

XENTAURIX® Media & Broadcast Logger Professional

The XENTAURIX Media & Broadcast Logger (XBL) is a professional broadcast recording and verification system for digital recording and playback of a wide variety of TV, radio, video and streaming formats, including their multimedia data. Originally designed as a pure video logger, the Media & Broadcast Logger has meanwhile grown far beyond this field of application. It is used as a multisource multi-channel video encoder, transcoder, recorder, streaming and web server, multiscreen monitor, for the production of video clips, snapshots as well as a search engine and for content analysis. The logger systems are characterized by groundbreaking user-friendliness, high flexibility and multifunctionality and have been in use since 2000.



Areas of application

- TV/Radio/Livestream Broadcasting Evidence,
- TV recording, editorial research, clip production,
- TV competition monitoring, ratings analysis,
- IPTV/OTT applications for user groups,
- education and training,
- Activity recording in control centers and command centers: video, audio, monitors, keyboard logging

Scalable, multifunctional system

The Professional Logger System consists of an XBL master unit and several XBL subunits. The XBL master unit manages and controls the entire system with all connected XBL subunits and includes the user and content management, database, streaming and web server. Depending on the expansion stage, the system can record an unlimited number of signals from TV, radio, video and live streams simultaneously in different qualities and over periods of weeks, months and even years (loop recording).

Record web TV streams and websites

The Media & Broadcast Logger records live video streams from web TV as well as from social media channels (Facebook, YouTube, Twitch etc) automatically, manually or time-controlled and can be analyzed. The system also of-

fers the possibility to record and archive complete web-sites including all subpages or specific websites.

High Density

The XBL subunits are encoder, transcoder, recorder and storage system in one unit. Depending on the input format, a subunit can encode up to 40 channels and record the content on the internal 8TB standard RAID hard disk array or external storage servers. Depending on the enclosure variant, the internal hard disk capacity per XBL subunit can be up to 128TB. Recording quality and bandwidth are adjustable for each channel, from CIF to HD1080p. The high number of channels in the smallest design (1-3 U depending on the version) saves space for electronics installation and energy costs.

Recording and metadata search

EPG, subtitles, as-run logs, teletext or transcripts from speech recognition can be recorded synchronously with the content. Bookmarks can be added during or after recording. By combining the recording with metadata, content can be quickly found via the integrated full-text search engine and retrieved on a per-customer basis. The Professional System thus provides an exceptional TV/radio/video/media search engine for all professional applications.



The Media & Broadcast Logger records direct IP streams in M/SPTS or RTP/RTSP format. When recording transport streams, a combination with a proxy is possible. Thus, recordings with excellent video and audio quality can be realized with low memory requirements. In combination with the integrated streaming and web server, the logger system offers MPEG-Dash streaming for live operation with constant replay function over the entire recording time, VoD and payout.

Integrated Receiver

For DVB and FM/AM applications, the subunit has integrated receivers. A DVB-S receiver can contain up to 8 internal tuners. In AM/FM operation, the receiver board can process up to 32 radio stations.

Multisource operation

In the basic configuration, the Broadcaster Sub-units have M/SPTS IP inputs. Optional inputs for analog signals, DVB-S/C/T, ASI, SD/HD-SDI, RGB/ TS, DVI/HDMI or FM/AM/ DAB are available.

Easy to use, user-friendly

The modern HTML5-based dashboard with the various templates offers a combination of multiscreen live and playback, metadata, clip creation, search functions, storyboard and analysis tool displays on one interface. Layouts can be customized and stored locally or centrally for specific users. Video clips can be edited quickly and easily via drag & drop, cut with frame accuracy and uploaded with a single mouse click. Framestore-based recording technology allows clients to switch directly from live viewing to instant replay and create video clips in this mode as well. With add-on modules, a variety of complementary applica-

tions are possible, such as audience rating analysis, TV spot monitoring, S2T, AI-based content analysis, multiscreen monitoring, etc. The HTML5-based dashboard supports all common browsers such as Edge, Safari, Firefox, Chrome as well as all stationary and mobile devices with different operating systems such as iOS, Android or Windows.

Media & Broadcast Logger Type Professional

The combination of XBL master unit and a large number of XBL subunits with a wide variety of signal inputs enables customer-specific systems that can be expanded and modernized at any time and thus offer investment security. By cascading XBL subunits, a virtually unlimited number of channels is available. An XBL subunit can be equipped internally with a storage capacity of up to 128TB as a RAID array. The XBL subunits can also record to external NAS. For high availability requirements, the Professional system is available in cluster fail-back design.

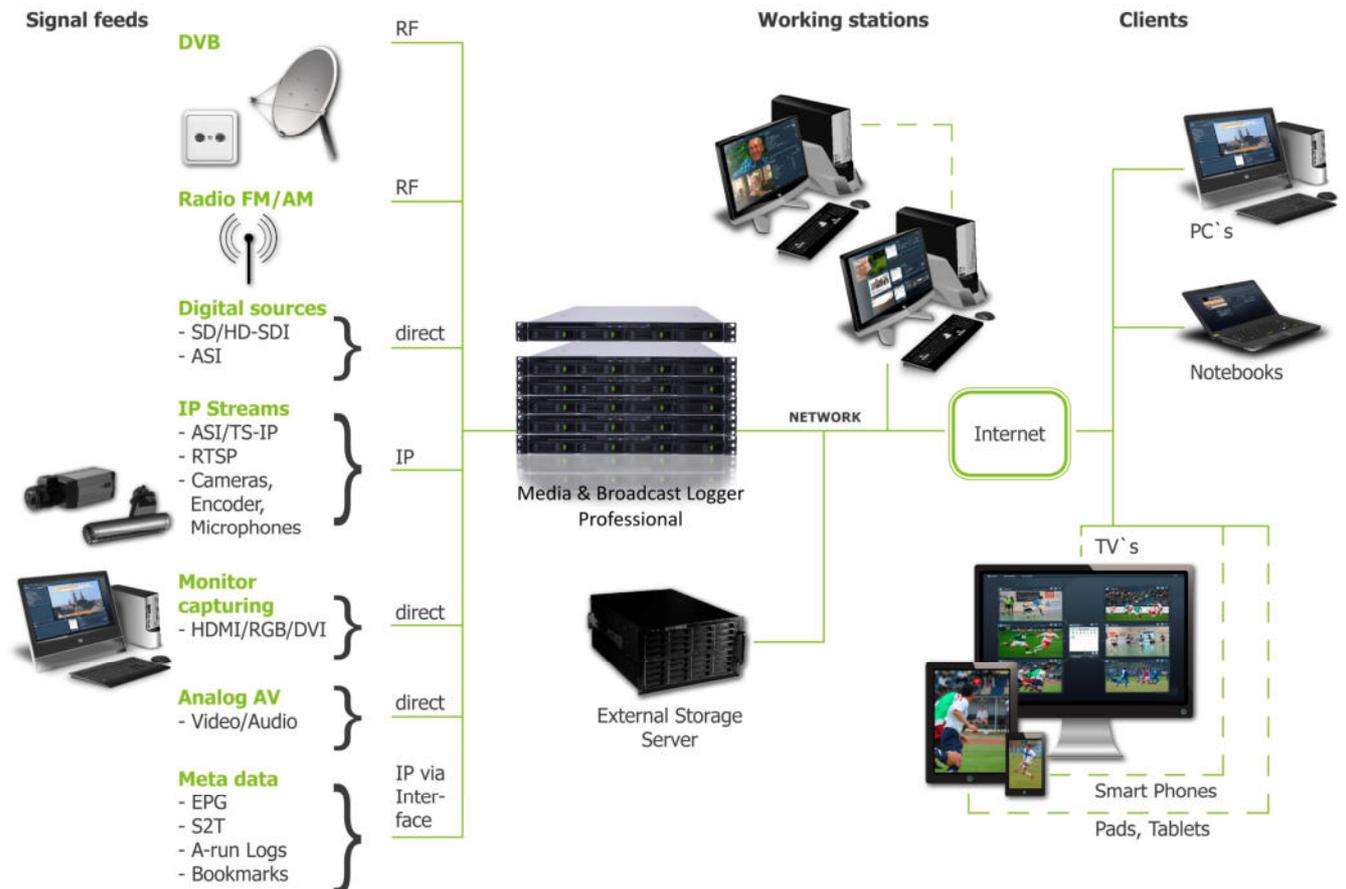
No client license costs

With the Professional System there are no client license costs. As many users as the system load and network capacity allow can work on the system.



Images: Examples of custom dashboard layouts

XENTAURIX Media & Broadcast Logger Professional



Extensions / software and hardware modules

Input formats

The XENTAURIX Media & Broadcast Loggers have M/SPTS and RTP/RTSP IP inputs as standard. The XBL subunits can be equipped with integrated receivers for DVB-S/CT, Radio AM/FM/DAB by built-in grabber cards for Ana-log/Composite, HD-SDI, ASI, DVI/HDHMI/RGB.

Logger Hardware

The hardware is designed for very high operational reliability. To ensure maximum fail-safe operation, the following hardware options are available:

- **X-RAID5 + Storage Upgrade:** Expandability from RAID1 to RAID5 recording with 8TB (XBL-Standard)
- **X-8TB Storage:** Expand storage capacity by an additional 8TB, for XBL Standard and Professional versions
- **X-PSU:** Expansion to redundant power supply
- **X-Cluster:** Highest operational reliability due to cluster system
- **X-FailOver:** Failover security through failover backup server (n+1)

TS Recording with Proxy

- **X-TS module:** The module enables recording of DVB and IP signal sources in Native MPEG TS. The combination with a low resolution H.264/265 proxy enables frame accurate editing, cutting and uploading of TS Native videos.

Content Analysis

- **X-TV Rating Monitor** Ideal module for the clear presentation and evaluation of TV viewer ratings, viewer groups or viewer migration. This is a very effective way of evaluating and optimizing TV reports or commercials.
- **TV spot monitoring** For automatic recognition of TV spots
- **Music recognition** TV/radio: Enables automatic recognition of music titles on TV and radio with title, artist, playing time and other data based on a central music database.
- **TV content recognition using AI** TV and video content is automatically analyzed using artificial intelligence and identified according to pattern features.

Signal Monitoring

- The XBL broadcast systems include a variety of free monitoring features as standard according to TR101290. For DVB, signal strength, signal quality are logged, signal error messages are generated for CC (continuity, counter), PMT (program map table), PES (packet-sized elementary stream) and TEI (transport error indicator).
- **X-VALD** (Video/Audio Loss and image freeze) module for detection of video/audio loss and freezing of transmission
- **X-Loudness** Module for monitoring and displaying level loudness according to EBU R128/ITU-R BS.1770-1

Subtitles

- **X-CC/TT** This module extracts subtitles, DVB subtitles and videotext pages from the TV signal and stores them in the database with the videos. Through text-based search functions, relevant videos can be played back immediately.

Multiaudio

- **X-MultiAudio** module for recording, streaming, and playing back another stereo channel in a video stream. Up to 8 stereo channels per stream are possible.

Multiviewer

- With the X-Multiviewer module, the XENTAURIX system can be expanded to an external monitor/video wall display. Live TV, radio and video streams with metadata are displayed on one or more monitors.

Details about the software and hardware extensions for the Media & Broadcast Loggers as well as support and services can be found under <https://www.xentaurix.com/en/products/xentaurix-modules/>

Highlights XENTAURIX Media & Broadcast Logger Professional

- Scalable, multifunctional multichannel - multisignal media & broadcast logger system
- State-of-the-art, clear and user-friendly HTML5 dashboard with individual layout creation and local and central storage
- Multiscreen display for live and synchronous playback
- Modular design, expandable at any time, no channel limitation
- Input signals: TS-IP, RTSP-IP, analog, SD/HD-SDI, DVB-S/C/T, ASI, radio: FM/AM/DAB as well as RGB/DVI/HDMI,
- Very fast insertion and configuration of new signal sources
- Multibit Streaming encoding, recording, playback and restreaming
- TS recording in MPEG Native format with LR Proxy (optional)
- Simultaneous display and playback of selected channels and video clips
- Import, display and search of metadata like EPG, as-run logs, subtitles, bookmarks
- Support for speech recognition and transcriptions (Professional only)
- Playback of recorded data via slider with fast forward and rewind, bookmarks, storyboard, calendar, video clips and via keywords from bookmarks, subtitles, EPG, teletext and AI-based metadata + speech to text recognition (optional)
- Instant replay function over the entire recording time
- Storyboard function
- LDAP support
- Transcoder support
- Integrated Clip Maker
- EPG Importer
- Multibit recording, adjustable for each channel
- Ring memory adjustable for each channel (in days or by memory capacity)
- Integrated timer for scheduled recordings
- Integrated web and streaming server
- Administration level: configuration, search, filtering, group functionality, signal analysis of live and recorded signals
- Alarm management and mail notification, system status display
- Highest operational security through cluster and failover backup system (optional)
- Multilingual DE, GB, Arabic additional menu languages on request
- Highly reliable software and hardware
- Made in Germany
- In use worldwide since 2001

Recording duration of an XBL subunit in days with 16TB total capacity

1	960	480	240
2	480	240	140
4	240	140	70
8	140	70	35
16	70	35	17.5
32	35	16	8.75

Delivery versions

Artikel Nr.	Typ
400550	XBL-MU Masterunit Professional in 2 HE 19" Rack
420102	XBL-Subunit 2U-Framework with 6 Hotswap Bays, equipped with 4 x 2TB 24/7 hard disks @ RAID5 level, 16GB RAM, OS Win 8.1, 2x SSD120GB @RAID1 for OS, Ethernet 2x 100/1000Mbit/s, 6xUSB 2.0, housing 19", 2 HE Rackmount Chassis (BxHxT) 430x88x660mm, weight: ~26kg, PSU2 single : 120-230V AC, 650W
420103	XBL-Subunit 3U-Framework with 8 Hotswap Bays, equipped with 4 x 2TB 24/7 hard disks @ RAID5 level, 16GB RAM, OS Win 8.1, 2x SSD120GB @RAID1 für OS, Ethernet 2x 100/1000Mbit/s, 6xUSB 2.0, housing 19", 3 HE Rackmount Chassis (BxHxT) 430x132x660mm, weight: ~28kg, PSU2 single: 120-230V AC, 650W
400613	X-REC Capture and recording device for XBL- Broadcaster Standard or Professional Subunits with 1 x M/SPTS-IP input per channel

Additional delivery versions on request