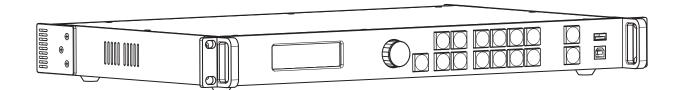
Vivid Drive 28N User Manual



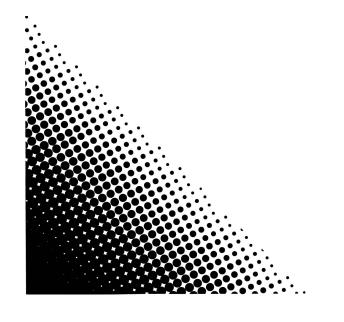






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1. Before You Begin

What Is Included

- Vivid Drive 28N
- Power Cord
- DVI CableVGA Cable

- DP Cable
- HDMI Cable
- RJ45 Cable

- DP to HDMI Adaptor
- USB Cable
- Quick Reference Guide

Unpacking Instructions

Carefully unpack the product immediately and check the container to make sure all the parts are in the package and are in good condition.

Claims

If the box 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 report damage to the carrier immediately may invalidate your claim. In addition, keep the box and contents 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 delivery.

Text Conventions

Convention	Meaning				
1–512 A range of values					
50/60 A set of values of which only one can be chosen					
Settings	A menu option not to be modified				
<enter></enter> A key to be pressed on the product's control panel					
ON	A value to be entered or selected				

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.
(j)	Important installation or configuration information. The product may not function correctly if this information is not used.
	Useful information.

Disclaimer

Chauvet believes that the information contained in this manual is accurate in all respects. However, Chauvet assumes no responsibility and specifically disclaims any and all liability to any party for any loss, damage or disruption caused by any errors or omissions in this document, whether such errors or omissions result from negligence, accident or any other cause. Chauvet reserves the right to revise the content of this document without any obligation to notify any person or company of such revision, however, Chauvet has no obligation to make, and does not commit to make, any such revisions. Download the latest version from www.chauvetdj.com.

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Safety Notes

- This product is not intended for permanent installation.
- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- Always disconnect the product from the power source before cleaning or replacing the fuse.
- \bigwedge
- Avoid direct eye exposure to the light source while the product is on.
- Make sure the power cord is not crimped or damaged.
- Never disconnect the product from power by pulling or tugging on the cord.
- If mounting the product overhead, always secure to a fastening device using a safety cable.
- Make sure there are no flammable materials close to the product when operating.
- Do not touch the product's housing when operating because it may be very hot.
- The voltage of the outlet to which you are connecting this product must be within the range stated on the decal or rear panel of the product.
- The product is for indoor use only! (IP20) To prevent risk of fire or shock, do not expose the product to rain or moisture.
- Always install the product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Be sure that no ventilation slots on the product's housing are blocked.



- Never connect the product to a dimmer or rheostat.
- Make sure to replace the fuse with another of the same type and rating.
- Never carry the product from the power cord or any moving part. Always use the bracket.
- The maximum ambient temperature is 104 °F (40 °C). Do not operate this product at higher temperatures.
- In the event of a serious operating problem, stop using the product immediately.
- Do not open this product. It contains no user-serviceable parts.
- 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.

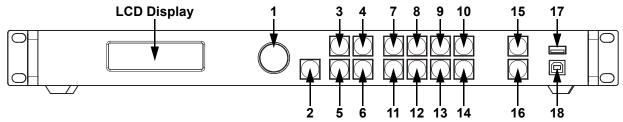


Keep this User Manual for future use. If the product is sold to someone else, be sure that they also receive this document.



2. Introduction

Product Front Overview

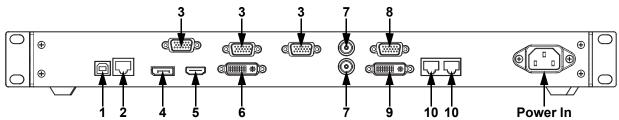


Control Panel Description

#	Name	Function
1	<menu> Knob</menu>	Rotate to navigate upwards or downwards through the menu list, and increase or decrease a selected numeric value. Push to enable the currently displayed menu option or set the currently selected value into the selected function.
2	<esc></esc>	Exits the current menu or function
3	<screen></screen>	Navigates to the Screen Settings menu
4	<output 1=""></output>	Navigates to the Output Settings menu, or enters the number 1 when editing a number value
5	<freeze></freeze>	Freezes the video output
6	<test 6=""></test>	Navigates to the Test Pattern menu, or enters the number 6 when editing a number value
7	<hdmi 2=""></hdmi>	Selects HDMI input source, or enters the number 2 when editing a number value
8	<dvi 3=""></dvi>	Selects DVI input source, or enters the number 3 when editing a number value
9	<vga1 4=""></vga1>	Selects VGA1 input source, or enters the number 4 when editing a number value
10	<vga2 5=""></vga2>	Selects VGA2 input source, or enters the number 5 when editing a number value
11	<vga3 7=""></vga3>	Selects VGA3 input source, or enters the number 7 when editing a number value
12	<cvbs1 8=""></cvbs1>	Selects CVBS1 input source, or enters the number 8 when editing a number value
13	<cvbs2 9=""></cvbs2>	Selects CVBS2 input source, or enters the number 9 when editing a number value
14	<dp 0=""></dp>	Selects DP input source, or enters the number 0 when editing a number value
15	<take></take>	Enables PIP
16	<black></black>	Blacks out the video output
17	USB (A)	Cascades to other Vivid Drive 28N products
18	USB (B)	USB B port for firmware updates, connecting to NovaLCTMars or SmartLCT, and/or cascades from other Vivid Drive 28N products



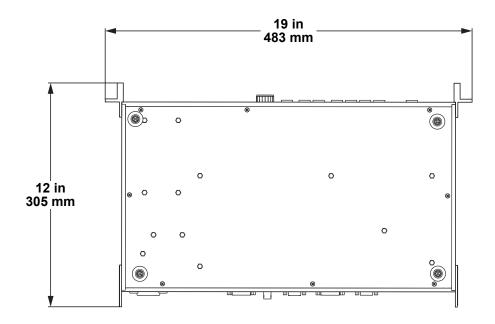
Product Rear Overview

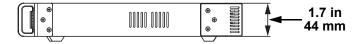


Real Panel Description

#	Name	Function
1	USB	USB B port for firmware updates, connecting to NovaLCTMars or SmartLCT
2	RJ45	RJ45 port for remote control system connection
3	VGA1-3	DE-15 connector for video input from a VGA source (numbered from left to right)
4	DP	DisplayPort input port
5	HDMI	HDMI input port
6	DVI	DVI input port
7	CVBS1-2	BNC connector for CVBS input (bottom is 1, top is 2)
8	VGA OUT	DE-15 connector for VGA output
9	DVI OUT	DVI output port
10	LED OUT 1-2	Ethernet ports for sending video signal to video panels (left is 1, right is 2)

Product Dimensions







3. Setup

AC Power

The Vivid Drive 28N has an auto-ranging power supply and it can work with an input voltage range of 100 to 240 VAC, 50/60 Hz.

To determine the product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to the product's specifications chart. The listed current rating indicates the product's average current draw under normal conditions.



- Always connect the product to a protected circuit (a 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.

Mounting

The Vivid Drive 28N fits on a standard 19" rack, or it can be placed on its feet on a flat, level surface.

Signal Connections

The Vivid Drive 28N uses the Novastar control protocol to send video signal to the connected panels. The Vivid Drive 28N has USB and ethernet ports for interfacing with a computer, DP, HDMI, DVI, CVBS, and VGA ports for video input, as well as a VGA out port, a DVI out port, and 2 ethernet out ports for sending video signal to the connected panels.

Video Source Connection

The Vivid Drive 28N can be linked directly to a video source using a DP connection, an HDMI connection, a DVI connection, a CVBS connection, or a VGA connection.

Software Connection

The Vivid Drive 28N can be linked to a computer running the NovaLCT or SmartLCT software using a USB (type A or B) connection or an ethernet cable. This will provide options for the Vivid Drive 28N through a computer interface.

Preview Monitor Connection

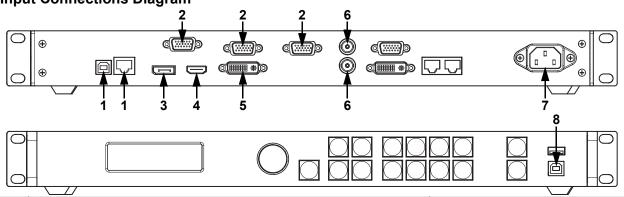
The Vivid Drive 28N can be linked to a monitor that will preview the LED output using a DVI cable plugged into the DVI OUT port or a VGA cable plugged into the VGA OUT port.

Cascading Connection

Multiple Vivid Drive 28N products can be linked 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.

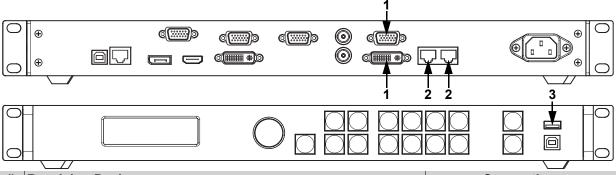






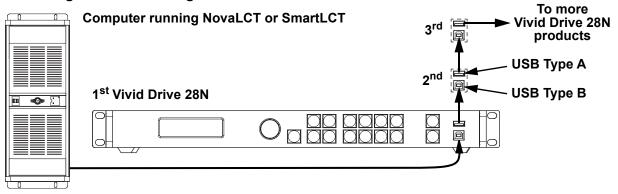
#	Purpose	Connections
1	Interface with a computer running NovaLCT software	USB Type B, Ethernet
2	Receive VGA video input	VGA
3	Receive DP video input	DP
4	Receive HDMI video input	HDMI
5	Receive DVI video input	DVI
6	Receive CVBS video input	CVBS
7	Receive AC Power	IEC
8	Link from another Vivid Drive 28N	USB Type B

Output Connections Diagram



#	Receiving Device	Connections
1	Preview monitor or the video input of another Vivid Drive 28N	VGA, DVI
2	LED video panels, such as the Vivid 4 from CHAUVET	Ethernet
3	Link to another Vivid Drive 28N	USB Type A

Cascading Connection Diagram





4. Operation

Control Panel Operation

To access the control panel functions, use the knob and buttons located on the front panel of the product. Refer to the <u>Product Front Overview</u> to see the knob and button locations.

Programming

Refer to the Menu Map to understand menu options. To access the menu from the Home Screen, press **<ESC>** or the **<MENU>** knob. Then turn the **<MENU>** knob to scroll through each level of the menu.

- Press the **<MENU>** knob to select the highlighted option. When selecting a number value that can be edited, turn the **<MENU>** knob to increase or decrease the selected value.
- Press **<ESC>** to exit to the previous menu level. Press it repeatedly to return to the Home Screen.

Menu Lockout Function

To prevent accidental changes to the menu or functions, lock the menu by pressing and holding the **<MENU>** knob and **<ESC>** for 3 seconds. Repeat to unlock the menu.

Menu Map

Refer to the Vivid Drive 28N product page on www.chauvetdj.com for the latest menu map.

Main Level		Programm	ing Levels	Description
Brightness		0–10	00%	Controls total output level
	Cabinet Row Qty		1–34*	Sets number of rows in video assembly. *Range determined by Column Qty and panels.
	Cabinet Column Qty		1–36*	Sets number of columns in video assembly. *Range determined by Row Qty and panels.
Screen Settings	Port1 Ca	binet Qty	1*–40*	Sets number of video panels connected to Output Port 1. *Range affected by Row Qty Column Qty, and panels.
	Data Flow(Front View)			Sets start point and path for data flow in video panel assembly
		1024x768		
	Preset Resolution	1280x1024		
			1366x768	
		1440x900		Selects a preset resolution
		1600x1200		
		1920x1080		
Input		1920x1200		
Settings		2048×640		
		Width (H)	800–3840	Sets custom pixel width
		Height (V)	600–1920	Sets custom pixel height
	Custom		60Hz	
	Resolution	Custom	59.94Hz	Sets custom refresh rate
		Refresh Rate	50Hz	
		30Hz		A 1:
			Apply	Applies custom resolution
	Scaling	Disable		Enables or disables scaling options
Output Settings		Enable		οριίστιο
Settings	Auto Fit	Auto Fit Disable		Enables or disables auto fit
		Enable		



Main Level		Programming Levels			Description
			Input Source		Shows the input source
			Width (H)	64*	Sets what part of the input to
		Input	Height (V)	48 *	output. *Dimension ranges
		Capture	Start X	0**	determined by Input Settings Resolution. **Offset ranges
			Start Y	0**	determined by dimensions.
			Width (H)	64* or 2-100%	Sets the dimensions and offset
	Custom Scaling		Height (V)	64** or 39-100%	of the output. *Dimension ranges determined by screen
Output			Start X	0- **	settings. **Offset ranges
Settings		Output Window	Start Y	0- **	determined by dimensions.
(cont.)		Williadw	Otal i	Pixel	Sets units to pixels
			Units	Percentage	Sets units to percentage
			Cooling	Custom	Scaling may not maintain ratio
			Scaling Mode	Equal Ratio	Scaling maintains original ratio
		Start X	*	Equal Ratio	Sets the image offset.
	Image Offset				*Ranges determined by
	g :	Start Y	*	· - *	screen settings.
	Apply to all		Disable		Enables or disables Apply to
	Apply to all		Enable		all
		PIP		able able	Enables or disables Picture In Picture
			CUSTOM		Custom layout
		LAYOUT	L+T		Left and top layout
			L+B		Left and bottom layout
			R+T		Right and top layout
			R.	+B	Right and bottom layout
			CE	NT	Center layout
			T+B		Top and bottom layout
			HDMI		Selects main input source
			DVI		
			VGA2		
			VGA3		
		Main Source	CVBS1		(Disabled when PIP enabled).
Advanced	PIP		CVBS2		eriabled).
Settings			DP		
			VG	6A1	1
			HDMI		
			D	VI	1
			VG	GA2	Selects PIP input source (main and PIP input sources
			VG	GA3	cannot both be digital or
		PIP Source	CV	BS1	analog. One must be digital
				BS2	[HDMI, DVI, or DP], the other
)P	analog [VGA or CVBS].)
			VGA1		-
		Width (H)	64*		Sets dimensions and offset of
		Height (V)	64- *		the PIP. *Dimension ranges determined by screen size. **Offset ranges determined by dimensions.
		Start: X	0- **		
		Start: Y	0		
		Gtart. I	by dimension		by difficitions.



Main Level		Programm	Description		
			PIP Crop	Disable Enable	Enables or disables PIP cropping
		PIP Crop	Width (H)	64 *	Sets the crop dimensions and
	PIP	Settings	Height (V)	48 *	offset of the PIP. *Dimension
	(cont.)		Start X	0**	ranges determined by Input Settings. **Offset ranges
			Start Y	0**	determined by crop dimensions
		Transparency 0-		-15	Sets the PIP transparency
			Window Swap)	Swaps Main and PIP sources
	Bodundonov	Primary			Sets this driver as primary
	Redundancy		Backup		Sets this driver as backup
	Manning		Disable		Enables or disables Manning
	Mapping		Enable		Enables or disables Mapping
		,	VGA Auto ADJ	J	Auto-adjusts VGA input
		Α	ADC Calibratio	n	Calibrates ADC
	Advanced	Vidoo	Sync	Disable	Enables or disables video
	Attr	Video	Sylic.	Enable	synchronization
		Go Homepage (s) 30–3600		30–3600	Sets number of seconds display is inactive before returning to the Home Screer
	Presettings	Presetting 1–10 Save		Saves the current settings	
				Loads the selected presetting	
Advanced Settings		Delete			Deletes the selected presetting
(cont.)		Normal			Video output
,			Black out		Blacks out the output
			Freeze		Freezes the output
		Test Pattern	R G	B W	Selects a test pattern
		Display	Contrast	0–100%	Adjusts the contrast of the output
			Saturation	0–100%	Adjusts the saturation of the output
	Control		Sharpness	0–24	Adjusts the sharpness of the output
		_	Hue	-180–180	Adjusts the hue of the output
		lmage quality	Color	Custom	Custom color temperature
			Temperature	4000–9500K	•
			Red	0–255	Adjusts the red level
			Green	0-255	Adjusts the green level
		Gam	Blue	0-255	Adjusts the blue level
			Gamma	1.0-4.0	Adjusts the gamma
			Reset	No	Keep current settings
				Yes	Reset image quality settings



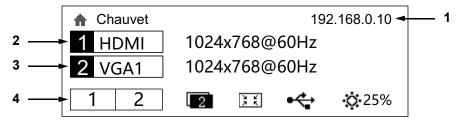
Main Level		Programm	ing Levels		Description
			0	ff	No switching effect
			С	ut	Cut effect
			Fade		Fade effect
	Display	Switching	Shrink Center		First source shrinks to center
	Control	Effect	Shrink Left Top		First source shrinks to top left
	(cont.)		Zoom Center		Second source zooms from center
			Zoom Left Top		Second source zooms from top left
		Fade Time (s)		-3	Sets the fade time
		Backup	Disable		Enable or disable video
		Баскар	Ena	able	source backups
				DVI	
				VGA3	
		Backup 1	HDMI ⇒	CVBS2	Sets backup video source to
		Zuonap .	,	DP	НОМІ
				VGA1	
				NULL	
			VGA2 ⇔	DVI	
	Inputs Backup	Backup 2		VGA3	
				CVBS2	Sets backup video source to
				DP	VGA2
				VGA1	
Advanced				NULL	
Settings (cont.)		Backup 3	OVDO4	DVI	
(COIII.)				VGA3	
				CVBS2	Sets backup video source to
			CVBS1 ⇒	DP	CVBS1
				VGA1	
				NULL	
			DVI ⇒	DVI*	
			VGA3 ⇒	VGA3*	
		Custom	CVBS2 ⇒	CVBS2*	Sets video source to be
		Backup	DP ⇒	DP*	backed up, then the backup video source
			VGA1 ⇒	VGA1*	video source
				NULL	
			1024x768		
				x1024	
				x768	
		Preset		x900	Selects a preset resolution
		Resolution		k1080	, , , , , , , , , , , , , , , , , , ,
	Output			k1200	
	Resolution			x640	
			Width (H)	800- *	Sets custom pixel width
		Custom Resolution	Height (V)	600- *	Sets custom pixel height
			Custom Refresh Rate	24–60Hz	Sets custom refresh rate
				ply	Applies custom resolution
	l	1	, .p	i- J	11



Main Level		Programm	ing Levels	Description	
	Cabinet	Load RCFG Files		Sends selected pre-loaded file to the connected panels	
Advanced Settings	Settings	Save to RV Card	No	Permanently saves uploaded firmware to connected panels	
(cont.)	OLED B		Yes 6–15	· ·	
		rightness	V	Sets display brightness	
	HW V	ersion	Current firmware version		
Factory		N	0	Resets the product to factory	
Reset		Ye	es	settings	
	Communic	cation Mode	USB connection takes priority		
	Communic	Cation Mode	LAN Preferred	Ethernet connection takes priority	
Communi-	Network	Config IPV4	Manually	Set IP address manually	
cation		Coming ir V4	Auto	IP address will be assigned	
Settings		IP Address	1-223.0-255.0-255.0-255	Sets IP address	
	Settings	Subnet Mask	0-255.0-255.0-255.0-255	Sets Subnet Mask	
		Reset	No	Resets network settings	
		Keset	Yes	Tresets Hetwork settings	
		Zhōn	Sets display language to Chinese		
		Eng	Sets language to English		
Language		Phās'	Sets language to Thai		
		Русс	ский	Sets language to Russian	
		Deu	Sets language to German		



Operating Settings Configuration Home Screen



The Vivid Drive 28N has a home screen that shows the current IP address, input sources, resolutions, refresh rates, and other operating settings. To see the home screen, press **<ESC>** repeatedly. To access the main menu from the Home Screen, press the **<MENU>** knob.

- 1. Shows the IP address of the product.
- Shows the main input source, the main output resolution, and refresh rate.
 Shows the PIP (Picture In Picture) input source, the PIP resolution, and refresh rate.
 Shows the status of the product, with the following icons:

Icon	Meaning	Icon	Meaning
1 2	Shows active LED OUT ports		Scaling disabled
1	Picture In Picture disabled		No control interface is detected
2	Picture In Picture enabled	*	USB control is active
9 K 2 K	Scale down mode		Ethernet control is active
F, 78 E 9	Scale up mode	0.25%	Current output brightness

Brightness

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

- 1. Press the **<MENU>** knob to access the menu.
- 2. Turn the <MENU> knob until Brightness is selected.
- 3. Press the <MENU> knob.
- 4. Turn the <MENU> knob clockwise or counter-clockwise to increase or decrease the brightness, from 0-100%.
- 5. Press the **<MENU>** 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 port 2 must be less than or equal to the number connected to port 1.

To access the Screen Settings menu, press <SCREEN>, or:

- 1. Press the **<MENU>** knob to access the menu.
- 2. Turn the <MENU> knob until Screen Settings is selected.
- 3. Press the **<MENU>** knob.



Cabinet Row Quantity

This setting defines the number of rows of panels (height) connected to the Vivid Drive 28N.

- 1. Access the **Screen Settings** menu.
- 2. Turn the <MENU> knob until Cabinet Row Qty is selected.
- 3. Press the <MENU> knob.
- 4. Turn the **<MENU>** knob clockwise or counter-clockwise to increase or decrease the number of rows, from **1–34**. (The highest number that can be selected is determined by the Column Quantity and the firmware of the connected panels. See the <u>Cabinet Quantity Charts</u>.)
- 5. Press the **<MENU>** knob.

Cabinet Column Quantity

This setting defines the number of columns of panels (width) connected to the Vivid Drive 28N.

- 1. Access the **Screen Settings** menu.
- 2. Turn the <MENU> knob until Cabinet Column Qty is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counter-clockwise to increase or decrease the number of columns, from **1–36**. (The highest number that can be selected is determined by the Row Quantity and the firmware of the connected panels. See the <u>Cabinet Quantity Charts</u>.)
- 5. Press the **<MENU>** knob.

Port 1 Cabinet Quantity

This setting defines the number of panels connected to output port 1 on the Vivid Drive 28N.

- 1. Access the **Screen Settings** menu.
- 2. Turn the <MENU> knob until Port1 Cabinet Qty is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counter-clockwise to increase or decrease the number of panels, from **1–115**. (The number range that can be selected is determined by the Row and Column Quantities and the firmware of the connected panels. See the <u>Cabinet Quantity Charts</u>.)
- 5. Press the **<MENU>** knob.



The maximum number of LEDs supported by each Port of the Vivid Drive 28N is 655,360. This amounts to 30 Vivid 4 panels (which are 104x208 pixels) or 60 panels that are 104x104 pixels per Port.

Cabinet Quantity Charts

Vivid 4 Cabinet Quantity Chart

The following chart shows the ranges usable for Row, Column, and Port 1 Quantity, assuming CHAUVET Vivid 4 panels are in use. Port 1 values exceeding 30 cannot be used for 104x208 pixel panels such as the Vivid 4. Available values may exceed the recommended values.

Total	Row	Col.	Port 1	Total	Row	Col.	Port 1	Total	Row	Col.	Port 1
	2	30			2	18			1	18	
	3	20			3	12		18	2	9	9–18
	4	15		36	4	9	18–30		3	6	
60	5	12	30	36	6	6	10-30		6	3	
80	6	10	30		9	4			9	2	
	15	4			12	3	†	17	1	17	9–17
	10	6		35	5	7	18–30		1	16	8–16
	12	5		33	7	5	10-30	16	2	8	
58	2	29	29–30	34	2	17	17–30	10	4	4	
57	3	19	29-30	33	3	11	17–30		8	2	
	2	28		33	11	3	17-30		1	15	8–15
	4	14			2	16		15	3	5	
56	7	8	28–30	32	4	8	16–30	15	5	3	
	8	7			8	4			15	1	
	14	4	1		1	30			1	14	
55	5	11	28–30	30	2	15	15–30	14	2	7	7–14
33	11	5	20-30		3	10			7	2	†



Total	Row	Col.	Port 1	Total	Row	Col.	Port 1	Total	Row	Col.	Port 1
	2	27			5	6		14	14	1	7–14
54	3	18	27–30	30	6	5	15–30	13	1	13	7–13
34	6	9	21-30	30	10	3	13–30	13	13	1	7-13
	9	6			15	2			1	12	
	2	26		29	1	29	15–29		2	6	
52	4	13	26–30		1	28		12	3	4	6–12
	13	4			2	14			4	3	0 .2
51	3	17	26–30	28	4	7	14–28		6	2	
	2	25			7	4			12	1	
50	5	10	25–30		14	2		11	1	11	6–11
	10	5			1	27			11	1	
49	7	7	25–30	27	3	9	14–27		1	10	
	2	24			9	3		10	2	5	5–10
	4	12			1	26			5	2	
48	6	8	24–30	26	2	13	13–26		10	1	
	8	6			13	2		_	1	9	
	12	4		25	1	25	13–25	9	3	3	5–9
46	2	23	23–30		5	5			9	1	
	3	15	23–30	2 1	24			1	8		
45	5	9				12	-	8	2	4	4–8
	9	5	_		3	8			4	2	
	15	3		24	4	6	12–24		8	1	
	2	22			6	4		7	1	7	4–7
44	4	11	22–30		8	3			7	1	
	11	4		00	12	2	40.00		1	6	1
	2	21		23	1	23	12–23	6	2	3	3–6
40	3	14	04 00	00	1	22	44 00		3	2	
42	6 7	7	21–30	22	2	11	11–22		6	1	
		6	1		11	2		5	1	5 1	3–5
	14	3 20		21	3	21 7	11–21		5 1		
	4		1	21	7	3	11-21	4	2	2	2–4
40		10	20 20					4	4	1	2-4
40	5 8	8 5	20–30		1 2	20 10	-		1	3	
	10	4	1	20	4	5	10–20	3	3	1	2–3
-	3	13		∠∪	5	4	10-20		1	2	
39	13	3	20–30		10	2		2	2	1	1–2
38	2	19	19–30	19	10	19	10–19	1	1	1	1
30		13	19-30	פו	'	13	10-19	'	'	ı	'



104x104 Cabinet Quantity ChartThe following chart shows the ranges usable for Row, Column, and Port 1 Quantity, assuming 104x104 pixel panels are in use. Port 1 values exceeding 60 cannot be used for 104x104 pixel panels. Available values may exceed the recommended values.

Total	Row	Col.	Port 1	Total	Row	Col.	Port 1	Total	Row	Col.	Port 1
	4	30			4	18		34	34	1	17–34
	5	24	_		6	12			1	33	
	6	20		72	8	9		33	3	11	17–33
	8	15			9	8	36–60	33	11	3	17-33
120	10	12	60		12	6			33	1	
120	12	10	- 00		18	4			1	32	
	15	8			24	3			2	16	
	20	6			2	35		32	4	8	16–32
	24	5			5	14		02	8	4	10 02
	30	4		70	7	10	35–60		16	2	
119	7	17	60		10	7			32	1	
	17	7			14	5		31	1	31	16–31
117	9	13	59-60	69	3	23	35–60		31	1	
	13	9			23	3			1	30	+
116	4	29	58-60		2	34	_		2	15	1
	29	4		68	4	17	34–60		3	10	1
115	5	23	58-60		17	4		30	5 6	6 5	15–30
	23 6	5 19			34	2			10	3	<u> </u>
114	19	6	57–60		3	33 22	1		15	2	1
	4	28			6	11	+		30	1	
	7	16		66	11	6	33–60		1	29	
	8	14			22	3	_	29	29	1	15–29
112	14	8	56–60		33	2	+		1	28	
	16	7	_		5	13			2	14	
	28	4	_	65	13	5	33–60		4	7	
-	5	22			2	32		28	7	4	14–28
	10	11	_		4	16	1		14	2	
110	11	10	55–60	64	8	8	32–60		28	1	
	22	5			16	4	+		1	27	
	3	36			32	2	1	07	3	9	44.07
	4	27	_		3	21		27	9	3	14–27
	6	18		63	7	9	32–60		27	1	1
108	9	12	54–60	63	9	7	32-60		1	26	
	12	9			21	3		26	2	13	13–26
	18	6		62	2	31	31–60	20	13	2	13-20
	27	4		62	31	2	31-00		26	1	
	3	35			2	30			1	25	
	5	21			3	20		25	5	5	13–25
105	7	15	53–60	60	4	15	30–60	30–60	25	1	
	15	7			5	12		24	1	24	12–24
	21	5			6	10			2	12	



Total	Row	Col.	Port 1	Total	Row	Col.	Port 1	Total	Row	Col.	Port 1
	4	26			10	6			3	8	
104	8	13	52–60		12	5			4	6	1
104	13	8	32-60	60	15	4	30–60	24	6	4	12–24
	26	4			20	3		24	8	3	12-24
	3	34			30	2			12	2	
102	6	17	51–60	58	2	29	29–58		24	1	
102	17	6	31-00	30	29	2	29-30	23	1	23	12–23
	34	3		57	3	19	29–57	23	23	1	12-23
	4	25		31	19	3	29-31		1	22	
	5	20			2	28		22	2	11	11–22
100	10	10	50–60		4	14			11	2	11-22
	20	5		56	7	8	28–56		22	1	
	25	4		30	8	7	20-30		1	21	
	3	33			14	4		21	3	7	11–21
99	9	11	50-60		28	2			7	3	11-21
33	11	9	30-00	55	5	11	28-55		21	1	
	33	3		33	11	5	20-33		1	20	
98	7	14	49–60		2	27			2	10	
30	14	7	43 –00		3	18		20	4	5	10–20
	3	32		54	6	9	27–54		5	4	
	4	24	48–60	34	9	6	21-34		10	2	
	6	16			18	3			20	1	
96	8	12			27	2		19	1	19	10–19
	12	8	10 00		2	26			19	1	10 15
	16	6		52	4	13	26–52		1	18	
	24	4		02	13	4			2	9	
	32	3			26	2		18	3	6	9–18
95	5	19	48–60	51	3	17	26–51		6	3	
	19	5	.6 66	<u> </u>	17	3			9	2]
93	3	31	47–60		2	25			18	1	
	31	3		50	5	10	25–50	17	1	17	9–17
92	4	23	46–60		10	5			17	1	
	23	4			25	2			1	16	
91	7	13	46–60	49	7	7	25–49		2	8	
	13	7			2	24	_	16	4	4	8–16
	3	30	_		3	16	_		8	2	1
	5	18	_		4	12	_		16	1	
	6	15		48	6	8	24–48		1	15	1
90	9	10	45–60		8	6		15	3	5	8–15
	10	9	.5 50		12	4	_		5	3	1
	15	6			16	3	1		15	1	
	18	5			24	2			1	14	1
	30	3		46	2	23	23–46	14	2	7	7–14
88	4	22	44-60		23	2			7	2	
	8	11		45	3	15	23–45		14	1	



Total	Row	Col.	Port 1	Total	Row	Col.	Port 1	Total	Row	Col.	Port 1
88	11	8	44–60		5	9		13	1	13	7–13
00	22	4	44-00	45	9	5	23–45	13	13	1	7-13
87	3	29	44–60		15	3	1		1	12	
01	29	3	44-00		2	22			2	6	
85	5	17	43–60	44	4	11	22–44	12	3	4	6–12
03	17	5	75-00	77	11	4		12	4	3	0-12
	3	28			22	2			6	2	
	4	21			2	21			12	1	
	6	14			3	14		11	1	11	6–11
84	7	12	42–60	42	6	7	21–42	''	11	1	0-11
04	12	7	42-00	72	7	6			1	10	
	14	6			14	3		10	2	5	5–10
	21	4			21	2		10	5	2	3-10
	28	3			2	20			10	1	
	3	27		41-60 40 5 8 20-40 20-40	4	10			1	9	
81	9	9	41–60		5	8	20_40	9	3	3	5–9
	27	3				9	1				
	4	20			10	4			1	8	
	5	16			20	2		8	2	4	4–8
80	8	10	40–60 39	13	3	20–39		4	2	_	
00	10	8		00	3	13	20-00		8	1	
	16	5		2	19	19–38	7	1	7	4–7	
	20	4		30	19	2	13-00	'	7	1	 /
	3	26			1	36			1	6	
78	6	13	39–60		2	18		6	2	3	3–6
70	13	6	39-00		3	12		0	3	2	3-0
	26	3		36	4	9	18–36		6	1	
77	7	11	39–60	30	6	6	10-30	5	1	5	3–5
"	11	7	39-00		9	4		3	5	1	3–3
76	4	19	38–60		12	3			1	4	
70	19	4	30-00		18	2		4	2	2	2–4
	3	25			1	35			4	1	
75	5	15	38–60	35	5	7	18–35	3	1	3	2–3
13	15	5	30-00		7	5		3	3	1	<u> </u>
	25	3			1	34		2	1	2	1–2
72	2	36	36–60	34	2	17	17–34	_	2	1	
1 4	3	24	30-00	#	17	2	1	1	1	1	1



Data Flow

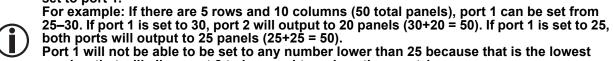
This setting addresses the panels in the connected assembly for both ports by selecting a starting point and a direction of flow, as seen from the front of the assembly.

- 1. Access the **Screen Settings** menu.
- 2. Turn the <MENU> knob until Data Flow(Front View) is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** 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.
<u></u>	Starts at top right, goes all the way left, down by one, all the way right, down by one, and repeats.
П÷	Starts at top right, goes all the way down, left by one, all the way up, left by one, and repeats.
<u></u>	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.
7	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>** knob.

The number of panels connected to port 2 may only be equal to or less than the number set to port 1.



number that will allow port 2 to be equal to or less than port 1.

These numbers assume the default settings are available, and not overridden by the

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



Example Configuration

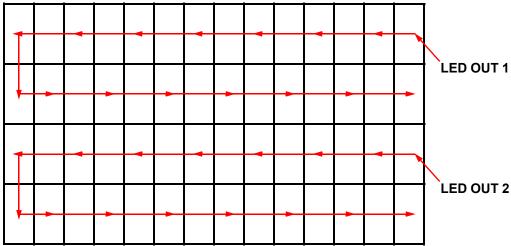
The following demonstrates how to set the Screen Settings for a video panel configuration with a Vivid Drive 28N and 56 Vivid 4 video panels.

- 1. Set the Cabinet Row Quantity to 4.
- 2. Set the Cabinet Column Quantity to 14.
- 3. Set the Port 1 Cabinet Quantity to 28. This will allow both ports to output to 2 complete rows.
- 4. Set the <u>Data Flow</u> 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



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 the **<MENU>** knob to access the menu.
- 2. Turn the <MENU> knob until Input Settings is selected.
- 3. Press the **<MENU>** 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> knob until Preset Resolution is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob to select a resolutions setting, from 1024x768, 1280x1024, 1366x768, 1440x900, 1600x1200, 1920x1080, 1920x1200, or 2048x640.
- 5. Press the **<MENU>** 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.
- Turn the <MENU> knob until Custom Resolution is selected.
- Press the <MENU> knob.



Custom Resolution Width

This setting defines the input's width in pixels.

- 1. Access the **Custom Resolution** menu.
- 2. Turn the <MENU> knob until Width (H) is selected.
- Press the <MENU> knob.
- 4. Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the width, from **800–3840** (This range is determined by the Screen Settings).
- 5. Press the **<MENU>** knob.
- 6. Press **<ESC>** to return to the previous menu level.

Custom Resolution Height

This setting defines the input's height in pixels.

- Access the Custom Resolution menu.
- Turn the <MENU> knob until Height (V) is selected.
- Press the <MENU> knob.
- 4. Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the height, from 600-1920 (This range is determined by the Screen Settings).
- 5. Press the **<MENU>** knob.
- 6. Press **<ESC>** to return to the previous menu level.

Custom Refresh Rate

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

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

To make custom Input Settings permanent (until they are changed), Apply must be selected.

From the **Custom Resolution** menu.

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

Output Settings

The Output Settings determine the area and offset of the video output. To access the Output Settings menu, press **<OUTPUT/1>** or do the following:

- 1. Press the **<MENU>** knob to access the menu.
- Turn the <MENU> knob until Output Settings is selected.
- 3. Press the **<MENU>** 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 to be enabled.

- 1. Access the Output Settings menu.
- Turn the <MENU> knob until Scaling is selected.
 Press the <MENU> knob.
- 4. Turn the <MENU> knob clockwise or counterclockwise to select Disable or Enable.
- 5. Press the **<MENU>** knob.
- 6. Press **<ESC>** to return to the previous menu level.

Auto Fit

The Auto Fit function automatically fits the video output to the connected panel assembly, based on the Screen Settings and Input Settings. To enable or disable Auto Fit:

- 1. Access the Output Settings menu.
- 2. Turn the <MENU> knob until Auto Fit is selected.
- Press the <MENU> knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to select **Disable** or **Enable**.
- 5. Press the **<MENU>** knob.
- 6. Press **<ESC>** to return to the previous menu level.



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:

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

Input Source

The Input Source is set by 8 buttons on the front panel of the Vivid Drive 28N. Press the button of the desired input twice to set it as the Input Source. To set the Input Source through the menu, see Mainton Source under Picture In Picture in the Advanced Settings.

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> knob until Width (H) is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the width, from **64**—___ (This range is determined by the <u>Input Settings</u>).
- 5. Press the **<MENU>** 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.
- Turn the <MENU> knob until Height (V) is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the height, from **48–**___ (This range is determined by the **Input Settings**).
- 5. Press the **<MENU>** 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>** knob until **Start X** is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **MENU>** knob clockwise or counterclockwise to increase or decrease the offset, from **0**—____ (This range is determined by the <u>Input Capture Width</u>).
- 5. Press the <MENU> 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 1080, and the current Width is set to 680, the offset can be set from 0–400.

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> knob until Start Y is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the offset, from **0**—____ (This range is determined by the <u>Input Capture Height</u>).
- 5. Press the **<MENU>** 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 1040, and the current Height is set to 340, the offset can be set from 0–700.



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 menu:

- 1. Access the **Custom Scaling** menu.
- 2. Turn the <MENU> knob until Output Window is selected.
- 3. Press the **<MENU>** knob.

Output Window Width

The Output Window Width defines the width in pixels or percentage to which the video output will be limited.

- 1. Access the **Output Window** menu.
- 2. Turn the **<MENU>** knob until **Width (H)** is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **MENU>** knob clockwise or counterclockwise to increase or decrease the width, from **64**—___ (Pixels. This range is determined by the <u>Screen Settings</u>.) or **2–100%** (Percentage).
- 5. Press the **<MENU>** knob.

Output Window Height

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

- 1. Access the Output Window menu.
- Turn the <MENU> knob until Height (V) is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the height, from 64-___ (Pixels. This range is determined by the <u>Screen Settings</u>.) or 39-100% (Percentage).
- Press the <MENU> 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> knob until Start X is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **MENU>** knob clockwise or counterclockwise to increase or decrease the offset, from **0—**____ (This range is determined by the <u>Output Window Width</u>).
- 5. Press the **<MENU>** 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 1456, and the current Width is set to 730, the offset can be set from 0–726.

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> knob until Start Y is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the offset, from **0**—____ (This range is determined by the <u>Output Window Height</u>).
- 5. Press the <MENU> 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 816, and the current Height is set to 610, the offset can be set from 0–206.

Output Window Units

To set whether the units in the Output Window menu are displayed in pixels or a percentage:

- 1. Access the Output Window menu.
- 2. Turn the **<MENU>** knob until **Units** is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob to select the desired units, from **Pixel** or **Percentage**.
- 5. Press the **<MENU>** knob.



Output Window Scaling Mode

The Output Window Scaling Mode determines whether the values in the Output Window settings can be edited independently of each other, or if the original ratio will be maintained.

- 1. Access the **Output Window** menu.
- 2. Turn the <MENU> knob until Scaling Mode is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob to select the desired units, from **Custom** (values can be set independently) or **Equal Ratio** (values will scale with each other to maintain the original ratio).
- 5. Press the **<MENU>** knob.

Image Offset

The Image Offset settings allow 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>** knob until **Image Offset** is selected.
- 4. Press the **<MENU>** 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> knob until Start X is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the offset, from -____ (This range is determined by the Input Settings).
- 5. Press the **<MENU>** 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 resolution extends horizontally past the panel assembly by 200 pixels, the Horizontal Image Offset can be set from 0–200.

Vertical Image Offset

The Horizontal 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>** knob until **Start Y** is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the offset, from -_____ (This range is determined by the Input Settings).
- 5. Press the **<MENU>** 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 resolution extends vertically past the panel assembly by 200 pixels, the Vertical Image Offset can be set from 0–200.

Apply to all

The Apply to all setting determines whether changes to any Output Settings will affect all Output Settings.

- 1. Access the **Output Settings** menu.
- 2. Turn the <MENU> knob until Apply to all is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob to select **Disable** or **Enable**.
- 5. Press the **<MENU>** knob.

Advanced Settings

The Advanced Settings include options such as Picture In Picture (PIP), display options, and backup settings, among others. To access the Advanced Settings menu:

- 1. Press the **<MENU>** knob to access the menu.
- 2. Turn the <MENU> knob until Advanced Settings is selected.
- 3. Press the **<MENU>** knob.



Picture In Picture

The Picture In Picture function allows 2 video sources to be displayed at once on the same video panel assembly from a single Vivid Drive 28N. To access the Picture In Picture menu:

- 1. Access the **Advanced Settings** menu.
- 2. Turn the **<MENU>** knob until **PIP** is selected.
- 3. Press the **<MENU>** knob.

To enable PIP, press <TAKE>. To enable or disable PIP through the menu:

- 1. Access the **Picture In Picture** menu.
- 2. Turn the <MENU> knob until PIP is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob to select **Disable** or **Enable**.
- 5. Press the **<MENU>** knob.

Picture In Picture Layout

This setting determines the location upon the connected panel assembly where the Picture In Picture video will appear.

- 1. Access the **Picture In Picture** menu and enable the function.
- 2. Turn the **<MENU>** knob until **LAYOUT** is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob to select the layout, from CUSTOM (layout is set independently), L+T (left and top), L+B (left and bottom), R+T (right and top), R+B (right and bottom), CENT (center), or T+B (top and bottom).
- Press the <MENU> knob.

Main Source

To set the Main **Input Source** through the menu:

- 1. Access the Picture In Picture menu.
- 2. Turn the <MENU> knob until Main Source is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the <MENU> knob to select the Main Input Source, from HDMI, DVI, VGA2, VGA3, CVBS1, CVBS2, DP, or VGA1.
- 5. Press the **<MENU>** knob.

Picture In Picture Source

To set the video source for the Picture In Picture function:

- 1. Access the **Picture In Picture** menu.
- 2. Turn the <MENU> knob until PIP Source is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob to select the PIP Input Source, from HDMI, DVI, VGA2, VGA3, CVBS1, CVBS2, DP, or VGA1.
- 5. Press the **<MENU>** knob.



The PIP Input Source and Main Input Source cannot both be set to either digital or analog video inputs. One must be digital (HDMI, DVI, or DP), and the other must be analog (VGA or CVBS).

Picture In Picture Width

To set the width of the space allocated for the Picture In Picture on the connected panel assembly:

- 1. Access the Picture In Picture menu and enable the function.
- 2. Turn the **<MENU>** knob until **Width (H)** is selected.
- Press the <MENU> knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the width, from **64–**___ (This range is determined by the <u>Input Settings</u>).
- 5. Press the **<MENU>** knob.

Picture In Picture Height

To set the height of the space allocated for the Picture In Picture on the connected panel assembly:

- 1. Access the Picture In Picture menu and enable the function.
- 2. Turn the <MENU> knob until Height (V) is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the height, from **64–**___ (This range is determined by the **Input Settings**).
- 5. Press the <MENU> knob.



Picture In Picture Horizontal Offset

To set the horizontal offset of the space allocated for the Picture In Picture on the connected panel assembly:

- 1. Access the **Picture In Picture** menu and enable the function.
- 2. Turn the **<MENU>** knob until **Start: X** is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the offset, from **0** _ _ _ (This range is determined by the <u>Picture In Picture Width</u>).
- 5. Press the **<MENU>** knob.



The Picture In Picture 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 Picture In Picture Width and the maximum Picture In Picture Width. For example: If the maximum Width is 1040, and the current Width is set to 730, the offset can be set from 0–310.

Picture In Picture Vertical Offset

To set the vertical offset of the space allocated for the Picture In Picture on the connected panel assembly:

- 1. Access the **Picture In Picture** menu and enable the function.
- 2. Turn the <MENU> knob until Start: Y is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the offset, from 0-____ (This range is determined by the <u>Picture In Picture Height</u>).
- 5. Press the **<MENU>** knob.



The Picture In Picture 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 Picture In Picture Height and the maximum Picture In Picture Height. For example: If the maximum Height is 1664, and the current Height is set to 700, the offset can be set from 0–964.

Picture In Picture Crop Settings

The Picture In Picture Crop Settings allow the Vivid Drive 28N to select a specific area of the Picture In Picture video source to output to the connected panel assembly. To access the Picture In Picture Crop Settings menu:

- 1. Access the **Picture In Picture** menu and enable the function.
- 2. Turn the <MENU> knob until PIP Crop Settings is selected.
- 3. Press the <MENU> knob.

To enable or disable the Picture In Picture Crop Settings:

- 1. Access the <u>Picture In Picture Crop Settings</u> menu.
- 2. Turn the **<MENU>** knob until **PIP Crop** is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob to select Disable or Enable.
- 5. Press the **<MENU>** knob.

Picture In Picture Crop Width

The Picture In Picture Crop Width stretches or zooms in on the Picture In Picture video horizontally, without altering the dimensions of the space allocated for the Picture In Picture on the connected panel assembly.

- 1. Access the **Picture In Picture Crop Settings** menu and enable the function.
- Turn the <MENU> knob until Width (H) is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the width, from **64–**___ (This range is determined by the <u>Input Settings</u>).
- 5. Press the **<MENU>** knob.

Picture In Picture Crop Height

The Picture In Picture Crop Height stretches or zooms in on the Picture In Picture video vertically, without altering the dimensions of the space allocated for the Picture In Picture on the connected panel assembly.

- 1. Access the Picture In Picture Crop Settings menu and enable the function.
- 2. Turn the <MENU> knob until Height (V) is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the height, from **64–**___ (This range is determined by the **Input Settings**).
- Press the **<MENU>** knob.



Picture In Picture Crop Horizontal Offset

The Picture In Picture Crop Horizontal Offset determines how far to the right in the Picture In Picture video source to display, without altering the location of the Picture In Picture on the connected panel assembly.

- 1. Access the <u>Picture In Picture Crop Settings</u> menu and enable the function.
- 2. Turn the **<MENU>** knob until **Start X** is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **MENU>** knob clockwise or counterclockwise to increase or decrease the offset, from **64–**___ (This range is determined by the <u>Picture In Picture Crop Width</u>).



The Picture In Picture 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 Picture In Picture Crop Width and the maximum Picture In Picture Crop Width. For example: If the maximum Width is 1040, and the current Width is set to 730, the offset can be set from 0–310.

Picture In Picture Crop Vertical Offset

The Picture In Picture Crop Vertical Offset determines how far down in the Picture In Picture video source to display, without altering the location of the Picture In Picture on the connected panel assembly.

- 1. Access the Picture In Picture Crop Settings menu and enable the function.
- 2. Turn the <MENU> knob until Start Y is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **MENU>** knob clockwise or counterclockwise to increase or decrease the offset, from **48—**___ (This range is determined by the <u>Picture In Picture Crop Height</u>).



The Picture In Picture 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 Picture In Picture Crop Height and the maximum Picture In Picture Crop Height. For example: If the maximum Height is 624, and the current Height is set to 150, the offset can be set from 0–474.

Picture In Picture Transparency

The Picture In Picture Transparency setting determines how much the Main Input source will show through the Picture In Picture effect on the connected panel assembly.

- 1. Access the Picture In Picture menu and enable the function.
- 2. Turn the **<MENU>** knob until **Transparency** is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the transparency, from 0-15.
- 5. Press the **<MENU>** knob.

Picture In Picture Window Swap

The Picture In Picture Window Swap setting swaps the Main Input video source with the Picture In Picture video source when selected.

- 1. Access the Picture In Picture menu and enable the function.
- 2. Turn the <MENU> knob until Window Swap is selected.
- 3. Press the **<MENU>** knob.

Redundancy

The Redundancy function allows a Vivid Drive 28N to be set as either Primary or Backup and connected to the same panel assembly as another Vivid Drive 28N. Should the Primary product fail, the Backup will take over and continue to output video.

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

Mapping

The Mapping function allows the Vivid Drive 28N to output the port number and panel number to each connected panel.

- 1. Access the **Advanced Settings** menu.
- 2. Turn the **<MENU>** knob until **Mapping** is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the <MENU> knob to select Disable or Enable.
- 5. Press the **<MENU>** knob.



Advanced Attributes

The Advanced Attributes includes the VGA Auto-Adjust, ADC Calibration, Video Synchronization, and the Screen Timeout function. To access the Advanced Attributes menu:

- 1. Access the **Advanced Settings** menu.
- 2. Turn the <MENU> knob until Advanced Attr is selected.
- 3. Press the **<MENU>** knob.

VGA Auto Adjust

To activate the VGA Auto Adjust:

- 1. Access the **Advanced Attributes** menu.
- 2. Turn the <MENU> knob until VGA Auto ADJ is selected.
- 3. Press the **<MENU>** knob.

ADC Calibration

To activate the ADC Calibration:

- 1. Access the **Advanced Attributes** menu.
- 2. Turn the <MENU> knob until ADC Calibration is selected.
- 3. Press the **<MENU>** knob.

Video Synchronization

To enable or disable Video Synchronization:

- 1. Access the Advanced Attributes menu.
- 2. Turn the **<MENU>** knob until **Video Sync.** is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob to select **Disable** or **Enable**.
- 5. Press the **<MENU>** knob.

Screen Timeout

The Screen Timeout function determine show long (in seconds) the menu of the Vivid Drive 28N can remain inactive before it automatically returns to the Home Screen.

- 1. Access the Advanced Attributes menu.
- 2. Turn the **<MENU>** knob until **Go Homepage (s)** is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the time limit, from 30–3600.
- 5. Press the **<MENU>** knob.

Presettings

The Vivid Drive 28N has the ability to save and recall up to 10 complete settings configurations. To save, access, or delete any of these presettings:

- Access the <u>Advanced Attributes</u> menu.
- Turn the <MENU> knob until Presettings is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob clockwise or counterclockwise to select a Presetting, from Presetting 1–10.
 Presettings will be labeled as either Blank or Saved.
- 5. Press the <MENU> knob.
- Turn the <MENU> knob clockwise or counterclockwise to select from Save (saves current settings configuration the selected Presetting), Load (Configures all settings to match the selected Presetting), or Delete (clears the selected Presetting of all configurations).
- 7. Press the **<MENU>** knob.

Display Control

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

- 1. Access the Advanced Attributes menu.
- 2. Turn the **<MENU>** knob until **Display Control** is selected.
- 3. Press the **<MENU>** 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. The Blackout and Freeze functions can be toggled by pressing the **SLACK>** and **FREEZE>** buttons on the control panel respectively. To select the playback mode through the menu:

- 1. Access the **Display Control** menu.
- Turn the <MENU> knob clockwise or counterclockwise to select a playback mode, from Normal, Black out, or Freeze.
- Press the <MENU> knob.



Test Pattern

The Vivid Drive 28N has 4 test colors and 4 test patterns for testing the functionality and connection of all connected video panels.

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

Icon	Meaning	Icon	Meaning
R	Outputs full red		Outputs horizontal lines
G	Outputs full green		Outputs vertical lines
В	Outputs full blue		Outputs forward slanting lines
W	Outputs full white (all colors full)		Outputs backward slanting lines

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

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.
- Sharpness determines the amount of detail in the output.
- 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.
- Color Temperature sets the color balance settings to preset maximum values.
- Red, Green, and Blue values set maximum values for each color, which affects the color temperature of the video output.
- **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> knob until Image quality is selected.
 - 3. Press the <MENU> knob.
 - 4. Turn the <MENU> knob clockwise or counterclockwise to select a setting, from Contrast, Saturation, Sharpness, Hue, Color Temperature, Red, Green, Blue, Gamma, or Reset.
 - 5. For:
 - Contrast or Saturation, turn the <MENU> knob clockwise or counterclockwise to increase
 or decrease the percentage, from 0–100%.
 - Sharpness, turn the <MENU> knob clockwise or counterclockwise to increase or decrease the level of detail, from 0–24.
 - Hue, turn the <MENU> knob clockwise or counterclockwise to increase or decrease the color shift, from -180-180.
 - Color Temperature, turn the <MENU> knob clockwise or counterclockwise to increase or decrease the preset color temperature, from 4000–9500K. When the color values are set manually, this option will read Custom.
 - Red, Green, or Blue, turn the <MENU> knob clockwise or counterclockwise to increase or decrease the maximum value for the selected color, from 0–255.
 - **Gamma**, turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the correction level, from **1.0–4.0**.
 - Reset, turn the <MENU> knob clockwise or counterclockwise to select from No (keep the
 current settings) or Yes (reset the Image Quality settings).
 - 6. Press the **<MENU>** knob.
 - 7. Repeat steps 4-6 until the output is set as desired.



Switching Effect

The Switching Effect determines the way the Vivid Drive 28N will transition from one input source to another.

- 1. Access the **Display Control** menu.
- 2. Turn the <MENU> knob until Switching Effect is selected.
- Press the <MENU> knob.
- 4. Turn the <MENU> knob clockwise or counterclockwise to select a switching effect, from Off (no switching effect), Cut (cut effect), Fade (fade effect), Shrink Center (the first video source shrinks to the center), Shrink Left Top (the first video source shrinks to the top left), Zoom Center (the second video source zooms in from the center), or Zoom Left Top (the second video source zooms in from the top left).
- 5. Press the **<MENU>** knob.

To set the Fade Time (in seconds), do the following:

- 1. Access the **Display Control** menu.
- Turn the <MENU> knob until Fade Time(s) is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the fade time (in seconds), from 0-3.
- 5. Press the **<MENU>** knob.

Inputs Backup

The Inputs Backup setting allows the Vivid Drive 28N to set a backup video source for the HDMI input, VGA2 input, CVBS1 input, and one other custom input. To enable the Inputs Backup function:

- 1. Access the **Advanced Settings** menu.
- 2. Turn the **<MENU>** knob until **Inputs Backup** is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob until **Backup** is selected.
- 5. Press the **<MENU>** knob.
- 6. Turn the **<MENU>** knob clockwise or counterclockwise to select from **Disable** or **Enable**.

To set each Backup:

- Access the <u>Advanced Settings</u> menu.
- 2. Turn the **<MENU>** knob until **Inputs Backup** is selected.
- 3. Press the <MENU> knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to select from **Backup 1** (sets an Input Backup for the HDMI input), **Backup 2** (sets an Input Backup for the VGA2 input), **Backup 3** (sets an Input Backup for the CVBS1 input), or **Custom Backup** (Sets an Input Backup for a selected input).
- 5. Press the **<MENU>** knob.
- 6. For Backup 1, Backup 2, or Backup 3, skip to step 9.
- 7. For **Custom Backup**, Turn the **<MENU>** knob clockwise or counterclockwise to select to which input to assign a backup, from **DVI**, **VGA3**, **CVBS2**, **DP**, or **VGA1**.
- Press the <MENU> knob.
- Turn the <MENU> knob clockwise or counterclockwise to select which input to assign as the selected Backup, from DVI, VGA3, CVBS2, DP, VGA1, or NULL (no backup for the selected input).
- 10. Press the **<MENU>** knob.
- 11. Repeat steps 4-10 until the Backups are all set as desired.

Output Resolution

This setting determines the video resolution of the output available from the VGA OUT and DVI OUT ports on the real panel of the Vivid Drive 28N. To access the Output Resolution menu:

- 1. Access the **Advanced Settings** menu.
- Turn the <MENU> knob until Output Resolution is selected.
- 3. Press the **<MENU>** knob.

Preset Output Resolution

To use a Preset Resolution:

- 1. Access the **Output Resolution** menu.
- 2. Turn the <MENU> knob until Preset Resolution is selected.
- Press the <MENU> knob.
- Turn the <MENU> knob clockwise or counterclockwise to select a resolution, from 1024x768, 1280x1024, 1366x768, 1440x900, 1920x1080, 1920x1200, or 2048x640.
- 5. Press the <MENU> knob.



Custom Output Resolution

To set a Custom Resolution, follow the instructions below.

- 1. Set the width.
 - a. Access the **Output Resolution** menu.
 - b. Turn the <MENU> knob until Custom Resolution is selected.
 - c. Press the <MENU> knob.
 - d. Turn the <MENU> knob until Width (H) is selected.
 - e. Press the <MENU> knob.
 - f. Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the width, from 800–3840.
 - g. Press the **<MENU>** knob.
- Set the height.
 - a. From having set the width, turn the <MENU> knob until Height (V) is selected.
 - b. Press the **<MENU>** knob.
 - Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the height, from 600–1920.
 - a. Press the <MENU> knob.
- 3. Set the refresh rate.
 - a. From having set the height, turn the <MENU> knob until Custom Refresh Rate is selected.
 - b. Press the **<MENU>** knob.
 - Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the refresh rate, from 24–60Hz.
 - d. Press the **<MENU>** knob.
- 4. Apply the changes.
 - a. From having set the refresh rate, turn the <MENU> knob until Apply is selected.
 - b. Press the **<MENU>** knob to save the custom output resolution and apply it.

Cabinet Settings

The Cabinet Settings allow the firmware of the connected panels to be updated through the Vivid Drive 28N, temporarily or permanently. To access the Cabinet Settings menu:

- 1. Access the **Advanced Settings** menu.
- 2. Turn the **<MENU>** knob until **Cabinet Settings** is selected.
- 3. Press the <MENU> knob.

Temporary Panel Firmware Update

Using this setting will send a selected pre-loaded file to the connected panels. The connected panels will return to their previous setting upon cycling their power.

- 1. Access the **Cabinet Settings** menu.
- 2. Turn the <MENU> knob until Load RCFG Files is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to select which file to send to the connected panels.
- 5. Press the **<MENU>** knob.

Permanent Panel Firmware Update

To permanently save the temporarily loaded firmware update to the connected panels:

- 1. From the **Cabinet Settings** menu.
- 2. Turn the <MENU> knob until Save to RV Card is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to select **No** (do not save permanently) or **Yes** (save permanently).
- 1. Press the **<MENU>** knob.

Display Brightness

To change the brightness of the OLED display on the Vivid Drive 28N:

- 1. Access the **Advanced Settings** menu.
- 2. Turn the <MENU> knob until OLED Brightness is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob clockwise or counterclockwise to increase or decrease the brightness, from 6–15.
- 5. Press the **<MENU>** knob.



Firmware Version

To view the current firmware version of the Vivid Drive 28N:

- 1. Access the **Advanced Settings** menu.
- 2. Turn the <MENU> knob until HW Version is selected.
- 3. Press the **<MENU>** knob.

Factory Reset

To reset the Vivid Drive 28N to factory default settings:

- 1. Press the **<MENU>** knob to access the menu.
- 2. Turn the **<MENU>** knob until **Factory Reset** is selected.
- 3. Press the **<MENU>** knob.

Communication Settings

The Communication Settings include the communication method preference and the network settings such as the IP address. To access the Communication Settings menu:

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

Communication Mode

The Communication Mode setting determines which connection will take priority if both the USB and RJ45 ports are connected.

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

Network Settings

The Network Settings include the IP Address and the Subnet Mask. To access the Network Settings menu:

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

IP Configuration

To change between a default IP address and setting one manually:

- Access the <u>Network Settings</u> menu.
- Turn the <MENU> knob until Config IPV4 is selected.
- 3. Press the **<MENU>** knob.
- Turn the <MENU> knob clockwise or counterclockwise to select Manually (uses a custom IP address) or Auto (uses a default IP address).
- 5. Press the **<MENU>** knob.

Custom IP Address

To set a custom IP address:

- 1. Access the **Network Settings** menu.
- 2. Set Config IPV4 to Manually.
- 3. From the Network Settings menu, turn the <MENU> knob until IP Address is selected.
- 4. Press the <MENU> knob.
- 5. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the first number value in the IP address, from **1–223**.
- 6. Press the **<MENU>** knob.
- 7. Turn the **MENU>** knob clockwise or counterclockwise to increase or decrease the second number value in the IP address, from **0–255**.
- 8. Press the <MENU> knob.
- 9. Repeat steps 7 and 8 for the third and fourth number values in the IP address.
- 10. If necessary, repeat steps 5-9 until the IP address is set as desired.
- 11. Press **<ESC>** to return to the previous menu level.



Subnet Mask

To set the subnet mask:

- 1. Access the **Network Settings** menu.
- 2. Set Config IPV4 to Manually.
- 3. From the Network Settings menu, turn the <MENU> knob until Subnet Mask is selected.
- 4. Press the <MENU> knob.
- 5. Turn the **<MENU>** knob clockwise or counterclockwise to increase or decrease the first number value in the subnet mask, from **0–255**. Alternatively, use the numbered buttons on the front of the control panel to enter the desired value.
- 6. Press the **<MENU>** knob.
- 7. Repeat steps 5 and 6 for the second, third, and fourth number values in the subnet mask.
- 8. If necessary, repeat steps 5-7 until the subnet mask is set as desired.
- 9. Press **<ESC>** to return to the previous menu level.

Reset Network Settings

To reset the Network Settings to their default configuration:

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

Display Language

To change the display language:

- 1. Press the **<MENU>** knob to access the menu.
- 2. Turn the <MENU> knob until Language is selected.
- 3. Press the **<MENU>** knob.
- 4. Turn the **<MENU>** knob clockwise or counterclockwise to select the language, from **Zhōngwén** (Chinese), **English** (English), **Phās'ā thịy** (Thai), **Pyccкий** (Russian), or **Deutsch** (German).
- 5. Press the <MENU> knob.

NovaLCT/SmartLCT Software

The Vivid Drive 28N can be configured by a computer running the NovaLCT or the SmartLCT software, through a USB of ethernet connection. You can download the NovaLCT and the SmartLCT software from www.chauvetdj.com/products/vivid-drive-28n.

For instructions on the use of the NovaLCT or the SmartLCT software, download the respective User Manuals for each application from www.novastar.tech/download.



5. Maintenance

Product Maintenance

Dust build-up reduces light output performance and can cause overheating. This can lead to reduction of the light source's life and/or mechanical wear. To maintain optimum performance and minimize wear, clean your lighting products at least twice a month. However, be aware that usage and environmental conditions could be contributing factors to increase the cleaning frequency.

To clean the product, follow the instructions below.

- 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 surface/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 (350 mm)
 1.7 in (44 mm)
 4.8 lb (2.2 kg)

Note: Dimensions in inches are rounded.

Power

Power Supply Type Switching (internal)	Range 100 to 240 VAC, 50/60 Hz	Voltage Selection Auto-ranging
Parameter Parameter	120 V, 60 Hz	230 V, 50 Hz
Consumption Operating Current	42 W 0.7 A	42 W 0.4 A
Power I/O	U.S./Worldwide	UK/Europe
Power input connector Power Cord plug	IEC Edison (U.S.)	IEC Local Plug

Connections

Input	Purpose	Output	Purpose
2 USB Type B	Software Connection, Backup/Update Connection	1 USB Type A	Backup/Update Connection
1 Ethernet RJ45	Linking Connection		

Thermal

Maximum External Temperature	Cooling System
104 °F (40 °C)	Convection

Control

PC Software	Control Protocol
NovaLCT and SmartLCT	Novastar

Ordering

Product Name	Item Code	UPC Number
Vivid Drive 28N	99081537	781462218850





Video

Maximum Supported Panels **Maximum Supported Resolution Maximum Supported LEDs** 1,310,720

30 Vivid 4 panels per RJ45 1920x1080

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

	품	D	<u>ح</u>	<u>ح</u>	<u>\</u>		
Source Resolution	HDMI	DΥ	VGA1	VGA2	VGA3	Type	Shown on Display
720x480i59.94	~	0	0	0	0	SD	720x240@60Hz
720x487p59.94	~	~	~	~	\Diamond	ED	720x480@60Hz
720x576p50	~	~	\Diamond	\Diamond	0	LD	720x576@50Hz
1920x1080p30	~	~	\Diamond	\Diamond	0	HD	1080P@30Hz
1920x1080p29.97	~	~	\Diamond	\Diamond	0		10001 @30112
1920x1080p25	>	~	\Diamond	\Diamond	0		1080P@25Hz
1920x1080p24	~	~	\Diamond	\Diamond	0		1080P@24Hz
1920x1080p23.98	~	~	\Diamond	\Diamond	0		10001 @24112
1280x720p60	>	~	~	~	\		720P@60Hz
1280x720p59.94	~	~	~	~	\		7201 @00112
1280x720p50	>	~	\Diamond	\Diamond	0		720P@50Hz
1280x720p30	~	~	0	0	0		720P@30Hz
1280x720p29.97	~	~	0	0	0		7201 @30112
1280x720p25	>	~	\Diamond	\Diamond	0		720P@25Hz
1920x1080p60	~	~	0	0	\	3G	1080P@60Hz
1920x1080p59.94	~	~	0	0	<		10001 @00112
1920x1080p50	~	~	0	0	0		1080P@50Hz



Returns

In case you need to get support or return a product:

- If you are located in the U.S., contact Chauvet World Headquarters.
- If you are located in the U.K. or Ireland, contact Chauvet Europe Ltd.
- If you are located in Benelux, contact Chauvet Europe BVBA.
- If you are located in France, contact Chauvet France.
- If you are located in Germany, contact Chauvet Germany.
- If you are located in Mexico, contact Chauvet Mexico.
- If you are located in any other country, DO NOT contact Chauvet. Instead, contact your local distributor. See www.chauvetdj.com for distributors outside the U.S., U.K., Ireland, Benelux, France, Germany, or Mexico.



If you are located outside the U.S., U.K., Ireland, Benelux, France, Germany, or Mexico, contact your distributor of record and follow their instructions on how to return Chauvet products to them. Visit our website www.chauvetdj.com for contact details.

Call the corresponding Chauvet Technical Support office 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 for the return.

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

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

Clearly label the package with the 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.

Before sending the product, clearly write 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
Chauvet World Headquarters	
Address: 5200 NW 108th Ave.	Voice: (844) 393-7575
Sunrise, FL 33351	Fax: (954) 756-8015
Voice: (954) 577-4455	Email: chauvetcs@chauvetlighting.com
Fax: (954) 929-5560	
Toll Free: (800) 762-1084	Website: www.chauvetdj.com
Chauvet Europe Ltd	
Address: Unit 1C	Email: <u>UKtech@chauvetlighting.eu</u>
Brookhill Road Industrial Estate	
Pinxton, Nottingham, UK	Website: www.chauvetdj.eu
NG16 6NT	
Voice: +44 (0) 1773 511115	
Fax: +44 (0) 1773 511110	
Chauvet Europe BVBA	
Address: Stokstraat 18	Email: BNLtech@chauvetlighting.eu
9770 Kruishoutem	
Belgium	Website: www.chauvetdj.eu
Voice: +32 9 388 93 97	
Chauvet France	
Address: 3, Rue Ampère 91380 Chilly-Mazarin	Email: FRtech@chauvetlighting.fr
France	Website: www.chauvetdj.eu
Voice: +33 1 78 85 33 59	
Chauvet Germany	
Address: Bruno-Bürgel-Str. 11 28759 Bremen	Email: <u>DEtech@chauvetlighting.de</u>
Germany	Website: www.chauvetdj.eu
Voice: +49 421 62 60 20	
Chauvet Mexico	
Address: Av. de las Partidas 34 - 3B (Entrance by Calle 2)	Email: servicio@chauvet.com.mx
Zona Industrial Lerma	Website: www.chauvetdj.mx
Lerma, Edo. de México, CP 52000	
Voice: +52 (728) 690-2010	

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