

Kalypso VIDEO PRODUCTION CENTER **Release Notes SOFTWARE VERSION 14.0** 071072123 **DECEMBER 2006**



Affiliate with the N.V. KEMA in The Netherlands

CERTIFICATE

Certificate Number: 510040.001

The Quality System of:

Grass Valley, Inc.

400 Providence Mine Road Nevada City, CA 95945 United States 15655 SW Greystone Ct. Beaverton, OR 97006 United States 10 Presidential Way 3rd Floor, Suite 300 Woburn, MA 01801 United States

Nederland B.V. 4800 RP BREDA The Netherlands Weiterstadt, Germany Brunnenweg 9 D-64331 Weiterstadt Germany Rennes, France Rue du Clos Courtel Cesson-Sevigne, Cedex

Technopole Brest Iroise CS 73808 29238 Brest Cedex 3 France 17 rue du Petit Albi-BP 8244 95801 Cergy Pontoise Cergy, France 2300 South Decker Lake Blvd. Salt Lake City, UT 84119 United States

7140 Baymeadows Way Suite 101 Jacksonville, FL 32256

Jacksonville, FL 32256 United States

Including its implementation, meets the requirements of the standard:

ISO 9001:2000

Scope:

The design, manufacture and support of video hardware and software products and related systems.

This Certificate is valid until: June 14, 2009
This Certificate is valid as of: August 30, 2006
Certified for the first time: June 14, 2000

H. Pierre Sallé President

KEMA-Registered Quality

The method of operation for quality certification is defined in the KEMA General Terms And Conditions For Quality And Environmental Management Systems Certifications. Integral publication of this certificate is allowed.

KEMA-Registered Quality, Inc.

4377 County Line Road Chalfont, PA 18914 Ph: (215)997-4519 Fax: (215)997-3809 Accredited By: ANAB





Kalypso VIDEO PRODUCTION CENTER	
Release Notes	
SOFTWARE VERSION 14.0 071072123	
DECEMBER 2006 O O O O O O O O O	



Contacting Grass Valley

Region	Voice	Fax	Address	Web Site
North America	(800) 547-8949 Support: 530-478-4148	Sales: (530) 478-3347 Support: (530) 478-3181	Grass Valley P.O. Box 599000 Nevada City, CA 95959-7900 USA	www.thomsongrassvalley.com
Pacific Operations	+852-2585-6688 Support: 852-2585-6579	+852-2802-2996		
U.K., Asia, Middle East	+44 1753 218 777	+44 1753 218 757		
France	+33 1 45 29 73 00			
Germany, Europe	+49 6150 104 782	+49 6150 104 223		

Copyright © Grass Valley. All rights reserved. This product may be covered by one or more U.S. and foreign patents.

Grass Valley Web Site

The <u>www.thomsongrassvalley.com</u> 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 — Software updates, drivers, and patches can be downloaded.



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



Contents

Introduction	
New Features in Release	7
Changes in Release	7
Additional Information	
K2 Server Characteristics and Requirements	9
Still Store Loader Enhancements	
Control Panel Copy Swap Enhancements	
Copy Swap Subpanel Buttons	
Main Panel Copy and Swap Operation	12
PBus Keyframeable Recall	13
PBus Device Pane	
PBus Triggers Pane	
Keyframe-Based Learn/Recall	
PBus Register	
Recall at KF	
Learn at KF	
Test Recall	
Update PBus Dev	
Keyframe-Based PBus Example Procedure	
Register-Based Learn/Recall	
Recall Enable.	
Learn Enable	
PBus Device Patching.	
PBus Patch Menu (Single Suite Mode)	
Enhanced Acquire Menu (Multi-Suite Mode)	
PBus Device Configuration Changes	
Copy/Clear Trigger Names	
Source Display Unshift/Shift	
Multi-Delegate Transform Engines	
Multiple Transform Engine Delegation	
Multi Select Button	24
Main Panel and Menu Panel Delegation Interactions	
Effects Send Double Touch Activation/Deactivation	
Kalypso 14.0 Software Update	
Kalypso System Update Checklist	
Kalypso Software Versions and the 14.0 Update	
Kalypso Software on Newly Purchased Kalypso Systems	
IP Address Considerations.	
New Single Control Surface Kalypso Systems	
Multiple Control Surfaces and Suites	
Kalypso 14.0 Components	
Kalypso 14.0 Detailed Software Update Procedure	
Time Required	
Materials Required	
Backup Current Configuration and Effects Files	
Save Authorization Code	
Install Basic 14.0 Software on a Kalypso System.	

Contents

Clear NV Memory	39
Restore Kalypso Configuration Files	41
Confirm System Operation	41
Backup New Configuration and Effects Files	
Single Suite Procedure Completed	42
Calibrate Main Panel Lever Arms and Joystick	42
Verify or Set Date and Time of Kalypso System Components	43
Verify or Set Menu Panel Date and Time	43
Verify or Set Video Processor Date and Time	44
Software Installation on Multiple Control Surface Kalypso Systems	46
	46
Update Procedure	
Machine Control Interface Installation and Configuration	
Electronic Documentation	
Documentation for Release 14.0	
Acrobat Reader	
.PDF File Names	
To Browse the Documentation on the CD	
To Install the Documentation on a Computer	
Uninstalling Older Documentation	
Additional Kalypso System Update Information	
Kalypso System IP Addresses	50
Changing IP Addresses	
Machine Control IP Addresses	
Kalypso Software Downloads	
Backing Down to an Earlier Software Version	52
Kernel Update Process	
Software Authorization	
Authorization Code Compatibility	
Uninstall Kalypso Menu From PC	
Uninstall Kalypso Installer From PC	56
Uninstall Kalypso Backup Components From PC	
Software Installation Troubleshooting	57

Kalypso Release Notes

Introduction

This document describes installation and other information specific to Kalypso Video Production Center Release 14.0 software. See page 26 for Kalypso system update instructions.

New Features in Release

- Still Store Loader enhancements (see page 10)
- Control Panel Copy Swap Enhancements (see page 11)
- PBus Keyframeable Learn and Recall (see page 13)
- PBus Device Patching (see page 18)
- Source Display Unshift/Shift (see page 23)
- Multi-Delegate Transform Engines (see page 24)

Changes in Release

- PBus trigger names can now be copied between devices and cleared (see page 21).
- Clip selection on the External Device Control menu now includes a
 search mechanism, to support folders with large numbers of clips.
 Entering the name of a clip in the Go To Clip datapad will scroll the list so
 that clip is displayed, permitting its selection. You can also choose
 whether or not the clip name search is case sensitive.
- The Odetics DDR machine control protocol now supports the Spotbox EVS external device.

- The Transform Engine Menus now include a parameter default reset. Select a soft knob then bring up the pop-up keypad in the Menu panel, enter a period ".", and press enter. This sets the parameter of the selected TEs to the default value. It will also affect any slave TEs that may be selected. This is not menu wide and is only in the TE menus.
- Newer Kalypso HD/Duo systems require system software version 12.0.2.4 or later (does not apply to Classic Kalypso). The recent change of a Kalypso hardware component required a change in the Kalypso system software. More specifically, firmware code that is installed in the switcher during a normal system software installation has changed to be compatible with the new hardware. The modules affected are the mix/effects modules in the Kalypso electronics chassis:
 - 2 each in the Kalypso-2HD/Duo
 - 4 each in the Kalypso-4HD/Duo.

CAUTION If a system software version earlier than 12.0.2.4 is used, vertical noise across keys may result.

Description—Module number 671-6484-00, Serial number **BH0630xxxx** or later, requires system software **v12.0.2.4**. For example, a module with SN BH0631xxxx requires system software 12.0.2.4 or later, while a module with SN **BH0629xxxx** can run with any software version.

Serial Number Location—The serial number is located on the barcode label on the lower right side of the mix/effects modules.

Note Make sure software and hardware are compatible when moving modules between switchers.

Additional Information

K2 Server Characteristics and Requirements

- The K2 Server can take up to several seconds to load or cue a clip. Please refer to the K2 Server product documentation for more information.
- When configuring a K2 Server (running v3.1.9.579 software) with a Kalypso (running v14.0.0 system software), connect only one AMP client per K2 channel. If more than one AMP client is connected to a K2 channel, unexpected results may occur.
- Response times for AMP Ethernet and/or AMP Serial vary based on the amount of data being retrieved.
- After issuing a load command to AMP Ethernet, the switcher will wait for the load command to complete before issuing any other AMP commands.

Still Store Loader Enhancements

The Still Store Loader program now supports transfer and conversion of the following graphics formats. Earlier Still Store versions supported only .BMP, .TIF, and native Still Store .GVA and .IMD formats.

- Bitmap files (.BMP)
- Graphic Interchange Format files (.GIF)
- Kalypso Still Store files (current format .GVA, old format .IMD)
- JPEG files (.JPG, JIF, .JPEG, .JPE)
- .ICO (icon files)
- .JNG
- .PMG
- .PGM
- .PNG
- .PPM
- PhotoShop (.PSD)
- Tagged Image Format Files (.TIF, .TIFF)
- Targa files (.TGA, .TARGA)
- .XBM
- .XPM

Files in any of the above formats can be opened by Still Store Loader and transferred to the Kalypso Still Store. During the transfer files are converted to native .GVA format. Files of the above formats can also be saved locally as either .GVA, .TIF, or .BMP format files.

Source files transfer and convert bit for bit. For consistent Still Store image sizes you will need to match the resolution of the source image to the destination format. Bitmap editing software (PhotoShop, for example) may provide the means to resize images to a compatible resolution. Table 1 can be used for reference when creating source image files:

Table 1. Pixel Dimensions of Supported Image Formats

525	625	720P	1080i
768 x 512	768 x 576	1280 x 720	1920 x 1080

Oversize images are cropped when transferred to the Still Store, and undersized images can be matte filled to full raster before transfer.

Refer to the Still Store Loader Appendix in the *Kalypso User Manual* for detailed Still Store Loader instructions.

Control Panel Copy Swap Enhancements

Keyer and Matte settings can now be copied and swapped directly on the Main panel. Wipe settings can now be copied with the Main panel as well. In previous software versions only entire M/E settings could be copied and swapped from the Main panel. Individual settings could be copied and swapped using the Copy Swap menus in earlier software and this capability remains available in the new software.

Copy Swap Subpanel Buttons

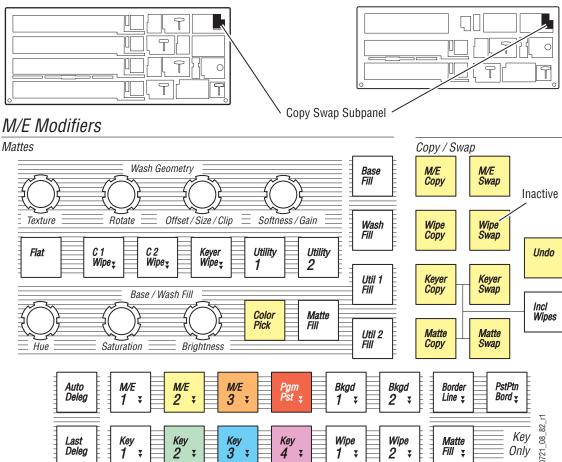


Figure 1. Copy Swap Subpanel and Delegation Buttons

The Main panel **Wipe Copy**, **Keyer Copy**, **Keyer Swap**, **Matte Copy**, and **Matte Swap** buttons operate the similar to their **M/E** button counterparts above. The **Wipe Swap** button is inactive.

The **Incl Wipes** button is used to include the wipe pattern information with Keyer and Matte copy and swap operations.

Main Panel Copy and Swap Operation

The general procedure consists of pressing the **Copy** or **Swap** button of the desired type, then pressing delegation buttons to specify exactly which settings to Copy or Swap. This may require a series of button presses to fully identify which settings will be transferred. Groups of delegation buttons available at each step in the process will blink to help you identify which buttons to press. When the settings have been completely specified using the delegation buttons, the Copy or Swap operation occurs and then the delegation buttons return to their usual illumination state.

The most complicated Copy operation is shown below as an example. Other Copy and Swap operations will require fewer delegation button presses. This example involves copying a Complex Wipe pattern from the M/E 1 Primary partition to M/E 2 Secondary partition.

Copy M/E 3 Wipe 1 to M/E 2 Wipe 2 Example

- **1.** Press the **Wipe Copy** button. This initiates the process of identifying which wipe settings to copy. The delegation buttons in the Copy/Swap subpanel illuminate.
- **2.** Press the **M/E 3** delegation button. The other M/E delegation buttons go off, indicating M/E 3 has been selected to copy.
- **3.** Press the **Wipe 1** delegation button. The Keyer and other Wipe delegation buttons go off and the Primary and Secondary delegation buttons on each M/E illuminate.
- **4.** Press any illuminated **Pri** button. This completes the selection of the M/E 3, Wipe 1, Primary partition settings. The Copy Swap subpanel delegation buttons will now blink, indicating the target of the copy operation needs to be specified.
- **5.** Press the following delegation buttons in order to begin specifying the target: M/E 2, Wipe 2, Pri. The Complex Wipe delegation buttons in the M/E Modifiers subpanel will then illuminate. You need to specify which Complex Wipe generator will receive the settings.
- **6.** Press the **C1 Wipe** delegation. The Copy operation takes place and all the delegation buttons return to their usual tallies.

PBus Keyframeable Recall

PBus device effect Learns and Recalls are now keyframeable. This makes it possible to recall several different external PBus effects within the same Kalypso E-MEM. Previously, only one PBus effect setting could be stored and recalled with an E-MEM. The single PBus effect per E-MEM method still remains available for use, if desired. However, because these two methods employ different mechanisms, both techniques should not be used in the same E-MEM.

PBus Recalls are programmed into an E-MEM with the PBus & GPI menu, accessed via PBus & GPI, PBus (Figure 2).

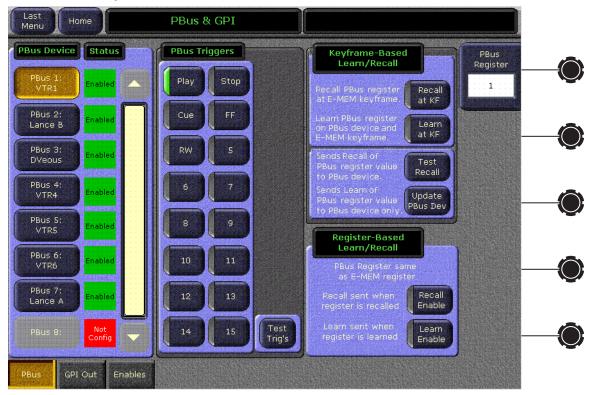


Figure 2. PBus & GPI Menu

PBus Device Pane

The **PBus Device** pane on the left allows selection of an external PBus device, to which the rest of the controls on the menu will be delegated. Only one PBus device can be selected at a time.

PBus Triggers Pane

The **PBus Triggers** pane in the center of the screen operates the same as in previous software releases.

- 1. Go to the location in the E-MEM where you want to send a trigger.
- **2.** Select the PBus device to which you wish to send triggers.
- **3.** Select the trigger command(s) on the menu you wish to send.
- **4.** Either **Insert** a new keyframe or **Modify** the existing keyframe to add the triggers (and any other workbuffer changes) to that keyframe.
- **5.** Repeat the above steps for all the keyframes in the E-MEM where you wish to send PBus triggers.

Running that E-MEM with Triggers Enabled will send those PBus commands at those keyframes.

The **Test Trig's** button can be used to manually send the selected triggers to the PBus device. Triggers are sent as soon as the button is touched, with no need to Insert or Modify keyframes.

Keyframe-Based Learn/Recall

The Kalypso system can interact with PBus devices by sending Learn and Recall commands. The Learn command Kalypso sends to the device instructs the device to remember its current state, and associate that state with a number sent by Kalypso along with the Learn. This number, shown as a PBus Register value on the Kalypso Menu, is not necessarily the same as the external PBus device effect storage register number (if one exists). Different external devices use different storage mechanisms. By mapping Kalypso PBus Register numbers to different PBus device states, potential problems with mismatches of the numbering of available storage locations are overcome.

The Recall command the Kalypso system sends to external PBus devices contains the PBus Register value, and the PBus device is then responsible for recalling the internal effect setting that had previously been learned when that Kalypso number was sent.

Understanding this mapping mechanism will help you successfully use PBus Learns and Recalls. For example, if the PBus device's effect settings are changed and saved to that same location after the Kalypso Learn was sent but before the Kalypso Recall is sent, the changed settings will be recalled. Carefully coordinating the operation of the external PBus devices and Kalypso E-MEM creation is essential. You should also check that your E-MEM effects run correctly with the PBus devices before you use these effects on-air.

PBus Register

The PBus Register control knob data pad is used when building E-MEMs to select the number that will be sent to the PBus device with a PBus Recall, Learn, or Update command. It also determines what number will be stored in the current Kalypso E-MEM keyframe if an Insert or Modify occurs with the Recall at KF and/or Learn at KF buttons illuminated.

When running an E-MEM, the PBus register number currently stored in each keyframe for the delegated PBus device is reported on the data pad.

Note The PBus Register number is NOT used for Register Based Learns or Recalls.

Recall at KF

When building E-MEMs, doing an **Insert** or **Modify** with the **Recall at KF** button illuminated will save the currently selected PBus Register number to the current keyframe. Subsequently running that E-MEM will send a PBus Recall with that number to the delegated and enabled PBus device.

When running an effect the Recall at KF button illuminates on every keyframe where that function is activated for the delegated PBus device.

Learn at KF

When building E-MEMs, doing an **Insert** or **Modify** with the **Learn at KF** button illuminated will save the currently selected PBus Register number to the current keyframe and also sends a Learn command with that number to the PBus device. The PBus device is responsible for remembering its current effect settings and will recall them if it receives a Recall command with that number when a Kalypso E-MEM is run.

Test Recall

Pressing the **Test Recall** button will manually send a PBus Recall command with the PBus Register number selected above to the PBus device. This action is instantaneous and does not require an Insert or Modify.

Update PBus Dev

Pressing the **Update PBus Dev** button will send a PBus Learn command with the currently selected PBus Register number to the PBus device. This action is instantaneous and does not require an Insert or Modify. You can use this command to re-sync effects on a PBus device with the desired effects to be run if the E-MEM was built when the PBus device was not connected.

Keyframe-Based PBus Example Procedure

As an example, the following steps can be used with a DVEous properly configured for control by PBus to load several different DVEous effects and run them at specific timeline locations in an E-MEM.

- **1.** Ensure the DVEous is PBus enabled in the PBus & GPI Out Enables menu and the E-MEM level that device is assigned to is enabled.
- **2.** Delegate the DVEous for control by touching its PBus Device button on the left side of the PBus and GPI menu. Its status should report **Enabled**.
- **3.** Setup the DVEous with the first effect you wish to use.
- **4.** Go to a keyframe in the E-MEM effect that is earlier than the location where you wish to use that DVEous effect.
- **5.** Select a PBus Register number with the soft knob or data pad on the PBus & GPI menu. Because it is the first DVEous effect you can use the number **1**, but any number will work.
- **6.** Touch the **Recall at KF** and **Learn at KF** buttons so they are both illuminated.
- Press Modify on the Main panel to store the Recall command and number into the E-MEM keyframe. This also sends the Learn command to the DVEous, saving that effect.
- **8.** Go to the E-MEM keyframe where you want the first DVEous effect to begin running.
- **9.** Touch the PBus Trigger **Run** button so it is illuminated.
- **10.** Press **Modify** on the Main panel to store the Run command into the E-MEM keyframe.
- **11.** Go to a later keyframe in the effect that is before the location where you want the second DVEous effect to run.
- **12.** Setup the DVEous with the second effect you wish to use. Be sure it is in a different register than the first DVEous effect.
- **13.** Select a different PBus Register number with the soft knob or data pad on the PBus & GPI menu. For this second effect you can use the number **2** (or any number different from that used above).
- **14.** Touch the **Recall at KF** and **Learn at KF** buttons so they are both illuminated, then press **Modify** on the Main panel to store the second Recall command and number into the E-MEM keyframe and make the DVEous Learn its second effect.

- **15.** Go to the E-MEM keyframe where you want the second DVEous effect to begin running, touch the PBus Trigger **Run** button so it is illuminated, then press **Modify** on the Main panel to store the Run command into the E-MEM keyframe.
- **16.** Repeat Step 11 through Step 15 for all the DVEous effects you will use.

When this E-MEM is recalled and run, as each keyframe with a PBus command is encountered it will be sent to the DVEous which will recall and run its effects as programmed.

Reusing PBus Effects in the Same E-MEM

If you want to use the same DVEous effect at a different location in the E-MEM, go to that E-MEM keyframe and select only the **Recall at KF** button. Make sure the **Learn at KF** button is OFF. Then select the PBus Register Number that was used for the Learn of the DVEous effect you want to reuse and press **Modify**. This saves only the Recall command and number into that E-MEM keyframe and does not change the current state of the DVEous.

Register-Based Learn/Recall

Register-Based PBus operations are the same as the PBus Learn and Recall mechanism used in previous software versions. The number of the current E-MEM (not the PBus Register number on the data pad above) will be sent to the PBus device, and only one PBus setting is supported per E-MEM. The external PBus device must support this feature, and may need to maintain a map of switcher effect numbers and its own effect numbers (or the data for the effect itself).

The only difference in functionality is two separate menu buttons are available, one for Register-Based Recall and one for Register-Based Learn.

Recall Enable

When building E-MEMs, doing a **Learn** or **Learn Modify** with the **Recall Enable** button illuminated programs that E-MEM to send a PBus Recall command to the delegated PBus device (along with the register number of the E-MEM) when that E-MEM is later recalled.

When an E-MEM is recalled, this button will illuminate if this feature has been activated for the delegated PBus device.

Learn Enable

When building E-MEMs, doing a **Learn** or **Learn Modify** with the **Learn Enable** button illuminated sends a Learn command (with the E-MEM register number) to the PBus device. The PBus device is responsible for remembering its current effect number and associating it with the Kalypso E-MEM register number it received.

PBus Device Patching

PBus devices can now be patched, allowing easy reuse of E-MEM effects built on different Kalypso systems with different PBus port assignments.

Two different patching mechanism exist. In Single Suite mode a new PBus Patch menus is available, and in Multi Suite Mode the Acquire menu has been enhanced to support PBus patching.

PBus Patch Menu (Single Suite Mode)

The PBus Patch menus is accessed via **Daily Setups**, **Suite Prefs**, **PBus Patch** (Figure 3).

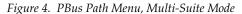


Figure 3. PBus Patch Menu, Single Suite Mode

To patch the PBus devices, select a Logical ID of the device in the left pane, and then select the Physical PBus button on the right pane. The current mappings are reported in the central status boxes.

Enhanced Acquire Menu (Multi-Suite Mode)

In Multi-Suite mode, touching the PBus Patch button on the Suite Prefs menu posts a message with an Acquire Menu button (Figure 4).



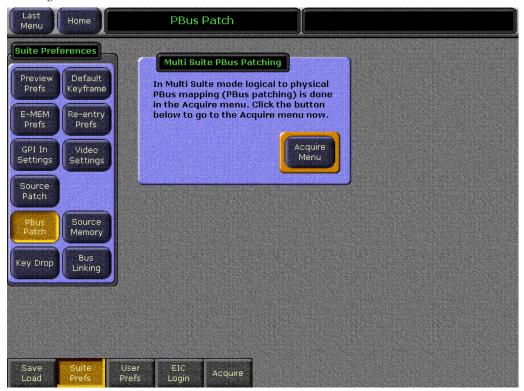


Figure 5. Acquire Resources Menu with PBus Devices Shown **Acquire Resources** Menu Suite1 Components **Physical Components** PBus 2 Top VTR1 Suite1 PBus 1 (PBus #1) PBus 1 Desired Lance B Suite1 (PBus #2) PBus 2 DVeous Suite1 PBus 3 PBus 3 (PBus #3) Acquire Specific Suite2 PBus 4 PBus 5 Release Suite2 PBus 5 PBus 6 Global Acquire Suite2 PBus 6 PBus 7 Acquire Desired Transform Suite1: 6 Engines Suite2: 0 Release 6 Quantity Undesired Available : 0 Suite1: 16 End Release 16 Suite2 : 0 Quantity

Touching the **Acquire Menu** button takes you to that menu (Figure 5).

Login

Suite

PBus Devices can be released and acquired by each suite the same as other Kalypso system resources. By acquiring them in different listed order they become patched to different physical PBus ports.

Available: 0

PBus Device Configuration Changes

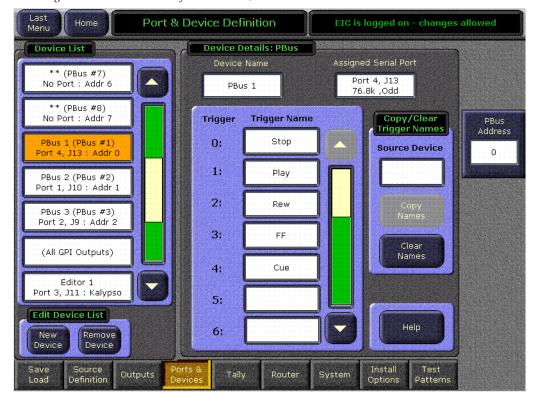


Figure 6. Port & Device Definition Menu, PBus Device Selected

In the Eng Setup, Port & Device Definition menu all PBuses now appear in the scrolling list, whether or not they are configured. All must exist so they can be patched to one another. Unnamed PBuses that are not configured are marked with asterisks and report **No Port**. When **New Device** is selected, a PBus Device button is no longer available, since they all are already listed.

To configure a PBus device, select it directly from the scrolling list and then enter the necessary information.

Copy/Clear Trigger Names

In the Ports & Devices menu PBus edit pane you can now copy trigger names from one PBus device to another. You can also clear the trigger names from a PBus device.

Copying Trigger Names

1. Select on the scrolling list on the left the PBus device you want to receive new trigger names.

- **2.** Touch the **Source Device** datapad and enter the physical slot number of the PBus device with the trigger names you wish to copy. When selected, the Copy Names button will no longer be grayed out.
- **3.** Touch **Copy Names** to copy the trigger names to the selected device.

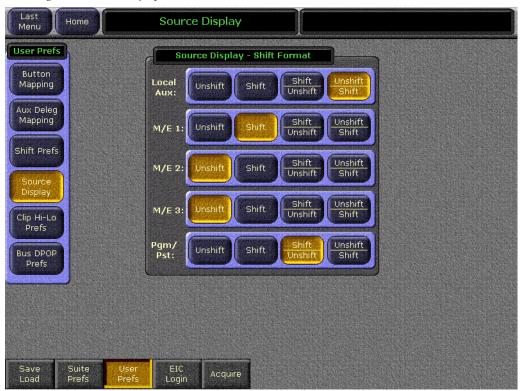
Clear Trigger Names

The trigger names for the PBus device currently selected in the scrolling list on the left can be cleared by touching the **Clear Names** button.

Source Display Unshift/Shift

Source Displays can now be configured to show the shifted source above the unshifted source. Touch **Daily Setups**, **User Prefs**, **Source Display** to select the display preference for each bank (Figure 7).

Figure 7. Source Display Menu



Multi-Delegate Transform Engines

Parameters for multiple Transform Engines can now be adjusted simultaneously on the Transform Engine menus, rather than having to change them separately for each Transform Engine. In addition, Effects Send for Transform Engines can now be activated or deactivated directly on the Transform Engine menu by double touching their delegation buttons.

Multiple Transform Engine Delegation

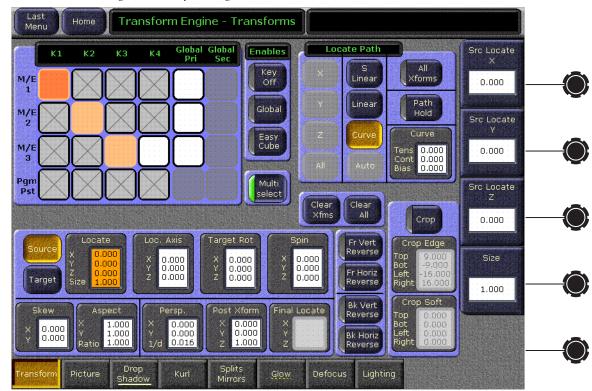


Figure 8. Transform Engine Menu, Multi-Select Enabled

Multi Select Button

When the **Multi Select** button is active, more than one Transform Engine or Global Channel can be selected for control on the menu. You cannot select a Transform Engine and a Global Channel at the same time, however. Only multiples of the same type can be selected. Adjustments to the parameters on the rest of the menu will be applied to all the selected Transform Engines or Channels.

When multiple Transform Engines are selected, parameter values for the first selected item (colored darker than the other items) will be displayed on the menu. This is considered the master Transform Engine for display purposes.

When a feature (like Drop Shadow or Glow) in another Transform Engine menu is active, the name of the menu category selection buttons will be underlined. If that feature is ON for one or more of the delegated TEs but not for all, the underline will be broken.

As before, parameter changes made by entering values in datapads are absolute, while parameter changes made with the soft knob are relative.

Main Panel and Menu Panel Delegation Interactions

Transform Engine delegation operations performed on the Transform Engine subpanel of the Main panel can affect the delegations on the Menu pane (see bullet items below), but the reverse is not true. Delegation button tally lights on the Main panel will not change when delegations are changed with the Transform Engine menu. The joystick and other Main panel button controls will only apply to those Transform Engines that have been delegated using the Main panel, even if multiple Transform Engines have been delegated using the Transform Engine Menu.

If Transform Engine delegations are changed using the Main panel
when the Transform Engine menu Multi Select button is On, multiple
delegations will be accepted by the Menu. The last TE delegated from
the panel becomes the new master (the master can be changed at the
menu).

When **Multi Select** is On and TEs are delegated from the panel to the current selection in the menu, previously delegated TEs are not deselected.

• If Transform Engine delegations are changed using the Main panel when the Transform Engine menu **Multi Select** button is Off, only the last touched Transform Engine delegation will be accepted by the Menu.

It has always been possible to delegate multiple Transform Engines in the same M/E for control on the Main panel, by holding down more than one delegation button in the Transform Engine subpanel. This feature is retained, but the existing limitation that the Transform Engines must be in the same M/E remains in force. If you wish to control Transform Engines in different M/Es, use the Transform Engine Menu. If you want to control multiple M/Es in the same M/E, you can use either the Main panel or the Menu.

Effects Send Double Touch Activation/Deactivation

Touching a Transform Engine Menu delegate button twice rapidly now turns Effects Send on or off for that Transform Engine. You no longer have to go to the Effects Send Menu or use the Main panel to activate/deactivate Effects Send for Transform Engine operations.

Note

If you encounter responsiveness issues when double-touching within the TE menu, reduce the double-click speed for the mouse in the Windows operating system at the menu panel. You can access the double-click speed adjustment through the Windows Start Menu, select Control Panel, and click on the Mouse icon.

Kalypso 14.0 Software Update

Kalypso System Update Checklist

The following checklist is an overview of the steps involved in updating a system running recent Kalypso software to version 14.0. These actions should be performed in the listed order. Updating from some earlier soft-

wa	re versions will require additional steps (see Table 2 on page 29).
me	tailed instructions for all the procedures are provided later in this docu- nt. Cross references for individual steps are included in the checklist for ick reference.
	REQUIRED – Backup Eng Setups, Suite Prefs, User Prefs, Source Memory, Macros, E-MEM, and R- MEM files (see page 31).
Not	You will need these backup files to restore system data after the update, and if you reinstall older software.
	Save the character string of your Kalypso system authorization code and keep it with the back up configuration files. On Kalypso HD/Duo systems you will need this if you update your system with new features and then decide to back down to an earlier software version (see page 31).
	Perform NEW Kalypso Application Software installation from CD (see page 32).
	• Exit the Kalypso Menu application and any other running applica-

- ations.
- Disable virus protection software on the Menu panel (if installed)

Note Virus protection is NOT recommended for use with menu panels.

(OPTIONAL) If installing on a Kalypso Classic system running 9.0 or earlier software, unseat the Classic M/E and Transform Engine modules to delay reflash until after the Frame boots.

Note Kalypso HD/Duo systems do not have flash memory, so their modules should not be unseated. No flash update occurs when upgrading a Kalypso Classic system from 9.1 or later software to 14.0, so there is no reason to unseat modules on Kalypso systems running those software versions.

- Insert the Kalypso Release Software CD into the system's CD-ROM drive.
- Agree to the license notice, select the Kalypso Application Software menu item, and select Install New Software.
- Select the checkboxes for the principle Kalypso system components (Frame, Still Store, Menu Panel, Main Panel, Local Aux Panel).
- Ping to verify system IP addresses.
- Start the update.
- Kernel updates (if required) occur here. Follow on-screen instructions carefully.

When prompted, manually reset the Video Processor frame and the
control surface components that were updated and then click OK. The
Menu panel will reboot automatically.

Note (Kalypso Classic upgrades from 9.1 or earlier only.) If M/Es and Transform Engine modules were not unseated above, wait for them to reflash and system to finish booting. A NO FRAME COMM message is expected until boot-time reflash is complete.

Ц	Confirm the software versions just installed are correct (see page 39). If
	you have multiple control surfaces they will report earlier software ver-
	sions at this time. They will be updated later.

- ☐ REQUIRED—Clear NV Memory (see page 39):
 - Close the Kalypso Menu application and any other running programs.
 - Set the Video Processor frame boot dial switch to 1.
 - Reset the frame and wait at least 30 seconds for reboot.
 - Run the Kalypso Install program and select Clear NV Memory.

CAUTION Allow the Clear NV Memory function to complete before going to the next step.

- Set the Video Processor frame boot dial switch back to zero (0) and reboot the frame.
- Perform a preliminary system check after clearing NV Memory (see page 41).

Load the files from the backup created at the start of this procedure in the following order: Eng Prefs, Suite Prefs, User Prefs, E-MEMs, R-MEMs, Macros, and Source Memory checking at each step (see page 41).
Confirm Kalypso system operation (see page 41).
If you have multiple control surfaces, perform NEW install for each additional control surfaces (see page 46).
Save the current Eng Setups, Suite Prefs, User Prefs, Source Memory, Macros, E-MEM, and R-MEM files to a NEW backup (see page 42).
If your system uses 32-Crosspoint Remote Aux panels and they have not been updated, install the software on all these remote panels using the update tools supplied separately.
If your system has the KAL-IF-PROFILE or KAL-IF-VTR options and they were not updated with a 10.2 release, update the Machine Control Support software (see page 47).
(Kalypso HD/Duo only) If you use NetCentral and want it to report all installed options, reinstall the NetCentral Agent Configuration Tool onto the Kalypso HD/Duo Menu panel where the Agent was originally installed. Install only the Agent. You do NOT need to reinstall the Net Central support files (see page 33).
Calibrate the Main panel Lever Arms and Joystick (see page 42).
Check Kalypso frame date and time values via menu panel browser, and set them if they are not correct (see page 43).

Kalypso Software Versions and the 14.0 Update

It is recommended to have the Kalypso system be running version 9.1 or higher software before updating it to 14.0. Older systems may require hardware changes before their software can be upgraded, or system failure may result. Refer to Table 2 if you wish to upgrade directly from an earlier software version and carefully follow all the cross referenced instructions.

Table 2. Software Upgrade Matrix

Current Software	Steps Required for Upgrade to Version 14.0	Notes and Cross References
12.X 11.X	Install 14.0 software on the Kalypso system components (Video Processor frame, Main panel(s), Menu panel(s), and Local Aux panel.	See page 30
10.2.X	Re-install Still Store Loader, if you were using that utility program with the Kalypso Still Store option. You should replace all occurrences of the older program, including any loaded onto PCs.	See page 33
	Update the software on any 32-Crosspoint Remote Aux panels used with your Kalypso System. The Remote Aux Panel software and update tools are not included on the Kalypso 14.0 Software CD, but are available for download from the Thomson Grass Valley website. This update is recommended but is not required.	Refer to the Remote Aux Panel Upgrade Instructions provided with the Remote Aux software.
10.1.X	Install 14.0 software.	See page 30
	Re-install Still Store Loader, if you were using that utility program with the Kalypso Still Store option. You should replace all occurrences of the older program, including any loaded onto PCs.	See page 33
	If your system has the KAL-IF-PROFILE or KAL-IF-VTR options, update the Machine Control Support software.	See page 33
	Update the software on any 32-Crosspoint Remote Aux panels used with your Kalypso System.	See note above.
	Install 14.0 software.	See page 30
9.1.X	Re-install Still Store Loader, if you were using that utility program with the Kalypso Still Store option. You should replace all occurrences of the older program, including any loaded onto PCs.	See page 33
	Enter authorization codes for any software enabled options.	See page 55
	If your system has the KAL-IF-PROFILE or KAL-IF-VTR options, update the Machine Control Support software.	See page 33
9.0.0 and earlier	Software and hardware upgrade procedure not described in this document. Hardware and firmware changes may be required before updating the software to prevent system failure.	Contact Grass Valley Customer Service.

Kalypso Software on Newly Purchased Kalypso Systems

New Kalypso systems ship with the latest hardware and software installed. If Release 14.0 software is already installed, there is no need to update the system. You can see the current version of Kalypso software by touching the **Status & Diags** Home menu button to access the Versions menu.

IP Address Considerations

New Single Control Surface Kalypso Systems

A new Kalypso system will operate on an isolated network with the default IP addresses configured at the factory (except for 32 Crosspoint Remote

Aux panels). However, if you wish to integrate the Kalypso system into an existing network, wish to use gateway communications, or wish to add more Kalypso control surface components, IP addresses may need to be changed. See *Kalypso System IP Addresses on page 50* for specific information.

Multiple Control Surfaces and Suites

If you plan to use multiple control surfaces (for example, more than one Main panel or more than one Menu panel) on the same Kalypso Video Processor frame, you must make sure the IP addresses of the additional panels are unique before connecting them to the network. Using default IP addresses of multiple panels will cause network conflicts and unpredictable system operation. See *Kalypso System IP Addresses on page 50* for specific information.

Kalypso 14.0 Components

The Kalypso 14.0 Software Release includes the following:

- Kalypso 14.0 Software CD,
- Kalypso 14.0 Documentation CD,
- Kalypso 14.0 Release Notes, and
- Kalypso 14.0 Release Notes Addendum.

The software packages (and documentation) can be downloaded from the Grass Valley website. See *Kalypso Software Downloads on page 52* for specific instructions.

Kalypso 14.0 Detailed Software Update Procedure

Note

If you are updating a Kalypso Classic system running software earlier than 9.1, additional steps are required. Contact Grass Valley Customer Service for specific instructions.

Time Required

Kalypso Classic Systems

On a Kalypso Classic system running version 7.6 through 9.0 software, updating to 14.0 should take about 45 minutes, because a 30 minute flash memory update will occur. A Kalypso Classic system running 9.1 or later software can be updated quicker because there is no flash memory update.

Kalypso HD/Duo Systems

Kalypso HD/Duo systems do not have flash memory and so do not require a 30 minute update.

Note

Software download time and CD burn estimates are not estimated because the time required for these varies depending on the connection speed and applications used.

Materials Required

You will need the following materials for this update:

- Kalypso 14.0 Software CD,
- Two Zip disks or other backup media for configuration and effects files, and
- P/S 2 keyboard and mouse (if you need to change IP addresses or are installing the Kalypso menu application on a PC).

Backup Current Configuration and Effects Files

- 1. Save your system configuration files (Eng Setup, Suite Prefs, User Prefs, Source Memory), and your E-MEM registers, Macros, and R-MEM registers to removable media. Saving the multiple file sets (E-MEM, Macros, R-MEM) into separate folders can save time when you restore these files.
- **2.** Label the media with the version and date and store it in a safe place. You will use these files to restore your Kalypso system data after its NV Memory is cleared, and will want these files if you decide to back down to that earlier software version.

Save Authorization Code

Existing Kalypso authorization codes will work with 11.0 and later software. However, on Kalypso HD/Duo systems new authorization codes created for new features will not work with previous software versions. This may result in loss of system functionality should you decide to back down to earlier software. Should this occur, entering the previous authorization code will restore HD/Duo system operation with the options enabled by that earlier authorization code.

- **3.** Go to the **Eng Setup**, **Install Options** menu.
- **4.** Select **Perm** and save the Current Auth Code displayed. Writing the code on the removable media is a convenient way to do this. If you store the code elsewhere, indicate what Kalypso software version the code is used for.

Install Basic 14.0 Software on a Kalypso System

- **5.** Exit the Kalypso Menu application and any other applications that may be running.
- **6.** Disable any virus protection that may have been installed on the Kalypso Menu panel.
- 7. (OPTIONAL, Kalypso Classic systems) If you are updating a Kalypso Classic system running 9.0 or earlier software, Video Processor frame flash memory will need to be updated which can take up to 30 minutes. Unseating Video Processor frame modules before installing the software lets you confirm later in this procedure that the software has been loaded without having to wait for the flash memory update. This does NOT apply to Kalypso HD/Duo systems, which do not use flash memory.
 - Open the front door of the Kalypso Classic Video Processor frame and unseat all the M/E modules (slots A11 A14), and Transform Engine modules (slots A15-A16, if present). Do not completely remove the modules, just pull them out approximately one inch to disconnect them from the backplane.
- **8.** Insert the Kalypso Release 14.0 Software CD into the Kalypso system CD-ROM drive. The Kalypso Installation program will run and a license agreement screen will appear. Agree to the terms and touch **Next** >.

Select Type of Installation

9. After accepting the license agreement the following menu appears (Figure 9).

Figure 9. Installer Selection



This menu permits you to select from a variety of installations. Each option actually launches a different installer program appropriate to the item selected:

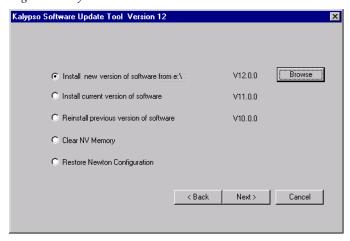
- Kalypso Application Software Used for installing software on actual Kalypso system hardware. The Install Tool and all new software components are copied to the Menu panel C: drive with this option, even if all the components are not selected for installation. This permits loading current and previous versions of software to the various Kalypso components without the CD.
- Menu on PC Installs only the Kalypso Menu application on a PC or an additional Menu panel, which when networked with the Kalypso system provides an additional control point.
- Still Store Loader Installs the Still Store Loader utility program on the system where the CD is currently mounted, either a PC or a Kalypso Menu panel.
- NetCentral Agent Configuration Tool Used to install the NetCentral Agent, required for the NetCentral option, on a Kalypso system.
 Available only when SNMP is configured.
- NetConfig with Newton Configurator Installs NetConfig, a
 network configuration tool originally created for Grass Valley
 Modular products. Newton Configurator is a NetConfig software
 plug-in that allows the user to configure the Newton controls in the
 Kalypso Menu application.
- Machine Control support Installs basic Machine Control software used with the KAL-IF-PROFILE and KAL-IF-VTR options.
- **10.** To install the basic Kalypso software on a Kalypso system (not a PC or additional Menu panel), select **Kalypso Application Software** and then touch **Install**.

Note If a Menu panel running Windows NT posts one or more .DLL file messages, you can select either Ignore or Reboot to continue with the installation.

Select Type of Software Update

11. The 14.0 Kalypso Install Tool will be copied to the C: drive and that application will launch, displaying the following menu (Figure 10).

Figure 10. Software Version Selection



These options are available:

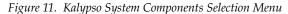
- **Install new version of software** Select this option if you are updating your system software. It installs new software from the inserted CD. The **Browse** button is intended for software installation over the network, if the CD disk is not available.
- Install current version of software Re-installs the currently loaded version of software. This is generally used to install the current software on new Kalypso hardware attached to the system. The CD disk is not required for this option.
- Reinstall previous version of software Installs the previously loaded software from a Kalypso system backup directory. This option is included for safety, and generally should not be necessary. The CD disk is not required for this option.

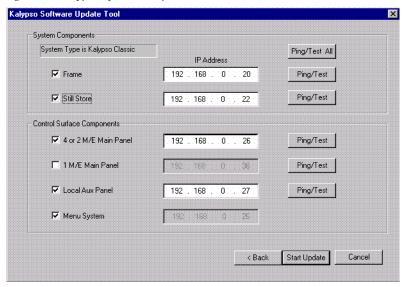
Note A Kalypso HD system running v 10.1 software must be set to HD operation before a 9.1 or earlier previous software version can be installed using the Previous option, because earlier software did not support SD mode.

- Clear NV Memory Used to drain Kalypso system non-volatile memory.
- Restore Newton Configuration Used to set Newton configuration information back to factory defaults.
- **12**. To install the new Kalypso software from the CD, select **Install new version of software** and touch **Next** >.

Select Components to Update

13. A menu appears listing Kalypso system components, IP addresses, and Ping/Test buttons (Figure 11).





- **14.** The installer automatically polls the IP address indicated for the frame and reports the system type (Kalypso Classic or HD/Duo). If that target address responds but is not a frame, UNKNOWN will be reported. A communications failure to that IP address will also be reported.
- **15.** Valid IP addresses are required. The default or previously used IP addresses are displayed. After checking the boxes of all the devices you wish to install, touch the **Ping/Test All** button on the upper right.
 - If communications succeeds, an **All selected targets Pinged ok** message will appear.
 - If a device fails to respond, that device will be identified with a No reply to Ping message. The device might be disconnected from the network, be unpowered, or the IP address may be incorrect. If necessary, change the IP addresses on the screen using a standard computer keyboard and mouse connected to the ports on the rear of the Main panel. You can test whether a single device is communicating with its individual Ping button.

Note All selected devices must Ping successfully before proceeding. If Ping for any selected device fails, continuing will make the Update Tool exit.

Download Software Files to the Selected Components

16. When the installation option selections and IP addresses are correct, touch the **Start Update** button. Ping is run automatically, then a progress bar is displayed and the components being loaded are identified. Systems running recent software will have updated kernel software and the process skips to Step 20 on page 37.

Kernel Version Test (Older Software Versions Only)

- **17.** If any older kernel software is detected, messages will be posted indicating which devices need to updated and reset (see *Kernel Update Process on page 53*).
- **18.** When all the kernels are current, the installer returns to the Kalypso System Components menu (Figure 12).

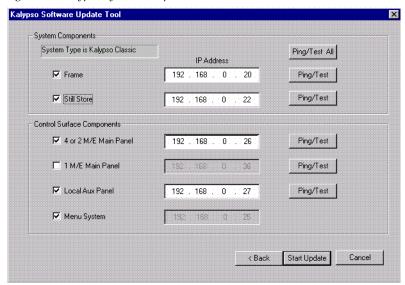


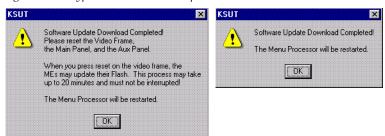
Figure 12. Kalypso System Components Selection Menu

19. With all the appropriate components checked, press **Start Update** again to download the Kalypso software to the selected components.

Reset Kalypso System Components

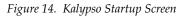
20. When the file transfers complete a menu similar to one shown in Figure 13 appears.

Figure 13. Kalypso Install Reset Prompt



- **21.** You must manually reset all the hardware components (Video Processor frame, Local Aux panel, Main panel) that were updated (see the *Kalypso Installation and Service Manual* for reset instructions).
- **CAUTION** If Kalypso Classic Video Processor M/E and Transform Engine (if present)
 Frame modules are not unseated on a system running 9.0 or earlier software,
 when the Frame is reset the modules will automatically update their flash
 memory, which will take up to 30 minutes. The Kalypso Classic system must
 not be disturbed during this process. During the flash memory update LEDs
 on each M/E module display a unique counting sequence. Status messages
 (**Erasing**, **Programming**) are also reported on the Menu panel.
- **22.** When all the components other than the Menu panel have been reset, Touch **0K**. The Menu panel resets itself automatically.
- **23.** If running Windows 2000, a log on prompt may appear. Enhanced Menu panels are set at the factory to log on using the default user name displayed and no password. Simply touch **0K** to log on without entering any password.

24. When Menu panel initialization completes the Kalypso Menu application will run and display its startup screen (Figure 14).





Confirm Software Versions

25. Touch **Home**, **Status & Diags** and check that the updated devices report the correct software version (Figure 15).



Figure 15. Kalypso System Software Versions, One Suite

Note Components with older software display the version and date in red. If you are updating a Multi-Suite Kalypso system some components will report older software at this time, which is normal. See *Software Installation on Multiple Control Surface Kalypso Systems on page 46* for more information.

Clear NV Memory

Kalypso system non-volatile memory (NV Memory) contains Engineering, Suite, and User configuration data, and also has data for all the effects registers. This data is stored as files on the Video Processor frame hard disk and is loaded on bootup. The Video Processor frame boot dial must be set to 1 and the frame rebooted before you can clear NV Memory.

Note You need backup copies of your configuration and data files so they can be restored after the NV Memory is cleared.

- **26.** Set the Video Processor frame boot dial to **1**. On Kalypso HD/Duo systems there is one boot dial on the Control module in slot 1, and another on the Still Store module, if present. Only the Control module boot dial needs to be set to 1. On Kalypso Classic systems there are two boot dials on the Control Module in slot 1. Only the lower dial, labeled **COM**, needs to be set to 1.
- **27.** Press the Video Processor frame **Reset** button and allow at least 30 seconds for the system to reboot.
- **CAUTION** If you do not wait at least 30 seconds for the frame to reboot the NV memory may not clear. You will need to repeat the procedure and wait the 30 seconds.
- **28.** Close the Kalypso Menu Application and any other running programs, then run the Kalypso Install program from the desktop (if it has been installed) or from the Kalypso Software CD.
- **29.** Select the **Clear NV Memory** box, then touch **Next**. The following screen will appear (Figure 16).

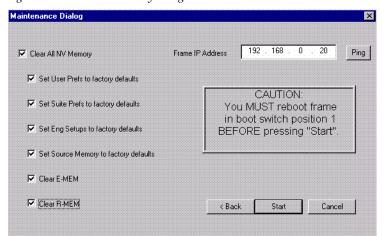


Figure 16. Clear NV Memory Categories Menu

- **30.** Ensure the IP address is correct and **Ping** to confirm the connection.
- **31.** Check the boxes of the items you wish to clear. The **Clear All NV Memory** box toggles all the check boxes on or off.
- **32.** Touch **Start** and confirm the dialog box by touching **OK**.
- **33**. A progress bar will be displayed. When done, you will be prompted to reset the frame. Touch **0K**.
- **34**. Reset the Video Processor frame using the zero boot dial setting.
 - **a.** Turn the Video Processor frame boot dial switch to position **0**.
 - **b.** Press the **Reset** button and allow at least 30 seconds for the system to reboot.

35. (OPTIONAL, Kalypso Classic systems running 9.0 or earlier software only) If you unseated modules at the start of the update, reseat the modules in the Video Processor frame. The modules will automatically update their flash memory, if necessary.

Preliminary System Check

- **36.** Go to the Status Versions menu and check that the Memory Usage meter is at 0%. This confirms the memory has been cleared.
- **37.** Check that an M/E can do a mix or wipe between two sources. This confirms basic system functionality. Note that because the memory was cleared factory default source names will be displayed.
- **38.** Remove the Kalypso Software CD from the drive and store it in a safe place.

Restore Kalypso Configuration Files

- **39.** Restore your backup files in the following order:
 - **a.** Reload your backup Eng Setup file and make sure it is correct by, for example, checking that the proper source names appear in the Eng Setups Sources menu. Older settings should be the same as before. Settings for new features will be set to defaults.
 - **b**. Load a Suite Profile, and check that the Suite Preferences settings are correct.
 - **c.** Load a User Profile and check that the User Preferences settings (Button Mapping for example) are correct.
- **40.** If there are any problems with any of the restored files, they may have become corrupted and need to be deleted and rebuilt. If a problem file locks the system, you may need to drain NV Memory again to restore system operation, but you will know what file is responsible. Contact Grass Valley Customer Service if you need troubleshooting assistance.

Confirm System Operation

- **41.** Check that all the installed M/Es and Transform Engines are operational. Select different crosspoints on the M/Es and fly a key with the Transform Engine. If an M/E or Transform Engine is not operational, its flash memory update might not have succeeded. See *Software Installation Troubleshooting on page 57*.
- **42.** Check that any software enabled options operate correctly, Existing authorization codes should work with the new software, but there are potential backward compatibility issues with these codes (see page 55).

- **43.** Reload the E-MEM files and check that the effects run properly. Older effects should work with the new software. If there are differences, however, you will need to edit or rebuild the effect with the new software version.
- **44.** Reload the Macros and check that they operate correctly.
- **45**. Load some Still Store images and confirm they display correctly.

Backup New Configuration and Effects Files

46. When you are satisfied with the new configuration, save the new configuration file and effects to a new Zip disk or memory stick.

CAUTION Do not overwrite the files previously saved from the old software. Newer software files do not work with older software.

- **47.** Label the media with the version and date and store it in a safe place.
- **48.** Reactivate any virus protection on the Menu panel that may have been disabled at the start of this procedure.

Single Suite Procedure Completed

The Kalypso system update for a single suite, single control surface Kalypso system is now complete. System time checks and hardware calibration should be done next.

If you have a multi-suite Kalypso system, additional steps are required (see *Software Installation on Multiple Control Surface Kalypso Systems on page* 46).

Calibrate Main Panel Lever Arms and Joystick

The Main panel lever arms and joystick can be calibrated from the Main panel.

- 1. If necessary, press and hold down the **Unshift**, **Shift**, **Near Side**, and **Far Side** buttons on any M/E for five seconds to bring up the Top Menu on the PGM PST source name display. The source buttons labeled **IP Config**, **Disply Adj**, **Calibrate**, and **EXIT** will illuminate.
- **2.** Press **Calibrate** to enter calibration mode. Lighted PGM PST Source buttons are labeled with all the lever arms and the joystick.
- **3.** To calibrate a lever arm, press the labeled button of the desired lever. Calibration values display and a button labeled **Calibrate** flashes.

- 4. Press the flashing Calibrate button. Directions for the procedure are displayed. Move the lever to its lower limit, press the lighted button labeled Press, then move the lever to its upper limit, again pressing the button labeled Press. The values of each limit are displayed.
- **5.** To calibrate the joystick, press the **Joystick** button. Calibration values are displayed and a button labeled **Calibrate** flashes.
- **6.** Press the flashing **Calibrate** button. Directions for the procedure are displayed. Move the joystick up, down, left, right, clockwise, and counterclockwise. After all the direction limits have been reached, press the button labeled **Press**. Release the joystick to allow it to find its neutral position and press the button labeled **Press**.
- 7. Press **Save/Exi**t to save the new calibration values.

Note Pressing **Exit Only** will exit the calibration mode without updating to the new values.

8. Press **Exit** to exit the Top Menu. After a few seconds the Main panel will automatically reboot and then return to normal operation.

Verify or Set Date and Time of Kalypso System Components

After software installation is complete and switcher operation has been verified, verify that your Kalypso system components are all set to the correct date and time. Incorrect date and time settings can interfere with the use of Temporary Authorization codes issued for enabling switcher options, and can make interpreting error log files difficult.

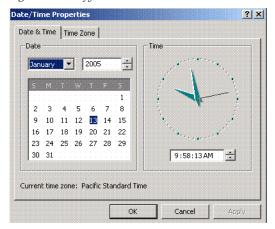
Note These procedures use a keyboard and mouse connected to the Menu panel.

Verify or Set Menu Panel Date and Time

- **1.** Minimize the Kalypso Menu panel application by selecting the **Home** button, then the **Minimize Menu** button in the Home menu to view the Windows 2000 desktop.
- 2. Under the Windows Start button, select Settings/Control Panel/Date/Time.

3. This will bring up the Date/Time Properties screen (Figure 17). In the Date & Time tab verify or set the correct time and date.

Figure 17. Verify or Set Windows 2000 Date and Time



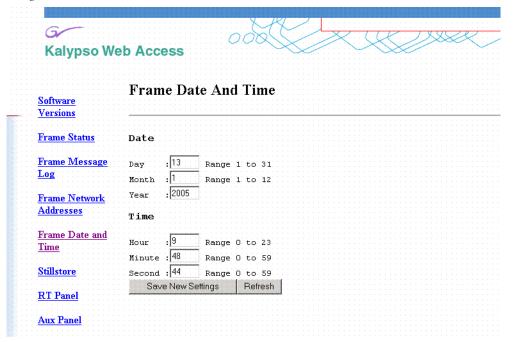
- **4**. Under the Time Zone tab, verify or set the correct time zone.
- **5.** Select **0K** and close the window.

Verify or Set Video Processor Date and Time

- **1.** With the Kalypso Menu panel application minimized, open Windows Internet Explorer on the Menu panel.
- **2.** Type the Video Processor's frame IP address on the web browser. This brings up the main Kalypso Frame Web Access screen (not shown).
- 3. Select the link on the left labeled Frame Date and Time.

4. In the Frame Date and Time screen (Figure 18), enter the current date and time to match that of the Menu panel

Figure 18. Video Frame Date and Time Screen



5. When finished, select the Save New Settings button.

Verify or Set Still Store, RT Panel, and Aux Panel Date and Time

To verify or set the date and time on the remaining Kalypso system components, do the following:

1. With the Frame Web Access page displayed, select the **Stillstore**, **RT Panel**, or **Aux Panel** link.

Note Kalypso System Component Web Access screens for the Still Store, Main Panel, and Local Aux Panel may also be reached by entering the IP address of the device in the address line of the web browser.

- **2.** Access the Date and Time page, change the settings for that component if necessary, and touch the **Save New Settings** button.
- **3.** Repeat for each component.

Software Installation on Multiple Control Surface Kalypso Systems

The Kalypso Resource Sharing feature permits coordinated operation of multiple control surfaces on the same Video Processor frame, using suites. The same version of software must be installed on all Kalypso system components. How this software is installed depends on the configuration of your facility. You will need to know the IP addresses of each component being updated.

Note

A Kalypso Menu panel retains the last set of IP addresses used, and the components selected for update, and these settings are used by default the next time that Menu panel is used for a software update. Setting all the Menu panels with appropriate defaults can help ensure the software of all the components of a multi-suite Kalypso system are updated correctly.

Guidelines

In general, the following software update guidelines apply:

- Each Menu panel (or PC running the Kalypso menu application) is updated locally, using the Kalypso Software CD inserted into that devices local drive.
- The components of each control surface are best updated using a Menu panel or PC operating in that control surface. If there is more than one Menu panel in a control surface, the EIC may wish to set the defaults of one panel for software updates of the control surface components, and set the defaults for the other panel to only update its own software.
- The Video Processor frame and Still Store option can be updated with a
 Menu panel in any control surface, but it is recommended this update
 occur once rather than be repeated with every component software
 update. The EIC may wish to assign one Menu panel (or a PC that has
 the Kalypso installer program installed) for updating the frame, and set
 the defaults so the frame is not installed from any other location.
- It is possible to update the software in the second suite while Kalypso Classic frame modules are updating their flash. However, the Frame should have completely rebooted and established communications with the other system components before you begin the second suite software installation. Frame communications can be confirmed by pressing an acquired M/Es source buttons and have the button tallies change accordingly. Though actual video will not change if the modules are removed, the tally changes indicate communication is present.
- When a Menu panel is used for a software update, it retains a backup version of the previously loaded software locally, permitting a return to that earlier software without need for the software CD. If multiple Menu panels are used for software update, there may be different backup versions of software resident on different Menu panels. Use care when backing down to earlier software versions, to avoid having different software versions running at the same time

Update Procedure

- 1. Disable virus protection software on the additional Menu panel (if installed) and close any other running applications, including the Kalypso Menu application.
- **2.** Verify IP addresses by selecting and Pinging the control panels of one surface only.
- **3**. Perform the software update on that control surface's components, without selecting the Frame or Still Store.
- **4.** Repeat for any additional control surfaces.
- **5.** Confirm all the installed software versions are correct by going to the Status Versions menu (Figure 19).



Figure 19. Kalypso System Software Versions, Two Suites

Note Components with older software display the version and date in red.

Machine Control Interface Installation and Configuration

Machine Control Interface software (formerly called OmniBus), used for external Profile VDR and VTR machine control via the Kalypso system Machine Control subpanel, is included on the Kalypso Software CD.

You need to decide whether installing Machine Control Support is appropriate.

- If you do not have the KAL-IF-PROFILE or KAL-IF-VTR options,
 Machine Control does not need to be installed. Your software installation is complete.
- If you updated your Machine Control (OmniBus) software when you installed Kalypso Release 10.2 or later software, you do not have to update the software. The Machine Control software has not changed from that version.
- If you have installed Machine Control (OmniBus) software prior to Release 10.2, or plan to begin using the KAL-IF-PROFILE and/or KAL-IF-VTR options to control Profiles VDRs or VTRs you need to install Machine Control Support software.

Refer to the separate *Machine Control Interfaces Installation Manual* for specific information.

File Transfer Tests and Installation Failure Notices

Note Notification messages are displayed if problems are detected during Kalypso software installation. Read any popup messages carefully.

The Kalypso system tests the FTP connection used during software installation. If a problem with the FTP connection is encountered, a popup notification is displayed and the installer program exits. The message may offer suggestions on what to do to continue with the installation. In earlier software versions, if an FTP failure occurred the installer automatically proceeded to the next software component without notification.

The installer now performs a confidence check of copied file sizes. If a copied file size does not match, the system will retry the file copy up to two times. Repeated failures post a popup notification and the installer will exit.

See *Software Installation Troubleshooting on page 57* for more information.

Electronic Documentation

Documentation for Release 14.0

A complete set of product documentation in .pdf format is included on the *Kalypso Documentation CD*. This electronic documentation can be viewed on screen, printed out, or installed onto a computer.

Kalypso 14.0 documentation is also available in .pdf format either directly from the Grass Valley downloads web page, or via a link on that page to the

Grass Valley documentation web page. The documentation page can be accessed directly via www.thomsongrassvalley.com/docs.

Note Hardcopy versions of these manuals are available for purchase from Grass Valley Customer Service.

Acrobat Reader

Adobe Acrobat Reader 4.0 or later is required to view the provided .pdf files. This version of Adobe Acrobat supports the cross document Search feature.

.PDF File Names

The first part of the .pdf file name identifies the product. The software version is identified with a V and two or three numbers, though some files do not have a software version. The type of manual is identified (for example RN for Release Notes) followed by the last six numbers of that manual's part number.

To Browse the Documentation on the CD

- **1.** Insert the CD into the computer.
- **2.** Open the Kalypso_Documentation folder and double click on the desired file.

To Install the Documentation on a Computer

- **1.** Insert the CD into the computer.
- **2.** Copy the entire Kalypso_Documentation folder to your computer's hard disk.

Copying the entire folder includes the .pdf index file used for the Adobe Acrobat Reader cross documentation Search feature.

You can also copy individual files by selecting and copying only the ones you want. You will be able to use the find function to search these files individually but the cross document search feature will not work.

Uninstalling Older Documentation

If you previously installed Kalypso documentation using a Release 7.6 or earlier CD, it should be uninstalled to avoid confusion that may result from the obsolete information. Earlier documentation installations created a Grass Valley Group location accessible from the Windows Start menu for that documentation.

To uninstall older documentation:

- 1. From the Windows desktop select Start, Settings, Control Panel.
- 2. Double click Add/Remove Programs.
- **3.** Select **Kalypso Documentation**, click **Add/Remove** and then follow the instructions on the screen.

This will remove the older .pdf documentation files. The Kalypso Documentation location in the Start menu may remain, but it should be empty. The new documentation is accessed from the Kalypso_Documentation directory on the CD or wherever you installed the .pdf files on your computer.

Additional Kalypso System Update Information

Kalypso System IP Addresses

The Kalypso Video Production Center is shipped with default IP addresses (Table 1). These default addresses can be used if the Kalypso system is operating on a dedicated network with no other devices present. Note that these addresses can be changed during installation, and so your system may not be using the defaults:

Table 1. Default IP Addresses

Device	IP Address
Video Processor frame	192.168.0.20 (Facility LAN)
	192.168.1.21 (Panel LAN, which exists on Kalypso Classic but is not used, and is not present on Kalypso HD/Duo)
	192.168.0.22 (Still Store)
Main panel (4-M/E and 2-M/E)	192.168.0.26
Main panel (1-M/E)	192.168.0.36
Menu panel	192.168.0.25
Additional Touch Screen Display	(undefined)
Local Aux panel	192.168.0.27
32 Crosspoint Remote Aux panels (when hard reset with the front panel buttons)	V0.0.2a SW: 192.168.0.250, Subnet Mask 255.0.0.0, Frame 192.168.0.251, Gateway 192.168.0.1
	V1.6.5 SW: 192.168.1.2, Subnet Mask 255.255.255.0, Frame 192.168.1.1, Gateway 192.168.1.1
All Subnet Masks (except Remote Aux panel)	255.255.255.0
All Gateways (except Remote Aux panel)	192.168.0.1

Note

On Kalypso Classic systems, though the Panel LAN is not used the frame still requires a Panel LAN IP address that is different from the Facility LAN. The Panel LAN must also have the same subnet mask as the Video Processor frame or the Facility LAN will not work.

Changing IP Addresses

CAUTION If other devices are present on the network (including a different Kalypso system) make sure every device has a unique IP address before it is connected to the network.

If you change the IP address of a Kalypso device, the IP address settings stored in the other devices must also be changed so they match. See the *Kalypso Installation and Service Manual* for specific procedures for changing IP addresses.

Machine Control IP Addresses

If you install the machine control (Encore) database file to use the Profile interface (KAL-IF-PROFILE), a default Profile VDR IP address (192.168.0.10) and **Profile 1** name are configured automatically when the machine control software is loaded. The Profile VDR used with the Kalypso system needs to be configured with this default address. Otherwise, the OmniBus system configuration needs to be changed. OmniBus configuration procedures are outside the scope of this document, but information is available in the separate *Machine Control Interfaces Installation* manual included on the Kalypso documentation CD.

The VTR interface option (KAL-IF-VTR) also requires an IP address on its serial engine. Serial engines shipped from Grass Valley may be pre-configured with a default IP address of 192.168.0.15 (255.255.255.0 subnet mask) and named VTR Control 1, which will work on a Kalypso system using default IP addresses. Serial engines shipped direct may not be configured with a default address or name, however. These systems will need to be set by the installation engineer to an IP address that is compatible with the Kalypso and Encore system components. Refer to the separate *Machine Control Interfaces Installation* manual included on the Kalypso documentation CD for specific instructions.

Kalypso Software Downloads

Note Beta software download procedures are different and require registration. Contact the Grass Valley beta program coordinator for specific information.

Kalypso system software is available from the Grass Valley website. You will need a PC with a high speed connection to the internet and a CD burner to download these files for use with a Kalypso system.

- 1. Using a web browser, go to www.thomsongrassvalley.com/downloads, select Broadcast Products, Switchers/Effects, Download The Latest Software. This takes you to the Grass Valley FAQ page.
- **2.** Click the **download** link for Kalypso, select the desired software version, then click **Go**. This takes you to the Grass Valley FTP site for that software version.
- **3.** Click on the **readme.txt** file for important information about that release.
- **4.** Click on the .**EXE** file to download a self-extracting .zip archive of the software. The time required for the download varies depending on the bandwidth of your connection and the size of the archive.
- **5**. Extract the archive, burn the entire downloaded package onto a CD, and label the CD with the software version.

Backing Down to an Earlier Software Version

WARNING Kalypso 14.0 software requires an SBC1000 Frame Processor upgrade for optimum system performance. The SBC1000 is fully compatible with 7.2.1 and higher software versions. You must install compatible software BEFORE you install the SBC1000. Once installed, if you wish to back down to 7.1 or earlier software you will need to reinstall the earlier Frame processor before you load the older software. If the processor is not replaced beforehand, unrecoverable Kalypso system failure will occur, requiring hard disk or disk-on-chip hardware replacement.

Note A Kalypso HD system running v 10.1 or later software must be set to HD operation before a 9.1 or earlier software version can be installed using the Previous option, because earlier software did not support SD mode.

Note On Kalypso HD/Duo systems, authorization codes that enable 11.0 and later features cannot be used with earlier software versions. You will need to enter the authorization code for that earlier version of software to regain full system functionality (see page 55).

Once Kalypso Release 14.0 software has been installed, if you need to back down to earlier software use the Kalypso Install program loaded onto the system by the 14.0 software update. A shortcut to this program resides on the Kalypso Menu panel desktop.

Using the 14.0 Desktop Kalypso Install Program

- **1.** Exit the currently running Kalypso Menu.
- **2.** Double touch the **Kalypso Install** shortcut icon on the desktop.
- 3. Select Reinstall previous version of software and touch Next >.

CAUTION Be sure the older version of software selected is compatible with your Kalypso system hardware configuration.

- **4.** Choose all the components that exist in your system, run **Ping** to ensure communications, then select **Start Update**.
- **5.** Follow the rest of the standard installation procedure. The previously loaded version of software will be installed.

Kernel Update Process

Software kernel versions are checked first during the Kalypso software installation process. Kernels reside on the following devices:

- Video Processor frame Control Processor hard drive
- Still Store option hard drive
- Local Aux panel DOC (Disk on Chip)
- Main panel DOC or hard drive

Depending on the devices involved and the versions discovered, different kernel update messages will be posted. In general, a message identifying the older kernels detected is displayed asking if you wish to continue. Continuing downloads kernel code to the device(s), and then another message is posted identifying the number of resets required to complete the kernel update for a particular device. When this is done, the reset message for the next device (if any) is displayed.

Note You need to carefully read all the menus and respond to each kernel update message in turn to completely update the system.

To Update Kernel Software:

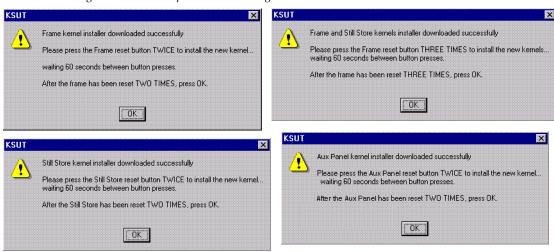
1. Examples of messages identifying older kernels are shown in (Figure 20).

Figure 20. Older Kernel Detected Messages



- **2.** Touch **OK** to download the kernel(s) to the device(s).
- **3.** Examples of messages identifying the number of resets required are shown in Figure 21.

Figure 21. Kernel Update Reset Messages



4. Reset that device the number of times indicated, being sure to wait the specified time (60 seconds) between resets (see the *Kalypso Installation and Service Manual* for specific reset instructions). When done touch **OK**.

Note Typically each device needs to be reset twice, with a one minute wait between resets. However, if the Still Store option is installed the Frame needs to be reset three times.

5. Read each subsequent message and follow the reset procedure stated for every device that was updated with the new kernel.

6. After the kernels are updated the installer returns to the Kalypso System Components menu. At this point only kernel software has been installed, so you need to continue the process to install the actual Kalypso software.

Software Authorization

New Kalypso systems ship with all purchased options already enabled, so authorization by the user is not required on these systems.

Customers who have purchased options should have received an authorization code for those options. This code needs to be entered on the specific Kalypso system for which the code was generated in order to enable the options.

- 1. Authorizations can be checked by touching **Eng Setup**, **Install Options**.
- **2.** To enter a new authorization code, touch the New Authorization data field and type in the number using the popup keypad.

Note You must login as the EIC before you can enter an authorization code.

3. After you have entered the authorization code, confirm that the options operate. In particular, check that the correct number of Chroma Keys are enabled. Contact Grass Valley Customer Service if you have any problems with your authorization code.

Authorization Code Compatibility

Authorization codes used with earlier Kalypso software versions should work with later software releases. These authorization codes, after being used on a newer release, should also continue to work if the Kalypso system software is backed down to an earlier version. However, for Kalypso HD/Duo systems, the format of authorization codes has been changed to support Kalypso 11.0 features. If you install an 11.0 software option (for example, Advanced TE Effects) on a Kalypso HD/Duo system, that authorization code will not work if you back that system down to an earlier software version. In some cases this can severely affect Kalypso system operation. For example, a valid authorization code for a Kalypso HD system is required for HD operation, even though it is a standard feature. For this reason, it is important that Kalypso HD/Duo customers save the authorization code for Kalypso versions earlier than 11.0 should you later decide to load an earlier software version onto that system.

Uninstall Kalypso Menu From PC

You can uninstall a Kalypso Menu application that has been loaded onto a PC with the Windows Add Remove Programs utility. Choosing **Automatic**

when prompted will remove the Kalypso Menu application. If multiple versions of the Kalypso menu were installed a Rollback screen will appear. Choose the default **No** setting to remove the Kalypso Menu application.

If you wish to remove all the files associated with the Kalypso Menu application (including any backup files) you can also delete the Kalypso Menu folder located in C:/Program Files.

Uninstall Kalypso Installer From PC

The Kalypso Installer program is automatically installed on the C: drive of that computer when the **Kalypso Application Software** selection is chosen during installation. This does not occur when the **Menu on PC** selection is chosen. The Kalypso installer program cannot be removed with the Windows Add Remove Programs utility.

To remove the Kalypso Installer program from the computer:

- 1. Insert the Kalypso software CD, which will autorun and show the licensing agreement. After agreeing to the terms the Kalypso Installer Selection screen will be displayed.
- 2. Choose Cancel and Exit Setup to exit the Kalypso Installer program.
- **3.** With the CD still in the drive, run the Setup.EXE uninstaller program located at:

[CD Drive]:/MenuPanel/Install Uninstall/Setup.EXE.

The prompt message shown in Figure 22 will be displayed.

Figure 22. Kalypso Installation Program Uninstall Prompt



4. Select **OK**. The Kalypso installer program and its desktop shortcut will be removed.

Uninstall Kalypso Backup Components From PC

When the **Kalypso Application Software** selection is chosen during installation, an Install folder containing several sets of backup folders is created on that computer's C: drive. These folders hold the current and previous versions of Kalypso software. Uninstalling the Kalypso Menu application and/or the Kalypso Installer programs will not automatically remove these other folders and files, which can occupy 75 MB or more of disk space.

CAUTION Do not delete the Install folder from an actual Kalypso Menu panel used with a Kalypso system, as this will make it impossible to re-install the current or previous versions of software without the Kalypso Software CD.

To completely remove all Kalypso files from a PC, after uninstalling the Kalypso Menu and the Kalypso Installer delete the C:\Install folder.

Software Installation Troubleshooting

The installation process consists of four major steps. A failure in one of these steps must be corrected before installation can continue.

When installing from CD, the installer first copies the necessary files to a directory on the hard drive where the installation is performed. These copies allow reinstallation or backing down to the previous version without the installation CD. Failure to copy files could be due to a CD read failure or a file system problem on the menu/PC running the install.

- Try cleaning the CD and attempting install again.
- Try running checkdisk on the CD. If errors are found, re-burn the CD or contact Customer Service for a new copy.
- Try removing c:\Install\...\NEW folders and their contents and attempt the install again.
- Ensure that the C: drive is not full.
- Try running checkdisk on the hard drive.

Next, the installer uses FTP to transfer files to the frame, still store and all panels. The installer transfers files to those IP addresses listed and enabled. FTP failures could be due to excessive network traffic or intermittent network connections, or due to file system problems on the destination. These file transfers replace the executables and FPGA images for the video hardware on the component's hard drive or disk on chip. The new files are used during the next boot up.

- If the transfer fails an executable may be deleted. Rebooting the component could render it non operational. Boot position 0 and 1 run different applications, so even in the event of an FTP failure, one of the executables should be intact.
- If the FTP transfer fails, try running the installation process again BEFORE rebooting the components.
- If it becomes necessary to reboot a component after an FTP failure and the component is nonresponsive after the reboot, try booting in boot position 1. This should allow installation to continue.

Note The Kalypso Still Store cannot have its software updated in frame boot position 1 or 2. If a Kalypso HD/Duo frame software update is required in either of these boot positions, uncheck the Still Store box, update the frame software, reboot the frame in position 0, run the installer, check only the Still Store box, and then install its software (the "install current" option can be used to save time). This does not apply to Kalypso Classic systems.

- In either boot position 0 or 1, FTP can be used to inspect the file system of the component.
- If the file system appears to be full, FTP can be used to remove log files, etc. Contact Customer Service before/while performing this cleanup operation to avoid deleting critical files.

After all files have been FTPed to the components, the components are reset. New executables and FPGA files are used during this boot operation.

A special process is used if an operating system Kernel needs to be replaced. The kernel needs to reside as the first entry in the hard disk/disk on chip directory so the file can't be installed reliably using FTP. Instead, the normal executable is replaced with a Kernel installer. A frame reset executes this kernel installer which manipulates the hard drive/disk on chip in such a way that the new kernel file is in the proper directory location. Depending on the work that needs to be performed, it may be necessary to reset the component additional times during this process. After the kernel has been replaced, the new application is FTPed to the component.

CAUTION A failure during the kernel replacement process could result in a non operational component requiring hard drive or disk on chip replacement. It is essential that the instructions are followed closely. There is no indication of progress during this procedure. Carefully measure the wait times between resets to insure each step completes before proceeding.

FPGA files are used in two different ways. For most modules, FPGA images are transferred to the modules during system boot. For Classic M/E and TE boards however, FPGA images are stored in flash on the module themselves. A processor on these modules transfers the image from flash to FPGAs when the board is reset. The frame processor tests a version code on each M/E and TE module at boot time and updates the flash if the version doesn't match what's expected. Flash during boot occurs before the system has fully initialized and holds off panel comms. The system also checks M/E and TE frame slots periodically for newly inserted modules and attempts to update them on the fly. Since flash updates are time consuming, some customers prefer to reboot the frame with modules unseated and allow the frame to initialize and establish panel comms, then insert M/E and TE modules so the "on the fly" update can proceed in the background.

Flash failures are rare unless the process is interrupted. If a failure does occur, a message is written to the frame log, but the board version is updated anyway. This prevents the system from getting stuck at boot time should a flash memory part fail permanently. A manual process to force

reflashing the M/E or TE board is provided in the separate *Kalypso Classic Installation and Service Manual*.

M/E status LEDs indicate flash update progress, boot progress, and normal operation. A red LED lights to indicate module boot/FPGA load or FPGA flashing. The green LEDs count up or down during these processes. If all goes well, the red LEDs will go out and the bottom most green LED will glow dimly indicating the module's processor is operating normally. The next green LED up displays a frame comms heartbeat. If this LED does not blink the frame is not communicating with the M/E but it is otherwise healthy.

Note

On Kalypso Classic systems, newly discovered M/E modules do not receive a heartbeat if any module is reflashing. Wait until all modules have reflashed before checking for heartbeats, unseating modules or resetting the frame. If a module is unseated during flash update, it may be necessary to manually force a flash update.

- If the module is functional but does not receive a heartbeat, reseat the board and/or reset the frame processor.
- If an FPGA fails to load on boot or a flash fails to program properly, one of the red LEDs will remain lit and the green LEDs will stop counting. The LED pattern provides an indication of which specific part failed to load/program. What's important to a customer is that the M/E has a hard failure and must be replaced.

The menu application is updated using a standard windows install process. This process must run on the processor hosting the menu application. No FTP is used in this process. The application is installed directly from the hard drive of that processor.

Note

From time to time, the installer application itself is updated. While a copy of the installer is placed on the hard drive it may not be compatible with the new software being installed. Always run the installer from the CD when installing new software.

When the frame boots, previous configuration (eng setups, suite prefs, user prefs) and effects are loaded from nonvolatile storage (from the frame's hard drive). If the frame fails to boot after a software update, there is a slight possibility that a corrupted file exists in NV storage. Clearing NV storage can allow the system to boot, then files can be loaded individually from backups one at a time to identify where the corruption exists. If the frame crash was due to corrupt NV files, loading the file manually will probably crash the frame. Reset the frame and rebuild the file from scratch or from a previous version that does load properly.