BLUEFISH444 ADOBE QUICK START v5.13.2

BLUEFISH444 HD-SDI SUPPORT

Bluefish444 ADOBE User guide

Introduction

Bluefish444, the Professionals choice, supports Adobe Creative Suite to bring true uncompressed 12-bit HD-SDI IO to users of Adobe Premiere Pro, After Effects, Audition, and the other Adobe Mercury Transmit™ enabled applications.

Bluefish444 has been the choice of professionals requiring the highest quality HD-SDI input and output solutions. Supporting 4:2:2 YUV, 4:4:4 RGB, 3D, and 4K HD-SDI, 12-bit video processing and the most accurate hardware scalers available in the market today.

Bluefish444 have a long history of providing OEM solutions to industry leading developers requiring high quality IO solutions capable of performing day in day out all year around. The range of Bluefish444 video hardware caters to Video Professionals that require tried and tested reliability combined with the true uncompressed input and output solutions. Supporting SD/HD/2K/4K Capture & Playback, 12-bit video processing combined with hardware scaling and a quality HDMI video preview. All cards are compatible with the world class DI tool, Bluefish444's own Symmetry application.

ADOBE compatible Bluefish444 hardware

Create|3D Ultra	Epoch | Horizon	Epoch | 2K Horizon
Create|3D	Epoch | Core	Epoch | 2K Core
Create|HD	Epoch | Ultra	Epoch | 2K Ultra
Epoch | 4K Supernova	Epoch | 4K Supernova Turbo	
Epoch | 4K Supernova S+	Epoch | 4K Supernova S+ Turbo	
Epoch | Neutron	Epoch | 4K Neutron	Epoch | 4K Neutron Turbo

	4:2:2 YUV 8-bit	4:2:2 YUV 10-bit	4:4:4 RGB 8-bit	4:4:4 RGB 10-bit	4:4:4 RGB 12-bit
SD(625/525) @25, 29.97fps	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	
HD 720P @23, 25, 50, 59, 60fps	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron			
HD 1080i @25, 29, 30fps	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron
HD1080PsF @23, 24, 25, 29, 30 fps	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron
HD 1080P @23, 24, 25, 29, 30fps	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron
HD 1080P @48, 50, 59, 60fps	4K Supernova 4K Neutron	4K Supernova 4K Neutron			
2Kx1080P/PsF @23, 24, 25, 29, 30fps	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron	4K Supernova 4K Neutron Neutron
2Kx1080P @48, 50, 59, 60fps	4K Supernova 4K Neutron	4K Supernova 4K Neutron			
UHD & 4K P @23, 24, 25fps	4K Supernova 4K Neutron Turbo	4K Supernova Turbo 4K Neutron Turbo	4K Supernova 4K Neutron Turbo	4K Supernova Turbo 4K Neutron Turbo	
UHD & 4K P @ 29, 30fps	4K Supernova 4K Neutron Turbo	4K Supernova Turbo 4K Neutron Turbo	4K Supernova Turbo 4K Neutron Turbo	4K Supernova Turbo 4K Neutron Turbo	
UHD & 4K P @ 48, 50, 59, 60fps	4K Supernova Turbo 4K Neutron Turbo	4K Supernova Turbo 4K Neutron Turbo			

Support and Downloads

Bluefish444 have a dedicated page for Adobe users to find information on support, driver downloads, user documentation, Bluefish444 and Adobe specific workflows
http://www.bluefish444.com/adobe/

Installation guide

Bluefish444 includes the Adobe Mercury Transmit Plug-in for Adobe CS6 and Adobe CC in our driver installation package.
For the latest installer please refer to the Bluefish444 website
 http://www.bluefish444.com/adobe/

Included in this installer package:

- Bluefish444 Driver
- Firmware updater
- Bluefish444 feature application
- ASIO audio drivers
- 3rd party application Plug-ins
- RS422 port to virtual Serial port driver
- Symmetry Software

Steps to install Bluefish444 driver package for use with ADOBE software

1. Install ADOBE software and 3rd party applications as required.
2. Physically install the Bluefish444 HD-SDI IO hardware in the recommended PCI express slot refer to the hardware user manual for details on physical card installation. The Bluefish444 user manual can be downloaded from the Manual section of the Bluefish444 website.
   http://www.bluefish444.com/support/downloads/
3. Download, save, and run the current bluefish444 retail installer package, available at the download section of the Bluefish444 website.
   http://www.bluefish444.com/support/downloads/
4. The Bluefish444 installer package may request that you update your hardware to the latest firmware. Bluefish444 recommend running the firmware included in the latest installer for use with all 3rd party applications.

Your Bluefish444 hardware should now be installed and ready for use with supported ADOBE software products.

*If the appropriate Plug-ins for your application has not been installed for any reason, or if any application does not detect the Bluefish444 hardware. Please uninstall the driver package through the Windows Control Panel > Uninstall. Restart the workstation and run the install package again.

BLUEFISH444 HD-SDI SUPPORT
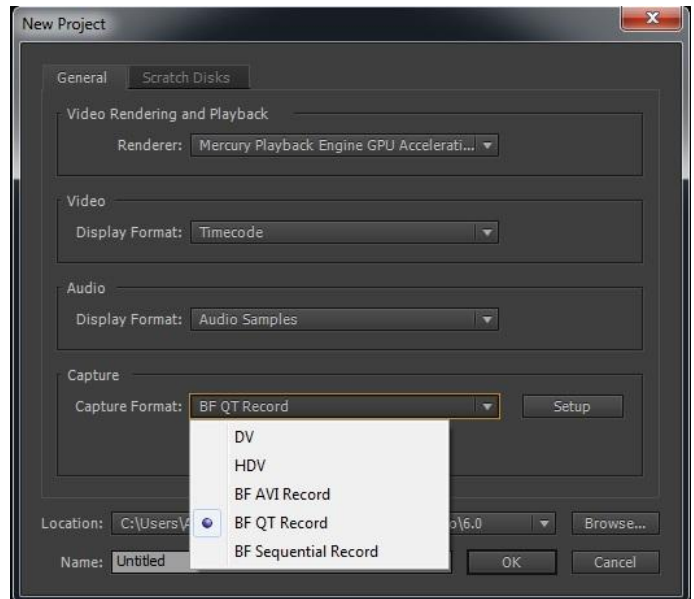
ADOBE Premiere Pro CC 2015

Open Adobe Premiere Pro select **New Project**

Select the **Capture Format >**

>   **BF AVI Record**
>   **BF QT Record**
>   **BF Sequential Record**

Select **Setup >**

VIDEO

>   **AVI YUV 8-bit**
>   **QuickTime v210 YUV 10-bit**
>   **QuickTime 2VUY YUV 8-bit**
>   **Cineon RGB 10-bit**
>   **DPX RGB 10-bit**
>   **TGA RGBA 8-bit**

AUDIO

>   **Stereo (2 channels)**
>   **5.1 Surround-Sound (6 channels)**

Timecode Source

>   **RP188 LTC – (HD)**
>   **RP188 VITC –(HD)**
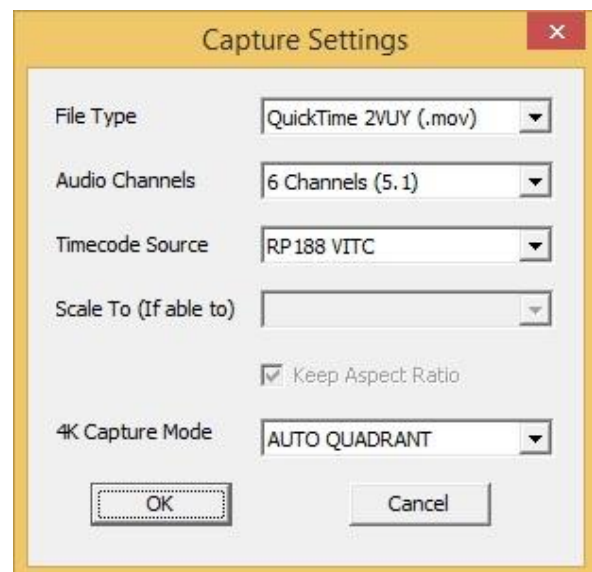>   **RS422 – (SD)**

Scale To

>   **Select a compatible scaling resolution**

4K Capture Mode
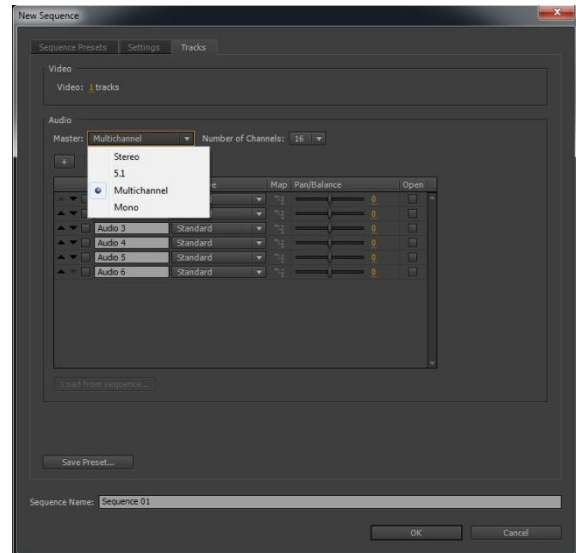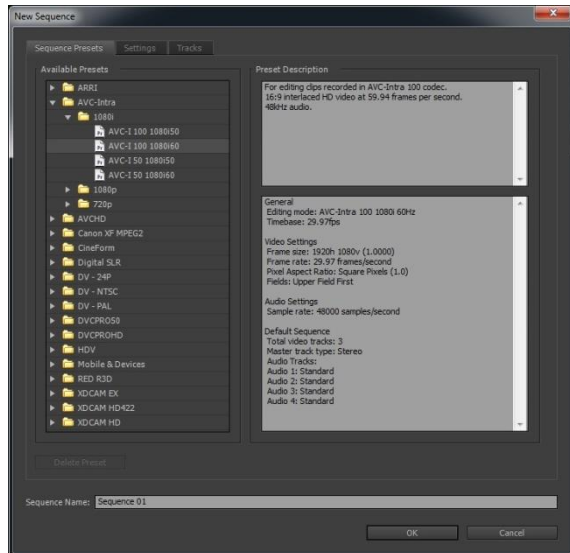
>   **None – Enable SD to 2K capture**
>   **Auto Quadrant – Enable Quadrant based 4K capture across 4 SDI cables.**
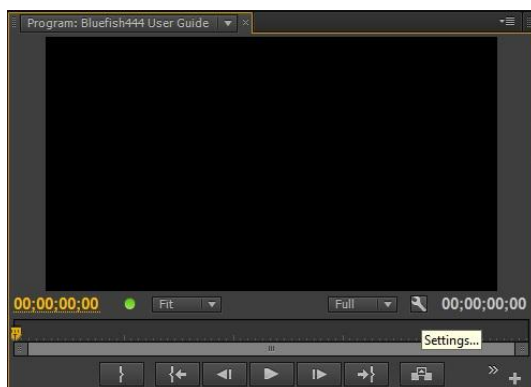
5

BLUEFISH444 HD-SDI SUPPORT

Configuring the ADOBE Premiere Pro Sequence

Adobe Mercury Transmit Plug-in no longer requires a specific Bluefish444 Sequence preset. Any existing Premiere Pro sequence preset will now provide Video preview from within Adobe Premiere Pro. Bluefish444 also include legacy presets for backwards compatibility and to allow custom render formats such as 4K XAVC.

To output up to 16 channels of embedded SDI audio with 8 channels of AES select *Multichannel* from the *Master* selection of the *Tracks* tab. The Adobe audio mixer will now allow you to send audio to the appropriate Bluefish444 audio channels, 1-16.

Configuring the ADOBE Premiere Pro Timeline

Within the Program window you can select the *Spanner* symbol. We recommend enabling the *Show Dropped Frames Indicator* this allows you to track dropped frames during playback and Export to tape.

Within the Program window the playback quality can be set by right clicking and selecting the *Playback Resolution* and *Paused Resolution.*
Bluefish444 recomends that these two options are set to the same resolution when possible.

Full Adobe sends a full resolution frame to the Bluefish444 hardware
1/2 Adobe sends a half resolution frame to the Bluefish444 hardware, with Auto scaling enabled the image will be scaled back to the Sequence resolution
1/4 Adobe sends a quarter resolution frame to the Bluefish444 hardware, with Auto scaling enabled the image will be scaled back to the Sequence resolution

BLUEFISH444 HD-SDI SUPPORT

Configuring the ADOBE Premiere Pro Preferences

Many of the Adobe Premiere Pro setting and Bluefish444 hardware configurations must be made specific to the user environment.
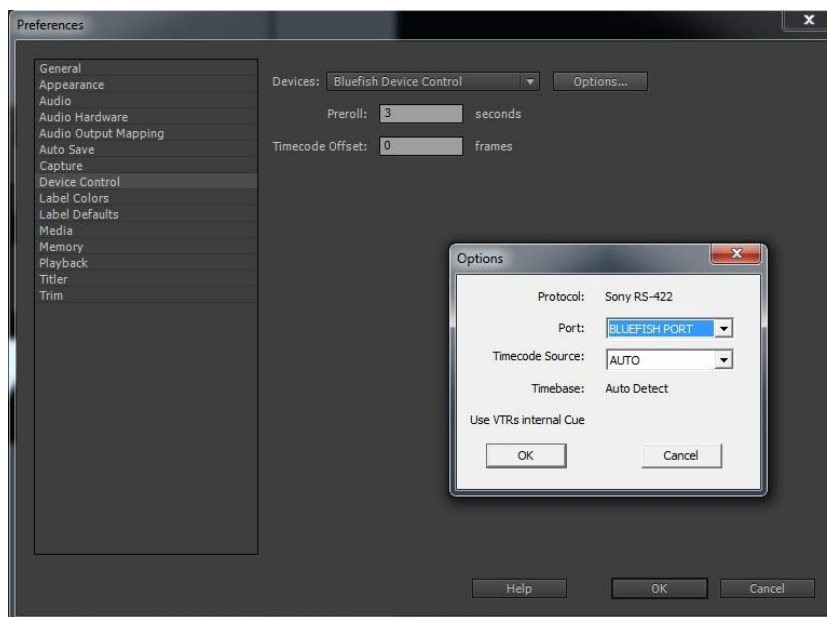
Select Edit > Preferences > Audio Hardware
unless you specifically require the Bluefish444 ASIO drivers choose Premiere Pro WDM Sound

Select Edit > Preferences > Device Control

Broadcast Video Tape Recorders can be connected via the Bluefish444 RS422 port.

Select **Bluefish Device Control > Options > Port: BLUEFISH PORT > Time-code Source: AUTO**
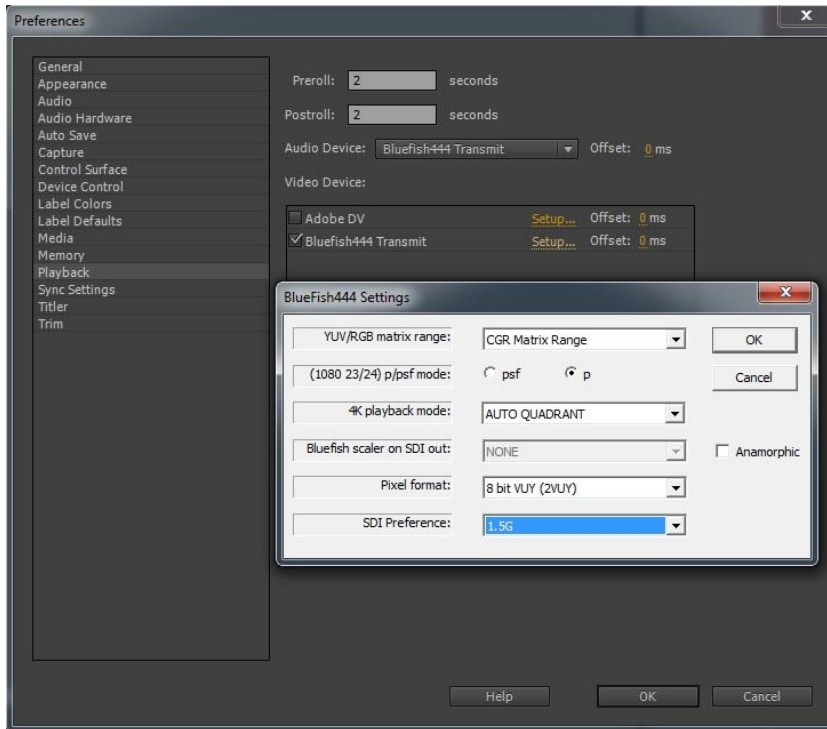
BLUEFISH444 HD-SDI SUPPORT

Select Edit > Preferences > Playback

Configure the Default Player to Adobe Player, the Audio Device to Bluefish444, ensure the Bluefish444 Video Device tick box is selected.

Select Bluefish444 > Setup

YUV/RGB Matrix Range:
CGR Matrix *Range for SDI output of source material with Full Range values*
SMPTE Matrix *Range for SDI output of source material with SMPTE Range values*

P / PsF mode:
Progressive *SDI output*
Progressive Segmented Frames *SDI output*

4K Playback mode:
None *for no 4K support*
Auto Quadrant *to allow 4K HD-SDI as Quad link SDI*
2 Sample Interleave *to allow 4K HD-SDI as 2 Sample Interleave and 4K HDMI*

Bluefish Scaler on SDI out:
None *for Adobe software scaling.*
AUTO Frame Size *for bluefish hardware scalers to determine the scaling and padding for the SDI output. Recommended for Non-full raster workflows (1440x1080)*
Format Specific *for applying an Up/Down/Cross conversion to the SDI output,*
e.g. **1080i50 720P50 > PAL***, will Down convert either* **1920x1080 i50** *or* **1280x720 p50** *to* **720x576 i50(PAL)***.*

Pixel Format:
Defines the pixel format of the frames to be transferred to the Bluefish444 hardware.

BLUEFISH444 HD-SDI SUPPORT

SDI Preference:

422 YUV Single Link 1.5G YUV 422 10bit SDI A

4224 YUVA fill + Key 1.5G YUV 422 10bit SDI A, Alpha(Key) 422 10bit SDI B

422 3G Level A 3G Level A YUV 422 10bit SDI A(HFR signals)

422 3G Level B 3G Level B YUV 422 10bit SDI A(HFR signals)

4444 RGB 10bit 1.5G Dual Link 1.5G RGB 4444 10bit SDI A+B

4444 RGB 10bit 3G A 3G Level A RGB 444 10bit SDI A

4444 RGB 10bit 3G B 3G Level B RGB 444 10bit SDI A

4444 RGB 12bit 1.5G Dual Link 1.5G RGB 4444 12bit SDI A+B

4444RGB 12bit 3G A 3G Level A RGB 444 12bit SDI A

4444 RGB 12bit 3G B 3G Level B RGB 444 12bit SDI A

BLUEFISH444 HD-SDI SUPPORT

After Effects CC 2015

Bluefish444 provide an HD-SDI video preview from within After Effects version 13 through the Adobe Mercury Transmit plug-in. Depending on the Hardware configuration this video preview supports up to 4096x2160 (4K resolution for Real Time and Non-Real Time video preview)

Functionality of After Effects version 13 when using the Adobe Mercury Transmit system is equal to the support provided in Adobe Premiere Pro, as listed above.

Notes

At this point in time the following SDI modes are not supported from inside After Effects v13.

SDI Preference:
4224 YUVA fill + Key 1.5G YUV 422 10bit SDI A, Alpha (Key) 422 10bit SDI B

23rd December 2015

Bluefish444 Epoch|4K Supernova connectors

Connector	Quad In	Quad Out	2 In 2 Out
1	Input A	Output A	Output A
2	Input B	Output B	Input A
3	Input C	Output C	Output B
4	Input D	Output D	Input B
5	NA	Genlock	Genlock

Epoch 4K supernova supports many video modes, signal types and frame rates.

To understand the capabilities of the hardware and each 3G HDSDI connector please refer to Table 1b.

BLUEFISH444 HD-SDI SUPPORT

Bluefish444 Epoch | 4K Supernova card setup (Quad Out)

Adobe supports Epoch | 4K Supernova up to 4K 30fps via Quad Link 1.5G SDI

Adobe supports Epoch | 4K Supernova Turbo up to 4K 60fps via Quad Link 3G SDI Level A/B

Video Mode	SDI connector card 1				SDI connector Card 2			
	SDI 1	SDI 2	SDI 3	SDI 4	SDI 1	SDI 2	SDI 3	SDI 4
4K Supernova								
SD	270M							
HD/2K YUV 1.5G	1.5G							
HD/2K YUV 3G	3G Level A/B							
HD/2K RGB 1.5G	1.5G Link A	1.5G Link B						
HD/2K RGB 3G	3G Level A/B							
4K YUV 1.5G	1.5G quad 1	1.5G quad 2	1.5G quad 3	1.5G quad 4				
4K RGB 3G	1.5G quad 1	1.5G quad 2	1.5G quad 3	1.5G quad 4				
4K Supernova Turbo								
SD	270M							
HD/2K YUV 1.5G	1.5G							
HD/2K YUV 3G	3G Level A/B							
HD/2K RGB 1.5G	1.5G Link A	1.5G Link B						
HD/2K RGB 3G	3G Level A/B							
4K YUV 1.5G	1.5G quad 1		1.5G quad 2		1.5G quad 3		1.5G quad 4	
4K RGB 3G	3G A/B quad 1		3G A/B quad 2		3G A/B quad 3		3G A/B quad 4	
4K YUV 3G	3G A/B quad 1		3G A/B quad 2		3G A/B quad 3		3G A/B quad 4	

23rd December 2015

BLUEFISH444 HD-SDI SUPPORT

Bluefish444 Epoch | 4K Supernova card setup (2 In 2 Out)

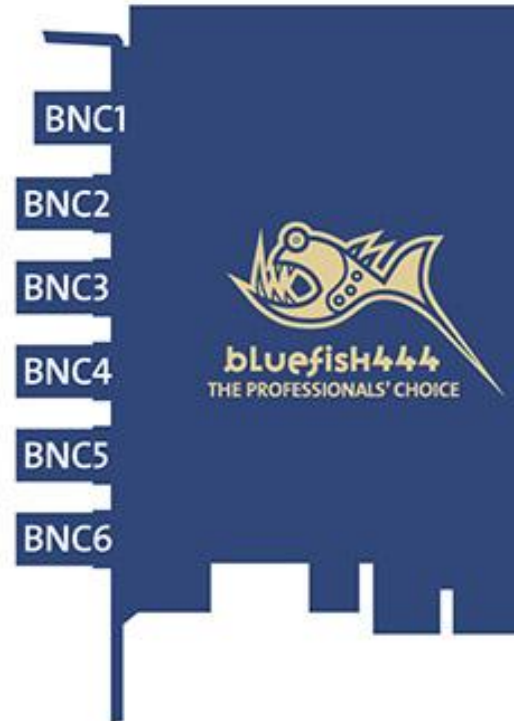Adobe supports Epoch | 4K Supernova up to 4K 30fps via Quad Link 1.5G SDI

Adobe supports Epoch | 4K Supernova Turbo up to 4K 60fps via Quad Link 3G SDI Level A/B

	SDI connector card 1				SDI connector Card 2			
Video Mode	SDI 1	SDI 2	SDI 3	SDI 4	SDI 1	SDI 2	SDI 3	SDI 4
4K Supernova								
SD	270M	270M Input A		270M Input B				
HD/2K YUV 1.5G	1.5G	1.5G Input A		1.5G Input B				
HD/2K YUV 3G	3G Level A/B	3G Input A		3G Input B				
HD/2K RGB 1.5G	1.5G Link A		1.5G Link B					
HD/2K RGB 3G	3G Level A/B	3G Input A		3G Input B				
4K Supernova Turbo								
SD	270M	270M Input A		270M Input B				
HD/2K YUV 1.5G	1.5G	1.5G Input A		1.5G Input B				
HD/2K YUV 3G	3G Level A/B	3G Input A		3G Input B				
HD/2K RGB 1.5G	1.5G Link A		1.5G Link B					
HD/2K RGB 3G	3G Level A/B	3G Input A		3G Input B				
4K YUV 1.5G	1.5G quad 1		1.5G quad 2		1.5G quad 3			1.5G input quad 4
4K RGB 3G	3G A/B quad 1		3G A/B quad 2		3G A/B quad 3			3G Input quad 4
4K YUV 3G	3G A/B quad 1		3G A/B quad 2		3G A/B quad 3			3G Input quad 4

BLUEFISH444 HD-SDI SUPPORT

Bluefish444 Epoch | 4K Supernova S+ connectors

Connector	Quad In	Quad Out	2 In 2 Out
1	NA	Copy A / BF Lock Out	Copy A / BF Lock Out
2	Input A	Output A	Output A
3	Input B	Output B	Input A
4	Input C	Output C	Output B
5	Input D	Output D	Input B
6	NA	Genlock	Genlock

Epoch | 4K Supernova S+ supports many video modes, signal types and frame rates.
To understand the capabilities of the hardware and each 3G HD-SDI connector please refer to Table 1b.

Epoch | 4K Supernova S+ Supports BF Lock generation on BNC 1. When Configuring 4K Modes with two Epoch | 4K Supernova S+ cards BF Lock will be enabled on BNC 1 and so should be connected to the Genlock input, BNC 6, of card two. This will allow card synchronisation for Quad Link signals across two cards.

BLUEFISH444 HD-SDI SUPPORT

Bluefish444 Epoch | 4K Supernova S+ card setup (Quad Out)

Adobe supports Epoch | 4K Supernova S+ up to 4K 30fps via Quad Link 1.5G SDI

Adobe supports Epoch | 4K Supernova S+ Turbo up to 4K 60fps via Quad Link 3G SDI Level A/B

Video Mode	SDI connector card 1				SDI connector Card 2			
	SDI 2	SDI 3	SDI 4	SDI 5	SDI 2	SDI 3	SDI 4	SDI 5
4K Supernova S+								
SD	270M							
HD/2K YUV 1.5G	1.5G							
HD/2K YUV 3G	3G Level A/B							
HD/2K RGB 1.5G	1.5G Link A	1.5G Link B						
HD/2K RGB 3G	3G Level A/B							
4K YUV 1.5G	1.5G quad 1	1.5G quad 2	1.5G quad 3	1.5G quad 4				
4K RGB 3G	3G A/B quad 1	3G A/B quad 2	3G A/B quad 3	3G A/B quad 4				
4K Supernova S+ Turbo								
SD	270M							
HD/2K YUV 1.5G	1.5G							
HD/2K YUV 3G	3G Level A/B							
HD/2K RGB 1.5G	1.5G Link A	1.5G Link B						
HD/2K RGB 3G	3G Level A/B							
4K YUV 1.5G	1.5G quad 1		1.5G quad 2		1.5G quad 3		1.5G quad 4	
4K RGB 3G	3G A/B quad 1		3G A/B quad 2		3G A/B quad 3		3G A/B quad 4	
4K YUV 3G	3G A/B quad 1		3G A/B quad 2		3G A/B quad 3		3G A/B quad 4	

BLUEFISH444 HD-SDI SUPPORT

Bluefish444 Epoch | 4K Supernova S+ card setup (2 In 2 Out)

Adobe supports Epoch | 4K Supernova S+ up to 4K 30fps via Quad Link 1.5G SDI

Adobe supports Epoch | 4K Supernova S+ Turbo up to 4K 60fps via Quad Link 3G SDI Level A/B
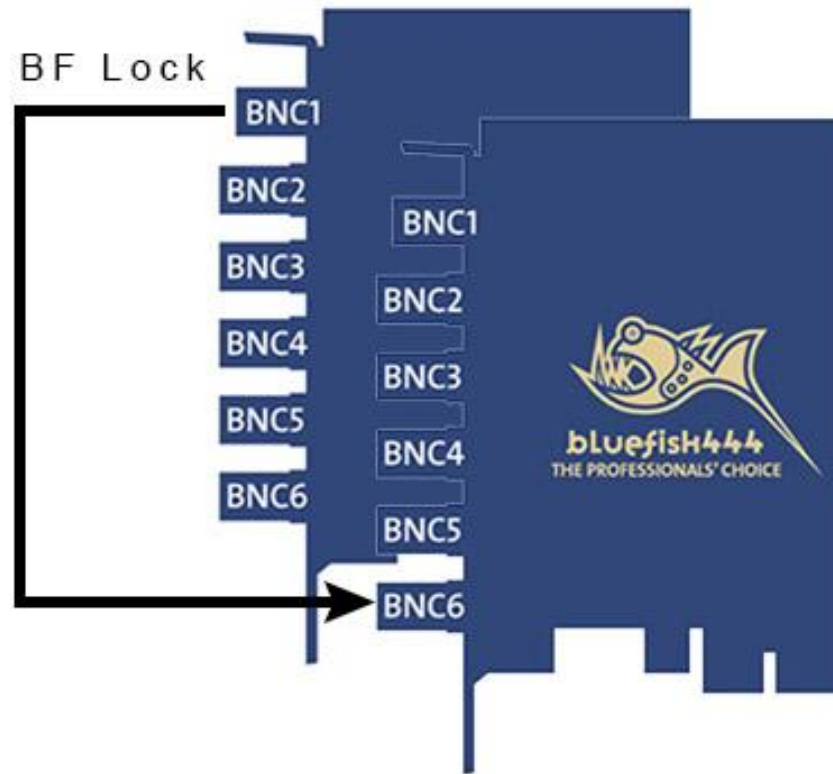
	SDI connector card 1				SDI connector Card 2			
Video Mode	SDI 2	SDI 3	SDI 4	SDI 5	SDI 2	SDI 3	SDI 4	SDI 5
4K Supernova S+								
SD	270M	270M Input A		270M Input B				
HD/2K YUV 1.5G	1.5G	1.5G Input A		1.5G Input B				
HD/2K YUV 3G	3G Level A/B	3G Input A		3G Input B				
HD/2K RGB 1.5G	1.5G Link A	1.5G Link A Input	1.5G Link B	1.5G Link B Input				
HD/2K RGB 3G	3G Level A/B	3G Input A		3G Input B				
4K Supernova S+ Turbo								
SD	270M	270M Input A		270M Input B				
HD/2K YUV 1.5G	1.5G	1.5G Input A		1.5G Input B				
HD/2K YUV 3G	3G Level A/B	3G Input A		3G Input B				
HD/2K RGB 1.5G	1.5G Link A		1.5G Link B					
HD/2K RGB 3G	3G Level A/B	3G Input A		3G Input B				
4K YUV 1.5G	1.5G quad 1	1.5G quad 1 IN	1.5G quad 2	1.5G quad 2 IN	1.5G quad 3	1.5G quad 3 IN	1.5G quad 4	1.5G quad 4 IN
4K RGB 3G	3G A/B quad 1	3G A/B quad 1 IN	3G A/B quad 2	3G A/B quad 2 IN	3G A/B quad 3	3G A/B quad 3 IN	3G A/B quad 4	3G A/B quad 4 IN
4K YUV 3G	3G A/B quad 1	3G A/B quad 1 IN	3G A/B quad 2	3G A/B quad 2 IN	3G A/B quad 3	3G A/B quad 3 IN	3G A/B quad 4	3G A/B quad 4 IN

BLUEFISH444 HD-SDI SUPPORT

Genlock and BF Lock

Epoch | 4K Supernova S+ cards allow for the generation of a proprietary sync signal, BF Lock, which can be fed into any Bluefish444 Genlock Input. When a BF Lock output is connected to the Genlock input of another Bluefish444 card you are able to share a common clock, or synchronisation between the two cards. Epoch | 4K Supernova S+ Turbo bundles should have this connection when operating in 4K video modes.

Bluefish444 Epoch | 4K Neutron connectors

Connector	Three In	Three Out	1 In 2 Out
MDR20 Breakout Connector			
HDMI	NA	HDMI out	HDMI out
1	Input A	Output A	Output A
2	Input B	Output B	Input A
3	Input C	Genlock / Output C	Genlock / Output B

Epoch | 4K Neutron supports many video modes, signal types and frame rates.

To understand the capabilities of the hardware and each 3G HD-SDI connector please refer to Table 1b.

18

BLUEFISH444 HD-SDI SUPPORT

Bluefish444 Epoch | 4K Neutron card setup (3 Out)

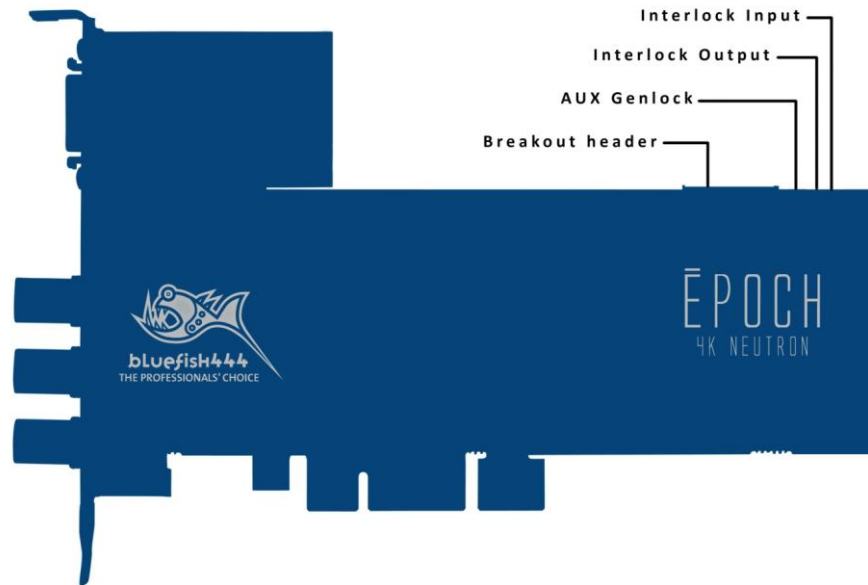Adobe supports Epoch | 4K Neutron up to 4K 30fps via Dual Link 3G Level B DS.

Adobe supports Epoch | 4K Neutron Turbo up to 4K 60fps via Quad Link 3G Level A.

Video Mode	SDI 1	SDI 2	SDI 3	SDI 1	SDI 2	SDI 3
4K Neutron						
SD	270M					
HD/2K YUV 1.5G	1.5G					
HD/2K YUV 3G	3G Level A/B					
HD/2K RGB 1.5G	1.5G Link A	1.5G Link B				
HD/2K RGB 3G	3G Level A/B					
4K YUV 3G (DS)	3G quad 1 & 2	3G quad 3 & 4				
4K Neutron Turbo						
SD	270M					
HD/2K YUV 1.5G	1.5G					
HD/2K YUV 3G	3G Level A/B					
HD/2K RGB 1.5G	1.5G Link A	1.5G Link B				
HD/2K RGB 3G	3G Level A/B					
4K YUV 1.5G	1.5G quad 1	1.5G quad 2		1.5G quad 3	1.5G quad 4	
4K RGB 3G	3G A/B quad 1	3G A/B quad 2		3G A/B quad 3	3G A/B quad 4	
4K YUV 3G	3G A/B quad 1	3G A/B quad 2		3G A/B quad 3	3G A/B quad 4	

19

BLUEFISH444 HD-SDI SUPPORT

Auxiliary Genlock and Interlock connections

Neutron cards feature an additional Auxiliary Genlock connector located internally on the top edge of the card. The Auxiliary Genlock input connects to the MDR20 Breakout.

Multiple Neutron cards may be locked together sharing a common clock. This is achieved by attaching the **Interlock cable** (Part Number CAB_ILOK) from the **Interlock Output** of one card to the **Interlock Input** of a second card.

BLUEFISH444 HD-SDI SUPPORT

Bluefish444 SDI Signal types and SDI Transport types

The table below shows the types of video signal that can be transported on various SDI types and how many cables might be required.

SDI Signal Type					SDI Transport Type				
TYPE	Frequency FPS	Resolution	Sampling	Colour Space	270M	1.5G	3G Level A	3G Level B	3G Level B DS
SD	@25, 29.97	625/525	422	YUV	1				
SD	@25, 29.97	625/525	444	RGB	2				
HD 720 P	@23, 25, 50, 59, 60	1280x720	422	YUV		1			
HD 1080 i	@25, 29, 30	1920x1080	422	YUV		1			
HD 1080 i	@25, 29, 30	1920x1080	444	RGB		2	1	1	
HD 1080 P/PsF	@23, 24, 25, 29, 30	1920x1080	422	YUV		1			
HD 1080 P/PsF	@23, 24, 25, 29, 30	1920x1080	444	RGB		2	1	1	
HD 1080 P	@ 48, 50, 59, 60	2048x1080	422	YUV		1	1	1	
2Kx1080 P/PsF	@23, 24, 25, 29, 30	2048x1080	422	YUV		1			
2Kx1080 P/PsF	@23, 24, 25, 29, 30	2048x1080	444	RGB		2	1	1	
2Kx1080 P/PsF	@48, 50, 59, 60	2048x1080	422	YUV		2	1	1	
UHD 1.77:1 P/PsF	@23, 24, 25, 29, 30	3840x2160	422	YUV		4			2
UHD 1.77:1 P/PsF	@23, 24, 25, 29, 30	3840x2160	444	RGB		8	4	4	
UHD 1.77:1 P/PsF	@48, 50, 59, 60	3840x2160	422	YUV		8	4	4	
UHD 1.89:1 P	@23, 24, 25, 29, 30	4096x2160	422	YUV		4			2
UHD 1.89:1 P	@23, 24, 25, 29, 30	4096x2160	444	RGB		8	4	4	
UHD 1.89:1 P	@48, 50, 59, 60	4096x2160	422	YUV		8	4	4	

Table 1b

23rd December 2015

Bluefish444 ADOBE support

General Information

Bluefish444 host a dedicated ADOBE webpage. Here you can find information on the latest supported features and hardware, along with installer updates and support contacts.

www.bluefish444.com/adobe

Contacting Support

Bluefish444 provide unlimited email and phone support to all registered customers for the life of the product warranty.

If you have any questions please contact support at:

support@bluefish444.com

support@bluefish444europe.com

For telephone support you must register your product at
www.bluefish444.com/support/techsupport

To help our representatives resolve your issues please have the following information on hand:

- System configuration and manufacture, motherboard type and devices installed
- SCSI or RAID controller card type as well as storage array configuration
- Operating System, and Version
- Applications installed, and Version
- Bluefish444 Serial number and product type
- Bluefish444 Installer version
- Contact number
- Company name