

# **Color Pipe**

Color Pipe settings ensure that incoming video signals are displayed accurately in the desired format. Each Input (4x 12G SDI, 1x HDMI) is assigned to a particular Color Pipe. Create up to 8 different Color Pipe settings at a time.



#### **Creating a New Color Pipe**

1. Navigate to MONITOR SETTINGS > FEED > COLOR PIPE.



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feed									
INPUT	L		Ð	СО	LOR PIP	E			
COLOR PIPE	A	A	ssign an	id config	gure color space and	d curve transfa	ormations to	o enable	
OUTPUT	<b>—</b>	H	DR and	SDR froi	m incoming log-bas	ed signals.			
OUTPUT PAGE	<b>Đ</b>			E		6			
WIRELESS	((ı·		Ø	Enable	e Color Pipe				
image			((t·						
			1						
BACKLIGHT	14				None				
CALIBRATION	*								
APPEARANCE	1								
controls			NEW	COLOR	R PIPE		+		
HEADPHONES	$\bigcirc$								
IMAGE ROTATE	Ś								
ANAMORPHIC	•								

2. Scroll down and tap **NEW COLOR PIPE +**.



OUTPUT PAGE	•		hla Calaa Dia a		
WIRELESS	((ı	S Ena	ble Color Pipe		
image		• ((t·			
		③ 1 ●			
BACKLIGHT	244		None		
CALIBRATION	*				
APPEARANCE	1				
controls		NEW COL	OR PIPE	+	
HEADPHONES	G				
IMAGE ROTATE	ç				

3. By default, the new Color Pipe standard is set to REC 709. Tap the scroll-down icon to make changes.



feed		Color Pipe 1 - R	EC 709		~
INPUT					
COLOR PIPE	Ø				
OUTPUT	<b>₩</b>	INPUT TYPE	$ \qquad \qquad$	SDR	C
OUTPUT PAGE	1	GAMUT		REC 709	ß
WIRELESS	((ı·	WHITE POINT	+	D65	ß
image		GAMMA		2.4	
BACKLIGHT	244	RANGE	$\left\ \leftrightarrow\right\ $	AUTO	ď
CALIBRATION	*	YCC STANDARD		AUTO	ß
APPEARANCE	1			DELETE 💼	
controls					

#### **CONFIGURABLE OPTIONS**



**INPUT TYPE** will be what signals the Monitor accepts. The default is **SDR**.

- SDR
- HDR
- LOG

\*NOTE: some of our monitors will accept HDR the monitor type will determine what options are available.

**GAMUT** is the color profile (These are your R G B parameters - where the points of the triangle are placed on the color profile). The default is **REC 709**.

\*NOTE: Some monitors will accept HDR. The monitor type will determine what options are available. \*\*NOTE When in a LOG input type, GAMUT will be replaced by CAMERA.

WHITE POINT can be adjusted to further move the white point inside the color Gamut.

**GAMMA** curve affects highlights and shadows. This should be matched to your camera's output (i.e. if the camera is outputting a 2.2 gamma curve, the color pipe should be matched to 2.2).

RANGE has three options:

- AUTO: The system will make a calculation based on ingest.
- LEGAL: Based on Broadcast standards for the Legal range of the color spectrum.

• FULL: This will be a complete spectrum of the color range

**YCC STANDARD** is the standard you use when converting YCC data to RGB. If unsure, use **AUTO** to match video metadata.

- AUTO
- MATCH GAMUT
- REC 601
- **REC 709**
- REC 2020

\*NOTE: It's important to know what type of signal you are sending, if you are unsure, it's best to leave set to Auto.

#### Assigning a Color Pipe Setting to an Input

- 1. Navigate to MONITOR SETTINGS > FEED > COLOR PIPE.
- 2. Select the input.



			MONITOR SETTINGS
feed			
INPUT	63	🐶 COLOR PIPE	
COLOR PIPE	Ø	Assign and configure color space and curve transformation	ons to
OUTPUT	<b>.</b>	enable HDR and SDR from incoming log-based signals.	
OUTPUT PAGE	Đ.	Eachla Calar Bina	
WIRELESS	((ı		
image		🤶 🛛 NONE 🗸 🗸	
			-
BACKLIGHT		(a) 2 ● REC 709 ~	
CALIBRATION	^		
APPEARANCE		NONE V	
controls		REC 709	
		808 BT.709 @100 NITS	
HEADPHONES	•••		
IMAGE ROTATE	G	HDR SONY > HDR (ST.2084)	
ANAMORPHIC	0		
DSLR SCALE	ដ្ឋ	NEW COLOR PIPE	+
INTERLACE	lili		

3. Select the Color Pipe setting you want to assign to the input.



C O	LOR PIPE - SDI 2	
Select	a Color Pipe to apply to SDI 2 input	
Rec	709	
SDR	BT.709	
HDR	ST.2084	

**NOTE:** If you don't see a Color Pipe that corresponds to your input, create a new Color Pipe setting (refer to the instructions <u>here</u>).

#### **Applying a Color Pipe Conversion**

The user can display an SDR or HDR conversion on the SmallHD monitor using the Color Pipe Display setting for log-based sources. Depending on the monitor type, the user may choose to convert the LOG video to SDR or HDR.

1. Navigate to **MONITOR SETTINGS > FEED > COLOR PIPE**.



#### 2. Scroll down and select a Color Pipe, or tap **NEW COLOR PIPE +**.

			MONITOR SETTINGS
feed			
INPUT	۵	COLOR PIPE	
COLOR PIPE		Assign and configure color space and curve transformatio	ns to
OUTPUT	Ţ	enable HDR and SDR from incoming log-based signals.	
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image			
BACKLIGHT	<u></u>		
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APPEARANCE		NONE V	
controls		REC 709	~
HEADPHONES	$\cap$	SDR BT.709 @100 NITS	~
IMAGE ROTATE	Ð	HDR SONY > HDR (ST.2084)	~
ANAMORPHIC	•		
DSLR SCALE	5	NEW COLOR PIPE	+
INTERLACE			

3. Tap INPUT TYPE, then select LOG from the drop-down menu.



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WHITE POINT	+	D65	ď
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RANGE	$\ \!$	AUTO	ď
YCC STANDARD		AUTO	ď
Select the ty	pe of inco	oming signal in order to acc	urately

Color Pipe 1 - Rec 709	~
INPUT TYPE	
SDR	
LOG	
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	Z
Select the type of incoming signal in order to ac	curately



4. Scroll down to **DISPLAY**, then make a selection from the **CONVERT TO** menu.

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DISPLAY 🖵				
CONVERT TO	$\oplus$	SDR	ď	
CONVERT WITH	<u> </u>	MANUFACTURER'S LUT	ď	
GAMUT		REC 709	ď	
WHITE POINT	*	D65	ď	
GAMMA		2.4		
		DELETE 🛗		
NEW COLOR P	IPE		+	

ycc standard 🗸 auto		
CONVERT TO		
DO NOT CONVERT	C	
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NEW COLOR PIPE	+	



5. Scroll up and tap the input to which you want to apply the conversion, then select the Color pipe.