

# **PICTOR OB1**

## **Technical Specifications**

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## System description

### Video

Pictor OB1 is a fully equipped mobile production unit with six 4K UHD cameras. Key points in the design have been technical quality, flexibility, cost-effectiveness and a focus on IT-centric protocols and centralized management.

In base configuration, OB1 features a Ross Carbonite 2M vision mixer and six Black Magic Production Cameras with in-house developed timecode, tally and CCU system. The cameras record in UHD 3840x2160 and transmit HDSDI over optical fiber (tactical grade) to the van. The same fiber is used for PGM-return, timecode, camera coms and tally and CCU signals.

The technical director has access to full industry standard vision mixing as well as switcher controlled character generator and video playback.

The program feed can be broadcast and streamed in HDTV resolutions while content is recorded in UHD.

The vision mixer features LiveEDL which streamlines post production by enabling automatic conform of camera iso-recordings to the technical directors switching decisions.

Vision switching can happen remotely using in-house developed iPad apps

Full remote monitoring and administration of OB1:s core technology is done over VPN from Pictors operations centre. This allows for safe and reliable operation, quick setup and fast turnaround time.

### Audio

The audio system in OB1 is built around Dante and audio over IP. The system is capable of recording and routing 128 inputs and 128 outputs using Steinbergs Nuendo as audio core. Audio configurations, patching and routing can be remotely administered and recalled.

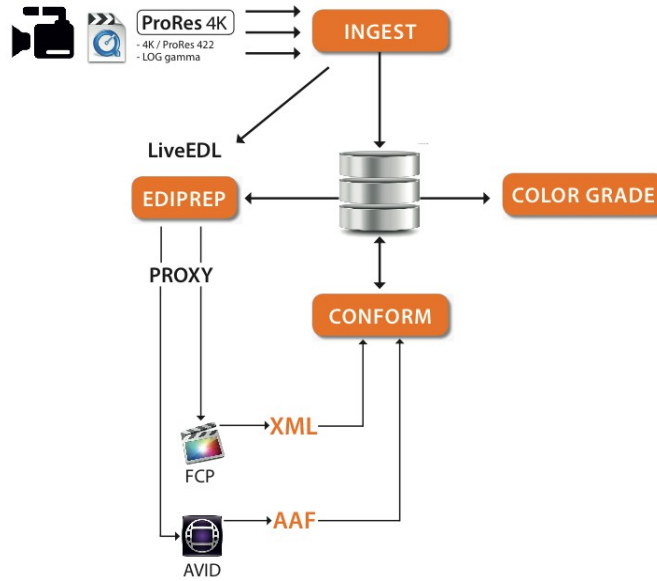
The system uses modular stageboxes that can be suited to the productions needs. In base configuration OB1 features 16 mic pres with full remote control capabilities as well as 8 line in and 8 line outs.

Stageboxes are available for interfacing with MADI networks and other standards. Stageboxes are interconnected via CAT7 cable or optical fibre.

The audio core is fully remote controllable and allows for audio recording and monitoring basically from anywhere. For example, OB1 can be deployed in production in a remote city, while the sound mixer is monitoring and mixing the audio from a suite in Pasila. This workflow is currently used in a production of a tv-series (Yle Fem, Kontroller). OB1 records the show in Vaasa and the shows program audio is mixed and monitored in an audio suite in Pietarsaari.

The mix position in the van itself and features a compact fader setup built around Eucon and Euphonix artist series. Other control surfaces available. Flexible configurations can also be made on location, where ad-hoc mix positions can be set up very quickly.

## Post workflow



### Video

Pictor offers a complete finishing workflow with support for both Avid based workflows as well as Final Cut Pro and Premiere. Pictors Ediprep-solution delivers packaged projects with audio assets as well as proxys of camera iso-recordings, program feed and the iso-recordings conformed to the LiveEDL that matches the program feed.

Pictor can then handle the conform and finishing of the program, or deliver assets to third party finishing houses.

### Audio

The audio assets can be delivered as a project in any industry standard DAW format. We offer full service audio post production via Sound Fix Audio Post. <http://www.sfx.fi>

## VEHICLE

### Mercedes-Benz Sprinter 315 CDI -12 (long body)

- Drivers license required: B
- Webasto heating system + AC-system
- 3200K and 5600K 12V lighting system
- Power consumption: 230V/8A for full production system
  - UPS with 15 minutes of system backup power
- Uplink: Ethernet with failover to 4G
  - VPN remote access / support / setup
- Wifi access points

## VIDEO SYSTEM

### Vision mixer:

- Ross Carbonite Plus
  - Carbonite 2M Panel
  - Inputs: 16 (10 in use / 6 inputs available)
  - Aux: 8
  - MLE: 1
  - Multiviewers: 2

### Camera system:

- Black Magic 4K Production Camera EF (6 cameras)
  - Timecode support
  - Tally/CCU system embedded optical fibre
- Lenses
  - Set of long and short EF zoom lenses.
- Accessories
  - Cineroid EVF system
  - Anton Bauer Dionic HD battery system
  - Cartoni Focus tripods (H527 fluid heads)
  - Cartoni P020 pedestals (H529 fluid heads)

### Camera links:

- Black Magic LC 3G-SDI fiber system (8 inputs, 6 in use by camera system)
  - Tactical Fiber interfaces
  - Neutrik opticalCON X-TREME fiber optic cable system
- Available fiber reels:
  - 6 x 50 meter opticalCON DUO (duplex LC)
  - 2 x 200 meter opticalCON DUO (duplex LC)
  - 2 x 200 meter opticalCON SPLIT 3-way reels (3x duplex multi cable)

### Format conversion / glue:

- Teranex 2d processors (6 units)
- Black Magic mini converters

**Master recorder:**

- Black Magic Hyperdeck Studio Pro (2 units)
  - 1080 ProRes/DNxHD recording
  - ISO recording in cameras: UHD ProRes and/or 1080p ProRes/DNxHD

**LTC generator / master clock:**

- Rosendahl Nanosyncs HD

**Video wall:**

- 27" TFT monitors for Ross multiviewers (3 units)

**Utility monitoring:**

- Black Magic Smartview Duo
- 22" 1080p reference monitor with HDLink converter

**Technical monitoring:**

- Black Magic Smartscope

**Control system:**

- Ross Dashboard

**Character generator / playback:**

- Caspar CG
  - Decklink 4K Extreme
  - Full automation support from vision mixer

**Data wrangling:**

- Black Magic Multidock for camera SSD:s
  - Automated data management, metadata tracking and backup
  - RAID storage
  - Optional LTO-6 data backup system

**Intercom system:**

- **ATEM and VOIP intercom system**
  - Camera coms embedded in fiber system
  - VoIP intercom system for mobile coms
  - Dante-distributed system for injection into on-set monitoring, in-ears
  - Optional adapters for other intercom systems

## AUDIO SYSTEM

### Audio mixer / DAW:

- Steinberg Nuendo 6.5
  - 128 inputs/128 outputs, Dante based. T

### Secondary recording:

- Waves Tracks Live (Dante virtual soundcard)

### Audio transport / matrix:

- Dante / Gigabit Ethernet (1000BASE-T / 1000BASE-LX)

### Audio Console / Control surface:

- Euphonix Artist Mix and Control (12 faders)
- Neyrinck V-control
- (Optional) Yamaha DM2000 with Dante cards

### Stagebox 1:

- 24 in / 8 out Dante stagebox
  - Interfaces: Focusrite Rednet 4 (2pcs) + Rednet 1 (1 pcs)
  - 16 mic/line preamps with remote gain
  - 8 line in / 8 line out
  - 16 port managed Gigabit Ethernet switch • Wifi access point

### Stagebox 2:

- 32 in / 32 out Dante stagebox (Digital, AES/ADAT)
  - Interface: Focusrite Rednet 3
  - Available in different configurations

### Stagebox 3 (optional):

- 64 in / 64 out Dante-MADI bridge
  - Interface: Focusrite Rednet 6
  - MADI bridge with internal independent sample rate conversion

### Monitoring:

- Genelec 8020, Genelec 1029A, Beyerdynamic headphones and headsets

### Microphone splitter system:

- LA Audio MS824, 16 channel 1:5 active splitting system.

### Microphones:

- Sennheiser MKH-60 microphones
- Sennheiser MKH-50 microphones
- Sennheiser G3 lavaliers
- Lectrosonics lavaliers
- Rode NTG2 microphones
- Rode Stereo microphone
- Other microphones and recording equipment available according to the productions needs.