

# CAM < > CCU

The world's most sophisticated CAM-CCU solution



**Barnfind**  
Technologies

Solutions from Barnfind Technologies AS

January 2016

## Barnfind Technologies

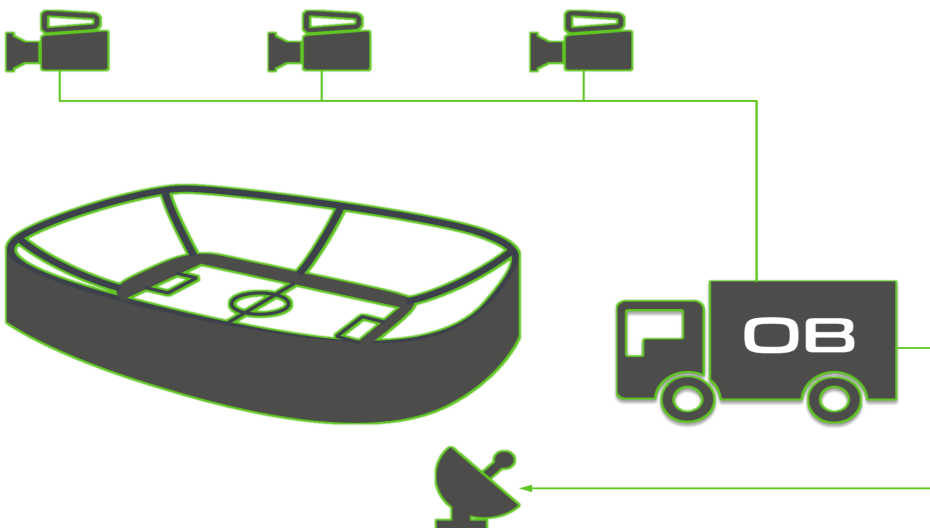
In just a few short years, Barnfind has made serious inroads in the television broadcast, service provider and post production markets by delivering a signal neutral platform that offers many functions and supports numerous signal formats in just one frame

Barnfind solutions are not only powerful, but are also flexible and, key to its success, scalable, and can be controlled by any third-party control system used in studios, OB vans or any kind of facility. Since its inception in 2012 many high end clients have been jumping onboard with Barnfind.

Barnfind products also accommodate new segments like Oil & Gas, Digital Signage, Telemedicine/Healthcare, Campus Networks, Government Applications, Industry, CCTV/Security, Defense, Conference, Events, House of Worship etc. In other words, Barnfind equals robust capabilities, cost and space saving, and power efficiency for virtually all applications.

### Camera to CCU

- Up to 200 km for remote production
- Up to 18 cameras in 1 single mode fiber
- Using tie-lines to interconnect multiple stage boxes
- Full control and quality
- Zero latency



Camera to CCU



*"The scope of functionalities within the*

*BarnOne frame is just incredible - we use it for main and return feeds contribution platform to our broadcasters head-ends, Video/Audio/ Intercom/EVS-network and synchronisation*

*...read more inside*

### Barnfind CAM/CCU solution:

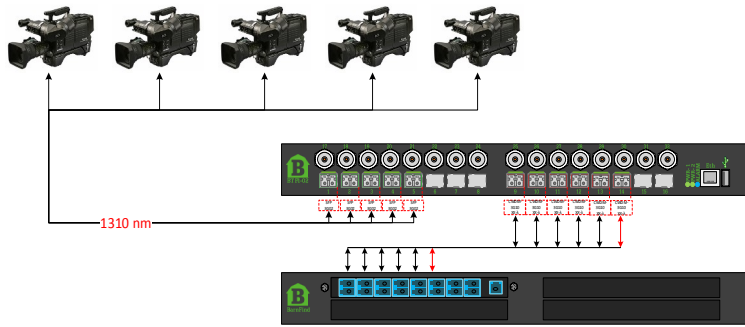
- Up to 18 CAM/CCU in one fiber
- Support any camera supplier
- Link includes Video, Audio, Tally, intercom and RCP
- Switch any camera to any CCU

**BarnOne - BarnMini - BarnStudio**

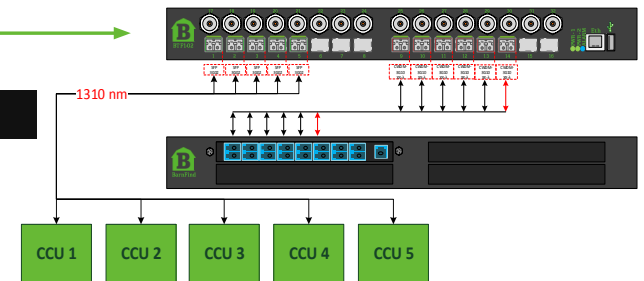
# Barnfind Solution

Figures shows the bidirectional signal transport between a camera from any supplier to a camera control unit (CCU). Up to 18 cameras/CCU can be multiplexed into 1 fiber for transport over long distances. The internal matrix in BarnOne frame allows the user to switch any camera to any CCU.

- Up to 18 CAM/CCU in 1 single mode fiber.
- Includes transmission of video, audio, tally, intercom and RCP.
- Other signal can be multiplexed into same fiber. SDI, AES, ASI, HDMI, Ethernet, CVBS, SDTI, MADi, KVM
- Switching functionalities between CAM and CCU.
- Monitoring of the signal flow.



1X fiber  
0-40km

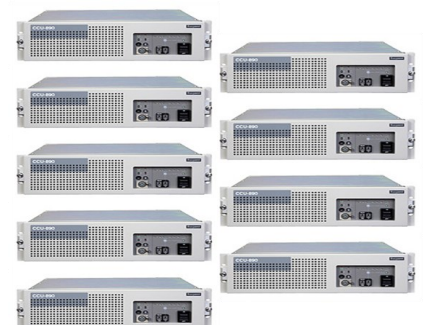
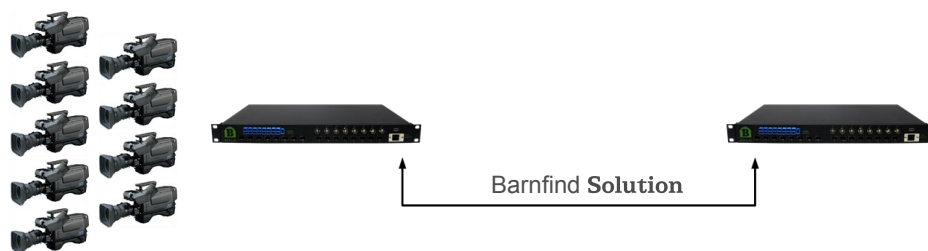
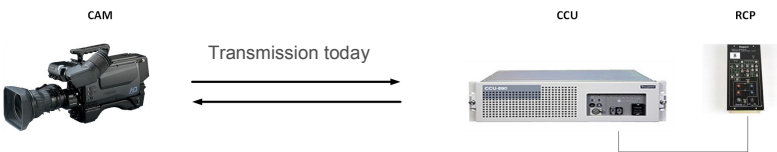
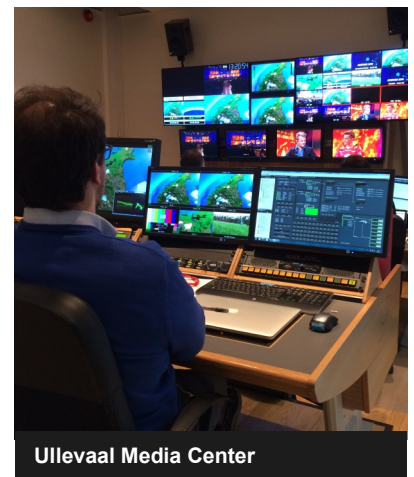


CAM/CCU with mixed signals

## Barnfind vs Traditional

With the traditional way of connecting camera to CCU, the operators are limited to heavy, non-flexible and expensive cables for the transmission of video, audio, tally, intercom and RCP.

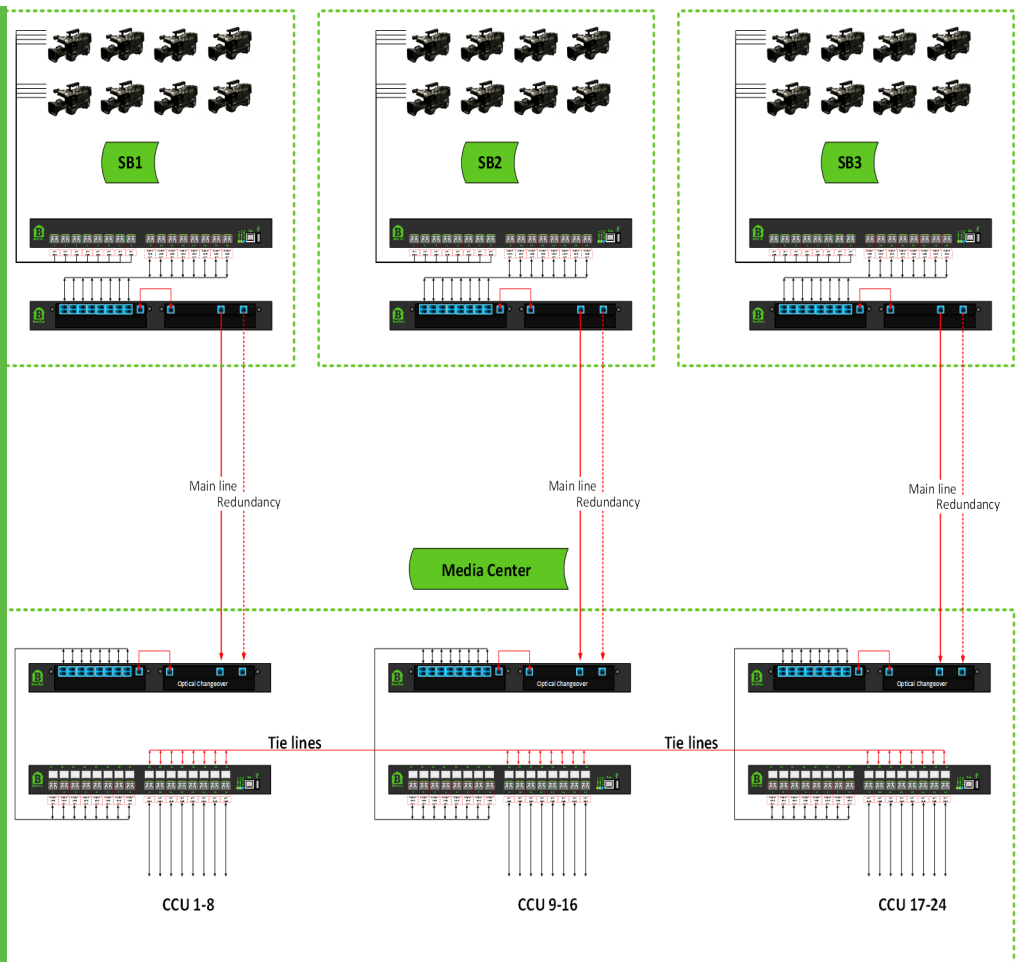
By using the Barnfind solution, a complete system e.g stagebox to control room can be designed with use of only 1 single mode fiber for the bidirectional traffic. On top of that, other broadcast signals such as MADi, HDMI, SDI, SDTI, ETH, CVBS, AES, ASI, can be multiplexed into the same fiber. You have full access to monitoring and control by using BarnStudio, or any other compatible control software e.g. Ross/OpenGear, Skyline/Dataminer, BFE, LSB/VSM, DNF, Black Magic, Rascular, Axon Cerebrum etc.



## Expand your existing system

By using Barnfind, you can easily, at a low cost, implement and expand your existing system.

The BarnOne frames are totally transparent, and allows any signal from any supplier to pass through.



Solution with multiple Stageboxes

## Multiple Stagebox system

The great advantage of using Barnfind, is the flexibility. It will fit in your existing system, it can be re-configured in few minutes.

The powerful combination of SFP modules and Barnfind's product series BarnOne, allows you to transport, multiplex and route regardless of the format and content.

As figure on top describe, a future extension of the system can be done by simply add more frames. An Integration with any 3<sup>rd</sup> party software can tie-line the BarnOne frames together for an endless quantity of signals.

Barnfind can also provide passive optical splitters and changeover modules for a full redundant solution.

# The solution at Ullevaal Media Center

"The scope of functionalities within the BarnOne frame is just incredible - we use it for main and return feeds contribution platform to our broadcasters head-ends,



Video/Audio/Intercom/EVS-network and synchronisation signals transport between our Studio, OB-compound and Commentary positions at the national football arena as well as a full blown remote production system including full control & quality/zero delay Camera-CCU solution - all with the same product! On top of all

that the BarnOne integrates seamlessly with our monitor and control system, making it absolutely unbeatable and a key part to our continued growth in productions."

*Jarle Marøy*

*Producer - head of development Ullevaal Media Center*

## Contact:

Contact a local Barnfind partner for more information about Barnfind products.

Visit our web page for application examples and downloads

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## Any camera manufacturer

Barnfind can handle Ikegami, GVG, Sony, Panasonic, Hitachi and other camera manufacturers. 18 bi-directional CAM<->CCU over one(!) single fiber. The extremely low latency and jitter specifications in the Barnfind platform together with the CAM<->CCU density is met by no other competitor. This makes Barnfind a natural choice when it comes to camera and base station control.



**SONY**

**Panasonic**

**Ikegami**

**HITACHI**



**See our BarnGuide for further details**

[www.barnfind.no/downloads](http://www.barnfind.no/downloads)