support by phone.

### International Support Centers

Our international support centers are available 24 hours a day, 7 days a week.

Support Center	Toll free	In country
France	+800 80 80 20 20	+33 1 48 25 20 20
United States	+1 800 547 8949	+1 530 478 4148

### Authorized Local Support Representative

A local support representative may be available in your country. To locate a support center during normal local business hours, refer to the following list. This list is regularly updated on the website for Grass Valley Product Support

(<http://www.grassvalley.com/support/contact/phone/>)

After-hours local phone support is also available for warranty and contract customers.

Region	Country	Telephone
Asia	China	+86 10 5883 7575
	Hong Kong, Taiwan, Korea, Macau	+852 2531 3058
	Japan	+81 3 6848 5561
	Southeast Asia - Malaysia	+603 7492 3303
	Southeast Asia - Singapore	+65 6379 1313


Region	Country	Telephone
Pacific	India	+91 22 676 10324
	Australia	1 300 721 495
	New Zealand	0800 846 676
	For callers outside Australia or New Zealand	+61 3 8540 3650
Central America, South America	All	+55 11 5509 3440
North America	North America, Mexico, Caribbean	+1 800 547 8949; +1 530 478 4148
Europe	UK, Ireland, Israel	+44 1189 230 499
	Benelux – Netherlands	+31 (0) 35 62 38 421
	Benelux – Belgium	+32 (0) 2 334 90 30
	France	+800 80 80 20 20; +33 1 48 25 20 20
	Germany, Austria, Eastern Europe	+49 6150 104 444
	Belarus, Russia, Tadzhikistan, Ukraine, Uzbekistan	+7 495 258 09 20
	Northern Europe	+45 404 72 237
	Southern Europe – Italy	+39 06 87 20 35 28
	Southern Europe – Spain	+34 91 512 03 50
Middle East, Near East, Africa	Middle East	+971 4 299 64 40
	Near East and Africa	+800 80 80 20 20; +33 1 48 25 20 20

---

# Upgrade instructions

Use these installation instructions to upgrade your K2 Summit system, K2 Solo Media Server, K2 Summit Transmission Client, or K2 Summit Transmission Server. Refer to the section in this document that applies to the upgrade kit that you received.

## Safety Summaries

 **WARNING:** *In order to avoid personal injury and prevent damage to this product and its peripheral products, be sure to review all safety and ESD precautions listed in the K2 product Service Manual.*


## Installing a two channel upgrade

Tools and materials needed:

- Upgrade codec module.

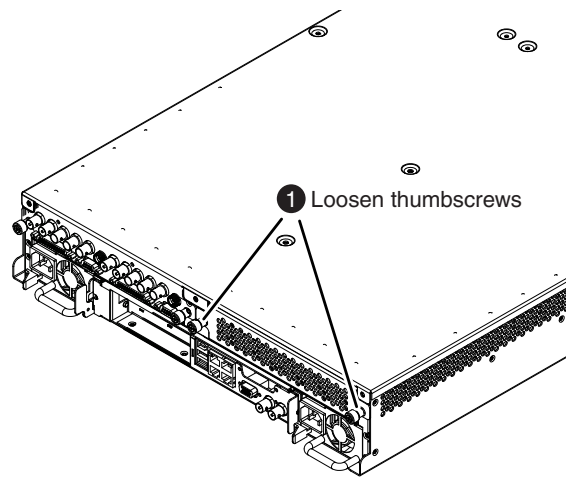
This section provides instructions for the following field kits.

Upgrade Nomenclature	Description
K2-XDP-2SDIO-FK	Adds two SD channels. For a K2 Summit Production Client model currently with two SD channels or two HD/SD channels, this adds two additional channels that are SD only.
K2-XDP-2HDIO-FK	Adds two HD/SD channels. For a K2 Summit Production Client model currently with two SD channels or two HD/SD channels, this is the first section in the steps to add two additional channels that are HD/SD.
K2-XDT-2HDIO-FK	Adds two HD/SD play-only channels. For a K2 Summit Transmission Client or K2 Summit Transmission Server model currently with two SD channels or two HD/SD channels, this is the first section in the steps to add two additional play-only channels that are HD/SD.

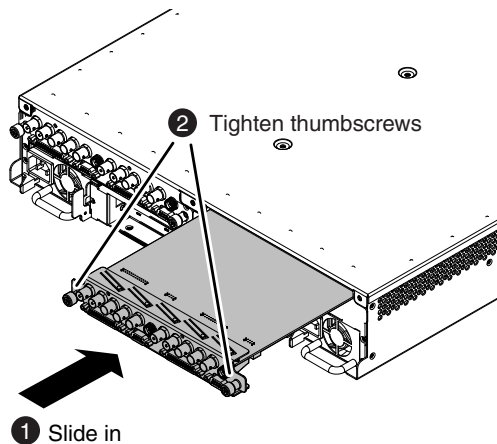
 **CAUTION:** *This system contains board-level components that must be protected from static discharge and physical shock. Wear a wrist strap grounded to the system chassis when handling system components.*

1. If you intend to upgrade K2 software along with this Field Kit upgrade, upgrade K2 software first, completing all upgrade processes as documented in "K2 Release Notes", then proceed with this procedure.
2. Restart the K2 system.
3. Log in to Windows.
4. When the AppCenter logon box appears, click **Cancel** and **Abort**.
5. Delete the channel suites file in the `C:\profile\ChannelSuites` directory. The file name begins with the K2 system's name. For example, if the name is k2client1, then the file name is `K2CLIENT1_localConnection.xml`.
6. Shutdown the K2 system.

7. From the rear panel, remove the blank plate that covers the empty codec module slot, as illustrated.



8. Install the upgrade codec module as illustrated.



**NOTE:** With a firm grip on the metal (EMI) bracket, ensure the board is level and parallel to the card guides to avoid damage to the components on the edge opposite the rear panel.

**⚠ CAUTION:** Improper handling can damage components on the board. Do not allow the board to come in contact with the chassis sheet metal during removal or installation. The components on the edge opposite the rear panel are the most susceptible to damage.

9. Start up the K2 system.

On restart, the K2 system rescans hardware and automatically discovers the new codec module.

10. If a message appears, follow the instructions in the message to either restart or shutdown/startup. This second startup process is necessary so that the K2 system can reconfigure appropriately.

11. After installing the replacement codec module, install the current version of K2 software and restart.

This is a re-install of current software, not an upgrade. You must install the same version of software that is currently on the K2 system now, regardless of whether you did or did not upgrade software earlier in this procedure. You install software now to ensure that the board is flashed with the proper version to be compatible with software currently on the K2 system. An over-install is all that is required. You do not need to first un-install the software.

12. Log in to Windows and AppCenter, and open Configuration Manager. The new channels are available for configuration.

Configure channels as follows:

- If you are installing K2-XDP-2SDIO-FK, your new channels are SD-only. Making settings as desired on your new SD channels. Then your installation of K2-XDP-2SDIO-FK is complete.
- If you are installing K2-XDP-2HDIO-FK or K2-XDT-2HDIO-FK, do not configure your new channels yet, as you must first license the new channels for HD. Continue with the next task to apply the HD license to your new channels.

## Installing the two channel HD license

Tools and materials needed:

- The license sheet you received with the upgrade kit.

This section provides instructions for the following field kits:

Upgrade Nomenclature	Description
K2-XDP-2HDL-FK	Upgrades two existing SD-only channels to support HD operation. For a K2 Summit Production Client model currently with two or four SD-only channels.
K2-XDT-2HDL-FK	Upgrades two existing SD-only bi-directional channels to support HD operation. For a K2 Summit Transmission Server or K2 Summit Transmission Client model currently with two or four SD-only channels.
K2-XDP-2HDIO-FK	Adds two HD/SD channels. For a K2 Summit Production Client model originally with two SD channels or two HD/SD channels, this is the second section in the steps to add two additional channels that are HD/SD.
K2-XDT-2HDIO-FK	Adds two HD/SD play-only channels. For a K2 Summit Transmission Client or K2 Summit Transmission Server model originally with two SD channels or two HD/SD channels, this is the second section in the steps to add two additional play-only channels that are HD/SD.

Work through the tasks in this section sequentially.

## Requesting a license

If you are installing K2-XDP-2HDIO-FK or K2-XDT-2HDIO-FK, make sure you have installed the upgrade codec module, as instructed in the previous task.

1. If you have not already done so, log on to the K2 Summit/Solo system.

**NOTE:** *You must log in as an Administrator with a local account, not a domain account.*

2. On the Windows desktop in the Grass Valley License Requests folder, open the appropriate license request shortcut.

The License Request Wizard displays.

3. Read the on-screen instructions, then click **Next**.

The Customer dialog box displays.

4. Enter the information requested on this page then click **Next**.

You must provide a valid email address to receive your license file.

The Sales Number dialog box displays.

5. Enter the Sales Order Number in the field then click **Next**.

Typically the Sales Order Number is found on the Software License sheet that you received from Grass Valley.

The Summary dialog box displays.

6. Review the License Request information and click **Finish**.

A License Request text file, *License\_Request\_<SalesNumber>.txt*, is generated and saved to the Windows Desktop.

**NOTE:** *If you are requesting licenses for more than one application, be sure to modify the name of the first License Request text file before saving it to your desktop. (In Notepad, use the Save As command.) Otherwise, the second License Request text file will overwrite it.*

7. If a K2 Summit/Solo system and the write filter is currently enabled, be aware that files on the desktop are lost on restart. Therefore do one of the following:

- Save the License Request text file(s) to a different location.
- Keep the K2 system running (do not restart) until after you have requested the license(s).

8. Do one of the following:

- Attach the License Request text file to an email.
- Paste the text directly into an email message.

You might want to keep a copy of the message for your records.

9. Send the email as instructed by the License Request Wizard.

An email will be sent from Grass Valley to the return email address you specified; your SabreTooth software license will be provided as a text file.

10. Save this email in case you ever need to re-image this machine.



Next, when you receive the email from Grass Valley with your license, add the license to the K2 Summit/Solo system.

## Adding a license

Your software license, *Licenses\_<SalesNumber>.txt*, is provided as a text file. Use the License Manager to add this file to your system and enable the desired feature.

1. If adding a license on a K2 Summit/Solo system, if you have not already done so, disable the write filter.
2. Double click on the License Manager icon on the Windows Desktop.  
The SabreTooth License Manager opens.
3. Do one of the following:
  - Choose **File | Import License** and navigate to the file location to open the text file.
  - Drag and drop the text file onto the License Manager.

You will now see the permanent license in SabreTooth, as well as any other licenses, permanent or temporary, that have been installed on this machine.

4. On a K2 Summit/Solo system, if you have completed your changes, enable the write filter.

You should archive the permanent license to a backup system.

### Related Links

[Disable write filter](#) on page 36

[Enable write filter](#) on page 36

## Installing a MPEG/AVC-Intra codec option upgrade

These field kits apply to the K2 Summit Production Client and the K2 Solo Media Server.

Prerequisites:

- K2 software version 7.1 x or higher is required
- If installing K2-XDP-AVCI-FK, the channels must have the HD license installed

Tools and materials needed:

- Two codec option cards
- #2 Phillips screwdriver

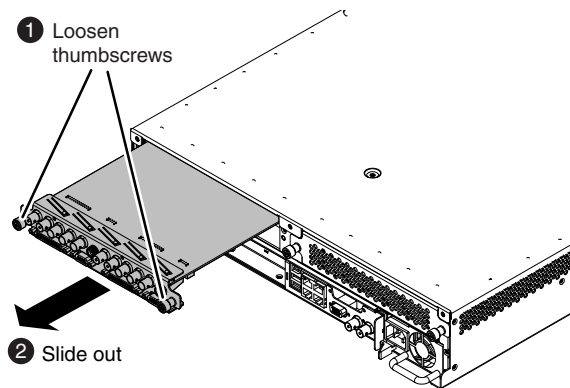
This section provides instructions for the following field kits:

Upgrade Nomenclature	Description
K2-XDP-MPG2-FK	Adds two MPEG2 encoder cards to provide two channels of MPEG record.
K2-XDP-AVCI-FK	Adds two AVC-Intra codec cards to provide two channels of AVC-Intra record and play.

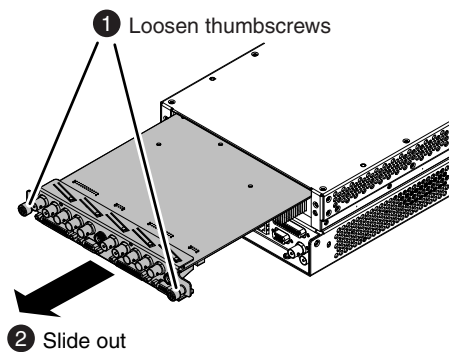
**⚠ CAUTION:** *This system contains board-level components that must be protected from static discharge and physical shock. Wear a wrist strap grounded to the system chassis when handling system components.*

1. If you intend to upgrade K2 software along with this Field Kit upgrade, upgrade K2 software first, completing all upgrade processes as documented in "K2 Release Notes", then proceed with this procedure.
2. Shutdown the K2 Summit/Solo system.
3. Access the rear panel and remove as illustrated.

#### **K2 Summit Production Client**



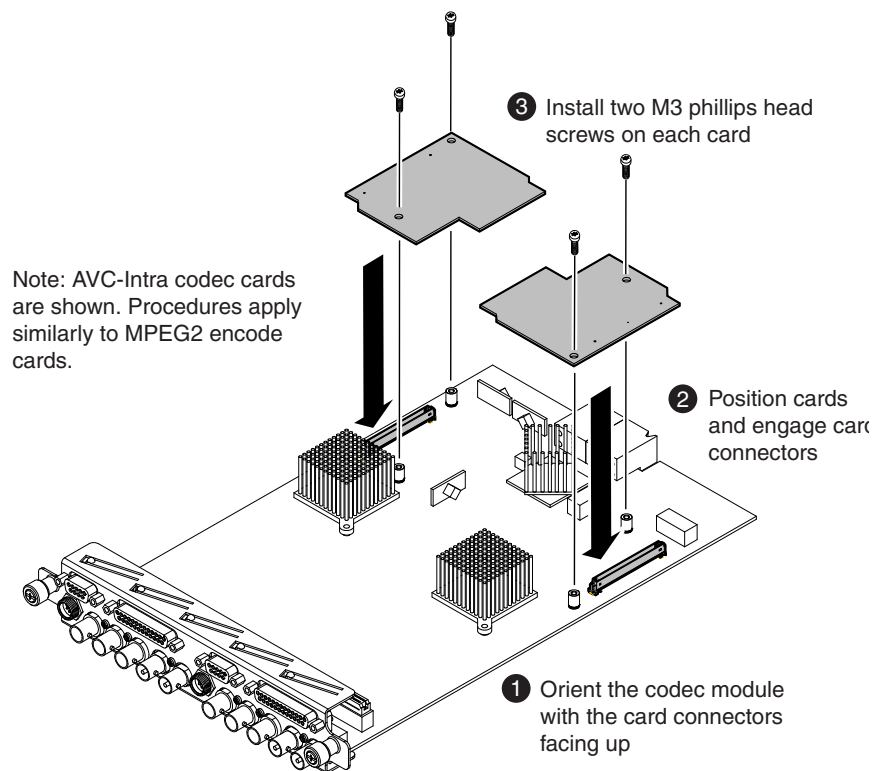
#### **K2 Solo Media Server**



**NOTE:** *With a firm grip on the metal (EMI) bracket, ensure the board is level and parallel to the card guides to avoid damage to the components on the edge opposite the rear panel.*

**⚠ CAUTION:** *Improper handling can damage components on the board. Do not allow the board to come in contact with the chassis sheet metal during removal or installation. The components on the edge opposite the rear panel are the most susceptible to damage.*

4. Install codec option cards as shown.



**NOTE:** Cards on a single codec module must be the same: either both MPEG-2 or both AVC-Intra. Installing different cards on a single codec module is not supported.

5. Install the codec module into the K2 Summit/Solo system.
6. Start up the K2 Summit/Solo system.

On restart, the K2 Summit/Solo system rescans hardware and automatically discovers the codec option cards.

7. If a message appears, follow the instructions in the message to either restart or shutdown/startup. This second startup process is necessary so that the K2 Summit/Solo system can reconfigure appropriately.
8. After installing the card, install the current version of K2 software and restart.

An over-install is all that is required. You do not need to first un-install the software. This ensures that the board is flashed with the proper version to be compatible with K2 software.

Log in to Windows and AppCenter, and open Configuration Manager. The new configuration options are available for configuration.

**NOTE:** Once a channel is operational with MPEG-2 or AVC-Intra, if you then remove the cards from the codec module you must also delete `C:/profile/config/config.xml`. Failure to do so causes errors in Configuration Manager.

## Installing 8.x software, CPU carrier module, and codec module upgrades

Tools and materials needed:

- Hardware as provided by upgrade kit. See descriptions below.
- Torx tool with T15 magnetic tip

This section provides instructions for the following field kits:

Upgrade Nomenclature	Description
K2-XDP-V8x-FK	<p>Upgrades a system with a Type I (Kontron) CPU carrier module currently at a software version lower than 8.0 to software version 8.x.</p> <p>Includes the following hardware:</p> <ul style="list-style-type: none"><li>• 1) 8 GB CompactFlash</li><li>• 1) 16 GB USB drive</li></ul> <p>Also includes K2 8.x software license.</p> <p>Applies to K2 Summit Production Client, K2 Summit Transmission Server/Client, and K2 Solo Media Server</p>
K2-XDP-CPU-FK	<p>Upgrades a system with a Type I (Kontron) CPU carrier module to the Type II (ADLINK) CPU carrier module and software version 8.x.</p> <p>Includes the following the following hardware:</p> <ul style="list-style-type: none"><li>• 1) Type II CPU carrier module</li><li>• 1) 8 GB CompactFlash</li><li>• 1) 16 GB USB drive</li></ul> <p>Also includes K2 8.x APPCENTER-PRO software license.</p> <p>Applies to K2 Summit Production Client and K2 Summit Transmission Server/Client. Does not apply to K2 Solo Media Server.</p>
K2-XDP-3G1-FK	<p>Upgrades a system with a Type I (Kontron) CPU carrier module to the Type II (ADLINK) CPU carrier module, 3G codec module, and software version 8.x.</p> <p>Includes the following hardware:</p> <ul style="list-style-type: none"><li>• 2) 3G codec module</li><li>• 2) 3G power supply modules</li><li>• 1) Type II CPU carrier module</li><li>• 1) 8 GB CompactFlash</li><li>• 1) 16 GB USB drive</li></ul> <p>Also includes K2 8.x APPCENTER-PRO software license.</p> <p>Applies to K2 Summit Production Client. Does not apply to K2 Solo Media Server or K2 Summit Transmission Server/Client.</p>

Upgrade Nomenclature	Description
K2-XDP-3G2-FK	<p>Upgrades a system with a Type II (ADLINK) CPU carrier module and first-generation codec module to the 3G codec module and software version 8.x.</p> <p>Includes the following hardware:</p> <ul style="list-style-type: none"> <li>• 2) 3G codec module</li> <li>• 2) 3G power supply modules</li> <li>• 1) 16 GB USB drive</li> </ul> <p>Also includes K2 8.x APPCENTER-PRO software license.</p> <p>Applies to K2 Summit Production Client. Does not apply to K2 Solo Media Server or K2 Summit Transmission Server/Client.</p>

If the system is already at version 8.x software with 8 GB CompactFlash and/or already has the Type II CPU carrier module, you must still reimaging the system and do all the steps in the procedure to ensure the system is properly initialized.

Work through the tasks in this section sequentially.

**⚠ CAUTION:** *This system contains board-level components that must be protected from static discharge and physical shock. Wear a wrist strap grounded to the system chassis when handling system components.*

## Saving settings

Do this task for all (V8x, CPU, 3G1, 3G2) upgrade kits.

Before doing this task, on the 16GB USB Recovery Flash Drive that you received with the kit, write the serial number of the K2 Summit/Solo system to identify it as belonging to that individual system.

1. If you are working on a K2 Summit SAN-attached system, on the K2 SAN's control point PC, use the K2Config application to remove the K2 Summit system from the SAN.
2. Make sure you are logged in to the K2 Summit/Solo system with administrator privileges.
3. Connect the USB Recovery Flash Drive to a USB port on the K2 Summit/Solo system.
4. On the USB Recovery Flash Drive, navigate to the following location:

`\tools\SaveRestoreScripts.`

5. Run the following and wait for the process to complete:

`ssave.bat`

This saves current settings onto the USB Recovery Flash Drive in the `\settings` directory.

6. Disconnect the USB Recovery Flash Drive.

Next, do one of the following:

- If you are installing K2-XDP-V8x-FK on a K2 Summit/Solo system, skip ahead and replace the CompactFlash boot media.

- If you are installing K2-XDP-3G2-FK on a K2 Summit/Solo system, skip ahead and replace the codec module and power supplies.
- If you are installing K2-XDP-CPU-FK or K2-XDP-3G1-FK on a K2 Summit system, replace the CPU carrier module.

## Replace CPU carrier module

Do this task if installing K2-XDP-CPU-FK or K2-XDP-3G1-FK on a K2 Summit system.

**NOTE:** *Do not attempt to replace the CPU carrier module on a K2 Solo Media Server. K2-XDP-CPU-FK and K2-XDP-3G1-FK do not apply to K2 Solo Media Server.*

1. Shutdown the K2 Summit system.
2. Disconnect all power cables from the K2 Summit system.
3. Press the power button on the K2 Summit system to drain off power from boards.
4. Remove any cables connected to the CPU carrier module.
5. Replace the current CPU carrier module with the new CPU carrier module.
6. Reconnect cables to the CPU carrier module.

Next, do one of the following:

- If you are installing K2-XDP-CPU-FK on a K2 Summit system, reconnect power cables, then skip ahead and replace the CompactFlash boot media.
- If you are installing or K2-XDP-3G1-FK on a K2 Summit system, replace the codec module.

### Related Links

[Front bezel assembly removal K2 Summit](#) on page 35

[Carrier module removal](#) on page 33

## Replace codec module and power supplies

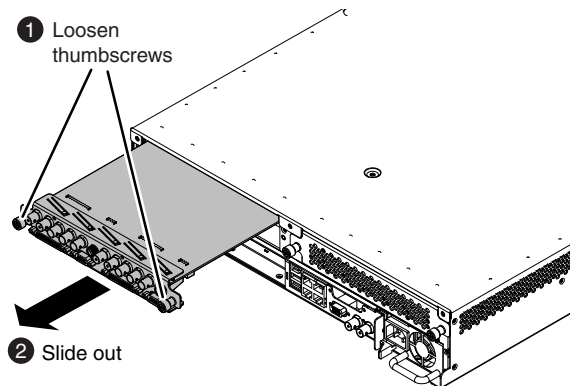
Do this task if installing K2-XDP-3G1-FK or K2-XDP-3G2-FK on a K2 Summit system.

**NOTE:** *Do not attempt to replace the CPU carrier module on a K2 Solo Media Server. K2-XDP-CPU-FK and K2-XDP-3G1-FK do not apply to K2 Solo Media Server.*

Before doing this task, do the following, if not already done:

- Shutdown the K2 Summit system.
  - Disconnect all power cables from the K2 Summit system.
  - Press the power button on the K2 Summit system to drain off power from boards.
1. Remove any cables connected to the codec modules.

2. Access the rear panel and remove as illustrated.



**NOTE:** With a firm grip on the metal (EMI) bracket, ensure the board is level and parallel to the card guides to avoid damage to the components on the edge opposite the rear panel.

**⚠ CAUTION:** Improper handling can damage components on the board. Do not allow the board to come in contact with the chassis sheet metal during removal or installation. The components on the edge opposite the rear panel are the most susceptible to damage.

3. Install the new codec modules.
4. Replace the current power supply modules with the new power supply modules.
5. Reconnect cables to the codec modules and power supplies.

Next, do one of the following:

- If you are installing K2-XDP-3G2-FK on a K2 Summit system, skip ahead and reimage.
- If you are installing or K2-XDP-3G1-FK on a K2 Summit system, replace the CompactFlash boot media.

#### Related Links

[Power supply module removal](#) on page 34

## Replace CompactFlash boot media

Do this task if installing K2-XDP-V8x-FK, K2-XDP-CPU-FK, or K2-XDP-3G1-FK.

Before doing this task, make sure the K2 Summit/Solo system is powered off.

1. Remove the front bezel assembly.
2. Replace the current CompactFlash boot media with the new CompactFlash boot media.
3. Replace the front bezel assembly.

Next, reimage the K2 Summit/Solo system.

#### Related Links

[Front bezel assembly removal K2 Summit](#) on page 35

[CompactFlash boot media removal K2 Summit](#) on page 35

[Front bezel removal K2 Solo](#) on page 37

[CompactFlash boot media removal K2 Solo](#) on page 37

## Reimage K2 Summit/Solo system

Do this task for all (V8x, CPU, 3G1, 3G2) upgrade kits.

Before doing this task, make sure that you have done the following:

- Saved settings using the *ssave.bat* script.
- Replaced hardware, as supplied by your upgrade kit.
- Reconnected cables.

1. If you have not already done so, connect keyboard, monitor, and mouse.

2. Do the following:

- a) Insert the Recovery Flash Drive into a USB port.
- b) Restart the machine, or power on if currently shut down.

The machine boots from the Recovery Flash Drive, into a version of Windows stored on the drive.

A MS-DOS command window opens.

- c) When prompted with a list of options, type 2 to select the Acronis option and then press **Enter**.  
The Acronis program loads.

3. In the Acronis main window, click **Recovery**.

The Restore Data Wizard opens.

4. On the Welcome page, click **Next**.

5. On the Backup Archive Selection page, do the following:

- a) In the tree view expand the node for **Removable Disk (D:)**. This is the Recovery Flash Drive.
- b) Select the image file as follows:
  - If your K2 Summit/Solo system has the Type I (Kontron) CPU carrier module, select the version 2.x image file.
  - If your K2 Summit/Solo system has the Type II (ADLINK) CPU carrier module, select the version 3.x image file.

- c) Click **Next**.

6. On the Restoration Type Selection page, select **Restore disks or partitions** and then click **Next**.

7. On the Partition or Disk to Restore page, select **MBR and Track 0** and then click **Next**.

8. On the Disk Selection page, select **Disk 1** and then click **Next**.

**NOTE:** *Verify capacity to make sure you select the boot media card. It has an interface identified as "IDE (0) Primary Master".*

9. On the Next Selection page, select **Yes, I want to restore another partition or hard disk drive** and then click **Next**.

10. On the Partition or Disk to Restore page, select **(C:)** and then click **Next**.

11. On the Restored Partitions Resizing page, select **Yes, I want to resize partitions** and then click **Next**.



12. On the Restored Location page, select **(C:)** and then click **Next**.

**NOTE:** *Verify capacity to make sure you select the boot media card (CompactFlash or mSATA) and not a media drive. The boot media has a much smaller capacity and has an interface identified as "IDE (0) Primary Master".*

13. On the Restored Partition Type page, select **Active** and then click **Next**.

14. Do one of the following:

- If the Restored Partition Size page does not appear. Skip ahead to the Next Selection page.
- If the Restored Partition Size page appears. Continue with the next step.

15. On the Restored Partition Size page, do one of the following:

- If **Free space after** reports 0 bytes, leave settings as they are. Click **Next**.
- If **Free space after** does not report 0 bytes, increase **Partition size** until **Free space after** reports 0 bytes. Click **Next**.

16. On the Next Selection page, select **No, I do not** and then click **Next**.

17. On the Restoration Options page, do not make any selections. Click **Next**.

18. On the "...ready to proceed..." page, verify that you are restoring the correct image to the correct location. Click **Proceed**.

19. On the Operation Progress page, observe the progress report.

20. When a "The data was successfully restored" message appears, click **OK**.

21. Click **Operations | Exit** to exit the Acronis True Image program.

The machine restarts automatically.

22. Remove the recovery media while the machine is shutting down.

23. Upon startup, wait for initialization processes to complete. This can take several minutes, during which time USB keyboard/mouse input is not operational. Do not attempt to shutdown or otherwise interfere with initialization processes.

After startup, one or more device discovery windows can open. Allow processes to complete without interference. If a Fibre Channel card driver, ignore until instructed later in this process.

Next, restore settings.

## Restoring settings after generic reimage

Do this task for all (V8x, CPU, 3G1, 3G2) upgrade kits.

This task assumes that you have saved settings using `ssave.bat` before reimaging the K2 Summit/Solo system, and that the reimage (Acronis) process is complete.

1. If you have not already done so, start up the K2 Summit/Solo system and log on with administrator privileges.

The administrator password is `adminGV!`.

2. Connect the USB Recovery Flash Drive to a USB port on the K2 Summit/Solo system.

3. From the USB Recovery Flash Drive, run the following and wait for the process to complete:

```
srestore.bat
```

4. If desired, name the computer (My Computer).

You can copy the name from `C:\README.txt`.

5. Run the following:

`C:\WINDOWS\NewSid\newsid.exe`

The New SID wizard opens.

6. In the New SID wizard, do one of the following:

- To allow the wizard to assign a new, random SID to the K2 Summit/Solo system, select **Random SID**.
- To retain the SID that the K2 Summit/Solo system had before reimaging, select **Specify SID**. Refer to `C:\README.txt` to get the SID and instructions on entering the SID.

7. In the New SID wizard, select **Rename the computer to:** and enter the computer name.

8. Click **Next** to complete the wizard.

The K2 Summit/Solo system restarts.

Next, restore network configuration.

## Restoring network configuration

Do this tasks in this section for all (V8x, CPU, 3G1, 3G2) upgrade kits.

Work through the tasks in this section sequentially to restore the default network configuration. As you do so, refer to `C:\ipconfig.txt` for the complete listing of the network settings that the K2 Summit/Solo system had before reimaging.

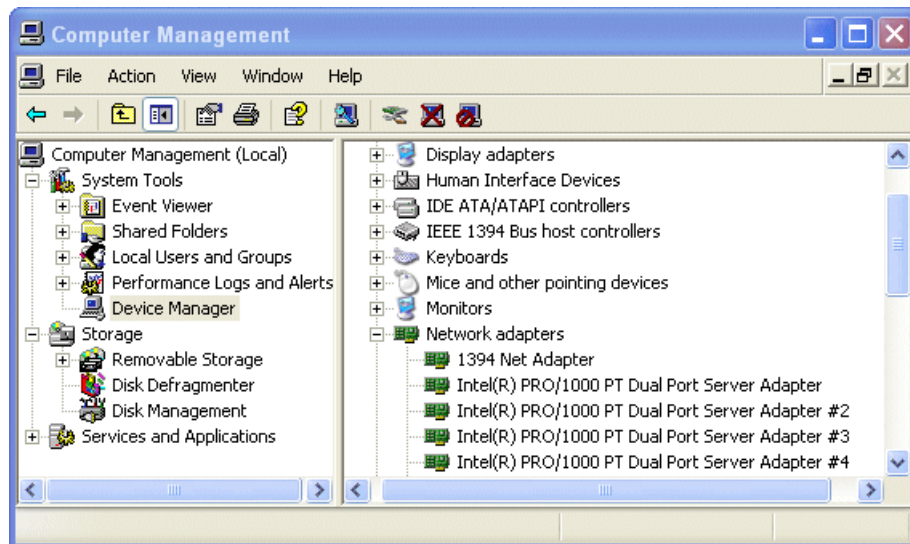
These tasks assume that K2 software is not yet installed, and therefore there is no write filter on the system. If K2 software is installed, manage the write filter accordingly.

### Identify adapters

On some systems, it is possible that the Microsoft Windows operating system has enumerated network adapter names in an unpredictable sequence. You must identify adapters by their location

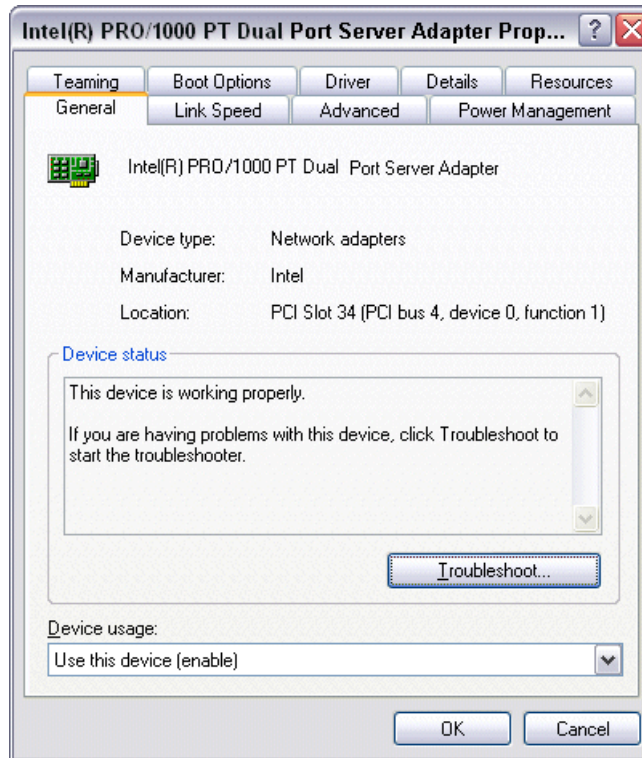
rather than by the enumeration assigned by the Windows operating system and verify or modify the adapter name as necessary.

1. Open Device Manager as follows:
  - a) On the Windows desktop, right-click the "My Computer" icon for your K2 system and select **Manage**. The Computer Management window opens.



- b) In the left pane select **Device Manager**.  
Device Manager opens in the right pane.
2. In Device Manager, expand **Network Adapters**.
3. Verify the list of adapters. The adapters have similar names, with the first adapter having no enumerator at the end of its name and the other adapters enumerated #2, #3, #4, etc.  
The 1394 adapter is for the IEEE 1394a port on the rear panel. This port is for debugging purposes only. It is not supported for customer use. Do not attempt to configure or otherwise use this port.

4. For each adapter shown, identify its location, as follows:
  - a) Under Network adapters, right-click one of the adapters and select **Properties**.  
If prompted, enter administrator password.  
The Properties dialog box opens.



- b) On the **General** tab take note of Location displayed within the parentheses.  
You must make a written record of the enumerator that the Windows operating system has assigned to this location (PCI bus X, device 0, function X). Use the table below and fill in the blanks:

On this system, Windows has assigned this adapter name...	To this location:
Intel® PRO/1000 PT Dual Port Server Adapter	PCI bus ____, device 0, function ____
Intel® PRO/1000 PT Dual Port Server Adapter #2	PCI bus ____, device 0, function ____
Intel® PRO/1000 PT Dual Port Server Adapter #3	PCI bus ____, device 0, function ____
Intel® PRO/1000 PT Dual Port Server Adapter #4	PCI bus ____, device 0, function ____

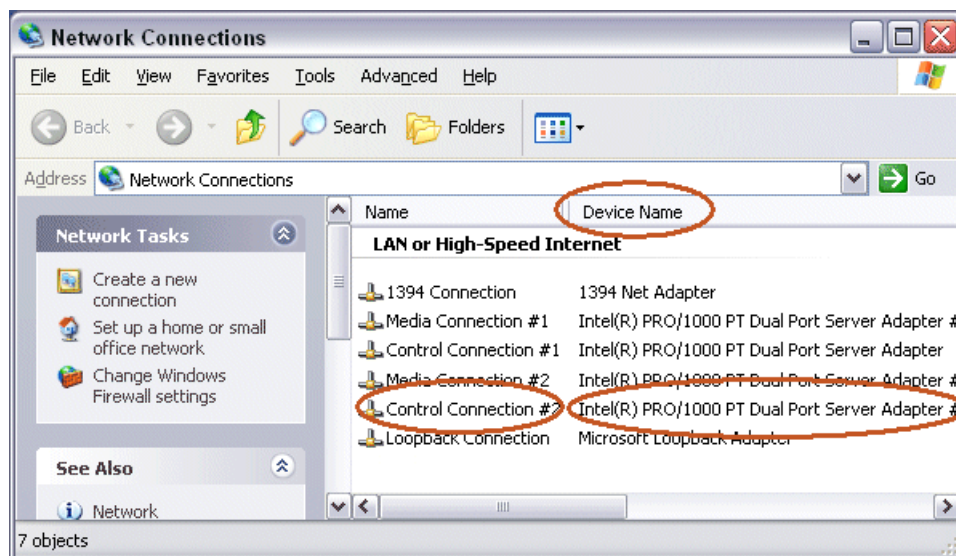
- Repeat the previous steps until you have determined which adapter name goes to which (PCI bus X, device 0, function X) location.

Next, name adapters.

### Name adapters

Before doing this task, you must know the (PCI bus X, device 0, function X) location of adapters.

- Open Network Connections, if it is not already open.
- In Network Connections, identify the adapter names and enumerators that the Windows operating system has assigned to adapters.



- Determine which adapter names in the Device name column are assigned to which (PCI bus X, device 0, function X) location.
- Reconcile the locations assigned to the adapter names with the names as currently configured in the Name column.

The required mapping of names to locations is specified in the following table:

The adapter name (as displayed in the Device Name column) that is assigned to this location...	Must be named as follows:
PCI bus 4, device 0, function 1	Control Connection #1
PCI bus 4, device 0, function 0	Media Connection #1
PCI bus 3, device 0, function 0	Media Connection # 2
PCI bus 3, device 0, function 1	Control Connection #2

5. Proceed as follows:

- If all the names on this system are configured correctly to locations, skip the rest of this procedure.
- If names on this system are not configured correctly to locations, for each adapter name incorrectly configured, complete the remaining steps of this procedure.

6. Select the name in the Name column.

7. Select **File | Rename** to enter rename mode.

8. Type the name required for the location.

Next, create the Control Team.

#### **Create the Control Team**

Before beginning this task, make sure of the following:

- Adapters are named

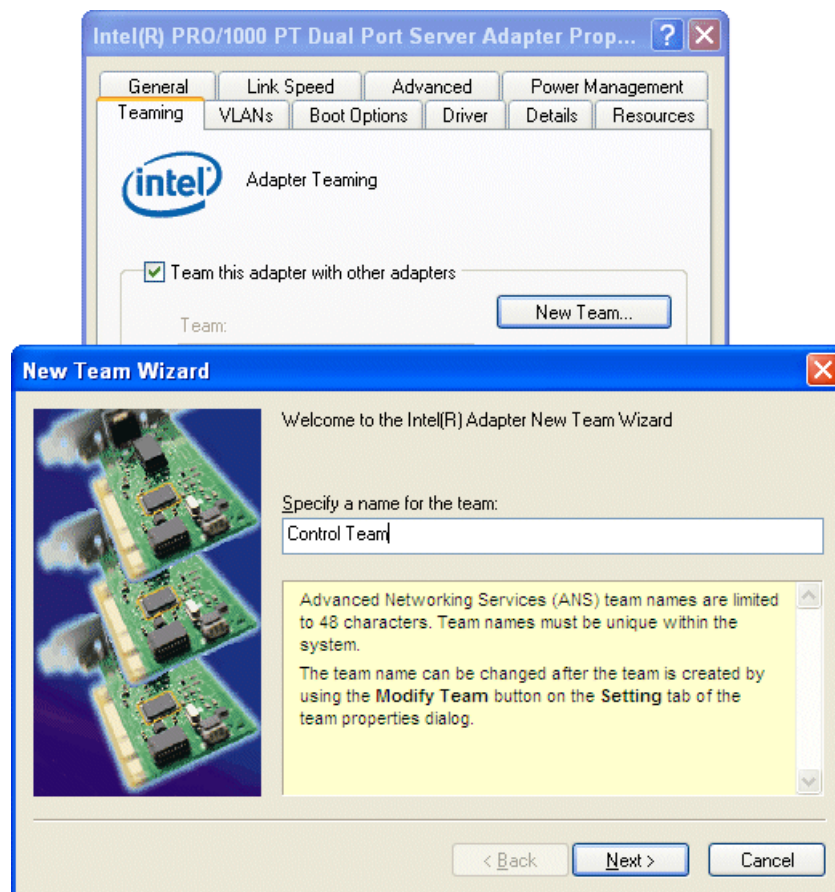
***NOTE: Team control ports only. Do not team media ports.***

1. In Device Manager, right-click the adapter name that on this system is assigned to location PCI bus 4, device 0, function 1.

2. Select **Properties**

The Properties dialog box opens.

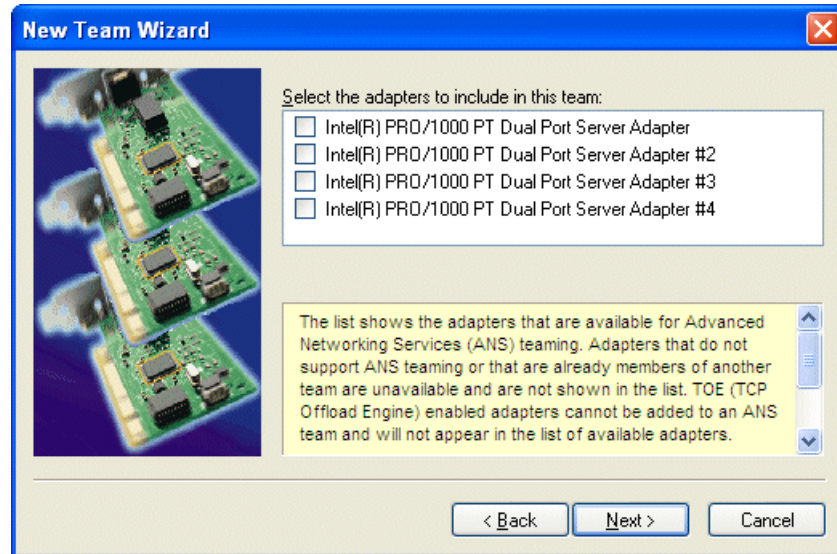
3. Select the **Teaming** tab.



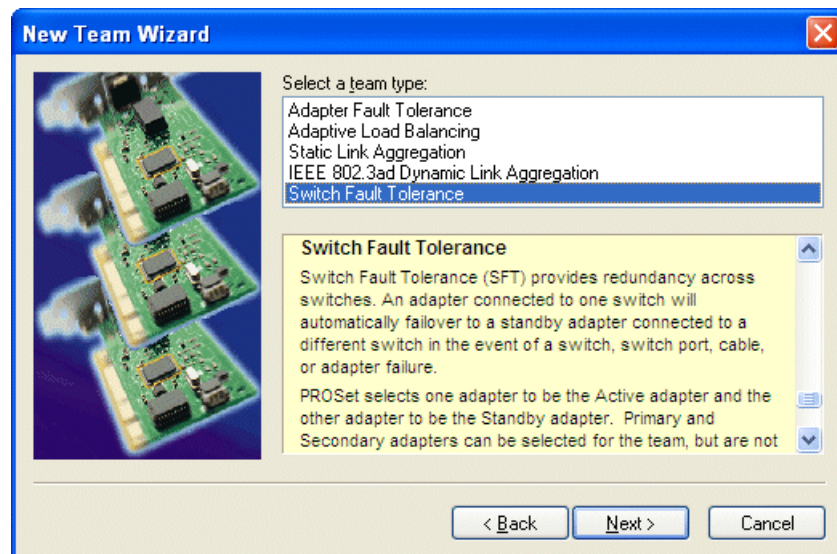
4. Select **Team this adapter with other adapters**, then click **New Team**. The New Team Wizard opens.

5. Enter Control Team.

Click **Next**.



6. Select the check box for the adapter name that maps to Control Connection #1 (PCI bus 4, device 0, function 1) and for the adapter name that maps to Control Connection #2 (PCI bus 3, device 0, function 1). Click **Next**.



7. Select **Switch Fault Tolerance**. Click **Next**.
8. Click **Finish** and wait a few seconds for the adapters to be teamed.



9. Open the Modify Team dialog box as follows:
  - a) In **Device Manager | Network Adapters**, right-click **Control Team** and select **Properties**. The Properties dialog box opens.
  - b) Select the **Settings** tab.
  - c) Click **Modify Team**. A dialog box opens.
10. On the **Adapters** tab, do the following:
  - a) Select the top entry, which is the adapter name that maps to Control Connection #1 (PCI bus 4, device 0, function 1) and click **Set Primary**.
  - b) Select the adapter name that maps to Control Connection #2 (PCI bus 3, device 0, function 1) and click **Set Secondary**.
11. Click **OK** and **OK** to close dialog boxes.
12. Restart the K2 Summit/Solo system.

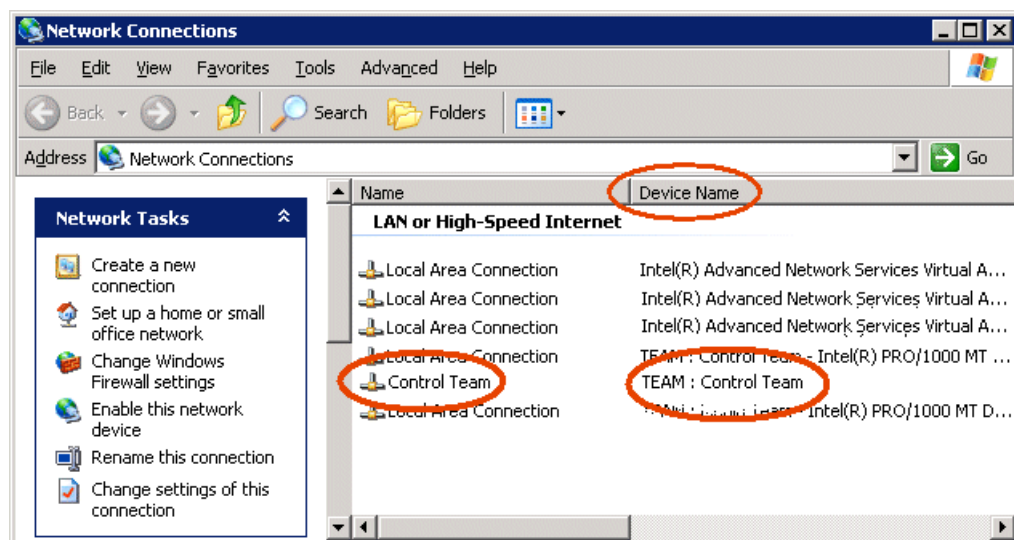
Next, name team and loopback.

### Name team and loopback

Before beginning this task, make sure of the following:

- Adapters are named
- The control team is created

1. On the Windows desktop right-click **My Network Places** and select **Properties**. The Network Connections window opens.



2. For the Control Team and the loopback, select adapter names in the “Device Name” column and rename them as follows:
  - a) Select the adapter name.
  - b) Select **File | Rename** to enter rename mode.
  - c) Type the name, as specified in the following table:

In the Device Name column, select this adapter name...	And rename it as follows:
TEAM : Control Team	Control Team

3. Do one of the following:
  - If you intend to use SiteConfig for device discovery and IP address configuration, you do not need to set an IP address for the Control Team at this time. You are done with this procedure.
  - If you are not using SiteConfig, set an IP address for the Control Team at this time. Use standard Windows procedures.

**NOTE:** *Do not set IP addresses for the two Media Connections.*

Next, reorder adapters.

#### Reorder adapters

Before beginning this task, make sure of the following:

- Adapters are named correctly according to their PCI bus location
  - The control team is created
  - The team and loopback are named
1. If K2 software is installed, disable the write filter, if it is not already disabled.
  2. On the Windows desktop right-click **My Network Places** and select **Properties**.  
The Network Connections window opens.
  3. Select **Advanced**, then **Advanced Settings...**
  4. On the **Adapters and Bindings** tab, depending on the K2 system storage, order adapters as follows:

Internal or direct-connect storage	Shared (SAN) storage
Loopback	Control Team
Control Team	Control Connection #1
Control Connection #1	Control Connection #2
Control Connection #2	Media Connection #1
Media Connection #1	Media Connection #2
Media Connection #2	Loopback
1394 Connection	1394 Connection

If controlled by Dyno Production Assistant, refer to Dyno PA documentation for adapter order.

5. Click **OK** to close and accept the changes.

6. Close Network Connections.

Network configuration is restored.

Next, install software.

## Install software

Do this task for all (V8x, CPU, 3G1, 3G2) upgrade kits.

Find K2 software, SNFS software, and "K2 Release Notes" on the USB Recovery Flash Drive that you received with the upgrade kit.

1. Install SNFS software. Refer to "K2 Release Notes" for procedures.

SNFS uses the settings restored from *srestore.bat*.

2. Install 8.x K2 software. Refer to "K2 Release Notes" for procedures.

Next, do one of the following:

- If a standalone, internal storage K2 Summit system, skip ahead and install the SiteConfig Discovery Agent.
- If a K2 Summit system with direct-connect storage or shared storage on a redundant K2 SAN, install MPIO software.

## Install Multi-Path I/O software

Do this task on a K2 Summit system with direct-connect storage or shared storage on a redundant K2 SAN.

Before doing this task, make sure the write filter is disabled.

1. Access the Windows desktop on the K2 system.

You can do this locally with a connected keyboard, mouse, and monitor or remotely via the Windows Remote Desktop Connection.

2. Stop all media access. If AppCenter is open, close it.

3. Click **Start | Run**, type `cmd` and press **Enter**.

The MS-DOS command prompt window opens.

4. From the command prompt, navigate to the `C:\profile\mpio` directory.

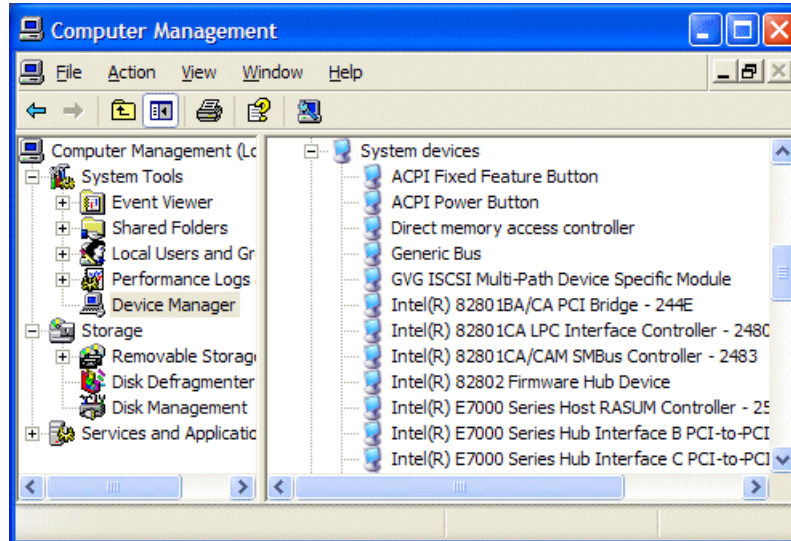
5. Type the following at the command prompt:

- `gdsminstall.exe -i c:\profile\mpio gdsm.inf Root\GDSM`

6. Restart the K2 system.

7. After restart, to verify that the software is installed, on the Windows desktop right-click **My Computer** and select **Manage**.

The Computer Management window opens.



8. In the left pane select **Device Manager**.
9. In the right pane open the **System devices** node and verify that **GVG ISCSI Multi-Path Device Specific Module** is listed.

Next, do one of the following:

- If the K2 Summit system does not have a Fibre Channel card, skip ahead and install the SiteConfig Discovery Agent.
- If the K2 Summit system has a Fibre Channel card, install the Fibre Channel card driver.

#### Related Links

[Disable write filter](#) on page 36

## Installing the Fibre Channel card driver

Before installing the Fibre Channel card driver, make sure that K2 software is installed and the write filter is disabled. Also, if the K2 Summit system is on a redundant K2 SAN or is connected to direct-connect storage, make sure that MPIO software is installed.

If your K2 Summit system has the optional Fibre Channel card, the driver for the Fibre Channel card is not installed on the recovery image provided by Grass Valley for that K2 Summit system. Therefore, after restoring the image, you must install the Fibre Channel card driver.

A K2 Summit system can have one of the following types of Fibre Channel cards:

- LSI

- ATTO

Depending on the type of Fibre Channel card in the K2 Summit system, do the appropriate task from this section to install the Fibre Channel card driver.

#### Related Links

[Disable write filter](#) on page 36

#### Installing the LSI Fibre Channel card driver

1. Make sure that you have access to the Fibre Channel card driver file. K2 software installation copies the driver to the local K2 Summit system, in `C:\Windows`. In that location, look for `LSI_SCSIPOINT_1.21.25.00`, then do one of the following:
  - If the file is present, continue with the next step in this procedure.
  - If the file is not present, procure the file from `ftp://ftp.grassvalley.com/pub/K2/Microcode_and_Drivers/LSI_SCSIPOINT`. The filename is `LSI_SCSIPOINT_1.21.25.00.zip`. Then continue with this procedure.
2. Upon restart a Found New Hardware wizard opens for the Fibre Channel controller. Install the driver on the first FC port as follows:
  - a) Select **Install from a list or specific location**. Click **Next**.
  - b) Select **Don't search. I will choose the driver to install** and then click **Next**.
  - c) Select **SCSI and Raid Controllers** and **Have Disk**.
  - d) Browse to `C:\Windows` and find `LSI_SCSIPOINT_1.21.25.00`. Click **Open** and **OK**.
  - e) Start the driver install by selecting **Next**.
  - f) On the Hardware Installation page, click **Continue Anyway**.
  - g) Click **Finish**.
3. If the K2 Summit system has a dual port Fibre Channel card, on the Found New Hardware wizard, install the driver on the second FC port as follows:
  - a) Select **Install from a list or specific location** and then click **Next**.
  - b) Select **Don't search. I will choose the driver to install**. Click **Next**.
  - c) Select **Have Disk**.
  - d) Browse to `C:\Windows` and find `LSI_SCSIPOINT_1.21.25.00`. Click **Open** and **OK**.
  - e) Start the driver install by selecting **Next**.
  - f) On the Hardware Installation page, click **Continue Anyway**.
  - g) Click **Finish**.
4. On the Found New Hardware wizard, install the first LSI Pseudo Device as follows:
  - a) Select **Install from a list or specific location**. Click **Next**.
  - b) Select **Don't search. I will choose the driver to install** and then click **Next**.
  - c) Select **Have Disk**.
  - d) Browse to `C:\Windows` and find `LSI_SCSIPOINT_1.21.25.00`. Click **Open** and **OK**.
  - e) Start the driver install by selecting **Next**.
  - f) On the Hardware Installation page, click **Continue Anyway**.
  - g) Click **Finish**.

5. If the K2 Summit system has a dual port Fibre Channel card, on the Found New Hardware wizard, install the driver on the second LSI Pseudo Device port as follows:
  - a) Select **Install from a list or specific location** and then click **Next**.
  - b) Select **Don't search. I will choose the driver to install** and then click **Next**.
  - c) Select **Have Disk**.
  - d) Browse to *C:\Windows* and find *LSI\_SCSIPOINT\_1.21.25.00*. Click **Open** and **OK**.
  - e) Start the driver install by selecting **Next**.
  - f) On the Hardware Installation page, click **Continue Anyway**.
  - g) Click **Finish**.
6. If the K2 Summit system is on a redundant K2 SAN or is connected to direct-connect storage, make the following registry settings:

```
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Symmpi\Parameters\Device]
"DriverParameter"="MPIOMode=2"
"MaximumSGList"=dword:000000ff
"NumberOfRequests"=dword:00000020
```

Next, install the SiteConfig Discovery Agent.

#### Installing the ATTO Fibre Channel card driver

1. Open Device Manager.
2. Right-click on **K2 Summit Client** and select **Manage**.
3. Click **Device Manager**
4. Install the first Fibre Channel driver as follows:
  - a) Right click on the upper Fibre Channel Controller and select **Update Driver...**
  - b) On the Welcome page, select **No, not this time** and then click **Next**.
  - c) Select **Install from a list or specific location** and then click **Next**.
  - d) Browse to *C:\Profile\Drivers\ Atto 8Gb HBA Drivers\x86*.
  - e) Click **OK**.
  - f) Click **Next**.
  - g) Click **Finish** when prompted.
  - h) In the Found new hardware wizard that will open for the ATTO Phantom device, select **No, not this time**.
  - i) Select **Install from a list or specific location** and then click **Next**.
  - j) Browse to *C:\Profile\Drivers\ Atto 8Gb HBA Drivers\x86*.
  - k) Click **OK**.
  - l) Click **Next..**
  - m) Click **Finish** when prompted.

5. Repeat the process for the second Fibre Channel Controller as follows:
  - a) Right-click on the remaining Fibre Channel Controller and select **Update Driver...**
  - b) On the Welcome page, select **No, not this time** and then click **Next**.
  - c) Select **Install from a list or specific location** and then click **Next**.
  - d) Browse to `C:\Profile\Drivers\ Atto 8Gb HBA Drivers\x86`.
  - e) Click **OK**.
  - f) Click **Next**.
  - g) Click **Finish** when prompted.
6. Verify that the two "ATTO" devices are now listed under the SCSI and RAID Controllers
7. Close the Device Manager and System windows

Next, install the SiteConfig Discovery Agent.

## Installing the Discovery Agent on a K2 Summit system

Do this task for all (V8x, CPU, 3G1, 3G2) upgrade kits.

Before doing this task, make sure the write filter is disabled.

Find the Discovery Agent installation files on the USB Recovery Flash Drive you received with the upgrade kit. The files are in the *ConnectivityKit* folder.

1. Navigate to your SiteConfig files.
2. To launch the program that installs the ProductFrame Discovery Agent Service do the following:
  - a) Copy the *Discovery Agent Setup* subdirectory to the device.
  - b) In the *Discovery Agent Setup* directory, double-click the *DiscoveryAgentServiceSetup.msi* file.  
The setup program launches to install the SiteConfig Discovery Agent.
  - c) Follow the setup wizard.
3. When presented with a list of device types, select one of the following as appropriate:
  - K2SummitSanClient
  - K2SummitStandaloneClient
4. Complete the setup wizard and restart the device.  
The restart is required after the installation.

Next, restore licensing.

### Related Links

[Disable write filter](#) on page 36

## Restore licensing

Do this task for all (V8x, CPU, 3G1, 3G2) upgrade kits.

1. Proceed as follows:

- If you are installing K2-XDP-V8x-FK, restart and test AppCenter operations. Pay special attention to functionality enabled by an AppCenter Elite license, such as ChannelFlex Suite features. If the test succeeds, skip ahead to final steps. If the test fails, then SabreTooth might not have accepted the copied licenses. Continue with the next step in this procedure.
- If you are installing K2-XDP-CPU-FK, K2-XDP-3G1-FK, or K2-XDP-3G2-FK, continue with the next step in this procedure.

2. Restore SabreTooth licenses as follows:

a) On the Windows desktop, click **License Manager**.

SabreTooth License Manger opens.

b) Proceed as follows:

- If the expected licenses do not show up on the USB Recovery Flash Drive, find the saved licenses in `\settings\stlicenses.xml`. Drag and drop this file into the License Manager window.
- If valid licenses show up in the list, then close the License Manager and restart the K2 Summit/Solo system.
- If the License Manager says the licenses are not for this machine then the hardware for the network interfaces has changed. Contact Grass Valley Customer Service to order new replacement licenses.

Next, complete final steps.

## Final steps

Do these steps for all (V8x, CPU, 3G1, 3G2) upgrade kits.

Before doing these steps, make sure the write filter is disabled.

1. Check the Windows operating system clock and, if necessary, set it to the correct time.
2. If you are upgrading a K2 Summit SAN-attached system, on the K2 SAN's control point PC, use the K2Config application to add the K2 Summit system back to the SAN.
3. Enable the write filter, if it is not already enabled.
4. When the K2 Summit/Solo system is fully configured, licensed, and operational, create a first-birthday disk image and store it on the USB Recovery Flash Drive. Refer to the K2 product's Service Manual for procedures.
5. Disconnect the USB Recovery Flash Drive and store it in the front bezel assembly.

If present, discard the previous 4 or 8 GB USB Recovery Flash Drive.

The upgrade process is complete for the following upgrade kits:

- K2-XDP-V8x-FK



- K2-XDP-CPU-FK
- K2-XDP-3G1-FK
- K2-XDP-3G2-FK

For a K2 Summit system upgraded with the CPU, 3G1, or 3G2 kits, if you do any service work or replace any Field Replaceable Units (FRUs), first consult "K2 Summit 3G Production Client Service Manual". This is true even if replacing an original FRU that has not been upgraded. System dependencies involving FRUs require procedures found only in "K2 Summit 3G Production Client Service Manual".

#### Related Links

[Disable write filter](#) on page 36

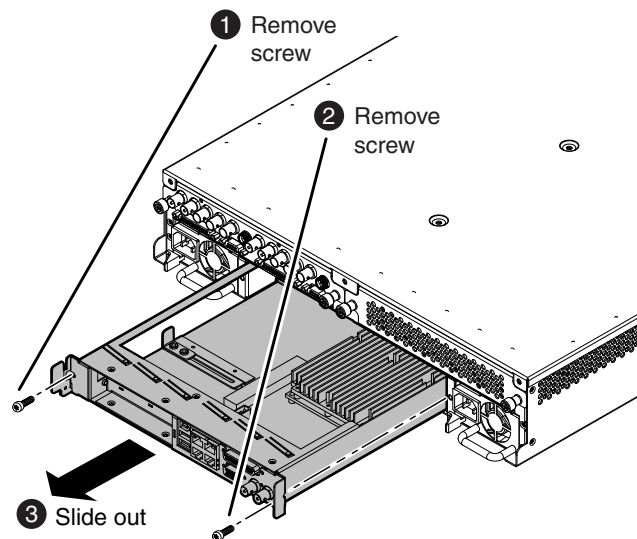
[Enable write filter](#) on page 36

## K2 Summit system procedures

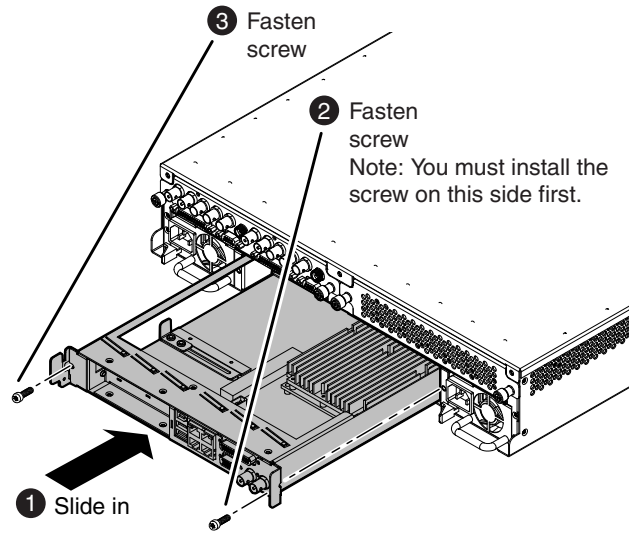
Refer to the following procedures as directed by the instructions for the Field Kit you are installing.

### Carrier module removal

1. When removing the carrier module, access it from the rear panel. Remove as illustrated.

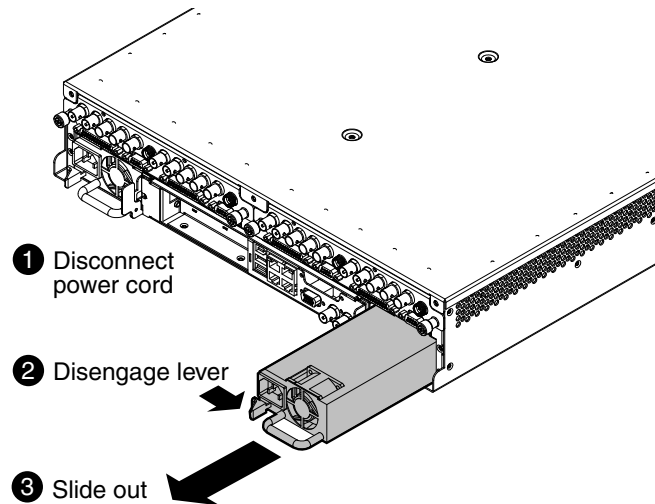


2. When replacing the carrier module, the screw attachment sequence is critical, as illustrated.



## Power supply module removal

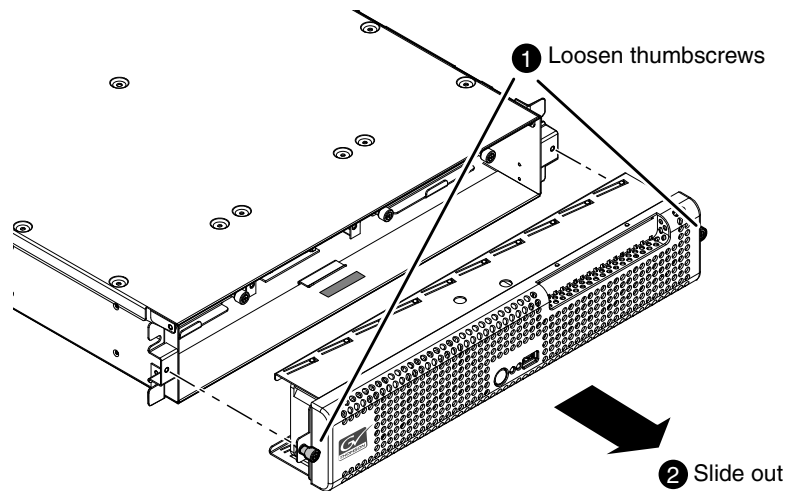
Access the power supply module from the rear panel. Remove as illustrated.



## Front bezel assembly removal K2 Summit

You can remove the bezel assembly while the K2 Summit system is operating. If you do so, make sure you replace it within three minutes to ensure that the correct operating temperature is maintained.

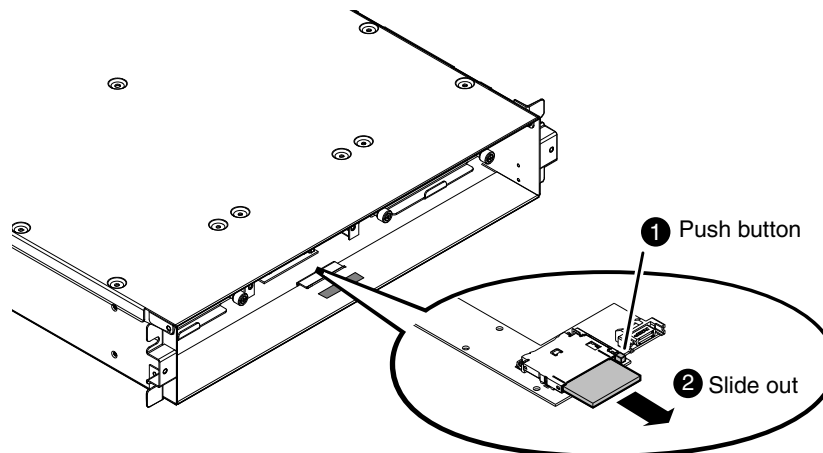
To remove the front bezel assembly, proceed as illustrated.



## CompactFlash boot media removal K2 Summit

Before doing this task, remove the front bezel assembly.

To remove the boot media, proceed as illustrated.



You must use the CompactFlash boot media provided by Grass Valley. Do not use CompactFlash media procured elsewhere.

## **Disable write filter**

Prerequisite:

- K2 software must be installed on the K2 Summit/Solo system.
1. If you have not already done so, log on to the K2 Summit/Solo system with Windows administrator privileges.
  2. From the Windows desktop, click **Start | All Programs | Grass Valley | Write Filter Utility**.  
FBWF Manager opens.
  3. Under Filter Settings, set Filter to **Disable**.  
Do not modify other settings.
  4. Click **OK**.
  5. When prompted, restart the K2 system.

## **Enable write filter**

Prerequisite:

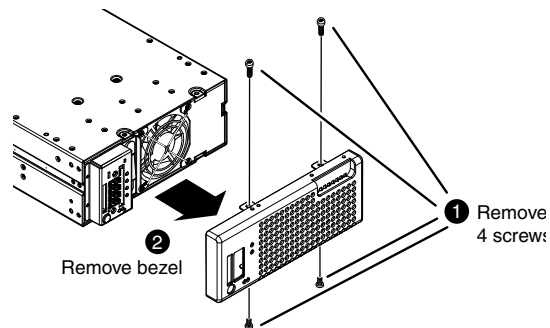
- K2 software must be installed on the K2 Summit/Solo system.
1. If you have not already done so, log on to the K2 Summit/Solo system with Windows administrator privileges.
  2. From the Windows desktop, click **Start | All Programs | Grass Valley | Write Filter Utility**.  
FBWF Manager opens.
  3. Under Filter Settings, set Filter to **Enable**.
  4. Under Protected Volumes, set C: to **Protected**.  
Do not modify other settings.
  5. Click **OK**.
  6. When prompted, restart the K2 system.

## **K2 Solo Media Server procedures**

Refer to the following procedures as directed by the instructions for the Field Kit you are installing.

## Front bezel removal K2 Solo

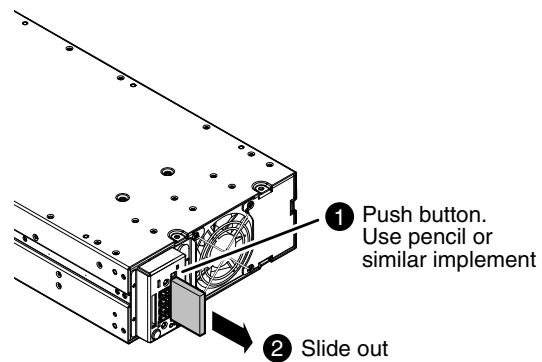
To remove the front bezel, proceed as illustrated.



**CAUTION:** Do not remove bezel while power is on. If powered, the fan can turn on with moving blades exposed.

## CompactFlash boot media removal K2 Solo

To remove the boot media, first remove the front bezel, then proceed as illustrated.



You must use the CompactFlash boot media provided by Grass Valley. Do not use CompactFlash media procured elsewhere.