



BarnOne - takes your signal anywhere

The ultimate stage-box solution The world's most sophisticated CAM-CCU solution The most flexible remote production unit on the market

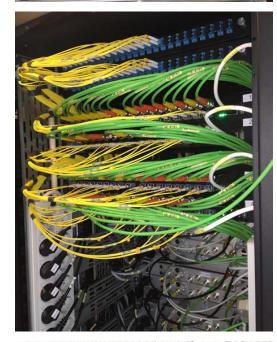
www.barnfind.no

BarnOne

The world's most compact and flexible signal transport system









Main features:

- A full 32 x 32 router in every BarnOne 1RU frame.
- Whatever signal that enters the system can be routed to any output, distributed, converted, monitored and analyzed.
- Extremely high granularity in 1RU 32 completely separate full bandwidth inputs, 32 completely separate full bandwidth outputs.
- The BarnOne series can be used as a fixed box or repurposed on the fly to meet any change in demand.
- Every SFP port is bi-directional.
- Every BNC port is bi-directional.
- All ports are re-clocked.
- We accept any MSA compliant SFP. NO "lock-in" to proprietary expensive single manufacturer made units.
- Multiple reference switching; the router can be portioned to switch different signal types on different references, both analog and digital reference.
- Powerful and simple upgrade path; Industry unique double CWDM capacity- HILO System using existing CWDM infrastructure.
- BarnStudio software included in the BarnOne price. A simple and quick to learn control system where you are able to monitor and follow signal integrity through multiple nodes.
- Most 3rd party control systems: Skyline/Dataminer, ScheduALL, LSB/VSM, BFE/KCS, DNF Control, TSL, Ross openGear/DashBoard, RASCULAR, Black Magic, Axon Cerebrum, SAM SW-P-08 etc. are integrated. It is easy to make tailor-made custom panels and monitoring solutions.
- Highest density in the market; where other manufacturers use 3-5RU
 Barnfind uses 1RU.
- Hot-swap optics ensures high reliability minimizing the need for maintenance windows and staff. Full redundancy.
- The BarnOne platform supports numerous signals in one frame such as common video and telco formats including KVM, SDTI (EVS), SMPTE 2022-6, MADI, SDI to IP, Ethernet, 4K 60p workflows, HDMI, DVI, Serial, GPI/O, CVBS, CAM-CCU (including video, audio, tally, intercom, RCP) etc.

Today's product portfolio will grow rapidly with new signal formats – start working with Barnfind today.

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BarnOne Frames

Order Name	Description	
BTF1-01	16 SFP ports	[®]
BTF1-02	16 SFP ports and 16 BNC	B 0000000 0000000i
BTF1-03-08	16 SFP ports and a 8 or 16 channel CWDM mux/ de-mux built in.	A
BTF1-03-16		
BTF1-04	32 SFP ports	
BTF1-05-08	16 SFP ports and 2X 8 or 16 channel CWDM mux de-mux built in.	n 8666 o 8666 o;
BTF1-05-16		
BTF1-06	24 SFP ports, 8 BNC	
BTF1-07-08	16 SFP ports, 8 BNC and a 8 or 16 channel CWDM mux/de-mux built in.	
BTF1-07-16		B RASSARA REARAS
BTF1-08-08	24 SFP ports and a 8 or 16 channel CWDM mux/ de-mux built in.	
BTF1-08-16		
BTF1-10	16 SFP ports, 8 BNC and 8 ch. AES digital audio embedding / de-embedding	

All base frames are 1RU-19". Price includes single PSU, control card and BarnStudio software for configuration and control.

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Accessories	
Order Name	Description
BT-PSU-100-240AC	110~240V to 12V, 120 W Redundant PSU for BarnOne / BTF-Mini-16
BT-PSU-36-72DC	48DC to 12V, 100 W Redundant PSU for BarnOne / BTF-Mini-16
BTF1-TRAY-PSU	Tray for PSU to be mounted on the rear side of BarnOne
BT-EXT-PAIR-5CM	Extention mounting brackets for BarnOne, 5cm deep.
BT-FAN-BARNONE	Fan Cassette for BarnOne

BarnOne



Some user feedback from customers around the world:

China: Chief Technical Engineer for the China Youth Games, Mr. Pan said: 'A durable, stable and high-quality signal transport, which provided a great efficiency and signal quality to our audience's national wide. We are impressed by the products flexibility, functionality and stability".

Turkey: Mr. Aykut Imen at Digiturk said: "Barnfind is a reliable, responsive partner and proved their understanding and professionalism in this field. BarnOne allows us to use any kind of 3rd party SFPs as well as any 3rd party control solution."

USA: "We needed a way to avoid the cost and complexity of one-to-one fiber drops, especially in very large productions with many channels of audio, video, and data signals for transport," said Mr. Kurt Heitmann, Senior Vice President, CP Communications. "With BarnOne, our clients are able to transport and switch up to 32 signals within a single frame and on a single fiber, greatly simplifying setup, operation, and troubleshooting for on-location productions." UK: Mr. Paul Sykes, Senior Systems Engineer in Gearhouse said "Barnfind's BarnOne platform was chosen because of its 1RU form factor and flexibility to accept multiple signal types. With size and weight being key factors in this project, the BarnOne solution was a perfect fit. Other solutions we looked at were based on multiple small boxes for conversion. Barnfind's approach gives us a robust platform with redundancy in a single frame."

Germany: Mr. Jürgen Blitz, Wige's head of technical operations: "Barnfind has not only proven to have great and flexible products that allow us to use and change any SFPs and signal formats on the fly, but their technical and customer service - before, during and after installation - is outstanding." Wige is focused mostly on motor sport production and does Formula 1, DTM (Deutsche Touring Meisterschaft), the 24 Hours race at Nürburgring etc.

BarnOne The Greenest, The Smartest, The Most Affordable and The Most Compact Solution in the world!



BarnOneSeries

Stage Box Break-out

Module-based Break-out panel



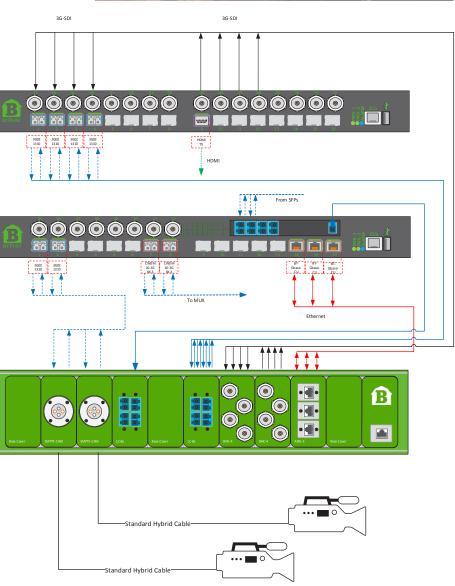
For all technical information - see our BarnGuide

The Barnfind Stagebox Breakout panel allows you to customize your own front panel based on the required connectors. The various selection of modules will be the connection points to one or more frames.

All modules are made of solid aluminium, with high performance connectors.

Note!

- The BTSB-BASE blind cover can be customized to fit any other connector outside the Barnfind selection.
- The cables between Break-out panel and frames are not included.







BTSB-2RU



BTSB-BASE

Blind cover to fill up unused slots in BTSB-2RU. Note, can also be used to customize for a special preferred connector.

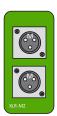


BTSB-BNC-4x

Panel mounted BNC connectors.



Panel mounted XLR (female) connectors.



BTSB-XLR-M2x

BTSB-LEMO-CAM

Panel mounted XLR (male) connectors.



BTSB-RJ45-3x

Panel mounted RJ45 connectors.



Panel mounted LEMO FXW.3K SMPTE connector. Used as standard on many hybrid fiber cameras. (CAM connector not included)*



BTSB-LC-8x

Panel mounted LC connectors. Metal enclosure



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Panel mounted LEMO EDW.3K SMPTE connector. Used as standard on many hybrid fiber cameras. (CCU connector not included)**



*LEMO 3K.93C SMPTE PANEL PLG, FXW with LC fibre



**LEMO 3K.93C SMPTE PANEL SKT, EDW with LC fibre

Optical Products

BT-HOUS-LGX-1RU is a 1-rack unit housing for passive optical products. It can accommodate up to 4 different LGX modules such as CWDM multiplexers, splitters and optical changeover switches. Each module is secured with thumbscrews for easy and quick replacement. This frame is often used when a client does not want to build CWDM muxes into the BarnOne frames, but house them in a separate housing.

Housing for Passive Optical Modules

Order Name	Description	
BT-HOUS-LGX-1RU	Barnfind standard empty chassis for up to 4 LGX Boxes in 1RU	
CWDM Mux/Demux	Fit into BT-HOUS-LGX-1RU Chassis	
Order Name	Description	
BT-WDM-LGX	2 channels in LGX box stand-alone	
BT-CWDM-MUX-08-LGX	8 channels in LGX box stand-alone	
BT-CWDM-MUX-16-LGX	16 channels in LGX box stand-alone	
BT-CWDM-MUX-18-LGX	18 channels in LGX box stand-alone	

Optical Splitters	Fit into BT-HOUS-LGX-1RU chassis
Order Name	Description
BT-SPLIT-2-LGX	Passive distribution of optical signals 1:2 out
BT-SPLIT-4-LGX	Passive distribution of optical signals 1:4 out
BT-SPLIT-8-LGX	Passive distribution of optical signals 1:8 out

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Optical Changeove	Fit into BT-HOUS-LGX-1RU chassis	
Switch		
Order Name	Description	
BT-OCS-2-LGX	Optical changeover 2:1, Non-latching	🗢 📙 🕯 🛄 👸 📳 👔 el consistent 💿

Accessories	
Order Name	Description
BT-ATT-LC-05	Attenuator for LC connectors, 5dBm
BT-PA-LC/LC-SM-SX-0.5M	Fiber patch cables LC-LC, Single Mode, Simplex
FAULT LOCATOR 8-10km	Visual fault locator optical tester
BT-POWER METER	Portable optical power meter
BARNCLEAN	Fiber optical connector cleaner
BARNCLEAN REFILL	Refill cassette for BarnClean

The "Norwegian army knife"

BarnMini

The BarnMini series has won much respect in many market segments around the world. With superior quality, re-clocking inside, your choice to use any MSA compatible SFPs, any signal format, any distance etc. we give flexibility that no other vendor can offer. We hear from our clients that they use it as their Norwegian army knife in their many demanding applications.

Very often, the small green BarnMini boxes are used as an extension of the BarnOne solutions in order to reach out to cameras, monitors or any other 3rd party products. Even the SDTI signal from EVS can be handled by BarnMini. Sometimes BarnMini boxes are used with CWDM SFP's inside so that a client can gather more than one signal and use a mux in order to get more signals over one fiber out in the field.

The BarnMini frame, BTF-Mini-16, is a housing with space for up to 16 x BarnMini modules of any kind. The BarnMini frame uses the same PSU as the BarnOne family, BTF1-XX. Note that the BTF-Mini-16 comes with one standard single PSU and redundant PSU is optional.

The BarnMini series will be growing with many new family members in the years to come.







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Order Number	Description	
BarnMini-01	BNC TX/RX, SFP port for transceiver (TX/RX), incl. PSU.	
BarnMini-02	2xSFP port for transceiver (TX/RX), incl. PSU.	
BarnMini-03	HDMI-SFP, HDMI RX, SFP port for transmitter (TX), incl. PSU.	
BarnMini-04	SFP-HDMI, HDMI TX, SFP port for receiver (RX), incl. PSU.	
BarnMini-05	12 ports GPI/O through ethernet / fiber, incl. PSU.	
BarnMini-06	Optical changeover 1:2. GPI controlled.	
BarnMini-11	BNC TX/RX, SFP port for transceiver (TX/RX), incl. PSU.	B
BarnMini-12	2xSFP port for transceiver (TX/RX), incl. PSU.	
BTF-Mini-16	2.5RU frame for housing of up to 16 BarnMinis, incl. PSU.	

Accessories	
Order Name	Description
BT-Mini-PSU	Spare PSU for BarnMini series (stand-alone)
BT-PSU-100-240AC	110 \sim 240V to 12V, 120 W Redundant PSU for BarnOne / BTF-Mini-16
BT-PSU-36-72DC	48DC to 12V, 100 W Redundant PSU for BarnOne / BTF-Mini-16

Barnfind SFP's

The Barnfind philosophy is to offer a future-proof platform that saves customers space and money. Our BarnOne and BarnMini's accept any SFP (Small Form Factor Pluggable) because you never know what tomorrow brings! Barnfind follows the standard multi-source agreement (MSA).

Any of today's MSA SFPs will fit into the system, and we are prepared for those that do not exist yet. **Barnfind has the Barn for it!**

All known and unknown SFP manufacturers are welcome to house their SFP solutions in our "Barns". If you would like to build your own SFP we can house it and integrate it for the global market. Please tell us if you do not see the SFP's you are looking for in our overview of SFP's. We only have a small initial selection of SFP possibilities listed. Please ask for other versions and SFP brands.

Whether our own SFPs or 3rd parties SFPs our BarnStudio reads the needed information on port number, temperature, signal strengths, signal loss, manufacturer, serial number, wavelength and connector type, and displays this in a separate list in BarnStudio and/or your 3rd party management system.

Many competitors have proprietary pin layout and/or software restrictions/limitations on their SFP's which leads them to being at a higher cost. With Barnfind SFP's you will soon discover you have your spare parts in your pocket!



All you need is in your pocket!





Please see Product Overview under DOWNLOADS at www.barnfind.no or ask your local partner for an overview of our standard SFP's.

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BarnOne's maintenance cost are extremely competitive. Think of BarnOne as the Motor highway and all the different SFP's as cars. By working with Barnfind you can drive different and new cars on our Motor Highway for unparalleled flexibility. No other competitor offers this flexibility. Although any SFP (MSA standard) will fit into our unique Barns, we can only offer warranty on our own SFP's.

BarnStudio - a management and configuration tool

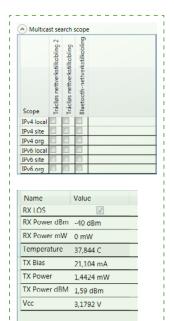
BarnStudio is first of all a management and configuration tool to be used for BarnOne frames. Further, it is a great tool for general monitoring of signal flow and diagnostic of SFPs, BNCs, many different optical parameters, fans, reclockers, equalizers etc.

Take a close look at our free-of-charge BarnStudio control software that gains more and more popularity throughout the production environment. The BarnStudio software is a comprehensive tool for configuration as well as for daily operation



You can install BarnStudio on your computer free of charge. Download it directly from our website and test it out: http://www.barnfind.no/control/

Basic inform	nation Netwo	rk Matrix Inputs	Outputs SFPs	Firmware Upgra	de Diagnos	tics SNI	/IP traps					
PortName	Vendor	PartNumber	SerialNumber	Production Date	WaveLength	Bitrate	SM	OM1	OM2	OM3	Copper	Connector
SFP #1					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #2	BarnFind Tech	BTSFP-LX-SM-0310	FS40218J0083	2014-3-8	1310	2,5 GHz	20000 m	0 m	0 m	0 m	0 m	LC
SFP #3					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #4					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #5					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #6	OPTONE	ESFP-LX-SM-0202	1301250563	2013-1-26	1310	2,5 GHz	2000 m	0 m	0 m	0 m	0 m	LC
SFP #7					0	N/A	0 m	0 m	0 m	0 m	0 m	
	EMBRIONIX	EB30HDRT-LM	114031800031	2014-3-26 AB	0	3 GHz	0 m	0 m	0 m	0 m	255 m	HD-BNC
SFP #9					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #10					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #11					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #12					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #13					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #14					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #15					0	N/A	0 m	0 m	0 m	0 m	0 m	
SFP #16					0	N/A	0 m	0 m	0 m	0 m	0 m	
Name	Value											
RX LOS		1										
RX Power	dBm -40 dBm											
RX Power	mW 0 mW											
Temperatu	are 39,844 C											
TX Bias	14,544 m	A										
TX Power	0,544 m\	-										
TX Power of	dBM -2,64 dBi	m										
Vcc	3.2416 V											



SFP #11 Output port 11	Rate Auto	SFP present
SFP #12 Output port 12	Rate Auto	SFP present
SFP #13 Output port 13	Rate Auto	SFP present
SFP #14 Output port 14	Rate Auto	SFP present
SFP #15 Output port 15	Rate Auto	SFP present
SFP #16 Output port 16	Rate Auto	SFP present

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group	SFP #2:	Input port 2] [
0	SFP #3:	Input port 3] [
-	SFP #4:	Input port 4] [3																								
	SFP #5:	Input port 5				1 1																					m					
	SFP #6:	Input port 6	H	H	+	11	÷	t		H	-	H	H	H		H	H	H	H	H	H	H	H	H	H	H	H		-	H	H	
	SFP #7:	Input port 7	H	片	┿	11	╬	╬		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	Ħ	H	-	H	H	
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	SFP #9:	Input port 9	니	니		11	4										Ц															
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	SFP #12:	Input port 12		ш		11																										
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	SFP #16:	Input port 16				10		7																								
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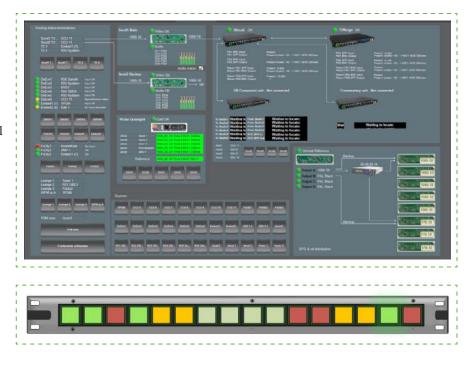
Barnfind also offers a WEB-GUI based solution.

Barnfind offers training sessions on a regular basis for both our hardware and software solutions.

Barnfind and 3rd party control

Over the years Barnfind has adopted to most known broadcast/ AV and telecom control systems in the world. Whatever your setup is - Barnfind has the control solution for you. Barnfind has strong relationships to any 3rd party control system on the market. For example Ross OpenGear/ DashBoard, LAWO VSM, BFE KSC, TSL Tallymann, BlackMagic Design, DNF Control, Dataminer/Skyline, RASCULAR, AXON and the industry-standard SW-P-08 routing control protocol, supported by most control panels and router manufacturers. The Barnfind platform fits perfectly into your existing application and is extremely easy to implement.

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UEFA CHAMPIONS LEAGUE

Fiber Transport Multiplexing Routing Conversion Distribution IP/Ethernet 4K 60p workflows 18 x CAM-CCU on one fiber Barnfind - the Championship Company *European Championships World Championships Olympic Games* You find us in most

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Gredit 💋 Uni 🕻

You find us in most Championships around the world

Barnfind handle all signal formats such as common video and telco formats including KVM, SDTI (EVS), SMPTE 2022-6, MADI, SDI to IP, Ethernet, 4K 6Op workflows, HDMI, DVI, Seriel, GPI/O, CVBS, CAM-CCU (including video, audio, tally, intercom, RCP) etc.

For all technical information - see our BarnGuide

