



ELITE-1000 Multi-Viewer Processor

ELITE-1000 series multi-view processor can display up to 16 channel video signals on one monitor. the name of the signal source, on-air status, clock and audio VU/PPM meter.

ELITE-1000 series multi-view processor uses 1RU frame which can house 4 input modules. Various signal formats are available, including CVBS, HD-SDI, SD-SDI, DVI and VGA. Video and audio signals in different format can be displayed on the screen and the input signals can also be detected and alarmed. ELITE-1000 supports TALLY indicator, UMD display, VU/PPM meter, clock display and correction.

ELITE-1000 has one HDMI output signal with resolution up to 1920×1080p. It also has one HDMI output with embedded audio and analog stereo audio output, and each audio output signal can select any signal source.

ELITE-1000 can be controlled via the front panel buttons, RS-232/422 and TCP/IP. The computer can adjust the parameters of each video signal, such as size, location and alarm.

ELITE-1000 is ideal for Studio, OB Vehicles, Broadcast Control Rooms and other applications where multi-channel audio and video signals need to be monitored.

ELITE-1000 Multi-Viewer Processor



DESCRIPTION

ELITE-1000 is a compact, high-resolution, modular multi-view processor built to streamline today's complex A/V monitoring workflow and make complicated installations a thing of the past. One 1RU ELITE-1000 can simultaneously display the combined graphics of up to 16 channel video signals (CVBS, HD-SDI, SD-SDI) and 16 channel audio signals (embedded audio or analog audio).

High Stability, Reliability and Security

ELITE-1000 uses a hardware design in order to avoid the instability, narrow BUS bandwidth, poor intellectual property protection and virus threat of PC-based architecture. The multi-view processor uses an industry-leading A/V processing chip for high-quality A/V output.

ELITE-1000 uses the industry standard frame for a variety of environments. The built-in cooling assembly greatly enhances the system's reliability. Redundant power supplies ensure 24/7 continuous operation.

Along with all of the physical characteristics, ELITE-1000 uses a set of detection methods including real-time alarming capabilities for still frame and SDI with embedded audio and digital audio loss.

Flexible Modular Design

ELITE-1000 uses flexible modular design. Depending on the size of the frame, up to 4 input modules can be placed in 1RU frame. Input modules in different formats can be processed in the same frame, including auto-detecting CVBS, HD-SDI, SD-SDI. ELITE-1000 can monitor graphics from the first channel to the sixteenth channel. The output module has 1 channel HDMI output (1920x1080p) which can be displayed on the mainstream LCD/LED or PDP monitor. The output module also supports 1 channel HDMI with embedded audio outputs and analog stereo audio outputs. Each channel output audio can be from different audio input sources.

Stable Working Mode, Flexible and Versatile Display Modes

Each input module in ELITE-1000 processor uses multi-bus parallel processing mode. Each video signal is processed

individually, and then the processed signals are sent in a unified format to multi-view module for graphics combination.

Each input module has two audio input modes: SDI with embedded audio and analog stereo audio. The audio signals are processed through the input module for unifying their signal format and calculating their VU and PPM value, and the processed audio signals are output to multi-view combination module.

The multi-view combination module synchronizes the video signals from the 4 input modules, and output audio VU meter. The combination module can store 16 standard display templates and 16 user-defined display templates. Each display template can be configured to be display sub-window. Each sub-window signal can be from different video sources.

Multi-function Integrity

ELITE-1000 supports TALLY indicator, UMD, VU/PPM meter, clock view and correction. TALLY indicator can be achieved through GPI/O. The input module provides each channel input video with TALLY signal input interface and dynamic UMD input interface. Users can choose the corresponding interface as needed. The UMD uses TSL protocol to support third-party router switch. Or UMD controller can directly drive ELITE-1000 to display the monitored signal's name through RS232/422.

Versatile Control Mode

The ELITE-1000 multi-view features a number of options for flexible operator control, including a front-panel LCD menu, RS-232/422 serial port and TCP/IP control. ELITE-1000's window control software can work either on-line or off-line. The control software has multiple functions: display template designing, real-time control and parameter setting.

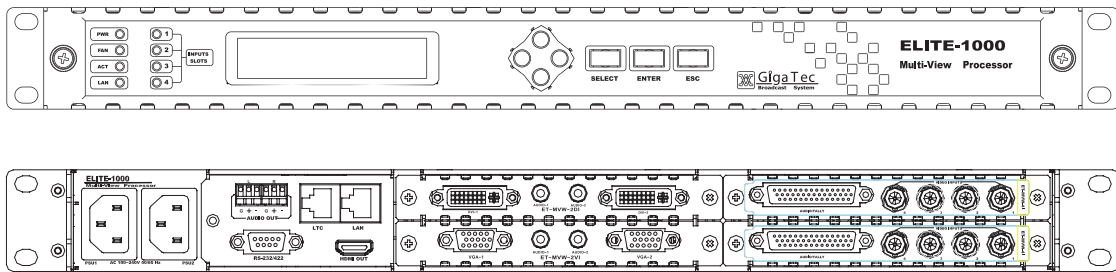
ELITE-1000 is ideal for broadcasting studio, master control room, OB vehicle, and AV field.

ELITE Multi-Viewer Processor

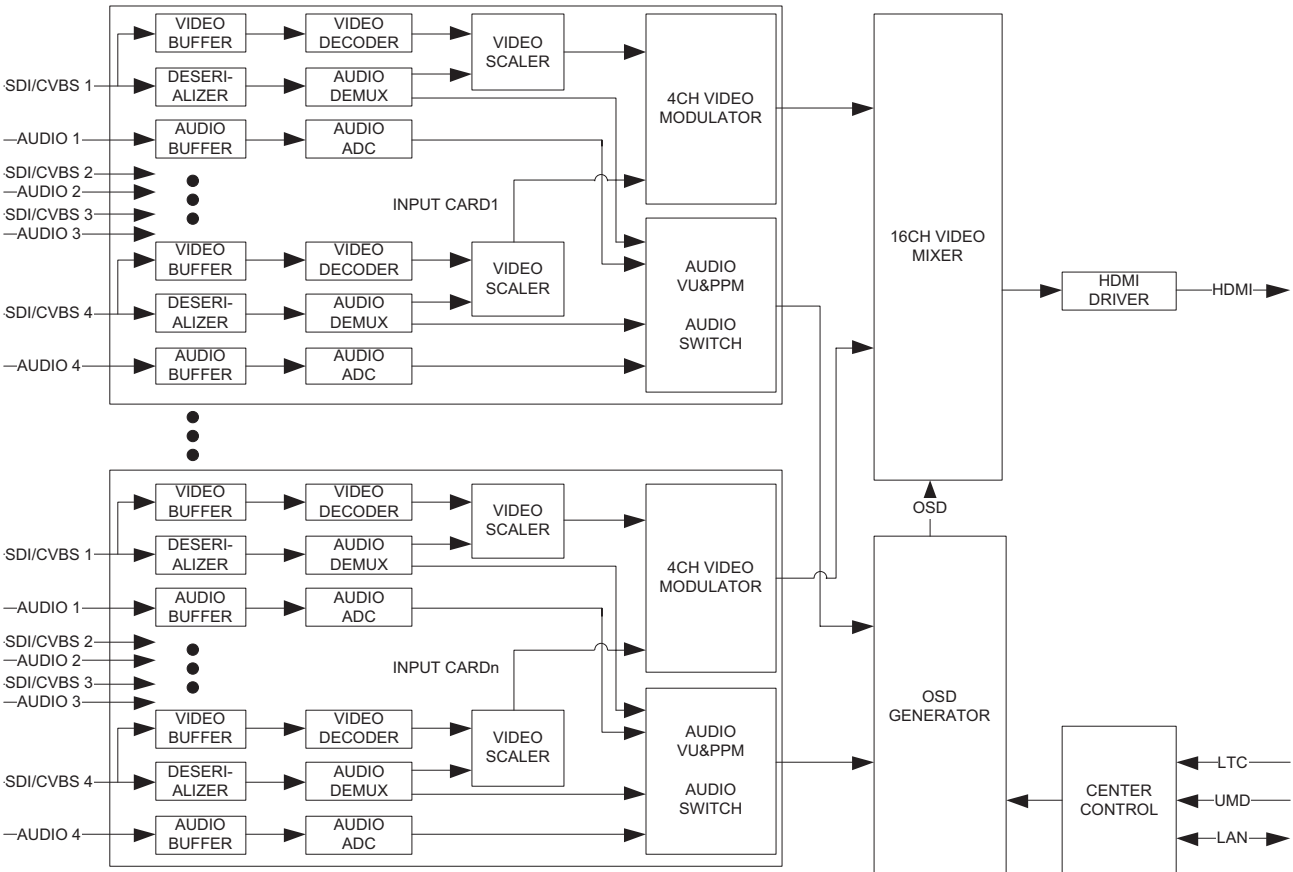
KEY FEATURES

- Modular, non PC-based architecture
- Redundant primary and backup power supplies, cooling system
- Multi-format video inputs: CVBS, HD-SDI, SD-SDI
- Displays audio VU/PPM meter and clock
- SDI with embedded audio input and analog stereo audio input
- Graphics combination of up to 16 channel video signals
- TALLY and UMD (TSL protocol)
- LTC input clock correction
- High-quality HDMI video output interface, resolution up to 1920×1080i
- HDMI with embedded audio outputs for monitoring
- 1 channel stereo analog audio outputs for monitoring
- Real-time detection and alarm for video loss, black burst, still frame and audio loss
- Non-volatile memory
- Remote control panel for audio monitoring, quick selection of monitoring channel and graphics layout
- The PC software can work on-line or off-line

FRONT & REAR VIEW



BLOCK DIAGRAM



ELITE Multi-Viewer Processor

SPECIFICATIONS

HD/SD/CVBS+Stereo Input Module

Video Input

Signal Format.....CVBS
Signal System.....PAL, NTSC
Connector.....BNC (×4)
Impedance.....75 Ω
Return Loss.....> 40 dB @ 5.5 MHz

Signal Format.....HD/SD-SDI
Signal System.....525I, 625I, 1080SF25/29/30, 1080I50/59/60
Connector.....BNC (×4)
Impedance.....75 Ω
Return Loss.....> 15 dB @ 270 MHz, > 10 dB @ 1485 MHz

Analog Audio Input

Signal Format.....Analog audio (unbalanced stereo)
Connector.....DB-44F (×1)
Level.....Up to +20 dB
Frequency Response.....20 Hz ~ 20 KHz
Impedance.....> 20 KΩ

TALLY Input

Signal Standard.....GPI NO
Connector.....DB-44F (×1)
Impedance.....Optocoupler isolation
Number.....1×4

Timecode Input (LTC)

Signal Standards.....EIA/TIA-232, EIA/TIA-422
Connector.....Three-terminal line or RJ-45 (×1)

Output

Video output

Signal Format.....HDMI
Connector.....HDMI (×1)
Resolution.....1280×1024, 1280×720, 1920×1080i
Transmission Distance.....15M
Embedded Audio.....2 tracks stereo

Analog Audio Input

Signal Format.....Balanced stereo
Connector.....DB-44F (×2)
Level.....Up to +20dB
Frequency Response.....20 Hz ~ 20 KHz
Impedance.....> 20 KΩ
S/N Ratio.....>75dB

Control

RS-232/422

Connector.....RJ-45 (×1) or DB-9F (×1)
Code Rate.....4800 ~ 115200bps
Signal Standards.....EIA/TIA-232, EIA/TIA-422

LAN

Connector.....RJ-45(×1)
Code Rate.....10/100Mbps
Signal Standards.....IEEE802.3

Mechanical

Width.....19 in. (483mm)
Height.....1RU (44mm)
Depth.....21 in. (531.5mm)

Electrical

Input Power Supply.....100 ~ 240V AC (±10%), 47 Hz ~ 63 Hz
Power Consumption.....80 W

Environmental

Operating Temperature.....32° ~ 104°F (0°C~40°C)
Relative Humidity.....10% ~ 90%

ORDERING INFORMATION

◆ Frame Configuration

Model

ELITE-FM
ELITE-PWR
ELITE-CB

Product Description

Multi-view Processor Frame (UMD and TALLY supported)
PSU (Redundant power supplies)
Control and Output Module

◆ Optional Accessory

Model

ET-SD-AV

Product Description

4 channel HD/SD/CVBS+ Stereo Input Module