

# BarnColor



## *The Easiest Fiber Transport System To Set Up & Use*

- B** 32-Feeds Over 2 Fiber Strands
- B** 16 Forward/16 Return Feeds
- B** Use As Throw-Downs Or Racked
- B** Quick Setup & Easy To Use
- B** 32 Feeds Over 2 Strands; 2-RU Each Side



# BarnColor

## Easy SDI Transport

## BarnColor Ins, Outs & Cascade



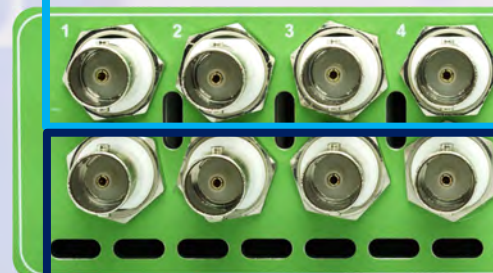
Easy To Use; Delightful To Set Up

- B** Units Function In Pairs; Local & Remote. SDI & Ethernet Versions Available.
- B** Accepts 4 x 3G-SDI Feeds, Converts To Fiber & Sends The Feeds To The Remote Unit.
- B** Receives 4 x 3G-SDI Return Feeds From The Remote Unit, Converts Them To Copper & Provides BNC Outputs For Each.
- B** 4 x 3G-SDI Forward Feeds & 4 x 3G-SDI Return Feeds Over 2 Fiber Strands (uses Neutric OpticalCON DUO or LC Connectors).
- B** 4 Different Color Pairs Available; Allows To Cascade Each Unit.
- B** Use All 4 Color Pairs To Send 16 x 3G-SDI Feeds & Receive 16 x 3G-SDI Return Feeds.

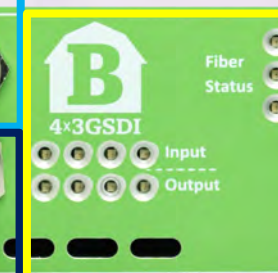
**Cascade Up To 4 Pairs Of Different Colors & Transport Up To 32 Feeds; 16 Forward & 16 Return Feeds.**



Accepts 4 x 3G-SDI Feeds, Converts To Fiber & Sends Feeds To The Remote Unit.



Receives 4 x 3G-SDI Return Feeds From The Remote Unit, Converts Them To Copper & Provides BNC Outputs For Each.

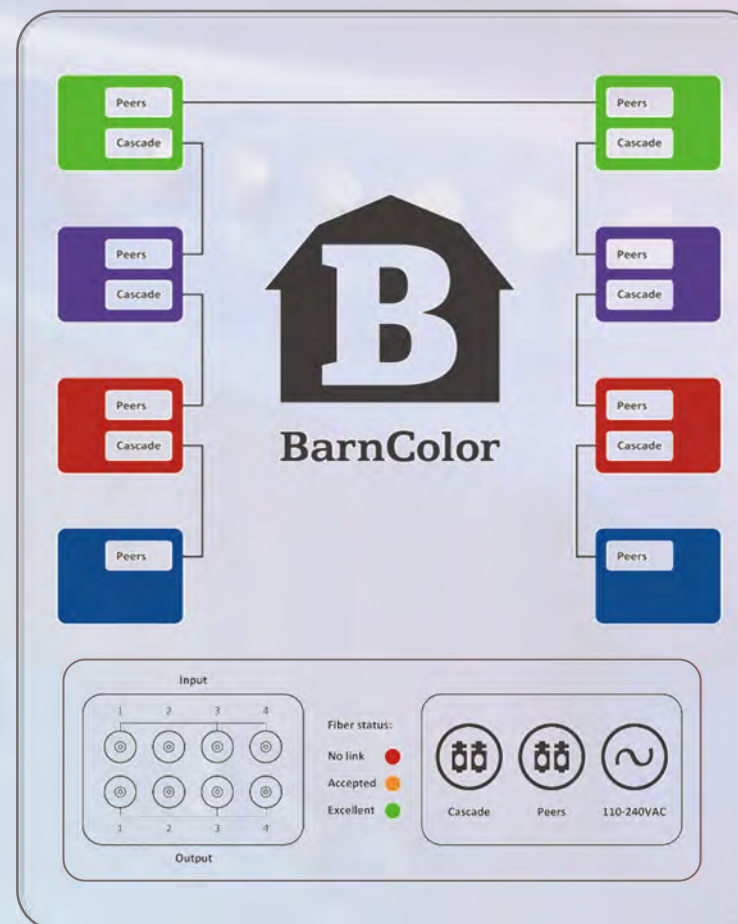


Monitoring Indicators For SDI I/O and Fiber Status.

Fiber I/O:  
Neutrik  
opticalCON DUO  
or LC standard  
patchcable.



Neutrik  
PowerCON  
110-240 VAC



### How BarnColor Simplifies Fiber Setup

Each unit functions in pairs; "local" and "remote". However, these are just "labels" because each unit can receive 4-channels and send 4-channels; so the concepts of local and remote no longer matter. By cascading 4 different color pairs (see drawing on the left – also available on top of each unit) you can send and receive up to 32 channels; 16 forward feeds and 16 return feeds.

Although the drawing shows the units in a certain order (blue, red, purple and green) the order need not be maintained; you can arrange the units in any order you prefer. Each color unit simply sends and receives from/to the same color unit – simple, practical and error free.

The BarnColor system is fully CWDM compatible and can connect to any other products that handle CWDM. So, you can have BarnColors in the auditorium and BarnOne frames in the machine room. Or, you can mix BarnColors, BarnMinis and BarnOnes with impunity ☺ Flexibility at its best!

Connections are made using a Neutric OpticalCON DUO or dual LC connectors. The units can be joined together and racked; each unit is 1-RU half-rack mount; it takes 2-RU to mount all 4 units.



# BarnColor

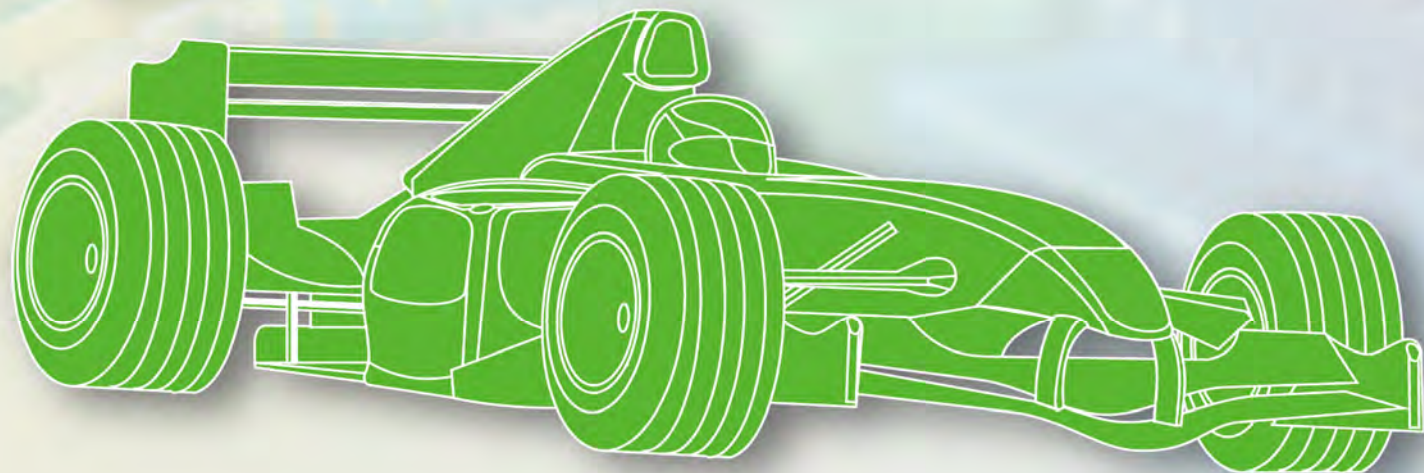
Easy  
Ethernet  
Transport



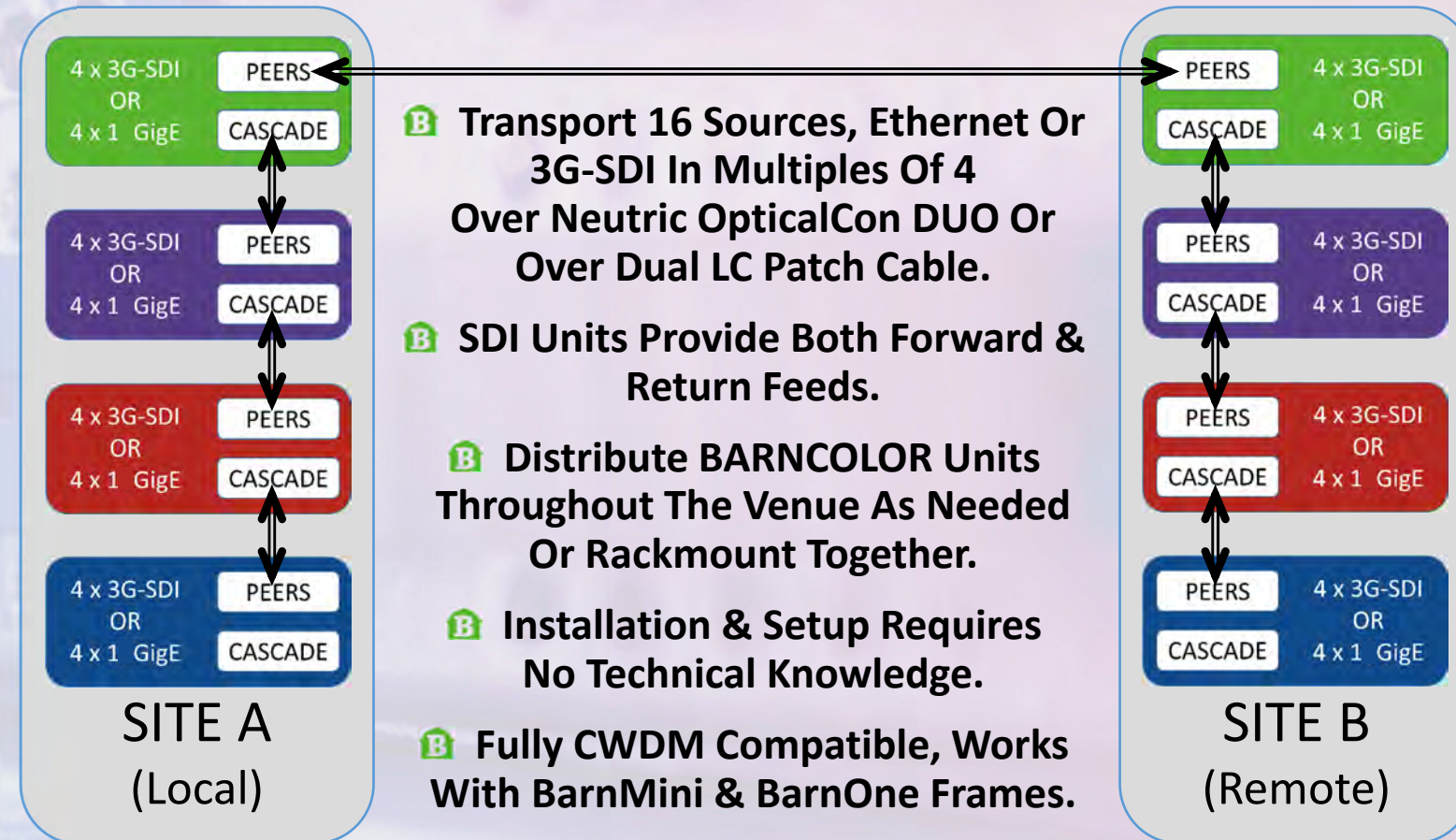
Cascade Up To 4 Pairs Of Different Colors & Transport Up To 16 x 1 Gbps Ethernet Feeds.



- B** Units Function In Pairs; Local & Remote. SDI Version Also Available.
- B** Accepts 4 x Ethernet Connections (up to 1 GigE; 35W PoE Each), Converts To Fiber & Establishes An Ethernet Connection To The Remote Unit.
- B** 4 Different Color Pairs Available; Allows To Cascade Each Unit.
- B** Use All 4 Color Pairs To Establish Up To 16 x 1 GigE Ethernet Connections Between Sites.
- B** Combine Ethernet and SDI BarnColor Units To Create Sophisticated SDI and Ethernet Signal Transport Systems.



# BarnColor Ethernet & SDI



## Easy To Combine With Traditional CWDM Solutions

BarnColor was designed to remove all complications from setting up and using fiber transport systems. However, depending on the application, you may want to use BarnColor at the venue site while using BarnOne frames at the studio or machine room.

There may be very good reasons for this. As an example, you can use BarnColor to collect your signals from several hubs/positions in the venue and use BarnOne frames in the machine room in order to take advantage of the signal monitoring, auto-switch on failure and routing/signal distribution capabilities that only our BarnOne frames can provide. Or, you may want to use BarnColor to augment an existing CWDM installation.

The chart on the left shows the operating frequencies for each BarnColor unit. Note that 2 of the frequencies (1271nm and 1451nm) are not utilized by BarnColor units. This is because these wavelengths are more susceptible to signal losses. However, if necessary, you can cascade into a BarnColor system using these frequencies for short distances.

BARNCOLOR -->		GREEN				PURPLE				RED				BLUE			
INPUT FREQS*	BF #	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1271 nm	27	NOT USED - CAN CASCADE INTO SYSTEM															
1291 nm	29	X															
1311 nm	31		X														
1331 nm	33			X													
1351 nm	35				X												
1371 nm	37					X											
1391 nm	39						X										
1411 nm	41							X									
1431 nm	43								X								
1451 nm	45	NOT USED - CAN CASCADE INTO SYSTEM															
1471 nm	47									X							
1491 nm	49										X						
1511 nm	51											X					
1531 nm	53												X				
1551 nm	55													X			
1571 nm	57														X		
1591 nm	59															X	
1611 nm	61																X

\*OUTPUT Frequencies are the same as input frequencies but use a separate mux and path.

# Related BARNFIND Product Lines

## THE BARN-ONE SERIES

The BarnOne series of signal transport frames provide a 32 x 32 built-in routing system with a combination of BNC and SFP I/O ports to satisfy any application. Several combinations of SFP-cages, BNCs and multiplexer are available.



Every SFP port is bi-directional and every BNC port can be set as an input or output and all outputs are re-clocked. Multiple reference switching can be set to different references depending on the signal being switched and the system works with most 3rd party control systems.

Routing, monitoring, converting, distributing and multiplexing in one BarnOne frame, provides extreme flexibility and allows game-changing opportunities in transport system design and utilization. Each BarnOne frame is contained within 1 RU space - the highest density yet that also offers the least power consumption in the industry.

## THE BARN-MINI SERIES

The BarnMini product line provides for even smaller form instrumentation for quick conversion and redundancy solutions for smaller, single signal challenges. Ten BarnMini products are currently available, and we invent more as our customers require them. Some of our BarnMinis have been developed for general applications; like conversion from copper SDI to fiber or fiber-to-fiber conversion where others have been developed for transmitting switch closures via Ethernet or fiber - our BarnGuide applications notes do a great job of describing each BarnMini as well as their intended applications.



## MUX/DEMUX, SPLITTERS & CHANGEOR SWITCHES



Barnfind offers a range of passive optical products to support our BarnOne frames, BarnMinis and, in case we need to combine functionalities, BarnColors. We call them the LGX series. They can act as a standalone module or they can be housed into our 1RU frame, BT-HOUS-LGX-1RU. This frame has a capacity for up to 4 pcs of any of the LGX modules. You can choose among different CWDM multiplexers, splitters and optical changeover switches.

## SFPs FOR OPTICAL, COPPER, IP/ETHERNET, HDMI, KVM & MORE

You would be amazed at the selection of SFPs we offer - from all flavors of optical SFPs to specific conversion SFP modules - all working seamlessly with our BarnOne frames and BarnMini connectivity instruments. Plus, our ability to handle Ethernet and KVM in conjunction with other signal transport, has been used to optimize equipment requirements while improving asset management in several facilities throughout the world.

