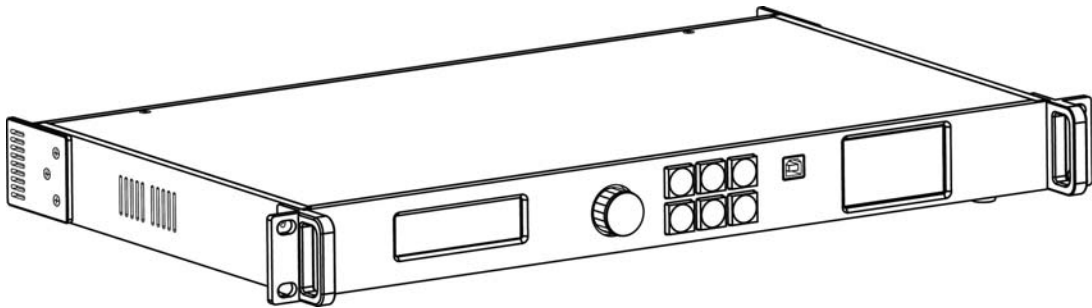# VIP
DRIVE 43Nova

User Manual

CHAUVET
PROFESSIONAL

EDITION NOTES

The VIP Drive 43Nova User Manual includes a description, safety precautions, installation, programming, operation, and maintenance instructions for the VIP Drive 43Nova as of the release date of this edition.

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Document Printing

For best results, print this document in color, on letter size paper (8.5 x 11 in), double-sided. If using A4 paper (210 x 297 mm), configure the printer to scale the content accordingly.

Intended Audience

Any person installing, operating, and/or maintaining this product should completely read through the guide that shipped with the product, as well as this manual, before installing, operating, or maintaining this product.

Disclaimer

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Document Revision

This VIP Drive 43Nova User Manual is the 3rd edition of this document. Go to www.chauvetprofessional.com for the latest version.

TABLE OF CONTENTS

1. BEFORE YOU BEGIN

What Is Included

- VIP Drive 43Nova
- 4 Rubber Feet
- Neutrik® powerCON® Power Cord
- USB Cable
- HDMI Extension Cable
- Cat5e Ethernet Cable
- Warranty Card

Unpacking Instructions

Immediately upon receiving this product, carefully unpack and check the container. Make sure you have received all the parts indicated above in good condition.

Claims

Upon receipt, if the container or the contents (the product and included accessories) appear damaged from shipping, or show signs of mishandling, notify the carrier immediately, not Chauvet. Failure to do so in a timely manner may invalidate your claim with the carrier. In addition, keep the container and all the packing material for inspection.

For other issues such as missing components or parts, damage not related to shipping, or concealed damage, file a claim with Chauvet within 7 days of receiving the merchandise.

Manual Conventions

CONVENTION	MEANING
1–512	A range of values
50/60	A set of values of which only one can be chosen
<SET>	A button on the product's control panel
Settings	A product function or a menu option

Symbols

SYMBOL	MEANING
⚠	Critical installation, configuration, or operation information. Not following these instructions may make the product not work, cause damage to the product, or cause harm to the operator.
ⓘ	Important installation or configuration information. The product may not function correctly if this information is not used.
📝	Useful information.

Safety Notes

Read all the following safety notes before working with this product. These notes contain important information about the installation, usage, and maintenance of this product.

⚠️ **This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained, certified technicians. Do not open the housing or attempt any repairs.**

ⓘ **All applicable local codes and regulations apply to proper installation of this product.**

Personal Safety

- Avoid direct eye exposure to the light source while the product is on.
- Always disconnect the product from the power source before cleaning or replacing the fuse.
- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- Do not touch the product's housing when operating because it may be very hot.

Mounting

- This product is for indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture. (IP20)
- CAUTION: When transferring product from extreme temperature environments, (e.g. cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow product to fully acclimate to the surrounding environment before connecting it to power.
- Mount this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Make sure there are no flammable materials close to this product while it is operating.
- Never carry the product by the power cord.

Power and Wiring

- Make sure the power cord is not crimped or damaged.
- Always make sure you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.
- Never connect this product to a dimmer pack or rheostat.
- Never disconnect this product by pulling or tugging on the power cable.

Operation

- Do not operate this product if there is damage on the housing or cables. Have the damaged parts replaced by an authorized technician at once.
- Do not cover the ventilation slots when operating to avoid internal overheating.
- The maximum ambient temperature is 113 °F (45 °C). Do not operate the product at higher temperatures.
- In the event of a serious operation problem, stop using this product immediately!

📝 **If your Chauvet product requires service, contact Chauvet Technical Support.**

2. INTRODUCTION

Description

The VIP Drive 43Nova is a streamlined all in one video wall mapper/scaler/switcher designed for use with Novastar video control protocol. With 4 inputs, 3 outputs and a preview monitor, the VIP Drive 43Nova will map your wall, scale/switch your video source, and allow remote triggering via DMX or web server eliminating the need for individual mappers, scalers, and video switchers. HDCP support and EDID management further improve the flexibility of the VIP Drive 43Nova.

Features

- Video wall processor that switches, scales, and outputs video signal to any Novastar video panel (including the F4 from CHAUVET)
- Powerful standalone mapping for video panels, without a computer
- Custom user interface makes setting up your wall fast and easy with on-screen visual feedback
- Front, integrated video screen assists switching and timing for live events
- Remote control via DMX supports mapping, triggering, and video adjustments, including scaling and positioning
- Supports DVI, HDMI, and HD-SDI for flexibility in various applications
- Includes 4 etherCON video outputs to support full HD at 2.6 million LED resolution
- Works with NovaLCT-Mars software for complex configurations and panel calibration
- Compact 1U packing eases transportation and integration into your existing setup

Product Overview

Front Panel Overview
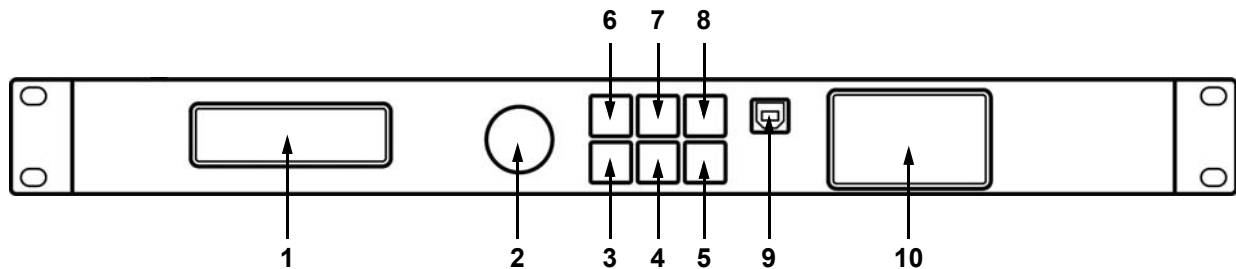
#	NAME	FUNCTION
1	Menu Display	An interface for the menu options of the product
2	MENU/ENTER Knob	Press to enable the currently selected menu option or set the currently selected value into the selected function. Turn clockwise to scroll down through the menu or increase a value when in a function. Turn counter-clockwise to scroll up through the menu or decrease a value when in a function.
3	MENU Button	Press to return to the previous menu level. Hold to return to the Home Screen.
4	SCALE/OUTPUT Button	Enables/Disables Auto Fit function. Can also be set to Black Out or Freeze.
5	MAP Button	Toggles MAP function (panels will display port and panel number) and accesses the Screen Settings menu. Can also be set to Black Out or Freeze.
6	HDMI Button	Select input source:
7	DVI Button	Press once to set as preview input source. Press again to output that source.
8	HD-SDI Button	Hold to set as PIP input source.
9	USB Port (Type B)	Control port to interface with computer
10	Preview Display	Previews selected input source before output to video panel

Rear Panel Overview
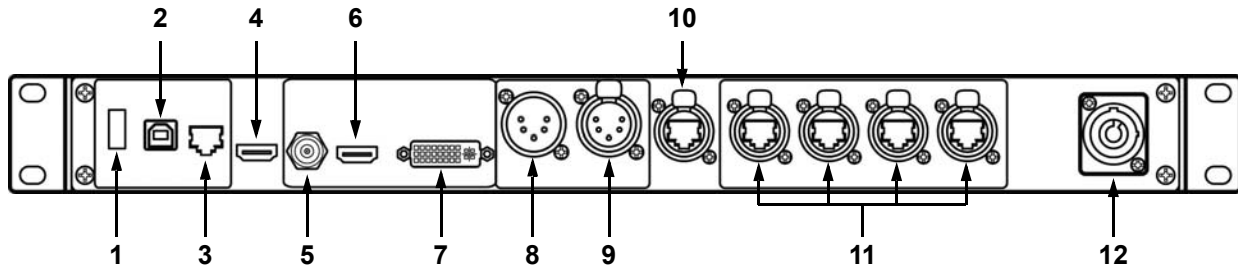
#	NAME	FUNCTION
1	**USB Port (Type A)**	For connecting to a computer, or for USB cascade output (control only, no video)
2	**USB Port (Type B)**	For connecting to a computer, or for USB cascade input (control only, no video)
3	**Ethernet Port**	For connecting to a computer network (control only, no video)
4	**PREVIEW HDMI Output**	For output preview on an external monitor
5	**HD-SDI Input**	SDI video input
6	**HDMI Input**	HDMI video input
7	**DVI Input**	DVI video input
8	**DMX Input**	DMX in port
9	**DMX Output**	DMX out port
10	**CITP Port**	Reserved for future use of Controller Interface Transport Protocol
11	**Neutrik® etherCON® Ports**	For output to LED video panel
12	**Neutrik® powerCON® Input**	Power input

Product Dimensions
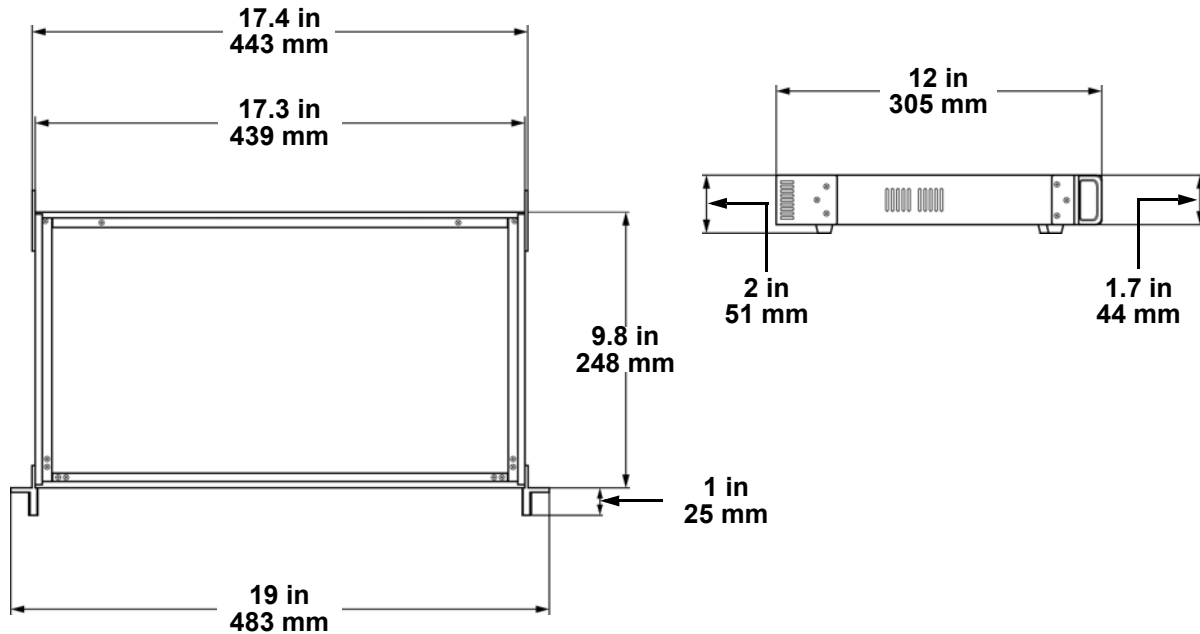
3. SETUP

AC Power

Each VIP Drive 43Nova has an auto-ranging power supply that works with an input voltage range of 100 to 240 VAC, 50/60 Hz. To determine the power requirements for each VIP Drive 43Nova, refer to the label affixed to the product. You can also refer to the Technical Specifications chart in this manual.

The listed current rating indicates the maximum current draw during normal operation. For more information, download Sizing Circuit Breakers from the Chauvet website: www.chauvetprofessional.com.

> • **Always connect the product to a protected circuit (circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.**
> • **To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.**

> **Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.**

AC Plug

The VIP Drive 43Nova comes with a power input cord terminated with a Neutrik® powerCON® connector on one end and an Edison plug on the other end (U.S. market). If the power input cord that came with your product has no plug, or if you need the change the plug, use the table below to wire the new plug.

CONNECTION	WIRE (U.S.)	WIRE (EUROPE)	SCREW COLOR
AC Live	Black	Brown	Yellow or Brass
AC Neutral	White	Blue	Silver
AC Ground	Green/Yellow	Green/Yellow	Green

Mounting

The VIP Drive 43Nova fits nicely on a standard 19" rack, or it can be placed on its rubber feet on a flat level surface.

Signal Connections

The VIP Drive 43Nova uses the NOVA control protocol to send video signal to the connected panels. The VIP Drive 43Nova has USB and Ethernet ports for interfacing with a computer, HDMI, HD-SDI and DVI ports for video input, as well as 4 Neutrik® etherCON® out ports, an HDMI out port, and a 5-pin DMX out port.

Video Source Connection

You can link the VIP Drive 43Nova directly to a video source using a DVI connection, an HDMI connection, or an HD-SDI connection.

NovaLCTMars Connection

You can link the VIP Drive 43Nova to a computer running the NovaLCTMars software using a USB (type A or B) connection or an ethernet cable. This will provide control options for the VIP Drive 43Nova through a computer interface.

DMX Connection

With DMX, you can control the color balance and dimmer levels for all connected panels. You can link the VIP Drive 43Nova to a DMX controller using a 5-pin DMX connection. If using other DMX-compatible products with this product, you can control each individually with a single DMX controller. The DMX Values section provides detailed information regarding the control personalities.

> **If you are not familiar with or need more information about DMX standards or the DMX cables needed to link this product to a DMX controller, download the DMX Primer from the Chauvet website: www.chauvetprofessional.com.**

Preview Monitor Connection

You can link the VIP Drive 43Nova to a monitor that will preview the LED output using an HDMI cable plugged into the PREVIEW HDMI port.

Cascading Connection

You can link multiple VIP Drive 43Nova products together in a cascading connection using the USB type A and B connections on the rear panel of the product. This will allow all products to be programmed at once.

Connection Diagrams
Input Connections Diagram
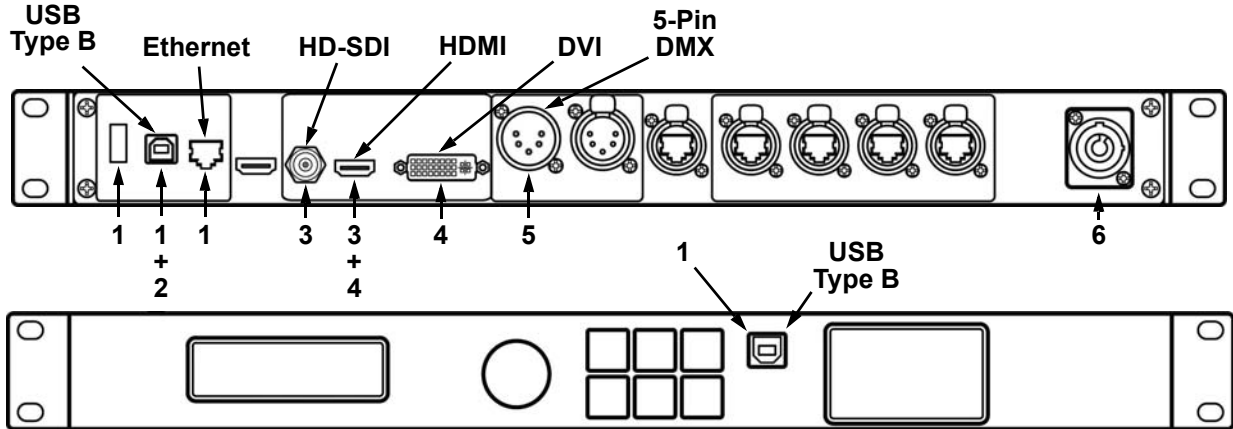
#	PURPOSE	CONNECTIONS
1	Interface with a computer running NovaLCTMars software	USB Type A and B, Ethernet
2	Link to another VIP Drive 43Nova	USB Type B
3	Link to a video device, such as a camera or a DVD player	HD-SDI, HDMI
4	Link to a computer video output	HDMI, DVI
5	Link to a DMX controller, interface, or daisy chain	5-pin DMX
	Receive AC power	Neutrik® powerCON®

Output Connections Diagram
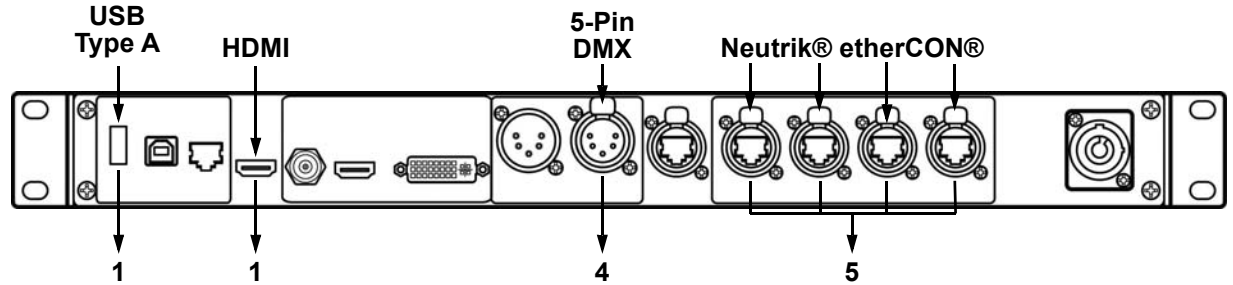
#	RECEIVING DEVICE	CONNECTIONS
1	Another VIP Drive 43Nova	USB Type A, 5-pin DMX
2	Preview Monitor	HDMI
3	DMX data stream	5-pin DMX
4	LED video panels, such as the F4 from CHAUVET	Neutrik® etherCON®

Cascading Connection Diagram
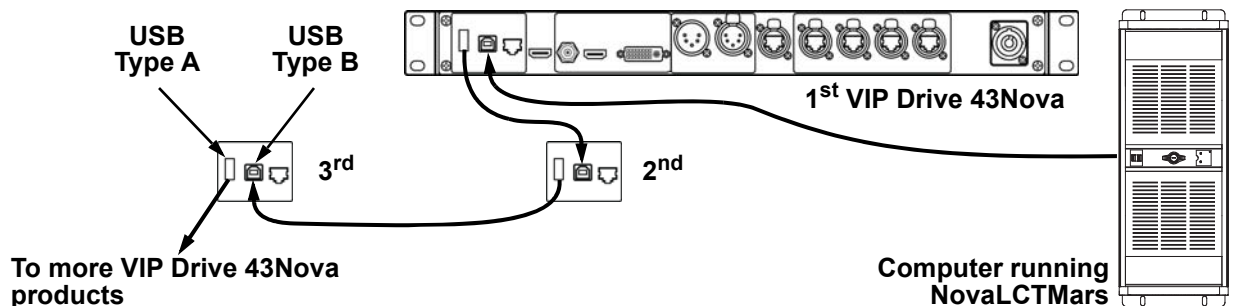
4. OPERATION

Control Panel Operation
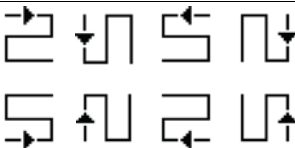
See the Product Overview for a detailed description of the control panel.

Programming

Refer to the Menu Map to understand the menu options. The menu map shows the main level and a variable number of programming levels for each option.

- To access the menu from the Home Screen, press the **<MENU>** button or the **<MENU/ENTER>** knob.
- To scroll through the options on each level of the menu, turn the **<MENU/ENTER>** knob. Turn it clockwise to scroll down, and turn it counter-clockwise to scroll up.
- Press the **<MENU/ENTER>** knob to select the highlighted option. This will take you to the next programming level for that option, or it will highlight a value that can be edited.
- To increase a selected number value, turn the **<MENU/ENTER>** knob clockwise. To decrease a selected number value, turn the **<MENU/ENTER>** knob counter-clockwise.
- Press **<MENU>** to exit to the previous main level. Hold **<MENU>** to return to the Home Screen.

Menu Map

MAIN LEVEL	PROGRAMMING LEVELS			DESCRIPTION
Brightness	**0–100%**			Controls total output level
Screen Settings	**Cabinet Row Qty**	**1–15***		Sets number of rows in video assembly. *Range determined by Column Qty and panels. See Cabinet Quantity Chart.
	Cabinet Column Qty	**1–30***		Sets number of columns in video assembly. *Range determined by Row Qty and panels. See Cabinet Quantity Chart.
	Port1 Cabinet Qty	**1–40***		Sets number of video panels connected to Output Port 1. *Range affected by Row Qty, Column Qty, and panels. See Cabinet Quantity Chart.
	Data Flow (Front View)			Sets start point and path for data flow in video panel assembly
Input Settings	**Preset Resolution**	**1024x768**		Selects a preset resolution
		1280x1024		
		1366x768		
		1440x900		
		1600x1200		
		1920x1080		
		1920x1200		
		2048x640		
	Custom Resolution	**Width (H)**	**800–3840**	Sets custom pixel width
		Height (V)	**600–1920**	Sets custom pixel height
		Custom Refresh Rate	**60Hz**	Sets custom refresh rate
			59.94Hz	
			50Hz	
			30Hz	
		Apply		Applies custom resolution values

MAIN LEVEL	PROGRAMMING LEVELS				DESCRIPTION
Output Settings	**Scaling**		Disable		Enables or disables scaling options
			Enable		
	Auto Fit		Disable		Enables or disables auto fit
			Enable		
	Custom Scaling	**Input Capture**	Input Source	– – – –	Shows the input source
			Width (H)	64–_ _ _ _*	Sets what part of the input to output. *Dimension ranges determined by Input Settings Resolution. **Offset ranges determined by dimensions.
			Height (V)	48–_ _ _ _*	
			Start X	0–_ _ _ _**	
			Start Y	0–_ _ _ _**	
		Output Window	Width (H)	128–_ _ _ _*	Sets the dimensions and offset of the output. *Dimension ranges determined by screen settings. **Offset ranges determined by dimensions.
			Height (V)	64*–_ _ _ _*	
			Start X	0–_ _ _ _**	
			Start Y	0–_ _ _ _**	
	Image Offset	Start X	-_ _ _ _*–_ _ _ _*		Sets the image offset. *Ranges determined by screen settings.
		Start Y	-_ _ _ _*–_ _ _ _*		
Display Control	**Normal**				Output runs normally
	Black Out				No output
	Freeze				Holds current output
	Test Pattern	R G B W ▤ ▥ ▨ ▧ R G B W			Outputs the selected color or pattern to test connected video panels
	Image quality	Contrast	0–100%		Sets color contrast level
		Saturation	0–100%		Sets color saturation level
		Hue	-180–180		Sets color hue level
		Sharpness	0–24		Sets color sharpness level
		Color Temperature	1000–9500K		Sets color settings to preset color temperatures. Shows **Custom** for manual color settings.
		Red	0–255		Sets maximum red level
		Green	0–255		Sets maximum green level
		Blue	0–255		Sets maximum blue level
		Gamma	1.0–4.0		Sets gamma correction level
	Switching Effect	Off			Selects switching effect
		Cut			
		Fade			
Advanced Settings	**PIP**	**PIP**	Disable		Enables or disables Picture In Picture
			Enable		
		Main source	HDMI		Sets main output source
			DVI		
			SDI		
		PIP Source	HDMI		Sets Picture In Picture source
			DVI		
			SDI		

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MAIN LEVEL	PROGRAMMING LEVELS			DESCRIPTION
Advanced Settings (cont.)	**PIP** (cont.)	Width (H)	128–_ _ _ _*	Sets dimensions and offset of the PIP. *Dimension ranges determined by Input Settings. **Offset ranges determined by dimensions.
		Height (H)	64–_ _ _ _*	
		Start X	0–_ _ _ _**	
		Start Y	0–_ _ _ _**	
		PIP Crop Settings	Disable	Enables or disables PIP cropping
			Enable	
		PIP Crop Settings Width (H)	64–_ _ _ _*	Sets the crop dimensions and offset of the PIP. *Dimension ranges determined by Input Settings. **Offset ranges determined by crop dimensions.
		Height (H)	48–_ _ _ _*	
		Start X	0–_ _ _ _**	
		Start Y	0–_ _ _ _**	
	Image Mosaic	Image Mosaic	Disable	Enables or disables image mosaic
			Enable	
		Total Width Pixels	128–24576	Sets Image Mosaic dimensions
		Total Height Pixels	128–24576	
		Load Area Width	128–24576	Sets Image Mosaic load area and offset. *Offset ranges determined by load area.
		Load Area Height	64–24576	
		Load Area Start X	0–23756*	
		Load Area Start Y	0–23484*	
	Preview Settings	HDMI		Sets input source for the Preview Display
		DVI		
		SDI		
		Monitor		
	Load Cabinet Files	No Config Files Inside!		Temporarily uploads selected firmware to connected panels
	Save to RV Card	No		Permanently uploads selected firmware to connected panels
		Yes		
	Redundancy	Primary		Designates this driver as primary
		Backup		Designates this driver as backup
	Factory Default	No		Resets the product to factory settings
		Yes		
	Presettings	**Presettings 1–10**	Save	Saves the current settings to the selected presettings
			Apply	Loads the selected presettings
			Delete	Deletes the selected presettings
	Custom Button	**SCALE**	SCALE	Assigns function of **<SCALE/OUTPUT>** button.
			Black Out	
			Freeze	
		MAP	MAP	Assigns function of **<MAP>** button.
			Black Out	
			Freeze	
	Advanced Attr	OLED Brightness	5–15	Sets display brightness
		Go Homepage(S)	30–3600	Sets number of seconds display is inactive before returning to the Home Screen
	DMX Address	1–512		Sets DMX address
	Firmware Version	V_._._._		Displays firmware version

MAIN LEVEL	PROGRAMMING LEVELS			DESCRIPTION
Communication Settings	Communication Mode		USB Preferred	USB will have priority
			LAN Preferred	Ethernet will have priority
	Network Settings	Config IPV4	Manually	Set IP address manually
			Auto	IP address will be assigned
		IP Address	_ _ _._ _ _._ _ _._ _ _	Sets IP address
		Subnet Mask	_ _ _._ _ _._ _ _._ _ _	Sets Subnet Mask
		Reset	No	Resets network settings to factory default
			Yes	
Language	？？/Chinese			Sets display language to Chinese
	English/？？			Sets display language to English

Operating Settings Configuration

Home Screen
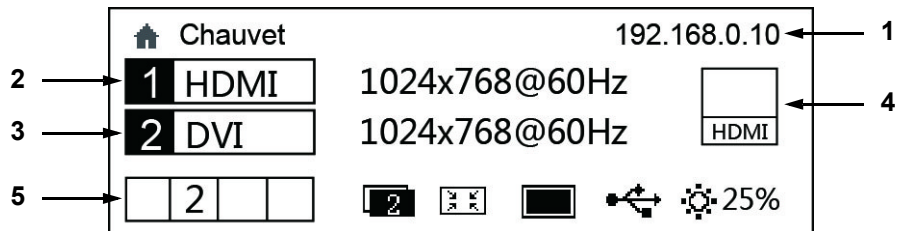
The VIP Drive 43Nova has a home screen that shows the current IP address, input sources, resolutions, refresh rates, and other operating settings. To see the home screen, hold **<MENU>** until it shows on the display. To access the main menu from the home screen, press **<MENU>** or the **<MENU/ENTER>** knob.

1. Alternates between showing the IP address and the name of the product.
2. Shows the main input source, the main output resolution, and refresh rate.
3. Shows the PIP (Picture In Picture) input source, the PIP resolution, and refresh rate.
4. Shows the input source being previewed and output through PREVIEW HDMI.
5. Shows the status of the product, with the following icons:

ICON	MEANING	ICON	MEANING
1 2 3 4	Shows active Neutrik® etherCON® output ports		Image mosaic enabled
1	PIP disabled		USB control is active
2	PIP enabled		Ethernet control is active
	Point-to-point display is active	DMX	DMX control is active
	Scale down mode		No control interface is connected
	Scale up mode	25%	Current output brightness
	Image mosaic disabled		Button functions are locked

Brightness

The brightness setting controls the total output level of the connected video panels.

1. Press **<MENU>** or the **<MENU/ENTER>** knob to access the menu.
2. Turn the **<MENU/ENTER>** knob until **Brightness** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise to increase the brightness, or counterclockwise to decrease the brightness, from **0–100%**.
5. Press the **<MENU/ENTER>** knob.

Screen Settings

The screen settings control the size of the connected video panel assembly, the ratio of panels to output port, and the direction of the data flow. The number of video panels connected to ports 2, 3, and/or 4 must be less than or equal to the number connected to port 1. For configurations with more than 30 columns or 15 rows of video panels, see **Image Mosaic**. There are 2 ways to access the Screen Settings menu. If set as default, pressing **<MAP>** will automatically access the Screen Settings menu (see Button Customization).

To access the Screen Settings menu through the display:
1. Press **<MENU>** or the **<MENU/ENTER>** knob to access the menu.
2. Turn the **<MENU/ENTER>** knob until **Screen Settings** is selected.
3. Press the **<MENU/ENTER>** knob.

Cabinet Row Quantity

This setting defines the number of rows of panels (height) connected to the VIP Drive 43Nova.
1. Access the **Screen Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Cabinet Row Qty** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counterclockwise to increase or decrease the number of rows, from **1–15**. (The highest number that can be selected is determined by the Column Quantity and the firmware of the connected panels. See the Cabinet Quantity Chart)
5. Press the **<MENU/ENTER>** knob.

Cabinet Column Quantity

This setting defines the number of columns of panels (width) connected to the VIP Drive 43Nova.
1. Access the **Screen Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Cabinet Column Qty** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counterclockwise to increase or decrease the number of columns, from **1–30**. (The highest number that can be selected is determined by the Row Quantity and the firmware of the connected panels. See the Cabinet Quantity Chart)
5. Press the **<MENU/ENTER>** knob.

Port 1 Cabinet Quantity

This setting defines the number of panels connected to output port 1 of the VIP Drive 43Nova.
1. Access the **Screen Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Port1 Cabinet Qty** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counterclockwise to increase or decrease the number of panels, from **1–40**. (The range of numbers that can be selected is determined by the Row and Column Quantities, and the firmware of the connected panels. See the Cabinet Quantity Chart)
5. Press the **<MENU/ENTER>** knob.

Cabinet Quantity Chart

This chart shows the ranges available for Row, Column, and Port 1 Quantity, with no panels connected. Values may change when panels are detected.

ROW	COL.	PORT 1	ROW	COL.	PORT 1	ROW	COL.	PORT 1	ROW	COL.	PORT 1
5	30	38–40	3	18	14–40	1	11	3–11	14	5	18–40
4	30	30–40	2	18	9–36	15	10	38–40	13	5	17–40
3	30	23–40	1	18	5–18	14	10	35–40	12	5	15–40
2	30	15–40	9	17	39–40	13	10	33–40	11	5	14–40
1	30	8–30	8	17	34–40	12	10	30–40	10	5	13–40
5	29	37–40	7	17	30–40	11	10	28–40	9	5	12–40
4	29	29–40	6	17	26–40	10	10	25–40	8	5	10–40
3	29	22–40	5	17	22–40	9	10	23–40	7	5	9–35
2	29	15–40	4	17	17–40	8	10	20–40	6	5	8–30
1	29	8–29	3	17	13–40	7	10	18–40	5	5	7–25
5	28	35–40	2	17	9–34	6	10	15–40	4	5	5–20

Row	Col.	Port 1	Row	Col.	Port 1	Row	Col.	Port 1	Row	Col.	Port 1
4	28	28–40	1	17	5–17	5	10	13–40	3	5	4–15
3	28	21–40	9	16	36–40	4	10	10–40	2	5	3–10
2	28	14–40	8	16	32–40	3	10	8–30	1	5	2–5
1	28	7–28	7	16	28–40	2	10	5–20	15	4	15–40
5	27	34–40	6	16	24–40	1	10	3–10	14	4	14–40
4	27	27–40	5	16	20–40	15	9	34–40	13	4	13–40
3	27	21–40	4	16	16–40	14	9	32–40	12	4	12–40
2	27	14–40	3	16	12–40	13	9	30–40	11	4	11–40
1	27	7–27	2	16	8–32	12	9	27–40	10	4	10–40
5	26	33–40	1	16	4–16	11	9	25–40	9	4	9–36
4	26	26–40	10	15	38–40	10	9	23–40	8	4	8–32
3	26	20–40	9	15	34–40	9	9	21–40	7	4	7–28
2	26	13–40	8	15	30–40	8	9	18–40	6	4	6–24
1	26	7–26	7	15	27–40	7	9	16–40	5	4	5–20
6	25	38–40	6	15	23–40	6	9	14–40	4	4	4–16
5	25	32–40	5	15	19–40	5	9	12–40	3	4	3–12
4	25	25–40	4	15	15–40	4	9	9–36	2	4	2–8
3	25	19–40	3	15	12–40	3	9	7–27	1	4	1–4
2	25	13–40	2	15	8–30	2	9	5–18	15	3	12–40
1	25	7–25	1	15	4–15	1	9	3–9	14	3	11–40
6	24	36–40	11	14	39–40	15	8	30–40	13	3	10–39
5	24	30–40	10	14	35–40	14	8	28–40	12	3	9–36
4	24	24–40	9	14	32–40	13	8	26–40	11	3	9–33
3	24	18–40	8	14	28–40	12	8	24–40	10	3	8–30
2	24	12–40	7	14	25–40	11	8	22–40	9	3	7–27
1	24	6–24	6	14	21–40	10	8	20–40	8	3	6–24
6	23	35–40	5	14	18–40	9	8	18–40	7	3	6–21
5	23	29–40	4	14	14–40	8	8	16–40	6	3	5–18
4	23	23–40	3	14	11–40	7	8	14–40	5	3	4–15
3	23	18–40	2	14	7–28	6	8	12–40	4	3	3–12
2	23	12–40	1	14	4–14	5	8	10–40	3	3	3–9
1	23	6–23	11	13	36–40	4	8	8–32	2	3	2–6
7	22	39–40	10	13	33–40	3	8	6–24	1	3	1–3
6	22	33–40	9	13	30–40	2	8	4–16	15	2	8–30
5	22	28–40	8	13	26–40	1	8	2–8	14	2	7–28
4	22	22–40	7	13	23–40	15	7	27–40	13	2	7–26
3	22	17–40	6	13	20–40	14	7	25–40	12	2	6–24
2	22	11–40	5	13	17–40	13	7	23–40	11	2	6–22
1	22	6–22	4	13	13–40	12	7	21–40	10	2	5–20
7	21	37–40	3	13	10–39	11	7	20–40	9	2	5–18
6	21	32–40	2	13	7–26	10	7	18–40	8	2	4–16
5	21	27–40	1	13	4–13	9	7	16–40	7	2	4–17
4	21	21–40	12	12	36–40	8	7	14–40	6	2	3–12
3	21	16–40	11	12	33–40	7	7	13–40	5	2	3–10
2	21	11–40	10	12	30–40	6	7	11–40	4	2	2–8
1	21	6–21	9	12	27–40	5	7	9–35	3	2	2–6

ROW	COL.	PORT 1	ROW	COL.	PORT 1	ROW	COL.	PORT 1	ROW	COL.	PORT 1
7	20	35–40	8	12	24–40	4	7	7–28	2	2	1–4
6	20	30–40	7	12	21–40	3	7	6–21	1	2	1–2
5	20	25–40	6	12	18–40	2	7	4–14	15	1	4–15
4	20	20–40	5	12	15–40	1	7	2–7	14	1	4–14
3	20	15–40	4	12	12–40	15	6	23–40	13	1	4–13
2	20	10–40	3	12	9–36	14	6	21–40	12	1	3–12
1	20	5–20	2	12	6–24	13	6	20–40	11	1	3–11
8	19	38–40	1	12	3–12	12	6	18–40	10	1	3–10
7	19	34–40	13	11	36–40	11	6	17–40	9	1	3–9
6	19	29–40	12	11	33–40	10	6	15–40	8	1	2–8
5	19	24–40	11	11	31–40	9	6	14–40	7	1	2–7
4	19	19–40	10	11	28–40	8	6	12–40	6	1	2–6
3	19	15–40	9	11	25–40	7	6	11–40	5	1	2–5
2	19	10–38	8	11	22–40	6	6	9–36	4	1	1–4
1	19	5–19	7	11	20–40	5	6	8–30	3	1	1–3
8	18	36–40	6	11	17–40	4	6	6–24	2	1	1–2
7	18	32–40	5	11	14–40	3	6	5–18	1	1	1
6	18	27–40	4	11	11–40	2	6	3–12			
5	18	23–40	3	11	9–33	1	6	2–6			
4	18	18–40	2	11	6–22	15	5	19–40			

Data Flow

This setting addresses the panels in the connected assembly for all ports by selecting a starting point and a direction of flow, as seen from the front of the assembly.

1. Access the **Screen Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Data Flow (Front View)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select from the following options:

ICON	MEANING
	Starts at top left, goes all the way right, down by one, all the way left, down by one, and repeats.
	Starts at top left, goes all the way down, right by one, all the way up, right by one, and repeats.
	Starts at top right, goes all the way left, down by one, all the way right, down by one, and repeats.
	Starts at top right, goes all the way down, left by one, all the way up, left by one, and repeats.
	Starts at bottom left, goes all the way right, up by one, all the way left, up by one, and repeats.
	Starts at bottom left, goes all the way up, right by one, all the way down, right by one, and repeats.
	Starts at bottom right, goes all the way left, up by one, all the way right, up by one, and repeats.
	Starts at bottom right, goes all the way up, left by one, all the way down, left by one, and repeats.

5. Press the **<MENU/ENTER>** knob.

The number of panels connected to ports 2, 3, and/or 4 may only be equal to or less than the number set to port 1.

For example: If there are 10 rows and 10 columns (100 total panels), port 1 can be set from 25–40. If port 1 is set to 40, port 2 will output to 40 panels, and port 3 will output to the remaining panels, which is 20 (40+40+20 = 100). If port 1 is set to 25, all ports will output to 25 panels (25+25+25+25 = 100).

Port 1 will not be able to be set to any number lower than 25 because that is the lowest number that will allow port 4 to be equal to or less than port 1.

These numbers assume the default settings are available, and not overridden by the firmware of connected panels.

Example Configuration

The following demonstrates how to set the Screen Settings for a video panel configuration with 1 VIP Drive 43Nova and 120 video panels that are 128x128 pixels.

1. Set the Cabinet Row Quantity to 8.
2. Set the to Cabinet Column Quantity to 15.
3. Set the Port 1 Cabinet Quantity to 30. This will allow each port to output to 2 complete rows.
4. Set the Data Flow to the icon below, which will start at the top left, go all the way to the right, down by one, all the way to the left, and down by one before repeating.

5. Connect the panels as in the diagram below:

As Viewed From the Back
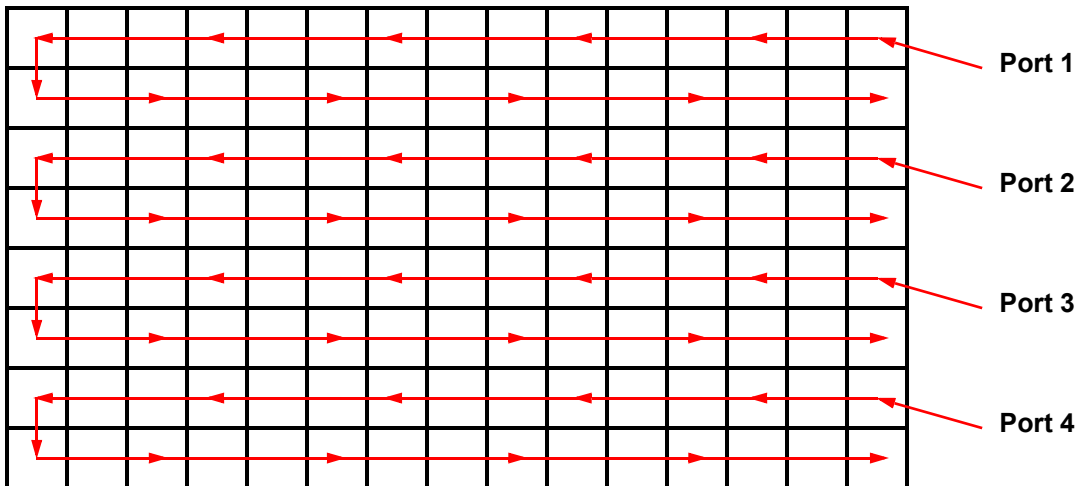
MAP Function

The **<MAP>** button not only instantly accesses the Screen Settings menu, but it also toggles the MAP function. When the **<MAP>** button is illuminated, all panels connected to the VIP Drive 43Nova will display their Port number (**Port:1–4**) and panel number (**#01–#_ _**).

Input Settings

The input settings allow a custom resolution and refresh rate to be selected, or a pre-defined resolution. To access the Input Settings menu:

1. Press **<MENU>** or the **<MENU/ENTER>** knob to access the main menu.
2. Turn the **<MENU/ENTER>** knob until **Input Settings** is selected.
3. Press the **<MENU/ENTER>** knob.

Preset Resolution

This option selects from one of 8 pre-defined resolutions for the input.

1. Access the **Input Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Preset Resolution** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select a resolution setting, from **1024x768**, **1280x1024**, **1366x768**, **1440x900**, **1600x1200**, **1920x1080**, **1920x1200**, or **2048x640**.
5. Press the **<MENU/ENTER>** knob.

Custom Resolution

This option defines a custom resolution and refresh rate for the input. To make changes in this menu permanent, **Apply** must be selected in the Custom Resolution menu.

To access the Custom Resolution menu:

1. Access the **Input Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Custom Resolution** is selected.
3. Press the **<MENU/ENTER>** knob.

Custom Resolution Width

This setting defines the input's width in pixels.

1. Access the **Custom Resolution** menu.
2. Turn the **<MENU/ENTER>** knob until **Width (H)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the width, from **800–_ _ _ _**. (This range is determined by the Screen Settings)
5. Press the **<MENU/ENTER>** knob.
6. Press **<MENU>** to return to the previous menu.

Custom Resolution Height

This setting defines the input's height in pixels.

1. Access the **Custom Resolution** menu.
2. Turn the **<MENU/ENTER>** knob until **Height (V)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the width, from **600–_ _ _ _**. (This range is determined by the Screen Settings)
5. Press the **<MENU/ENTER>** knob.
6. Press **<MENU>** to return to the previous menu.

Custom Refresh Rate

This setting defines the rate at which the input refreshes itself.

1. Access the **Custom Resolution** menu.
2. Turn the **<MENU/ENTER>** knob until **Custom Refresh Rate** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select a refresh rate, from **60Hz**, **59.94Hz**, **50Hz**, or **30Hz**.
5. Press the **<MENU/ENTER>** knob.
6. Press **<MENU>** to return to the previous menu.

Apply

To make custom input settings permanent (until they are changed), **Apply** must be selected.
From the **Custom Resolution** menu:

1. Turn the **<MENU/ENTER>** knob until **Apply** is selected.
2. Press the **<MENU/ENTER>** knob.

Output Settings

The output settings determine the area and offset of the video output. To access the Output Settings menu:

1. Press **<MENU>** or the **<MENU/ENTER>** knob to access the main menu.
2. Turn the **<MENU/ENTER>** knob until **Output Settings** is selected.
3. Press the **<MENU/ENTER>** knob.

Scaling

Enabling scaling allows the video output to be fitted more specifically to the size of the connected panel assembly. This also allows options such as Auto Fit and Image Mosaic to be enabled.

1. Access the **Output Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Scaling** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select **Enable** or **Disable**.
5. Press the **<MENU/ENTER>** knob.

Auto Fit

The Auto Fit function automatically fits the video output to the connected panel assembly, based on the Screen Settings and Input Settings. There are two ways to enable Auto Fit. If set as default, pressing **<SCALE/OUTPUT>** enables or disables both Scaling and Auto Fit (see Button Customization). To enable or disable Auto Fit through the menu:

1. Set **Scaling** to **Enable**.
2. In the **Output Settings** menu, turn the **<MENU/ENTER>** knob until **Auto Fit** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select **Enable** or **Disable**.
5. Press the **<MENU/ENTER>** knob.

Custom Scaling

The Custom Scaling settings determine the dimensions and offset for the section of the input to be displayed, and the dimensions and offset for the output to the connected panel assembly. To access the Custom Scaling menu:

1. Access the **Output Settings** menu.
2. Set **Scaling** to **Enable**.
3. Set **Auto Fit** to **Disable**.
4. Turn the **<MENU/ENTER>** knob until **Custom Scaling** is selected.
5. Press the **<MENU/ENTER>** knob.

Input Capture

The Input Capture settings define what area and where in the video input to capture for output to the connected panel assembly. To access the Input Capture menu:

1. Access the **Custom Scaling** menu.
2. Turn the **<MENU/ENTER>** knob until **Input Capture** is selected.
3. Press the **<MENU/ENTER>** knob.

Input Source

The Input Source is set by the top row of buttons on the front panel of the VIP Drive 43Nova. Press **<HDMI>**, **<DVI>**, or **<HD-SDI>** twice to set the Input Source.

Input Capture Width

The Input Capture Width defines the width in pixels to be captured from the selected video source.

1. Access the **Input Capture** menu.
2. Turn the **<MENU/ENTER>** knob until **Width (H)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the width, from **64–_ _ _ _**. (This range is determined by the **Input Settings**)
5. Press the **<MENU/ENTER>** knob.

Input Capture Height
The Input Capture Height defines the height in pixels to be captured from the selected video source.
1. Access the **Input Capture** menu.
2. Turn the **<MENU/ENTER>** knob until **Height (V)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the height, from **48–_ _ _ _**. (This range is determined by the **Input Settings**)
5. Press the **<MENU/ENTER>** knob.

Input Capture Horizontal Offset
The Input Capture Horizontal Offset defines how far to the right the video capture will be offset.
1. Access the **Input Capture** menu.
2. Turn the **<MENU/ENTER>** knob until **Start X** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **Input Capture Width**)
5. Press the **<MENU/ENTER>** knob.

The **Input Capture Width** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the current Input Capture Width and the maximum Input Capture Width. For example: If the maximum Width is 1920, and the current Width is set to 1720, the offset can be set from 0–200.

Input Capture Vertical Offset
The Input Capture Vertical Offset defines how far down the video capture will be offset.
1. Access the **Input Capture** menu.
2. Turn the **<MENU/ENTER>** knob until **Start Y** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **Input Capture Height**)
5. Press the **<MENU/ENTER>** knob.

The **Input Capture Height** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the current Input Capture Height and the maximum Input Capture Height. For example: If the maximum Height is 1080, and the current Height is set to 880, the offset can be set from 0–200.

Output Window
The Output Window settings define the dimensions and offset of the video output, as it will appear on the connected panel assembly. Editing the Output Window settings will shrink or expand the entirety of the video output, and/or move it around on the connected panel assembly. To access the Output Window settings:
1. Access the **Custom Scaling** menu.
2. Turn the **<MENU/ENTER>** knob until **Output Window** is selected.
3. Press the **<MENU/ENTER>** knob.

Output Window Width
The Output Window Width defines the width in pixels that the video output will be limited to.
1. Access the **Output Window** menu.
2. Turn the **<MENU/ENTER>** knob until **Width (H)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the width, from **128–_ _ _ _**. (This range is determined by the **Screen Settings**)
5. Press the **<MENU/ENTER>** knob.

Output Window Height

The Output Window Height defines the height in pixels that the video output will be limited to.

1. Access the **Output Window** menu.
2. Turn the **<MENU/ENTER>** knob until **Height (V)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the height, from **64–_ _ _ _**. (This range is determined by the **Screen Settings**)
5. Press the **<MENU/ENTER>** knob.

Output Window Horizontal Offset

The Output Window Horizontal Offset defines how far to the right the limited video output will be offset on the connected panel assembly.

1. Access the **Output Window** menu.
2. Turn the **<MENU/ENTER>** knob until **Start X** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **Output Window Width**)
5. Press the **<MENU/ENTER>** knob.

> The **Output Window Width** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the current Output Window Width and the maximum Output Window Width. For example: If the maximum Width is 1280, and the current Width is set to 1080, the offset can be set from 0–200.

Output Window Vertical Offset

The Output Window Vertical Offset defines how far down the limited video output will be offset on the connected panel assembly.

1. Access the **Output Window** menu.
2. Turn the **<MENU/ENTER>** knob until **Start Y** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **Output Window Height**)
5. Press the **<MENU/ENTER>** knob.

> The **Output Window Height** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the current Output Window Height and the maximum Output Window Height. For example: If the maximum Height is 1280, and the current Height is set to 1080, the offset can be set from 0–200.

Image Offset

The Image Offset setting allows the video output to be offset without altering the scaling from the input. To access the Image Offset menu:

1. Access the **Output Settings** menu.
2. Set **Scaling** to **Disable**.
3. Turn the **<MENU/ENTER>** knob until **Image Offset** is selected.
4. Press the **<MENU/ENTER>** knob.

Horizontal Image Offset

The Horizontal Image Offset defines how far to the right the unscaled video output will be offset on the connected panel assembly.

1. Access the **Image Offset** menu.
2. Turn the **<MENU/ENTER>** knob until **Start X** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **Input Settings**)
5. Press the **<MENU/ENTER>** knob.

> The size of the connected panel assembly must be smaller than the unscaled input video to use this setting. The offset will only be able to be set as much as the difference between the input resolution and the size of the connected panel assembly. For example: If the input resolution extends horizontally past the panel assembly by 200 pixels, the Horizontal Image Offset can be set from 0–200.

Vertical Image Offset

The Vertical Image Offset defines how far down the unscaled video output will be offset on the connected panel assembly.

1. Access the **Image Offset** menu.
2. Turn the **<MENU/ENTER>** knob until **Start Y** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **Input Settings**)
5. Press the **<MENU/ENTER>** knob.

> **The size of the connected panel assembly must be smaller than the unscaled input video to use this setting. The offset will only be able to be set as much as the difference between the input resolution and the size of the connected panel assembly. For example: If the input resolution extends vertically past the panel assembly by 200 pixels, the Vertical Image Offset can be set from 0–200.**

Display Control

The Display Control settings determine the playback status, color balance, and switching effects, and can be used to test the connected video panels. To access the Display Control menu:

1. Press **<MENU>** or the **<MENU/ENTER>** knob to access the main menu.
2. Turn the **<MENU/ENTER>** knob until **Display Control** is selected.
3. Press the **<MENU/ENTER>** knob.

Playback Status

There are three options to affect the playback status, which allow video playback as normal, black out all video playback, or freeze the video in the current frame.

1. Access the **Display Control** menu.
2. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select **Normal**, **Black Out**, or **Freeze**.
3. Press the **<MENU/ENTER>** knob.

Output Test

The VIP Drive 43Nova has 4 test colors, 4 moving test patterns, and 4 gradients for testing the functionality of all connected video panels.

1. Access the **Display Control** menu.
2. Turn the **<MENU/ENTER>** knob until **Test Pattern** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counterclockwise to select from:

ICON	MEANING	ICON	MEANING
R	Outputs full red	(forward slanting lines)	Outputs forward slanting lines moving diagonally
G	Outputs full green	(backward slanting lines)	Outputs backward slanting lines moving diagonally
B	Outputs full blue	R	Outputs a red gradient
W	Outputs full white (all colors full)	G	Outputs a green gradient
(horizontal lines)	Outputs horizontal lines moving vertically	B	Outputs a blue gradient
(vertical lines)	Outputs vertical lines moving horizontally	W	Outputs a white gradient

5. Press **<MENU>** to exit Output Test mode.

Image Quality

The Image Quality settings define the color balance and settings, such as saturation and gamma correction.

- Contrast controls the separation of different colors in the output.
- Saturation controls the intensity of all colors.
- Hue shifts the output of colors along a 360° spectrum. For example, at **-180**, green will be closer to blue, and red will be closer to orange, while at **180**, green will be closer to yellow, and red will be closer to pink.
- Sharpness determines the amount of detail in the output.
- Red, Green, and Blue values set maximum values for each color, which affects the color temperature of the video output.
- Color Temperature sets the color balance settings to preset maximum values.
- Gamma correction applies a non-linear function to the tonal ranges in the video before output, which balances the brightness and darkness of the resulting video.
    1. Access the **Display Control** menu.
    2. Turn the **<MENU/ENTER>** knob until **Image quality** is selected.
    3. Press the **<MENU/ENTER>** knob.
    4. Turn the **<MENU/ENTER>** knob clockwise or counterclockwise to select **Contrast**, **Saturation**, **Hue**, **Sharpness**, **Color Temperature**, **Red**, **Green**, **Blue**, or **Gamma**.
    5. For:
        - **Contrast** or **Saturation**, turn the **<MENU/ENTER>** knob clockwise or counterclockwise to increase or decrease the percentage, from **0–100%**.
        - **Hue**, turn the **<MENU/ENTER>** knob clockwise or counterclockwise to increase or decrease the color shift, from **-180–180**.
        - **Sharpness**, turn the **<MENU/ENTER>** knob clockwise or counterclockwise to increase or decrease the level of detail, from **0–24**.
        - **Color Temperature**, turn the **<MENU/ENTER>** knob clockwise or counterclockwise to increase or decrease the preset color temperature, from 1**000–9500K**. When the color values are set manually, this option will read **Custom**.
        - **Red**, **Green**, or **Blue**, turn the **<MENU/ENTER>** knob clockwise or counterclockwise to increase or decrease the maximum value for the selected color, from **0–255**.
        - **Gamma**, turn the **<MENU/ENTER>** knob clockwise or counterclockwise to increase or decrease the correction level, from **1.0–4.0**.
    6. Press the **<MENU/ENTER>** knob.
    7. Repeat steps 4-6 until output is set as desired.

Switching Effect

The Switching Effect determines the way the VIP Drive 43Nova will transition from one input source to another.

1. Access the **Display Control** menu.
2. Turn the **<MENU/ENTER>** knob until **Switching Effect** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counterclockwise to select **Off** (no switching effect), **Cut** (output cuts quickly from one source to the other), or **Fade** (output will fade from one source to the other).
5. Press the **<MENU/ENTER>** knob.

Advanced Settings

The Advanced Settings include options such as Picture In Picture (PIP), Image Mosaic (for configurations with more than one driver), monitor output control, memory settings, and menu display brightness.
To access the Advanced Settings menu:
1. Press **<MENU>** or the **<MENU/ENTER>** knob to access the main menu.
2. Turn the **<MENU/ENTER>** knob until **Advanced Settings** is selected.
3. Press the **<MENU/ENTER>** knob.

Picture In Picture

The Picture In Picture function allows two video sources to be displayed at once on the same video panel assembly from a single VIP Drive 43Nova. To access the Picture In Picture menu:
1. Access the **Advanced Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **PIP** is selected.
3. Press the **<MENU/ENTER>** knob.

To enable or disable PIP:
1. Access the **Picture In Picture** menu.
2. Turn the **<MENU/ENTER>** knob until **PIP** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise to select **Enable**, or counter-clockwise to select **Disable**.
5. Press the **<MENU/ENTER>** knob.

Video Source Selection

With PIP enabled, the video inputs must be designated as either the Main Source, or the PIP Source. A single source can be both Main and PIP. There are two methods of designating input source functions: with the buttons on the front panel of the product, and through the menu.
To designate input source functions with the buttons:
- One press of **<HDMI>**, **<DVI>**, or **<HD-SDI>** sets that source to output on the preview display, and through the PREVIEW HDMI port.
- A second press of that same button designates that source as the **Main Source**.
- Holding down **<HDMI>**, **<DVI>**, or **<HD-SDI>** designates that source as the **PIP Source**.

To designate input source functions through the menu:
1. Access the **Picture In Picture** menu.
2. Turn the **<MENU/ENTER>** knob until **Main Source** or **PIP Source** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select from **HDMI**, **DVI**, or **SDI**.
5. Press the **<MENU/ENTER>** knob.

PIP Dimensions and Offset

The PIP dimensions and offset settings define the space allocated for, and size of, the PIP on the connected panel assembly.

PIP Width

To set the PIP width:
1. Access the **Picture In Picture** menu.
2. Turn the **<MENU/ENTER>** knob until **Width (H)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the width, from **128–_ _ _ _**. (This range is determined by the **Input Settings**)
5. Press the **<MENU/ENTER>** knob.

PIP Height

To set the PIP height:
1. Access the **Picture In Picture** menu.
2. Turn the **<MENU/ENTER>** knob until **Height (V)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the height, from **64–_ _ _ _**. (This range is determined by the **Input Settings**)
5. Press the **<MENU/ENTER>** knob.

PIP Horizontal Offset

To set the PIP horizontal offset:
1. Access the **Picture In Picture** menu.
2. Turn the **<MENU/ENTER>** knob until **Start X** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **PIP Width**)
5. Press the **<MENU/ENTER>** knob.

> The **PIP Width** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the current PIP Width and the maximum PIP Width. For example: If the maximum Width is 1920, and the current Width is set to 1020, the offset can be set from 0–900.

PIP Vertical Offset

To set the PIP vertical offset:
1. Access the **Picture In Picture** menu.
2. Turn the **<MENU/ENTER>** knob until **Start Y** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **PIP Height**)
5. Press the **<MENU/ENTER>** knob.

> The **PIP Height** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the current PIP Height and the maximum PIP Height. For example: If the maximum Width is 1080, and the current Height is set to 680, the offset can be set from 0–400.

PIP Crop

The PIP Crop settings allow the VIP Drive 43Nova to select a specific area of the video to be output to the connected panel assembly. To access the PIP Crop menu:
1. Access the **Picture In Picture** menu.
2. Turn the **<MENU/ENTER>** knob until **PIP Crop Settings** is selected.
3. Press the **<MENU/ENTER>** knob.

To enable or disable PIP Crop:
1. Access the **PIP Crop** menu.
2. Turn the **<MENU/ENTER>** knob until **PIP Crop Settings** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise to select **Enable**, or counter-clockwise to select **Disable**.
5. Press the **<MENU/ENTER>** knob.

PIP Crop Width

The PIP Crop Width stretches or zooms in on the video horizontally, without altering the dimensions of the PIP itself on the connected panel assembly.
1. Access the **PIP Crop** menu.
2. Turn the **<MENU/ENTER>** knob until **Width (H)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the width, from **64–_ _ _ _**. (This range is determined by the **Input Settings**)
5. Press the **<MENU/ENTER>** knob.

PIP Crop Height

The PIP Crop Height stretches or zooms in on the video vertically, without altering the dimensions of the PIP itself on the connected panel assembly.
1. Access the **PIP Crop** menu.
2. Turn the **<MENU/ENTER>** knob until **Height (V)** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the height, from **48–_ _ _ _**. (This range is determined by the **Input Settings**)
5. Press the **<MENU/ENTER>** knob.

PIP Crop Horizontal Offset

The PIP Crop Horizontal Offset selects how far to the right in the input video to display, without altering the dimensions of the PIP itself on the connected panel assembly.

1. Access the **PIP Crop** menu.
2. Turn the **<MENU/ENTER>** knob until **Start X** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **PIP Crop Width**)
5. Press the **<MENU/ENTER>** knob.

> The **PIP Crop Width** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the current PIP Crop Width and the maximum PIP Crop Width. For example: If the maximum Width is 1920, and the current Width is set to 1020, the offset can be set from 0–900.

PIP Crop Vertical Offset

The PIP Crop Vertical Offset selects how far down in the input video to display, without altering the dimensions of the PIP itself on the connected panel assembly.

1. Access the **PIP Crop** menu.
2. Turn the **<MENU/ENTER>** knob until **Start Y** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–_ _ _ _**. (This range is determined by the **PIP Crop Height**)
5. Press the **<MENU/ENTER>** knob.

> The **PIP Crop Height** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the current PIP Crop Height and the maximum PIP Crop Height. For example: If the maximum Height is 1080, and the current Height is set to 680, the offset can be set from 0–400.

Image Mosaic

The Image Mosaic function allows multiple VIP Drive 43Nova products to each output a section of the same video input onto a panel assembly that is too large for a single VIP Drive 43Nova. Scaling must be enabled for Image Mosaic to function. To access the Image Mosaic menu:

1. Access the **Advanced Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Image Mosaic** is selected.
3. Press the **<MENU/ENTER>** knob.

To enable or disable Image Mosaic:

1. Set **Scaling** to **Enable**. (Setting **Scaling** to **Disable** automatically sets **Image Mosaic** to **Disable**.)
2. Set **Auto Fit** to **Disable**.
3. Access the **Image Mosaic** menu.
4. Turn the **<MENU/ENTER>** knob until **Image Mosaic** is selected.
5. Press the **<MENU/ENTER>** knob.
6. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select **Enable** or **Disable**.
7. Press the **<MENU/ENTER>** knob.

> The VIP Drive 43Nova does not signal link for HDMI, DVI, or SDI. Video signals that will be input to multiple products must be split from the source.

Total Width in Pixels

The Total Width in Pixels defines the width of the entire connected panel assembly.

1. Access the **Image Mosaic** menu.
2. Turn the **<MENU/ENTER>** knob until **Total Width Pixels** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the total width in pixels, from **128–24576**.
5. Press the **<MENU/ENTER>** knob.

Total Height in Pixels

The Total Height in Pixels defines the height of the entire connected panel assembly.
1. Access the **Image Mosaic** menu.
2. Turn the **<MENU/ENTER>** knob until **Total Height Pixels** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the total height in pixels, from **128–24576**.
5. Press the **<MENU/ENTER>** knob.

Load Area Width

The Load Area Width defines the width of the area upon the connected panel assembly to which this VIP Drive 43Nova will output.
1. Access the **Image Mosaic** menu.
2. Turn the **<MENU/ENTER>** knob until **Load Area Width** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the width, from **128–24576**. (This range is determined by the Total Width in Pixels)
5. Press the **<MENU/ENTER>** knob.

Load Area Height

The Load Area Height defines the height of the area upon the connected panel assembly to which this VIP Drive 43Nova will output.
1. Access the **Image Mosaic** menu.
2. Turn the **<MENU/ENTER>** knob until **Load Area Height** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the height, from **64–24576**. (This range is determined by the Total Height in Pixels)
5. Press the **<MENU/ENTER>** knob.

Load Area Horizontal Offset

The Load Area Horizontal Offset defines how far to the right on the connected panel assembly this product's load area begins.
1. Access the **Image Mosaic** menu.
2. Turn the **<MENU/ENTER>** knob until **Load Area Start X** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–23756**. (This range is determined by the **Load Area Width**)
5. Press the **<MENU/ENTER>** knob.

> The **Load Area Width** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the Load Area Width and the Total Width in Pixels. For example: If the Total Width in Pixels is 3000, and the Load Area Width is set to 1600, the offset can be set from 0–1400.

Load Area Vertical Offset

The Load Area Vertical Offset defines how far down on the connected panel assembly this product's load area begins.
1. Access the **Image Mosaic** menu.
2. Turn the **<MENU/ENTER>** knob until **Load Area Start Y** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the offset, from **0–23756**. (This range is determined by the **Load Area Height**)
5. Press the **<MENU/ENTER>** knob.

> The **Load Area Height** must be less than maximum to use this setting. The offset will only be able to be set as much as the difference between the Load Area Height and the Total Height in Pixels. For example: If the Total Height in Pixels is 4000, and the Load Area Height is set to 1500, the offset can be set from 0–2500.

Preview Settings

The Preview Settings determine which input source to show on the preview display, and through the PREVIEW HDMI output. There are two ways to select the preview source: with the buttons on the front panel of the VIP Drive 43Nova, or through the menu.

To select the preview source with the buttons, press **<HDMI>**, **<DVI>**, or **<HD-SDI>** once.

To select the preview source through the menu:

1. Access the **Advanced Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Preview Settings** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select from **HDMI**, **DVI**, **SDI**, or **Monitor** (preview display will show what is being output to connected panel assembly).
5. Press the **<MENU/ENTER>** knob.

Redundancy

The Redundancy function allows a VIP Drive 43Nova to be set as either Primary or Backup and connected to the same panel assembly. Should the Primary product fail, the Backup will take over and continue to output video.

1. Access the **Advanced Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Redundancy** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** clockwise or counter-clockwise to select either **Primary** or **Backup**.
5. Press the **<MENU/ENTER>** knob.

Factory Reset

To reset the VIP Drive 43Nova to factory default settings:

1. Access the **Advanced Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Factory Default** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select either **No** or **Yes**.
5. Press the **<MENU/ENTER>** knob.

Presettings

The VIP Drive 43Nova has the ability to save and recall up to 10 complete settings configurations. To save, access, or delete any of these presettings:

1. Access the **Advanced Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Presettings** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** clockwise or counter-clockwise to select a presetting, from **Presettings 1–10**.
5. Press the **<MENU/ENTER>** knob.
6. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select from **Save** (saves current settings configuration to the selected presetting), **Apply** (configures all settings to match the selected presetting), or **Delete** (to clear the selected presetting of all configurations).
7. Press the **<MENU/ENTER>** knob.

Button Customization

The **<SCALE/OUTPUT>** button and the **<MAP>** button can be configured to either black out the connected panel assembly or freeze the video output.

1. Access the **Advanced Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Custom Button** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select either **SCALE** or **MAP**.
5. Press the **<MENU/ENTER>** knob.
6. For:
   • **SCALE**, Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select from **SCALE**, **Black Out**, or **Freeze**.
   • **MAP**, Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select from **MAP**, **Black Out**, or **Freeze**.
7. Press the **<MENU/ENTER>** knob.

Advanced Attributes

The Advanced Attribute settings control menu display brightness and the screen timeout function.

1. Access the **Advanced Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Advanced Attr** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select either **OLED Brightness** or **Go Homepage(S)**.
5. Press the **<MENU/ENTER>** knob.
6. For:
    - **OLED Brightness**, Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the menu display brightness, from **5–15**.
    - **Go Homepage(S)**, Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the number of seconds the menu can be inactive before reverting to the Home Screen, from **30–3600**.
7. Press the **<MENU/ENTER>** knob.

Firmware Version

To view the firmware version, access the **Advanced Settings** menu and turn the **<MENU/ENTER>** knob until **Firmware Version** shows on the display.

Communication Settings

The Communication Settings determine interface port priority and TCP/IP configuration. To access the Communication Settings menu:

1. Press **<MENU>** or the **<MENU/ENTER>** knob to access the main menu.
2. Turn the **<MENU/ENTER>** knob until **Communication Settings** is selected.
3. Press the **<MENU/ENTER>** knob.

Communication Mode

The Communication Mode determines the priority of the interface ports. If both USB and ethernet are plugged in to the VIP Drive 43Nova, the connection selected as preferred will take precedence over the other.

1. Access the **Communication Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Communication Mode** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select either **USB Preferred** or **LAN Preferred**.
5. Press the **<MENU/ENTER>** knob.

Network Settings

The Network Settings configure the IP address and Subnet Mask of the product. To access the Network Settings menu:

1. Access the **Communication Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Network Settings** is selected.
3. Press the **<MENU/ENTER>** knob.

IP Mode

The IP address and Subnet Mask can be configured automatically or manually. To set how these settings should be configured:

1. Access the **Network Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Config IPV4** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select either **Manually** or **Auto**.
5. Press the **<MENU/ENTER>** knob.

IP Address

To configure the IP address manually:

1. Access the **Network Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **IP Address** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the first value in the IP address, from **1–223**.
5. Press the **<MENU/ENTER>** knob.
6. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the next value in the IP address, from **0–255**.
7. Press the **<MENU/ENTER>** knob.
8. Repeat until the IP address is set as desired.
9. Press **<MENU>** to finish setting the IP address.

Subnet Mask

To configure the subnet mask manually:

1. Access the **Network Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Subnet Mask** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the first value in the subnet mask, from **0–255**.
5. Press the **<MENU/ENTER>** knob.
6. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to increase or decrease the next value in the subnet mask, from **0–255**.
7. Press the **<MENU/ENTER>** knob.
8. Repeat until the subnet mask is set as desired.
9. Press **<MENU>** to finish setting the subnet mask.

Reset Network Settings

To reset the Network Settings to factory defaults without resetting the rest of the product:

1. Access the **Network Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **Reset** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select either **No** or **Yes**.
5. Press the **<MENU/ENTER>** knob.

Language

The menu of the VIP Drive 43Nova can be displayed in either English or Chinese.

1. Press **<MENU>** or the **<MENU/ENTER>** knob to access the main menu.
2. Turn the **<MENU/ENTER>** knob until **Language** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select either ？？ **/Chinese** or **English/**？？ .
5. Press the **<MENU/ENTER>** knob.

DMX Configuration

The VIP Drive 43Nova can connect with a DMX controller to allow control of the total dimmer level and the Image Quality.

DMX Address

The VIP Drive 43Nova uses 11 DMX channels, which makes the highest recommended starting address **502**. Three channels are reserved for future use.

1. Access the **Advanced Settings** menu.
2. Turn the **<MENU/ENTER>** knob until **DMX Address** is selected.
3. Press the **<MENU/ENTER>** knob.
4. Turn the **<MENU/ENTER>** knob clockwise or counter-clockwise to select the starting address, from **1–512**.
5. Press the **<MENU/ENTER>** knob.

DMX Values

CHANNEL	FUNCTION	VALUE	PERCENT/SETTING
1	Master Dimmer	000 ⇔ 255	0–100%
2	Contrast	000 ⇔ 255	Contrast, low to high
3	Saturation	000 ⇔ 255	Saturation, low to high
4	Hue	000 ⇔ 255	-180°–180°
5	Sharpness	000 ⇔ 255	0–24
6	Color Temperature	000 ⇔ 255	1000K–9500K
7	Red	000 ⇔ 255	0–100%
8	Green	000 ⇔ 255	0–100%
9	Blue	000 ⇔ 255	0–100%
10	Gamma	000 ⇔ 255	1.0–4.0
11	MAP	000 ⇔ 127	MAP Function inactive
		128 ⇔ 255	MAP function active

NovaLCTMars Software

The VIP Drive 43Nova can be configured by a computer running the NovaLCTMars software, through a USB or ethernet connection. You can download the NovaLCTMars software from www.chauvetvideo.com/vip-drive-43nova.

Software Setup

To install and access all functions of the NovaLCTMars software:
1. Download the NovaLCTMars software from www.chauvetvideo.com/vip-drive-43nova.
2. Run the setup file.
3. After installing the application and all included drivers, connect the VIP Drive 43Nova and run the software.
4. Click **User (U)** in the menu running across the top of the window to open the drop-down menu.
5. Click **Advanced User Login (A)**.
6. Type **admin** into the password field, and press the **Login** button on the screen, or press the **Enter** key.

> **Connect the VIP Drive 43Nova to the computer before running NovaLCTMars.**

Screen Configuration

The NovaLCTMars software has many configuration settings for any panel assembly connected to the VIP Drive 43Nova. The options are divided into 3 tabs that appear on a window after clicking **Screen Configuration**, selecting the product under **Current Operation Communication Port**, and clicking the **Next** button.

Sending Card Tab

On the Sending Card tab, the resolution and refresh rate can be set. From this tab the product's redundancy can be set, system configurations can be saved, and the product can also be restored to factory default settings.

Receiving Card Tab

On the Receiving Card tab, the parameters sent to the software the last time this tab was viewed will be displayed. This tab displays many options that can be edited, but Chauvet does NOT recommend altering any of them. From this tab the firmware for connected video panels can be uploaded and downloaded.

Screen Connection Tab

On the Screen Connection Tab, there are three options for configuring the size of the connected panel assembly, the distribution between video output ports, and the data flow: Simple, Standard, and Complex.
- Simple Screen mode functions the same way the **Screen Settings** do in the menu.
- Standard Screen mode allows the data flow and port distribution to be programmed manually with a visual interface.
- Complex Screen mode allows the configuration to be entered in a flow chart by driver number, port, and panel number, as well as dimensions and offset coordinates in pixels.

VIP Drive 43Nova Firmware Update

To update the firmware for the VIP Drive 43Nova, follow the instructions below:
1. Download the latest firmware update from www.chauvetvideo.com.
2. Plug the product into power, connect it to the computer, and open NovaLCTMars.
3. Click **User (U)** in the menu running across the top of the window to open the drop-down menu.
4. Click **Advanced User Login (A)**.
5. Type **admin** into the password field, and press the **Login** button on the screen, or press the **Enter** key.
6. Type **admin** again (There won't be a field for this, just type anywhere in the window). The Program Loading window will pop up.
7. If more than one VIP Drive 43Nova is connected, select the one to be updated from the **Current Operation Communication Port** drop-down menu.
8. Click the button to the right of **Program Path**, and browse to find and select the firmware update file.
9. Select the **Sending Card** check-box.
10. Click **Update**.

Video Panel Firmware Update

To update the firmware for a video panel connected to the VIP Drive 43Nova, do the following:
1. Download the latest firmware update from the manufacturer website. For example, the latest firmware update for the F4 from CHAUVET Professional can be downloaded from www.chauvetvideo.com.
2. Plug the video panel and VIP Drive 43Nova into power, connect the products together and to the computer, and open NovaLCTMars.
3. Click **User (U)** in the menu running across the top of the window to open the drop-down menu.
4. Click **Advanced User Login (A)**.
5. Type **admin** into the password field, and press the **Login** button on the screen, or press the **Enter** key.
6. Type **admin** again (There won't be a field for this, just type anywhere in the window). The Program Loading window will pop up.
7. If more than one VIP Drive 43Nova is connected, select the one connected to the panel to be updated from the **Current Operation Communication Port** drop-down menu.
8. Click the button to the right of **Program Path**, and browse to find and select the firmware update file.
9. Select the **Receiving Card FPGA** check-box.
10. Click **Update**.

Standalone Panel Update

With the NovaLCTMars software, a firmware update file can be saved to the VIP Drive 43Nova, to be uploaded to connected panels at any time. Under **Advanced Settings**:
- **Load Cabinet Files** will temporarily upload the selected firmware to the connected panels. This allows the process to be undone without damaging the panels if something goes wrong, such as the wrong firmware being uploaded. This method is power-volatile. Cycling the power to the panels will revert them to the previous firmware.
- **Save to RV Card** will permanently upload the selected firmware to the connected panels, overwriting the previous firmware.

5. TECHNICAL INFORMATION

Product Maintenance

To maintain optimum performance and minimize wear, clean this product frequently. Usage and environment are contributing factors in determining the cleaning frequency.

Clean this product at least twice a month. Dust build-up reduces light output performance and can cause overheating. This can lead to reduced light source life and increased mechanical wear.

To clean the product:

1. Unplug the product from power.
2. Wait until the product is at room temperature.
3. Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external vents.
4. Clean all transparent surfaces with a mild soap solution, ammonia-free glass cleaner, or isopropyl alcohol.
5. Apply the solution directly to a soft, lint free cotton cloth or a lens cleaning tissue.
6. Softly drag any dirt or grime to the outside of the transparent surface.
7. Gently polish the transparent surfaces until they are free of haze and lint.

> ⓘ **Always dry the transparent surfaces carefully after cleaning them.**

6. TECHNICAL SPECIFICATIONS

Dimensions and Weight

LENGTH	WIDTH	HEIGHT	WEIGHT
19 in (483 mm)	12 in (305 mm)	1.7 in (44 mm)	5.4 lb (2.45 kg)

Note: Dimensions in inches rounded to the nearest decimal digit.

Power

POWER SUPPLY TYPE	RANGE	VOLTAGE SELECTION
Switching (internal)	100 to 240 VAC, 50/60 Hz	Auto-ranging

PARAMETER	120 V, 60 Hz	208 V, 60 Hz	230 V, 50 Hz
Consumption	40 W	40 W	40 W
Operating Current	0.33 A	0.19 A	0.17 A

POWER I/O	U.S./CANADA	WORLDWIDE
Power input connector	Neutrik® powerCON® A	Neutrik® powerCON® A
Power Cord plug	Edison (U.S.)	Local Plug

Connections

INPUT	PURPOSE	OUTPUT	PURPOSE
2 USB Type B	Software Connection, Backup/Update Connection	1 USB Type A	Backup/Update Connection
5-pin XLR	DMX	5-pin XLR	DMX
1 Ethernet RJ45	Linking Connection		

Control

PC SOFTWARE	CONTROL PROTOCOL	DMX CHANNEL RANGE
NovaLCTMars	NOVA	11

Thermal

MAXIMUM EXTERNAL TEMPERATURE	COOLING SYSTEM
104 °F (40 °C)	Convection

Ordering

PRODUCT NAME	ITEM NAME	ITEM CODE	UPC NUMBER
VIP Drive 43Nova	VIPDRIVE43NOVA	21091232	781462215804

RoHS

Video

INPUT	SPECIFICATIONS	OUTPUT	PURPOSE
1 HDMI	EIA/CEA-861 standard, meeting HDMI-1.3 standard, HDCP support	4 Neutrik® etherCON®	Video Output
1 DVI-I	VESA standard, 1080i, HDCP support	1 HDMI	Preview Output
1 HD-SDI	480i, 576i, 720p, 1080i/p		

Supports: SMPTE 425M (Level A and Level B), SMPTE 424M, SMPTE 292M, SMPTE 259M-C and DVB-ASI

MAXIMUM SUPPORTED RESOLUTION	MAXIMUM SUPPORTED LEDS
1920x1080	2,621,440

Supported Resolutions

SOURCE RESOLUTION	HDMI	DVI	SDI	TYPE	SHOWN ON DISPLAY
720x487i59.94	✔	✔	✔	SD	720x240@60Hz
720x576i50	✔	✔	✔	SD	720x288@50Hz
720x487p59.94	✔	✔	⊘	ED	720x480@60Hz
720x576p50	✔	✔	⊘	ED	720x576@50Hz
1920x1080i60	✔	✔	✔	HD	1080i@60Hz
1920x1080i59.94	✔	✔	✔	HD	1080i@60Hz
1920x1080psf30	✔	✔	✔	HD	1080i@60Hz
1920x1080psf29.97	✔	✔	✔	HD	1080i@60Hz
1920x1080psf25	✔	✔	✔	HD	1080i@50Hz
1920x1080i50	✔	✔	✔	HD	1080i@50Hz
1920x1080psf24	✔	✔	⊘	HD	1080i@48Hz
1920x1080psf23.98	✔	✔	⊘	HD	1080i@48Hz
1920x1080p30	✔	✔	✔	HD	1080P@30Hz
1920x1080p29.97	✔	✔	✔	HD	1080P@30Hz
1920x1080p25	✔	✔	✔	HD	1080P@25Hz
1920x1080p24	✔	✔	✔	HD	1080P@24Hz
1920x1080p23.98	✔	✔	✔	HD	1080P@24Hz
1280x720p60	✔	✔	✔	HD	720P@60Hz
1280x720p59.94	✔	✔	✔	HD	720P@60Hz
1280x720p50	✔	✔	✔	HD	720P@50Hz
1280x720p30	✔	✔	⊘	HD	720P@30Hz
1280x720p29.97	✔	✔	⊘	HD	720P@30Hz
1280x720p25	✔	✔	⊘	HD	720@25Hz
1920x1080p60	✔	✔	✔	3G	1080P@60Hz
1920x1080p59.94	✔	✔	✔	3G	1080P@60Hz
1920x1080p50	✔	✔	✔	3G	1080P@50Hz

RETURNS

Send the product prepaid, in the original box, and with the original packing and accessories. Chauvet will not issue call tags.

Call Chauvet and request a Return Merchandise Authorization (RMA) number before shipping the product. Be prepared to provide the model number, serial number, and a brief description of the cause(s) for the return.

To submit a service request online, go to www.chauvetprofessional.com/service-request.

Clearly label the package with an RMA number. Chauvet will refuse any product returned without an RMA number.

> **Write the RMA number on a properly affixed label. DO NOT write the RMA number directly on the box.**

Once you have the RMA number, provide the following information on a piece of paper and place it inside the box:

- Your name
- Your address
- Your phone number
- RMA number
- A brief description of the problem

Be sure to pack the product properly. Any shipping damage resulting from inadequate packaging will be your responsibility. FedEx packing or double-boxing are recommended.

> **Chauvet reserves the right to use its own discretion to repair or replace returned product(s).**

CONTACT US

GENERAL INFORMATION	TECHNICAL SUPPORT
WORLD HEADQUARTERS	
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Visit the applicable website above to verify our contact information and instructions to request support. Outside the U.S., U.K., Ireland, Benelux, France, Germany, or Mexico, contact the dealer of record.