

XENTAURIX® Media & Broadcast Logger Professional

XENTAURIX® is the brand name of artec technologies AG's Media & Broadcast Logger product line (XBL) - a professional, multifunctional platform for media & broadcast recording, compliance logging, monitoring, and media/content analysis. It supports digital recording and playback of TV, radio, Web TV, social media streams, IP video sources and associated metadata. Originally developed as a long-term video recorder, XENTAURIX Media & Broadcast Logger has evolved into a powerful multi-channel encoder, transcoder, recorder, streaming and web server, offering video clip creation, multi-view monitoring, full-text search and metadata analysis within one integrated system.

XENTAURIX Media & Broadcast Loggers are used worldwide by broadcasters, cable and satellite operators, OTT providers, media agencies, regulatory authorities, and training institutions. It enables program monitoring, competition tracking, newsroom research, automated clip production, and content verification.



Since 2001 of continuous development, XENTAURIX Media & Broadcast Loggers are the world's longest-established broadcast logging system. Its proven reliability, scalability, and extensive feature set make it a trusted choice for mission-critical environments that require long-term operational stability and first-class manufacturer support.

Areas of Application

- Broadcasters
- News services and newsrooms
- Media agencies
- Cable and satellite operators
- OTT providers
- Government and media authorities
- Training and educational institutions
- Corporations
- Intelligence services

Professional, scalable, multifunctional system architecture

The XENTAURIX Media & Broadcast Logger "Professional" system is used for medium to large installations where maximum operational reliability, an unlimited number of channels, continuous scalability, modernization capability, and long-term investment protection are essential.

The system consists of one XBL-Masterunit and multiple XBL-Subunits. The XBL-Masterunit manages the entire platform, including user and content management, database, streaming server, and web server.

Depending on its configuration, the system can record a virtually unlimited number of TV, radio, video, and webcast live streams simultaneously in various qualities over weeks, months, or even years (loop recording). Multiple XBL-Subunits can be operated with a single Masterunit, either locally or distributed across multiple regions. This enables large-scale XENTAURIX Media & Broadcast Logger installations that can be accessed regionally and centrally. In the event of a network interruption between the XBL-Masterunit and XBL-Subunits, each XBL-Subunit continues recording autonomously. When the connection is restored, all data is automatically synchronized.

Recording Web TV, Social Media Streams, and Websites

XENTAURIX Media & Broadcast Logger records live streams from Web TV and social media platforms such as YouTube, Facebook, Twitch, TikTok, SnapChat or Instagram Stories — automatically, manually, or via time-controlled scheduling. Additionally, the system can capture entire websites, including all subpages, or selectively archive specific web content for analysis and documentation.

High Density Recording

Each XBL-Subunit integrates an encoder, indexer, transcoder, recorder, and storage system in a single device. Depending on signal type, one Subunit can encode up to 40 channels and record them on an internal 42 TB RAID-5 array, expandable to up to 256 TB per Subunit, or to external storage servers. Recording quality and bandwidth can be freely configured for each channel, from SD to UHD. Its compact, high-density design reduces rack space and energy consumption.

Recording and Metadata Search

XENTAURIX Media & Broadcast Logger records EPG, subtitles, as-run logs, teletext, SCTE markers, and speech-to-text transcripts synchronously with video content. Bookmarks can be added during or after recording. The integrated full-text search engine enables rapid retrieval of content across all metadata sources.

This makes XENTAURIX an extremely powerful search platform for TV, radio, video, and media archives.

IP Stream Recording

XENTAURIX Media & Broadcast Logger records direct IP streams in various formats. When recording transport streams, optional proxy recording provides excellent

video/audio quality with significantly reduced storage consumption. With the integrated streaming and web server, the system supports MPEG-DASH live streaming, instant replay, time-shift replay, VoD, and content restreaming.

TS Native & Proxy Recording

The optional X-TS module enables native MPEG-TS recording for DVB and IP sources. Combined with H.264/H.265 proxy recording, users can perform frame-accurate editing, cutting, and uploading of TS-native material via the low-resolution proxy.

DASH Streaming

With the integrated streaming and web server, the XBL supports MPEG-DASH live streaming, instant replay, VoD, and playback.

Multiple Signal Source Operation

Standard XENTAURIX Media & Broadcast Logger input signals include MPTS and SPTS IP streams (UDP, TCP, RTP). The system also supports a wide range of additional signal sources: Analog, DVB-S2/C2/T2 + ATSC/ATSC3.0, SDI, NDI, SMPTE 2110, ASI, QAM, RGB/DVI/HDMI, TS-IP, RTMP, RTSP, HLS, SRT, MPEG-DASH, SMOOTH and Radio FM/AM/DAB (via antenna).

All signals are processed via integrated capture cards — no external receivers, converters, or additional hardware are required.

Easy Operation & User-Friendly Interface

The XENTAURIX Dashboard is a modern, HTML5-based interface for professional media logging, monitoring, and analysis. Its modular tile layout combines live channels, playback, metadata, search, analytics, and optional modules within customizable views.

Tiles (e.g. video, status, replay, clipping) can be positioned and resized freely and interact dynamically—timeline selections instantly update related content. Instant Replay enables frame-accurate clip creation, drag-and-drop editing, and export to FTP, network storage, or social media. Automated clipping is supported via SCTE-35/104, EPG, or as-run logs. Layouts can be stored locally or centrally, with light/dark themes. The dashboard runs in any browser and supports cross-platform access.

Key features include:

- Instant Replay
- Frame-accurate clip creation
- Drag-and-drop video editing
- Clip export to FTP, NAS, cloud, or social media
- Automated clipping via SCTE-35/104, EPG, or as-run logs
- Light and dark themes
- Browser-based access (Edge, Safari, Firefox, Chrome)
- Cross-platform support (Windows, macOS, iOS, Android)

Integrated Search Engine

A powerful full-text search engine enables rapid content discovery across all metadata. Searches can be refined by channel and time range. Results include extended context, and playback begins instantly with second-level accuracy. The Dashboard Player supports synchronized playback of multiple channels in multiscreen mode — ideal for fast comparison and analysis.

Control XENTAURIX Via Rest API

The XENTAURIX REST API offers seamless integration into external media control systems along with numerous additional advantages for modern IT and broadcast infrastructures. As a standardized interface based on HTTP methods (e.g., GET, POST, PUT, DELETE), it enables platform-independent communication with XENTAURIX systems — whether on-premises or in the cloud.

Maximum Operational Availability

The optional XBL-Masterunit cluster fail-back architecture ensures high availability and uninterrupted operation. Two XBL-Masterunits operate in an active/active configuration, synchronizing databases, user management, and system states in real time. Combined with an n+1 Subunit redundancy model, the system maintains continuous recording, transcoding, and streaming even if individual XBL-Subunits fail.

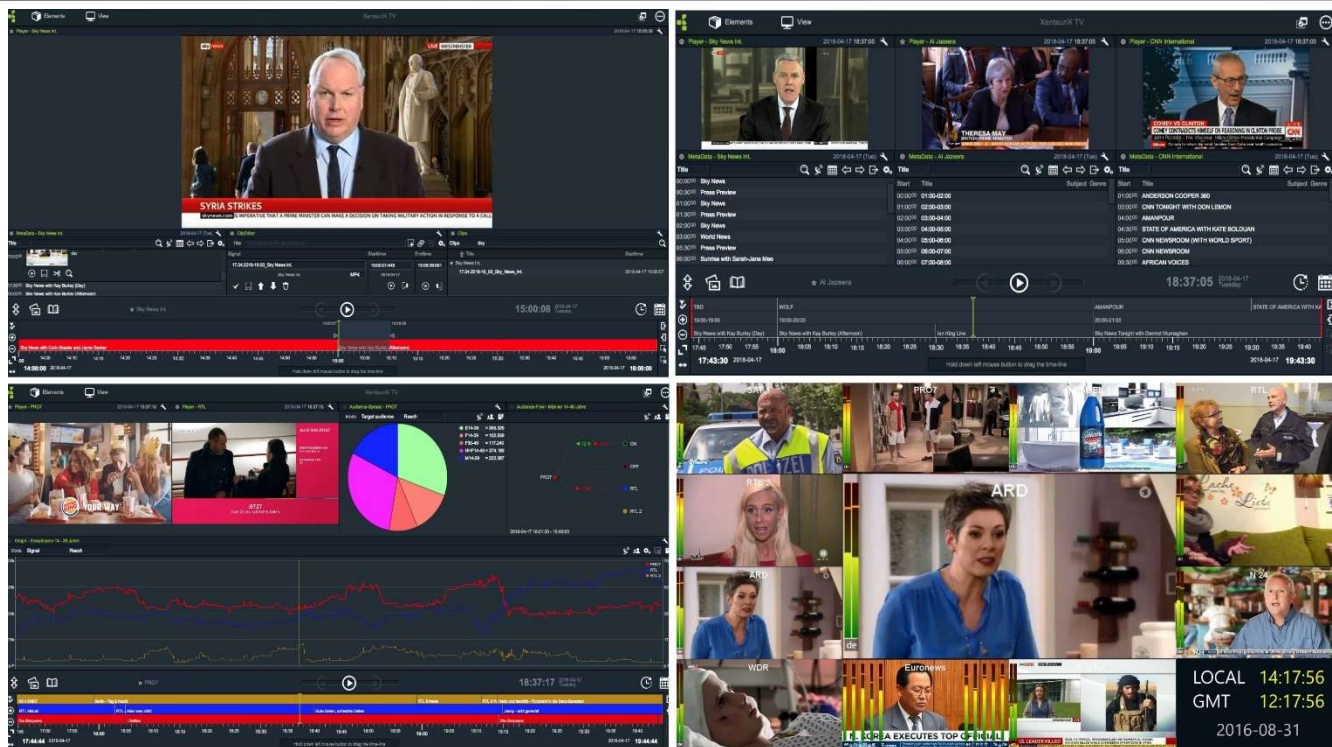
No Client License Fees

The XENTAURIX Media & Broadcast Logger does not require client-side license fees.

Any number of users — limited only by system performance and network capacity — can access the system simultaneously.

Support & Service

artec technologies AG, in close cooperation with its partners, offers outstanding first-hand support and service worldwide.

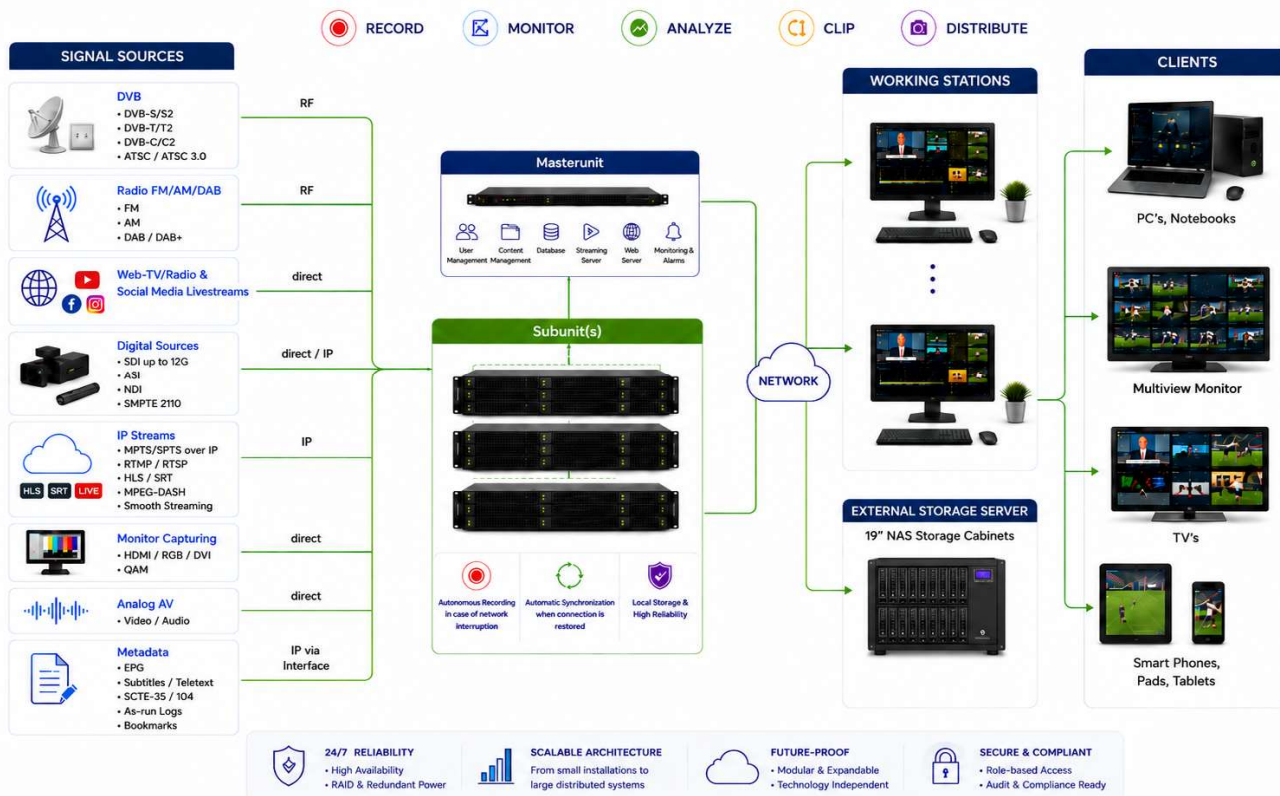


Images: Examples of custom dashboard layouts

XENTAURIX Media & Broadcast Logger Professional Architecture at a Glance

The diagram illustrates the versatility of the XENTAURIX Media & Broadcast Logger system—from support for a wide range of input signals and optional external storage integration to in-house and remote monitoring, search, and analysis workstations.

XENTAURIX Media & Broadcast Logger Professional



XENTAURIX Media & Broadcast Logger Extensions Modules

Multiple Input Devices

Standard input signals include MPTS and SPTS IP streams (UDP, TCP, RTP).

The system also supports a wide range of additional signal sources: Analog, DVB-S2/C2/T2 + ATSC/ATSC3.0, SDI, NDI, SMPTE 2110, ASI, QAM, RGB/DVI/HDMI, TS-IP, RTMP, RTSP, HLS, SRT, MPEG-DASH, SMOOTH and Radio FM/AM/DAB (via antenna).

Logger Hardware

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

- **X-Storage** 4x14TB @Raid 5 array as standard, the capacity can be optionally expanded according to the customer's requirements.
- **X-Cluster**: The optional XBL Masterunit HA cluster with automated failover and failback ensures high availability and uninterrupted operation.

TS & Proxy Monitoring & Recording

- **X-TS module** Native DVB MPEG-TS sources and TS-over-IP streams (high resolution) are recorded synchronously alongside a low-resolution MPEG-4 proxy recording. The proxy enables responsive re-view and frame-accurate in/out editing, while clip and snapshot export is performed against the aligned high-resolution MPEG-TS recording.

TV Audience Analytics

- **X-TV Rating Analyser** This module provides marketing, media, advertising, and broadcast organisations with a modern workspace for analysing TV programmes alongside viewer ratings. Audience measurement data from external providers (e.g., GfK, Nielsen and other market-specific services) is imported and processed within XENTAURIX, allowing users to search, compare time windows, and review or export relevant programme segments linked to rating peaks and trends.

Content Recognition

- **TV Ad** : With this module commercials on TV, radio and webcasts are automatically detected and stored near real-time. The commercials including program information and statistical data can be accessed via the XENTAURIX® Dashboard. With a detection rate of up to 99.9%, you can rely on trustworthy data.
- **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.
- **Speech to Text Recognition (S2T)**: The X-S2T module enables automatic transcription of speech to text in 24/7 mode, timer mode and by creating video and audio clips. The X-S2T module supports a variety of international languages.
- **TV content recognition using AI**: TV and video content is automatically analyzed using artificial intelligence and identified according to pattern features.

Signal Monitoring (all included at no extra ccost)

- It includes a set of monitoring features based on ETSI TR 101 290 for MPEG-2 Transport Stream compliance monitoring (e.g., PAT/PMT consistency, PCR checks, continuity counter errors, PES errors and TEI-flagged packets). For DVB reception, additional RF/Tuner metrics such as signal level/strength and signal quality (e.g., SNR/MER depending on the frontend) can be logged. In addition, SCTE-35 (and, where applicable, SCTE-104) cue message/flag monitoring is supported.
- **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/Closed Captions/Teletext

- **X-CC/TT** This module extracts subtitles and programme text from the TV signal—such as DVB subtitles and Teletext pages—and stores them as time-aligned metadata in the database, synchronised with the recorded video. Using the integrated full-text search, users can instantly locate relevant segments and start playback at the matching timestamp.

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 this free-of-charge integrated software feature, a XENTAURIX Media & Broadcast Logger system can be expanded to multiview display (display splitting or screen splitting). Multiple real-time TV, radio and video signals can be displayed on one or more monitors. The mosaic size and positioning of the signal sources can be configured and saved individually for each monitor in the Multiviewer layout. The decoding PC can also be selected in the MULTIVIEWER configuration. With the X-MULTIVIEWER feature, a XENTAURIX Media & Broadcast Logger 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.

Website Archiver

- The XENTAURIX Website Archiver captures entire websites or individual pages — either once or at scheduled intervals (e.g. every 5 minutes, hourly, daily, etc.). Unlike screenshots, it stores the complete HTML content. Archived pages can be accessed and scrolled through using the XENTAURIX Dashboard Player.

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 Type Professional

- Scalable, multifunctional, multi-channel/multi-signal Media & Broadcast Logger system.
- Modern, clear and user-friendly HTML5 dashboard with customizable user layouts.
- Integrated Multiviewer software for mosaics on one or multiple external monitors. Mosaic size, positioning, and layouts can be individually configured and saved for each monitor.
- Input signals: M/SPTS and RTP/RTSP IP inputs (UDP/TCP/RTP) and optionally: Analog, DVB-S/C/T + ATSC/ATSC3.0, SDI up to UHD, ASI, QAM, RGB/ DVI/HDMI, SMPTE ST 2110, NDI, SRT, TS-IP, RTMP, RTSP, MPEG Dash, SMOOTH and Radio FM/AM/ DAB (via antenna).
- Fast integration and configuration of new signal sources.
- Multi bitrate encoding, recording, playback and re-streaming.
- Native MPEG TS recording with optional low-resolution proxy.
- Simultaneous display and synchronized playback of selected channels and clips.
- Metadata import, display and full-text-search (e.g. EPG, as-run logs, subtitles, bookmarks, teletext, S2T).
- Speech to Text support and transcripts (optional).
- Advanced playback navigation: timeline/slider, fast forward/rewind, bookmarks, calendar, storyboard, and keyword search across metadata and optional AI-generated metadata.
- Instant replay directly from the live signal, as well as time-shifted replay across the entire recording period.
- Storyboard functionality.
- LDAP integration.
- Integrated transcoding support.
- Integrated Clip Maker: Free tool for frame-accurate editing and exporting of video clips, with support for proxy-based editing workflows.
- EPG importer.
- Multi bitrate recording per channel (individually configurable).
- Configurable loop (endless) or non-loop recording per channel (in days or by storage capacity).
- Integrated scheduler/timer for planned recordings.
- Integrated web and streaming server.
- GPU acceleration for AI modules
- REST API / SDK
- Administration tools: configuration, search, filtering, groups, signal analysis live and recorded.
- Role-based access control (RBAC)
- Audit logging
- Alarm Management: automated email alerts and system health/status monitoring.
- High availability via optional cluster or failover architecture.
- Multilingual UI: German, English, Arabic, Korean, Portuguese (additional languages on request).
- Highly reliable software and hardware.
- Made in Germany.
- Successfully deployed worldwide since 2001

Recording time of XBL-Subunit in days with 4x14TB@RAID5 array. (Usable storage capacity 32TB)

Channels/Bandwidth	1 Mbps	2 Mbps	4 Mbps	8 Mbps	16 Mbps
1	4176	2088	1044	522	261
2	2088	1044	522	261	130
4	1044	522	261	130	65
8	522	261	130	65	32
16	261	130	65	32	16
32	130	65	32	16	8

Delivery Options

Article No.	Typ
420100	XENTAURIX Media & Broadcast Logger XBL-Masterunit For controlling, configuring, managing and remote monitoring of as many XBL-Subunits as desired. Browser-based HTML5 administration software with user rights management, Encoder Remote Control (ERC), HighLight editor with thumbnail preview, recorder & ring-storage management, alarm messenger, log book, clip maker, bookmark editor, storyboard display, scheduler, EPG and as-run-log importer, day/time and logo inserter, MYSQL database, LDAP support, Streaming server and Web server, Mobile devices support, XBL Player, multi-screen with simultaneous playback, unlimited concurrent users. Hardware: 2U 19" rack with 4 x 5 1/2" drive slots equipped with 4 removable hard disks, 2x 240GB SSD RAID1 and 2x 10TB SATA RAID1, OS Windows Server 2025, Ethernet 2x 100/1000Mbit/s, 6xUSB 2.0, dual redundant supplies
42103	XENTAURIX Media & Broadcast Logger XBL-Subunit are encoder, transcoder, recorder and storage systems in one unit. XNG Software, Win11 OS, and optional hardware and software modules as required for the application. The Subunit captures, encodes and records video and audio content, including metadata, via the network/internet. The standard input signals are for M/SPTS (UDP/TCP/RTP) streams that are activated through the X-REC licenses and expandable for Analog, DVB-S2/C2/T2 + ATSC/ATSC3.0, SDI, NDI, SMPTE 2110, ASI, QAM, RGB/DVI/HDMI, TS-IP, RTMP, RTSP, HLS, SRT, MPEG-DASH, SMOOTH and Radio FM/AM/DAB (via antenna) sources. Hardware: 3U 19" rack featuring 8 x 5 1/2" drive slots equipped with 4x 14TB hard drives configured in a RAID5 array by a 4-port RAID controller + 2x10 TB SATA Raid1 for OS and XNG software. Ethernet 2x 100/1000Mbit/s, 6xUSB 2.0, dual redundant supplies
400613	X-REC Capture and recording activation license for XBL-Subunits or for extension of XBL Standard Logger with 1 x M/SPTS-IP input, per channel

Additional delivery options on request

We would be happy to prepare a detailed quotation for you. Please contact salesxentaurix@artec.de