

8960ENC

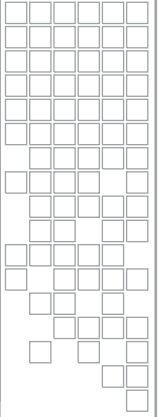
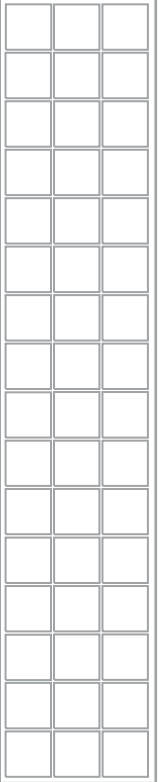
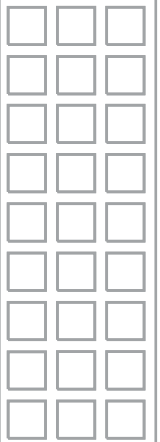
SDI to NTSC/PAL ENCODER

Release Notes



SOFTWARE VERSION 8.1.0

071809305
JUNE 2007



Contacting Grass Valley

International Support Centers	France 24 x 7	+800 8080 2020 or +33 1 48 25 20 20 +800 8080 2020 or +33 1 48 25 20 20	United States/Canada 24 x 7	+1 800 547 8949 or +1 530 478 4148
Local Support Centers (available during normal business hours)	Asia	Hong Kong, Taiwan, Korea, Macau: +852 2531 3058 Indian Subcontinent: +91 22 24933476 Southeast Asia/Malaysia: +603 7805 3884 Southeast Asia/Singapore: +65 6379 1313 China: +861 0660 159 450 Japan: +81 3 5484 6868		
		Australia and New Zealand: +61 1300 721 495	Central/South America: +55 11 5509 3443	
		Middle East: +971 4 299 64 40 Near East and Africa: +800 8080 2020 or +33 1 48 25 20 20		
	Europe	Belarus, Russia, Tadzikistan, Ukraine, Uzbekistan: +7 095 2580924 225 Switzerland: +41 1 487 80 02 S. Europe/Italy-Roma: +39 06 87 20 35 28 -Milan: +39 02 48 41 46 58 S. Europe/Spain: +34 91 512 03 50 Benelux/Belgium: +32 (0) 2 334 90 30 Benelux/Netherlands: +31 (0) 35 62 38 42 1 N. Europe: +45 45 96 88 70 Germany, Austria, Eastern Europe: +49 6150 104 444 UK, Ireland, Israel: +44 118 923 0499		

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Grass Valley Web Site

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

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

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

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



END-OF-LIFE PRODUCT RECYCLING NOTICE

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

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

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



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



8960ENC Release Notes

Introduction

This document provides information on the latest release of the software for use with the 8960ENC modules.

Version 8.1.0 Software Release

The new features and resolved issues included in release 8.1.0 are outlined below:

- Newton Control Panel interface has been enhanced to access more module parameters. Refer to [Table 1 on page 4](#) for a complete list of Newton controls.

Note These new control panel parameters may not be applicable in all cases when used with the VTEC Control Panel. VTEC Control Panel users are advised not to update to this new version.

- (28215, 28595, 28319, 28566) Status reporting to upper level devices such as the 8900NET card, SNMP reporting traps, and the Module Health bus are now correct for this module and consistent with the other modular module status reporting. Refer to the latest 98960ENC Instruction Manual for complete details.
- (28327) The FAULT LED will now flash on the module when a reference configuration error has occurred.
- (37446) The 8960ENC module no longer supports software updating via the 8900NET module. For software updating information, refer to [Updating Software on page 6](#).

Configuration Summary Table

Table 1 provides a complete summary of the 8960ENC functions and a comparison of the functionality available with each control type along with the ranges and default values for each parameter.

Table 1. Summary of Configuration Functions

Function Type	Default	Range/Choices Resolution	Web Page/ Function Name	Function Switch Bank/Setting	Newton Control Panel	Notes/ Conditions
Standard Recognition	Auto	Auto or Manual	Standard Selection/ Standard Recognition pulldown	1:0	Auto Std	
Manual Standard Selection	525	525 or 625	Standard Selection/ Manual Selection pulldown	1:1	Lines	Manual mode selected in Standard Recognition above.
Output Video Setup	Setup	Setup or No Setup	Standard Selection/ Output Video Setup pulldown	1:2	FF Setup	525 only
Vertical Interval Setup	Off	On or Off	Standard Selection/ VI Setup pulldown	2:F	VI Setup	
Line 21 Setup	Off	On or Off	Standard Selection/ Line 21 Setup pulldown	1:D	L21Setup	
Line 22 Setup	Off	On or Off	Standard Selection/ Line 22 Setup pulldown	1:E	L22Setup	
NTSC or PAL-M selection	NTSC	NTSC or PAL-M ^a	Standard Selection/ NTSC/PAL-M Select pulldown	1:3	525 Std	
Standards Selection Controls Type	Numeric	Numeric ^b or Slider	Standard Selection/ Controls Type pulldown	N/A	N/A	Web page only
Output Video Level	97.09%	41.5 to 171.55% ² (0.51% steps)	Standard Selection/ Output Video Level (% 1Vpp) Slider or arrow controls	1:4	Video	
User Adjustments	Calibrate	Calibrate or User	Levels/ User Adjustments pulldown	1:5	Levels	
Levels Control Type	Numeric	Numeric ² or Slider	Levels/ Controls Type pulldown	N/A	N/A	Web page only
Luma Level adjustment to set luma gain	99.74%	89.5 to 109.9% ² (0.08% steps)	Levels/ Luma Level (% White) Luma Level slider or arrow controls	1:6	Luma	User mode selected in User Adjustments above
Chroma Level adjustment to set chroma gain	99.52%	88 to 110.95% ² (0.09% steps)	Levels/ Chroma Level (% saturation) Chroma Level slider or arrow controls	1:8	Chroma	
Hue Level adjustment (525 only)	0 degrees	0 to 358.05 degrees ² (0.35 degree steps)	Levels/ Hue (degrees) Hue Level slider or arrow controls	1:9	Hue	
Black Level adjustment	7.54%	-14.22 to 21.48% ² (0.34% steps)	Levels/ Black Level (% White) Black Level slider or arrow controls	1:7	Black	
Lock Source selection	Reference	Video or Reference	Timing/ Lock Source pulldown	2:0	Lock To	

Table 1. Summary of Configuration Functions

Function Type	Default	Range/Choices Resolution	Web Page/ Function Name	Function Switch Bank/Setting	Newton Control Panel	Notes/ Conditions
Timing Control Type	Numeric	Numeric or Slider	Timing/ Controls Type pulldown	N/A	N/A	Web page only
Fine Delay control	0 ns	0 to 40.80 ns (0.16 ns steps)	Timing/ Fine Delay Fine Delay slider or arrow controls	2:1	Fine Dly	No submodule required
Horizontal Delay	0	0 to 63418 ns (525) 0 to 63862 ns (625) (37 ns steps)	Timing/ Horizontal Delay slider or arrow controls	2:2	H Delay	8900FSS submodule installed.
Vertical Delay	0	0 to 524 lines (525) 0 to 624 lines (625) (1line steps)	Timing/ Vertical Delay slider or arrow controls	2:3	V Delay	
Freeze Recognition	Manual	Manual or Auto	Timing/ Freeze Recognition pulldown	2:4	Frz Rec	
Freeze Mode	Frame	Field or Frame	Timing/ Freeze Mode pulldown	2:6	Frz Mode	
Freeze Field	Field 1	Field 1 or Field 2	Timing/ Freeze Field pulldown	2:7	FrzField	
Freeze Signal	Last Field	Last Field or Black	Timing/ Freeze Signal pulldown	2:8	Frz Sig	
Force Manual Freeze	Off	On or Off	Timing/ Freeze button	2:5	Freeze	
Cross Color Removal	Disable	Enable or Disable	Video Processing/ Cross Color Removal pulldown	2:A	CrossClr	
Chrominance Signal	Disable	Enable or Disable	Video Processing/ Chrominance Signal pulldown	2:A	Chr Sig	
Burst Signal	Disable	Enable or Disable	Video Processing/ Burst Signal pulldown	1:B	Burst	
VI Processing	Pass	Pass or Delete	Video Processing/ VI Processing pulldown	1:C	VI Proc	
Test Mode	Disable	Enable or Disable	Video Processing/ Test Mode pulldown	2:D	Tst Mode	Replace output signal with test pattern
Test Signal	Colorbar	Colorbar or Linearity	Video Processing/ Test Signal Select pulldown	2:C	Tst Sel	
Recall factory defaults	N/A	See Defaults column	Recall Factory Defaults/ Factory Defaults button	1:F (down)	N/A	

^a Grass Valley no longer supports PAL-M in any of its modular products. Although this setting may work in certain applications, Grass Valley will not warrant that it works or provide support if problems are encountered using this product with PAL-M signals. This product has not been modified to eliminate support for PAL-M. If this product has been used with PAL-M in the past without problems, there shouldn't be any issues using it for the same application. However, it is not recommended that customers use it in any new PAL-M applications.

^b The numeric displays are approximate values only. Calculation of displayed values are subject to decimal place truncation. Variation from the absolute value increases at higher adjustment levels.

Updating Software

The new software for this module must be downloaded to the module circuit board using a special cable assembly and PC application that comes as part of the an assembly kit (order number 8900-FLOAD-CBL).

The 8900-FLOAD-CBL assembly consists of a small circuit board and serial and ribbon cables that connect between a serial port on a PC and the ISP connector on an 8900 or 2000 module. A CD with the software loading application (ModLoad) is also included. The software upgrade requires downloading files from a PC to the module through the cable assembly.

If you do not have the 8900-FLOAD-CBL assembly kit, you will need to order it from Grass Valley Customer Service. To locate your nearest service center, refer to *Contacting Grass Valley* on page 2.

Acquiring Software

To acquire the 8960ENC update files, go to the Grass Valley Customer Service ftp site at this location:

<ftp.thomsongrassvalley.com/pub/modular/8900/8960ENC>

In the 8960ENC directory on the ftp site, copy the following files to your PC into the ModLoad application directory:

- 8960ENC_8.1.0.lcm
- 080839302.hex

Downloading Software

Once you have installed the Modload application as described in the *8900-FLOAD-CBL Software Update Instructions Manual* included on the CD, locate the 8960ENC module cabling diagram.

Attach the cables as described and download the update using the ModLoad application as described in the manual.

Verifying Update

To verify that the update was completed successfully, follow the instructions in the 8900-FLOAD-CBL manual.

If you have an 8900NET module in your frame, you may also quickly link to the Status web page of the updated 8960ENC module and note that the software now reports 8.1.0 as shown in [Figure 1](#).

Figure 1. 8960ENC Status Web Page.

Status

Model: [8960ENC](#) Description: [4:2:2 To NTSC/PAL Encoder](#)
 Frame Location: [Core Lab](#) , Slot: [3](#)
 Input Signal Name: [not assigned](#)
 8960ENC Status: [PASS](#)

Block Diagram: A central green box labeled "Internal State" has two green arrows pointing into it from the left, labeled "Input Signal(s)" and "Reference Signal". A grey arrow labeled "Output Signal(s)" points out of the box to the right. A green double-headed arrow labeled "Frame Bus" connects the bottom of the box to the text "Frame Bus" below it.

Properties

Hardware Revision	Serial Number	1229171
Software Version	Part Number	671-4698
Firmware Version		08

Updated software version

Accessing Reference Documents

For on-line access to any of the reference documents referred to in these Release Notes and the latest 8960ENC manual, go to the Thomson Grass Valley web site at this URL to link directly to Modular documentation:

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

