

# LEGAL-6

## Multi Rate Video & Audio Legalizer



The LegalEyes is a full-featured A/V legalizer system. This instrument accepts SD/HD SDI sources, legalizes video and audio levels (including Loudness) and outputs a corrected SDI feed for use in downstream processes. It supports RGB, Composite (PAL, NTSC 7.5IRE setup and NTSC 0 setup), simultaneous Composite + RGB and YCbCr gamut correction.

EyeHeight's proprietary **clobeRing** - luminance ring suppression technology - is also included, which proactively reduces content rejection, and a switchable monitoring output with unique "3D" processing indication is also provided. This 1RU instrument is ideal for ingest areas, receiving facilities and control rooms - any place where your signal must be correct, the LegalEyes can help. Some of its features are:

- Legalizes 3G-SDI, Dual Link SDI, SD-SDI and HD-SDI signals with full 10-bit processing.
  - Optional Audio Loudness Control/Correction available.
  - Composite, YCC (Component) and RGB color space correction - each with settable limits.
  - Two independent SD/HD SDI outputs - each settable as "Legalized", "Raw", and "Indicate" out.
  - Adjustable clipping levels and adjustable soft clipping knee levels.
  - Highly effective overshoot and undershoot suppression on the luminance signal.
  - Integral Luma and Chroma gain, black level adjustment and hue rotation.
  - EBU-R103 standard legalization settings.
  - Log output with Timecode and PC viewer program included. Simple text based RS232 automation protocol. Compatible with EyeHeight's geNETics automation protocol.
  - Mechanical relay bypass and redundant power supply options available.
- **NEW KARMA LOUDNESS OPTION (K):** The new option (K) for LegalEyes adds KARMAudioRT embedded audio loudness and peak-program level control to industry leading RGB, composite or combined composite and RGB video legalization. Now users can ensure video gamut, loudness, and peak-program level compliance with a single cost-effective product. The KARMAudioRT algorithm in the LEGAL-6 continuously monitors the stereo or multi-channel embedded audio loudness using ITU-R BS1770 Loudness and True Peak measurement algorithms and applies instantaneous correction to ensure that loudness limit and peak-program level limits are enforced.

The LegalEyes is a fully-featured legalizer system incorporating a 1U ethernet chassis with a hardware control panel which can also be controlled through a web-based Java softPanel program from any internet browser. The main features of the legalEyes are:

- Available in multi-rate version.
- Provides legalization of 3G/Dual Link/HD/SD-SDI input signals with full 10-bit processing throughout.
- Composite, YCC (Component) and RGB color spaces.
- Two independent SD/HD-SDI outputs, each changeable between “Legalized”, “Raw” and “Indicate” Out.
- Adjustable clipping levels.
- Adjustable soft clipping knee levels.
- Highly effective overshoot and undershoot suppression on the luminance signal - clobbering.
- Integral luma and chroma gain, black level adjustment and hue rotation.
- EBU-R103 standard legalization settings.
- Web-based Java softPanel and specific “web app” available.
- 7.5 IRE or 0 IRE Pedestal.
- Six user memories.
- Log output with Timecode and PC viewer program.
- Unique severity display mode on monitoring output.
- Two off-board GPI’s for memory recall.
- Compatible with the 14 GPI/tallies on the etherBox.
- Fully software and firmware updatable using flash technology.
- On-board simple text-based RS232 automation control. Compatible with EyeHeight’s geNETics automation control.
- Audio Loudness control option.
- Mechanical relay bypass available.
- Redundant power supply option.

#### AVAILABLE OPTIONS:

- **LEGAL-OP LOUD:** Loudness Control Option
- **LEGAL-OP PSU:** Redundant Power Supply
- **LEGAL-OP BYPASS:** Multi-rate Relay Bypass Option on I/O Module