



INTEGRATED MONITORING OF TV PRODUCTION STUDIO COMPLEX

TELESCREEN Light 7.8

TeleSCREEN Light is an optimal solution for ensuring centralized monitoring of TV production studio complex. The system provides for simultaneous visual and instrumental monitoring of signals at every stage of signal delivery, as well as automated monitoring of studio equipment operation.

Integrated broadcast quality monitoring

TeleSCREEN Light allows ensuring simultaneous continuous monitoring at any point of the TV channel path. Simultaneous monitoring of input signal, signals from all the studio sources, output signal and signals in carrier networks has turned into reality.

Visualization and adaptivity

All the studio signals may be displayed on one or several video monitors at the same time. Multi-window display of signals may be flexibly customized and quickly switched depending on the preferences of various users. The system allows creating a convenient workstation for both master control operator and operating personnel.

Control of content source status

TeleSCREEN Light allows ensuring visualization of the status of broadcasting equipment on a real-time basis (Play-Out server, mixing console, video recorder, etc.). The master control operator would receive all the necessary information on all the signals used, as well as broadcast content, status of signal sources and arising emergency events on one screen.

Ad insertion/replacement management

TeleSCREEN Light allows analyzing and logging the passing through ad insertion points in SDI (SCTE104) and MPEG TS (SCTE35) signals. Together with the analysis of the operation status of the broadcasting server, TeleSCREEN Light provides for an integrated monitoring and logging of ad insertion/replacement.

Alert and logging of emergency events (to be customized by user)

The system notifies via audio and video alerts upon detection of deterioration of the quality of monitored signals, as well as upon the occurrence of emergency events in the monitored studio equipment. All the detected emergency events are automatically recorded in the event log.

Remote visual monitoring

TeleSCREEN Light provides for both local and remote visual monitoring of signals. Monitoring of distributed (cloud) studio broadcasting and remote technical support to broadcasting have become a reality.

Easily scaled and multipurpose

TeleSCREEN Light may work with both one signal and dozens of signals at the same time. The capacity and functionality of the system may be expanded, where necessary, which provides for cost optimization. TeleSCREEN Light may be used not only in a fixed studio, but also as part of a TV mobile unit or small mobile studio.

Competitive product at reasonable price

TeleSCREEN Light does not require high initial costs. Given the best functionality, the cost of the system is significantly lower than those of similar products.

TeleSCREEN Light may be upgraded to TeleSCREEN PRO (with license).

TECHNICAL DATA

Input interfaces	Up to 64 Analog (CVBS (PAL, SECAM, NTSC) Up to 40 SD-SDI (SMPTE-259M, 10 bit, 270 Mbit/s) Up to 20 HD-SDI (SMPTE-292M, 10 bit, 1.5 Gbit/s) Up to 16 3G-SDI (SMPTE-372M, 424M, 12 bit, 2.970 Gbit/s) AES/EBU (24 bit/192 kHz) Up to 10 HDMI (v1.4)
Output video interface	DVI-D; HDMI v1.3, v1.4, v2.0; DisplayPort, HD-SDI
Output audio interface	3,5" mini jack, stereo, unbalanced S/PDIF, DVI-I, HDMI, DisplayPort, HD-SDI, AES/EBU
Control of external devices	Matrix switch
Remote visual monitoring	Multiviewer output streaming (HTTP, H.264/HEVC (H.265))

STUDIO INTEGRATION

Play-Out server control	Server operation status monitoring Content availability monitoring Play-list visual display (current/next) Output stream quality monitoring Visual and audio emergency alarm
Integration with studio equipment	Multi-screen display of signals used Visual indication of active mixer console sources Automatic synchronization (Les, TLS/UMD) window labels TALLY indication (to be customized by user)
GPI notification	Up to 128 GPI inputs/outputs Customized visual indication

ANALYSIS AND MONITORING (to be customized by user)

SDI signal	Missing input data, SDI stream errors, metadata analysis and monitoring
Video	Still/frozen video (tunable thresholds) Video artefacts detection (tunable thresholds) Video decoding errors*
Audio	Low/high audio level (tunable thresholds), clipping, antiphase Embedded audio decoding errors (Dolby Digital (AC-3), AAC)
Metadata	Teletext, subtitles (SDI (ETSI EN 300 706), MPEG-2 TS (ETSI EN 300 472)

AUDIO LOUDNESS ANALYSIS

Loudness level of audio track	For each audio track (ITU-R BS.1770-4, 2015) True Peak measurement (adjustable indicator, event analysis)
Adjustments to the volume of each audio track	For each audio track (ITU-R BS.1770-4, 2015)
External audio correction equipment	Supported

DISTRIBUTION NETWORK MONITORING

Supported signals	Analog signals: Analog RF (PAL, SECAM, NTSC, FM/AM) Digital signals: DVB-ASI (ETSI EN 50083-9) terrestrial DVB-T/T2 (ETSI EN 300 744, 302 755) satellite DVB-S/S2 (ETSI EN 300 421, EN302-307, EN301-210) cable DVB-C/C2 (ETSI EN 300 429 Annex A/B/C, (ETSI EN 302 769) IPTV (IP, Ethernet 1000Base-TX (ETSI TS 102 034))
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AD INSERTION/REPLACEMENT MONITORING (optional license)

Ad insertion marks	SCTE 104 (SD/HD/Dual Link/3G-SDI); SCTE 35 (MPEG-2 TS); DTMF; GPI (specific encrypted protocols)
Logging of passing the marks	Supported

VIDEO RECORDING (optional license)

Recording modes	Up to 20 HD-SDI / up to 40 SD-SDI / up to 40 Analog (with MPEG-2/-4/HEVC compression) Up to 128 AES/EBU (without compression) Up to 64 SPTS/MPTS (raw data) Automatic loop recording (tunable parameters), Manual recording.
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