

# VIO ALC

## HD/SD digital automatic loudness controller



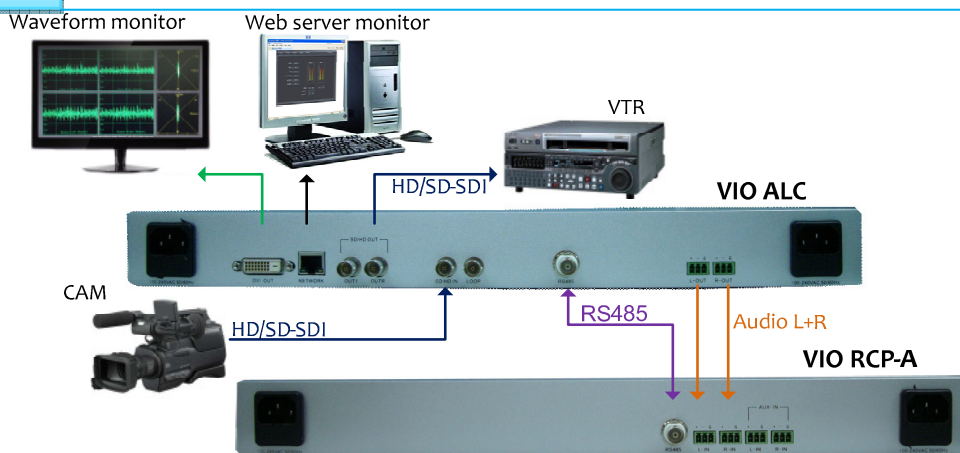
VIO ALC is a new product for HD/SD-SDI embedded audio loudness control. VIO ALC adopts advanced automatic loudness processing and excellent technology of reducing and eliminating audio noise. It automatically keeps valid audio data existing within required range. VIO ALC can apply to various occasions to deal with loudness problems, such as audio jumping between different programs.

### Key Features

- Advanced FPGA + DSP processing technology
- Based on ITU-R BS1770 standard
- Support the resolution of 480i 60, 576i 50, 720P, 1080i and 1080P
- Support SDI signal with embedded audio
- Up to 8 channels of audio processing with embedded audio
- Support signal loop-out when power off
- Unique technology of noise reduction. Loudness control only to valid data
- Two control modes, auto mode for automatic control of audio loudness, manual mode for customize adjustment of audio gain
- Support SNMP protocol and Web server monitor
- Monitor audio waveform and phase before and after processing from DVI interface
- Adopt RS485 to connect VIO ALC and RCP with a coaxial cable
- Two high quality of speakers and head phone configured on RCP, adjustable audio volume via knobs
- 1U chassis structure, redundant power and fan designed



### Application



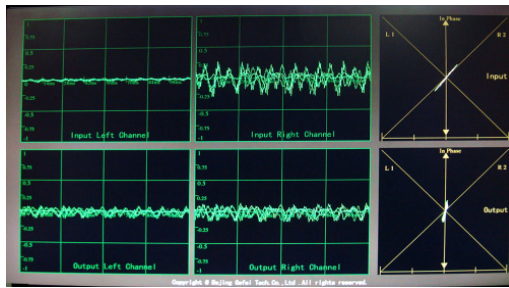
The front panel and back rear of VIO ALC



The front panel and back rear of VIO RCP-A



### Waveform and Web Server



Professional audio waveform and phase display before and after loudness control from DVI output



Web server monitoring the status of video and audio signal, the audio PPM before and after loudness control

### Technical Specifications

#### VIO ALC-HD

##### Signal Input

Input: 1xHD/SD-SDI, BNC, 75ohm  
Standard: SMPTE 292M; 1.5Gbit/s  
SMPTE 259M; 270Mbit/s  
Length: 100m @ 1.5Gb/s, 300m @ 270Mb/s with Belden 1694A

##### Signal Output

Output Interface: 3xHD/SD-SDI, BNC, 75ohm  
(2 after-loudness-control outputs, 1 of 2 for loop-out without power, 1 HD/SD-SDI loop)  
Standard: SMPTE 292M; 1.5Gbit/s  
SMPTE 259M; 270Mbit/s

##### Control Interface

RCP control: RS-485, BNC, no parity bit, Baud rate based on protocol  
Network port: RJ45, 1000MBase T Ethernet

##### Parameter range

The range of loudness control: 0~30dB adjustable

##### Physical

Power Supply: 2x120W

#### VIO ALC-SD

##### Signal Input

Input: 1xSD-SDI, BNC, 75ohm  
Standard: SMPTE 259M; 270Mbit/s  
Length: 300m with Belden 1694A

##### Signal Output

Output Interface: 3xSD-SDI, BNC, 75ohm  
(2 after-loudness-control outputs, 1 of 2 for loop-out without power, 1 HD/SD-SDI loop)  
Standard: SMPTE 259M; 270Mbit/s

##### Control Interface

RCP control: RS-485, BNC, no parity bit, Baud rate based on protocol  
Network port: RJ45, 1000MBase T Ethernet

##### Parameter range

The range of loudness control: 0~30dB adjustable

##### Physical

Power Supply: 2x120W

#### VIO RCP-A

##### Audio input

Input: 2x analog audio stereo  
(One for AUX audio in)  
Interface: 3pin, balanced

##### Parameter range

The range of loudness control: 0~30dB adjustable

##### Control Interface

RCP control: RS-485, BNC, no parity bit, Baud rate based on protocol

##### Physical

Power Supply: 2x110W

### Ordering Information

- VIO DAP-SD: SD digital audio gain controller (manual control only)
- VIO DAP-HD: HD digital audio gain controller (manual control only)
- VIO ALC-SD: SD digital audio loudness controller
- VIO ALC-HD: HD/SD digital audio loudness controller
- VIO RCP-A: VIO ALC/DAP universal remote panel, with speakers
- VIO AM-SD: Analog/AES/SD embedded digital audio monitor
- VIO AM-HD: Analog/AES/HD/SD embedded digital audio monitor