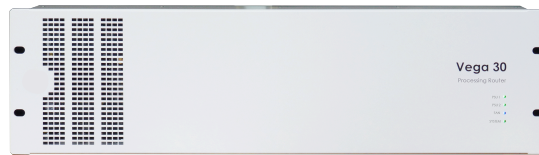


# Device: Grass Valley Sirius 800 & Vega 30 Routers



## Introduction

The Device Cores "GV Sirius 800 (SW-P-08)" and "GV Vega 30 (SW-P-08)" are used to control routing on the Sirius 800 series and Vega 30 routers from Grass Valley via the protocol SW-P-08 on IP.

The protocols have been developed using Cerebrum.

For the Device Cores using the SW-P-08 protocol only labels from matrix0, level0 and matrix0, level1/ matrix1, level0 are used.

The Device Cores "GV Sirius 800 (SW-P-08)" and "GV Vega 30 (SW-P-08)" are locked to using matrix0, level0.

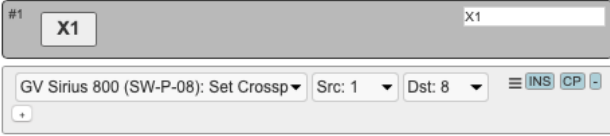
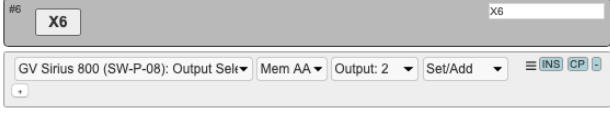
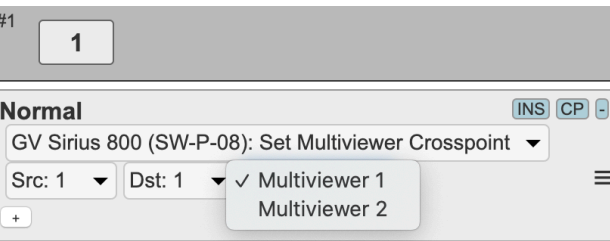
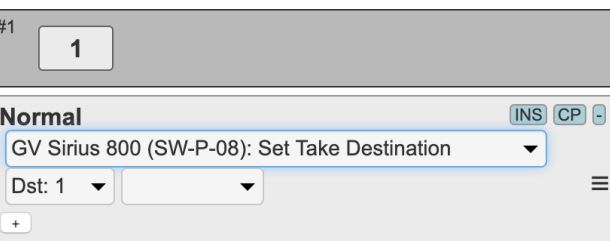
The Device Core "SW-P-08 Protocol Control" is used as a development Device Core for people being interested in using the SW-P-08 Protocol for other purposes than the Sirius 800 series and the Vega 30 router.

## GV Sirius 800 (SW-P-08)

The integration shares some similarities with the Device Core “BMD Videohub” and “AJA KUMO”. You can control up to 128x128 IO points. If you have configured naming on the router sources/destinations these will be shown in the display of the controller.

The Device Core will, by default connect to port TCP 2008.

This is a table of actions for the GV Sirius 800 (SW-P-08) Device Core

<p><b>Set Crosspoint</b></p> 	<p>Route a given source to a given destination</p> <p><i>Binary triggers:</i> Sets the selected routing.</p> <p><i>Pulse inputs:</i> Not implemented</p> <p><i>Binary outputs:</i> On when actual Source matches Destination</p> <p><i>Button colors:</i> Will be highlighted when Source matches Destination, otherwise dim.</p> <p>Destination: Can be selected from 1-128 or Mem A-D. If Mem AA or Mem BB is selected, the output is a group of values. In this case anywhere from 0 to 10 destinations can receive a route of the same source.</p> <p><i>Displays:</i> Shows the destination in the title bar (N/A if none, “(Multiple)” if many) and the input source in one or two text lines (depends on Large Labels configuration option)</p>
<p><b>Output Select</b></p> 	<p>See “Memory Groups” from System Device core for functionality except noted below:</p> <p><i>Display text:</i> For displays and smart switches, the value will be shown as the output label from the router. The title bar will show “Output Sel”. In case “Clear all” is selected, “Clear all” will be shown in the display.</p>
<p><b>Set Multiviewer Crosspoint</b></p> 	<p>Route a given source to a given destination in selected Multiview</p> <p><i>Binary triggers:</i> Sets the selected routing.</p> <p><i>Pulse inputs:</i> Not implemented</p> <p><i>Binary outputs:</i> On when actual Source matches Destination</p> <p><i>Button colors:</i> Will be highlighted when Source matches Destination, otherwise dim.</p> <p>Source: Can be selected from 1-200 or Mem A-D. If Mem AA or Mem BB is selected, the output is a group of values. In this case anywhere from 0 to 10 destinations can receive a route of the same source.</p> <p>Destination: Can be selected from 1-48 or Mem A-D. If Mem AA or Mem BB is selected, the output is a group of values. In this case anywhere from 0 to 10 destinations can receive a route of the same source.</p> <p><i>Displays:</i> Shows the multiview in the title bar and the input source in one or two text lines (depends on Large Labels configuration option)</p>
<p><b>Set Take Destination</b></p> 	<p>Readies a given source to a given destination</p> <p><i>Binary triggers:</i> Cycle Up/Down cycles through destinations 1-200</p> <p><i>Pulse inputs:</i> Cycles through destinations 1-200</p> <p><i>Button colors:</i> Will be highlighted when selected, otherwise dimmed</p> <p>Destination: Can be selected from 1-200</p> <p><i>Displays:</i> Shows Take Dest in the title bar and the destination in the second line within a box and the source assigned to that destination in the bottom line</p>

<div> <div>Set Take Source</div> <div>#1 1</div> <div>Normal</div> <div>INS CP -</div> <div>GV Sirius 800 (SW-P-08): Set Take Source</div> <div>Src: 1</div> <div>+</div> </div>	<p>Readies a given source to be routed</p> <p><i>Binary triggers:</i> Cycle Up/Down cycles through sources 1-200</p> <p><i>Pulse inputs:</i> Cycles through sources 1-200</p> <p><i>Button colors:</i> Will be highlighted when selected, otherwise dimmed</p> <p>Source: Can be selected from 1-200</p> <p><i>Displays:</i> Shows Take Src in the title bar and the source in the second line within a box</p>
<div> <div>Take</div> <div>#1 1</div> <div>Normal</div> <div>INS CP -</div> <div>GV Sirius 800 (SW-P-08): Take</div> <div>On Down</div> <div>Keep</div> <div>Clear</div> <div>+</div> </div>	<p>Performs a Take action</p> <p><i>Binary triggers:</i> Keep Sets the selected routing. Clear, clears the selected route.</p> <p><i>Pulse inputs:</i> Not implemented</p> <p><i>Binary outputs:</i> On Down- performs action on down, On Up- performs action when button is released</p> <p><i>Button colors:</i> Will be highlighted when selected, otherwise dimmed</p> <p><i>Displays:</i> TAKE</p>

## Device Configurations

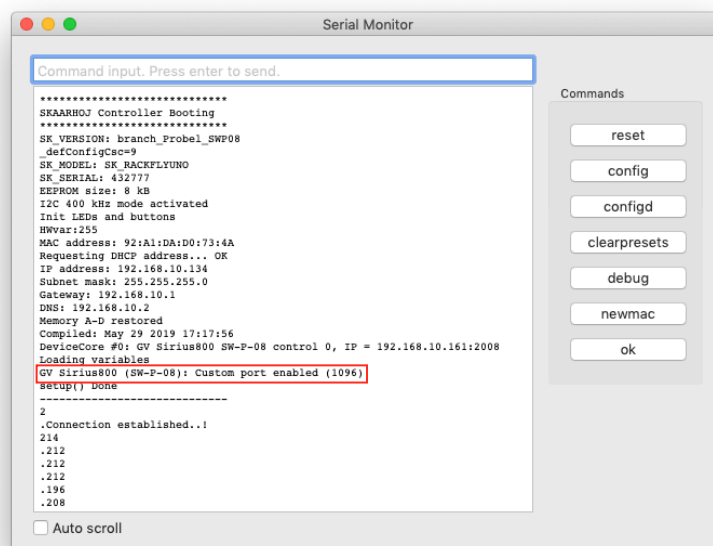
Device configuration options exist:

- Index 0: **Port Selection:** By default port is set to 2008. Use index 0 to set a alternative port
- Index 1: **Large Labels:** If "1", labels in displays will be max 5 chars and big font.

### Example I:

Enabling "Port Selection" could look like this device configuration code: "D0:0=1096" where the general form would be "Dx:y=z" where "x" is the number of the device core as installed on the controller (starting with zero for the first device core), "y" the index number and "z" the value for that index.

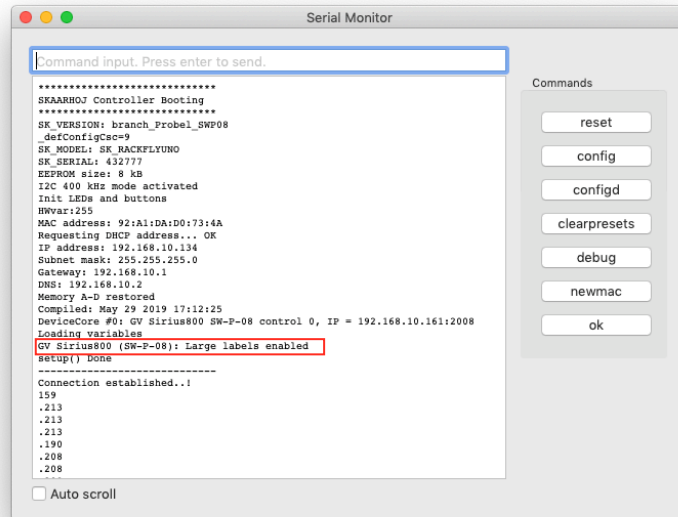
To confirm that a device configuration is in fact detected by the controller, please check it out on the serial monitor where it will be mentioned:



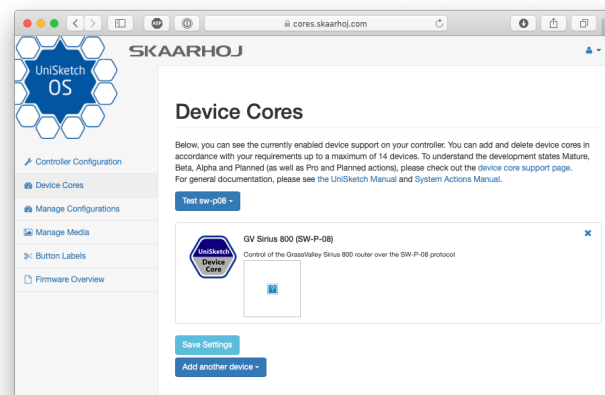
## Example II:

Enabling "Large Labels" could look like this device configuration code: "D0:1=1" where the general form would be "Dx:y=z" where "x" is the number of the device core as installed on the controller (starting with zero for the first device core), "y" the index number and "z" the value for that index.

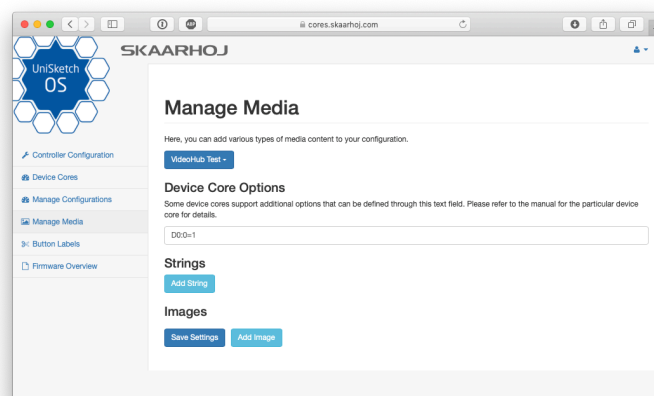
To confirm that a device configuration is in fact detected by the controller, please check it out on the serial monitor where it will be mentioned:



If the GV Sirius 800 (SW-P-08) device core is the first like below:



Then setting the "Large Labels" would be set by this configuration under "Manage Media" on your configuration page for your controller on [cores.skaarhoj.com](http://cores.skaarhoj.com)


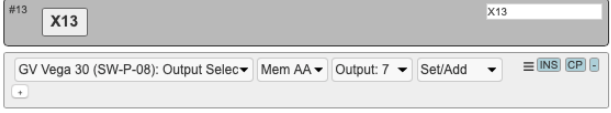
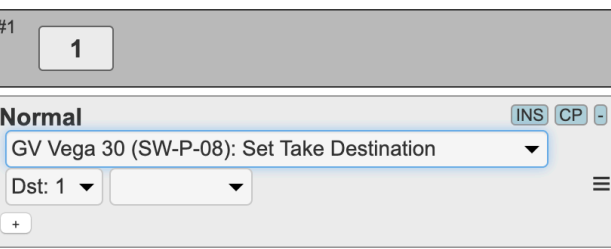
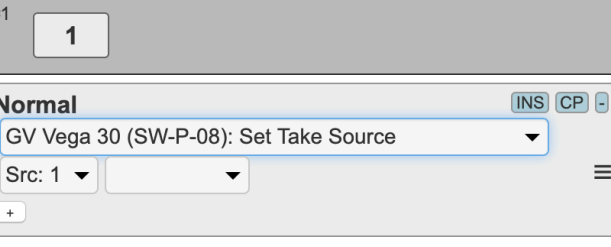


## GV Vega 30 (SW-P-08)

The integration shares some similarities with the Device Core “BMD Videohub” and “AJA KUMO”. You can control up to 34x34 IO points. If you have configured naming on the router sources/destinations these will be shown in the display of the controller.

The Device Core will, by default connect to port TCP 2008.

This is a table of actions for the GV Vega 30 (SW-P-08) Device Core

<p><b>Set Crosspoint</b></p> 	<p>Route a given source to a given destination</p> <p><i>Binary triggers:</i> Sets the selected routing.</p> <p><i>Pulse inputs:</i> Not implemented</p> <p><i>Binary outputs:</i> On when actual Source matches Destination</p> <p><i>Button colors:</i> Will be highlighted when Source matches Destination, otherwise dim.</p> <p><i>Destination:</i> Can be selected from 1-34 or Mem A-D. If Mem AA or Mem BB is selected, the output is a group of values. In this case anywhere from 0 to 10 destinations can receive a route of the same source.</p> <p><i>Displays:</i> Shows the destination in the title bar (N/A if none, “(Multiple)” if many) and the input source in one or two text lines (depends on Large Labels configuration option)</p>
<p><b>Output Select</b></p> 	<p>See “Memory Groups” from System Device core for functionality except noted below:</p> <p><i>Display text:</i> For displays and smart switches, the value will be shown as the output label from the router. The title bar till show “Output Sel”. In case “Clear all” is selected, “Clear all” will be shown in the display.</p>
<p><b>Set Take Destination</b></p> 	<p>Readies a given source to a given destination</p> <p><i>Binary triggers:</i> Cycle Up/Down cycles through destinations 1-34</p> <p><i>Pulse inputs:</i> Cycles through destinations 1-34</p> <p><i>Button colors:</i> Will be highlighted when selected, otherwise dimmed</p> <p><i>Destination:</i> Can be selected from 1-34</p> <p><i>Displays:</i> Shows Take Dest in the title bar and the destination in the second line within a box and the source assigned to that destination in the bottom line</p>
<p><b>Set Take Source</b></p> 	<p>Readies a given source to be routed</p> <p><i>Binary triggers:</i> Cycle Up/Down cycles through sources 1-34</p> <p><i>Pulse inputs:</i> Cycles through sources 1-34</p> <p><i>Button colors:</i> Will be highlighted when selected, otherwise dimmed</p> <p><i>Source:</i> Can be selected from 1-34</p> <p><i>Displays:</i> Shows Take Src in the title bar and the source in the second line within a box</p>

<div>Take</div> <div>#1 1</div> <div> <div>Normal</div> <div>INS CP -</div> <div>GV Vega 30 (SW-P-08): Take</div> <div>On Down ▼ Keep ▼</div> <div>+</div> </div>	<p>Performs a Take action</p> <p><i>Binary triggers:</i> Keep Sets the selected routing. Clear, clears the selected route.</p> <p><i>Pulse inputs:</i> Not implemented</p> <p><i>Binary outputs:</i> On Down- performs action on down, On Up- performs action when button is released</p> <p><i>Button colors:</i> Will be highlighted when selected, otherwise dimmed</p> <p><i>Displays:</i> TAKE</p>
---	---

## Device Configurations

Device configuration options exist:






- Index 0: **Port Selection:** By default port is set to 2008. Use index 0 to set a alternative port
- Index 1: **Large Labels:** If "1", labels in displays will be max 5 chars and big font.

See the section "GV Sirius 800 (SW-P-08)" for examples

## SW-P-08 Protocol Control

The Device Core will, by default connect to port TCP 1096.

This is a table of actions for the SW-P-08 Protocol Control Device Core

<p><b>Set Crosspoint</b></p> 	<p>Route a given source to a given destination on the selected Matrix and Level</p> <p><i>Binary triggers:</i> Sets the selected routing.</p> <p><i>Pulse inputs:</i> Not implemented</p> <p><i>Binary outputs:</i> On when actual Source matches Destination</p> <p><i>Button colors:</i> Will be highlighted when Source matches Destination, otherwise dim.</p> <p>Destination: Can be selected from 1-64 or Mem A-D. If Mem AA or Mem BB is selected, the output is a group of values. In this case anywhere from 0 to 10 destinations can receive a route of the same source.</p> <p><i>Displays:</i> Shows the destination in the title bar (N/A if none, "(Multiple)" if many) and the input source in one or two text lines (depends on Large Labels configuration option)</p>
<p><b>Output Select</b></p> 	<p>See "Memory Groups" from System Device core for functionality except noted below:</p> <p><i>Display text:</i> For displays and smart switches, the value will be shown as the output label from the router. The title bar will show "Output Sel". In case "Clear all" is selected, "Clear all" will be shown in the display.</p>
<p><b>Source Name</b></p> 	<p>Description coming soon.</p>
<p><b>Destination Association Name</b></p> 	<p>Renders naming for a chosen IO point</p> <p>DIV 128:6 MOD 128:4 equals  <math>128 \times 6 + 4 = 772</math></p>
<p><b>Source Association Name</b></p> 	<p>Description coming soon.</p>

## Device Configurations

Device configuration options exist:

- Index 0: **Port Selection:** By default port is set to 1096. Use index 0 to set a alternative port