AIB-3000

16-Channel Cinema Audio Processor

DTS Surround with Enhanced Bass Management

The AIB-3000 is a standalone 5.1/7.1/15.1 cinema audio processor compatible with all current and legacy media blocks. The AIB-3000 creates a sensational surround sound experience for certified DTS Surround Cinema auditoriums by achieving precise sound system calibration and full-range surrounds with its enhanced bass management.

The AIB-3000 offers a 16-channel premium quality audio processor and Digital-to-Analog converter. It has an expanded feature set including a built-in booth monitor, microphone, and interface with external audio media players. The AIB-3000 is also able to remotely switch input sources via Ethernet.
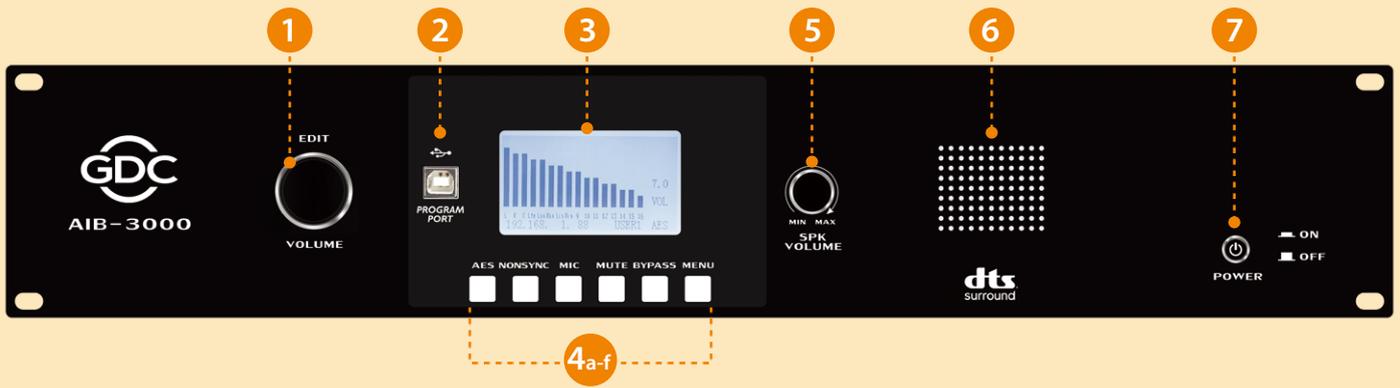
Highlights

1. User-friendly graphical user interface
2. Easy-to-use volume knob and built-in booth monitoring speaker
3. LCD display to show control interface
4. DTS Surround Cinema compliant room calibration
5. Surround bass management
6. Built-in crossover (three-way) enhances audio quality and reduces installation cost
7. Up to 16-channel audio processing capability & Digital-to-Analog converter
8. Hi/Vi-N outputs provide flexible connectivity
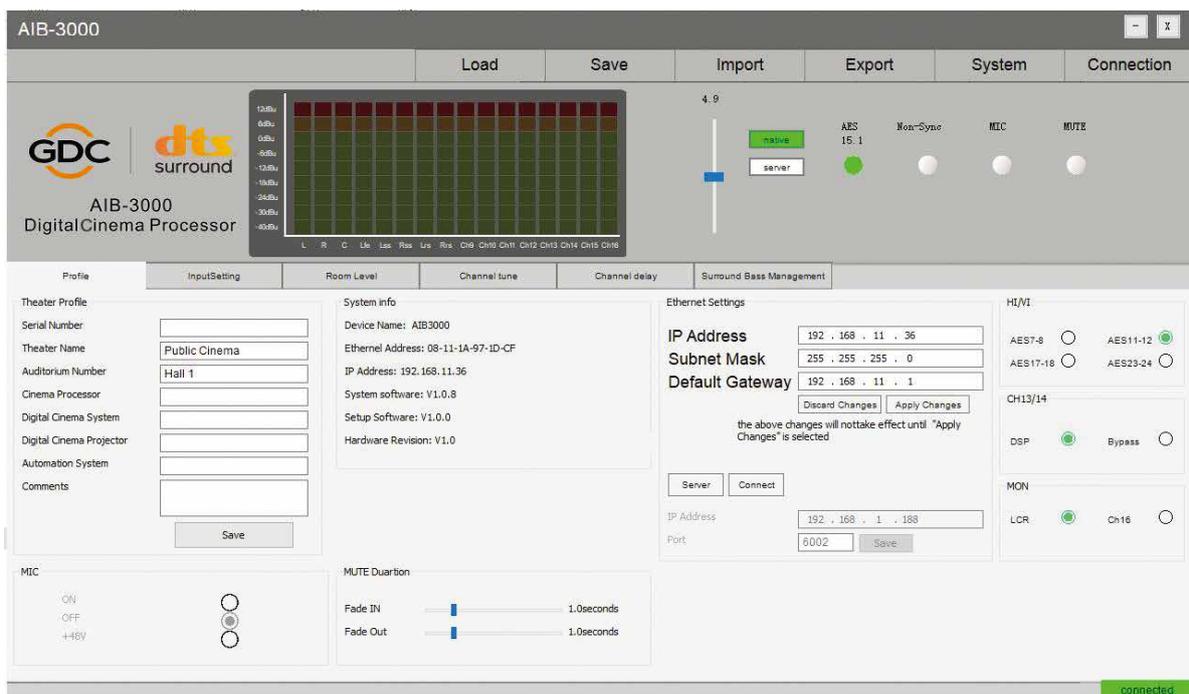9. Non-sync and microphone inputs provide flexible audio integration and direct microphone connectivity

Powering your digital cinema experience

AIB-3000 Front Panel

1. Multi-purpose knob used for sound level control and configuration on the LCD display
2. USB port for PC connection and firmware upgrade
3. LCD display for audio levels and configuration
4. Buttons:
   - 4a. Switch to AES input
   - 4b. Switch to NON-SYNC RCA analog input
   - 4c. Switch to MIC input
   - 4d. MUTE/UNMUTE audio output
   - 4e. BYPASS - mix center channel to left and right channels
   - 4f. MENU - enter configuration mode on LCD display
5. Volume knob for adjusting the booth monitor speaker level
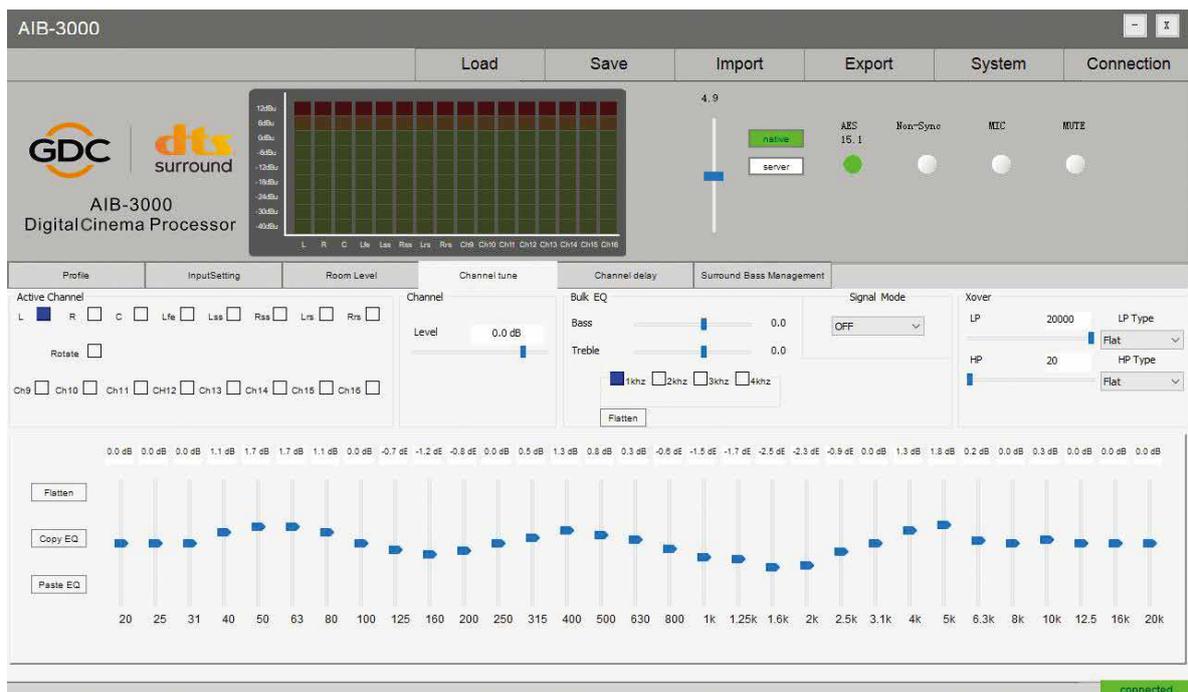6. Booth monitor speaker
7. Power switch

Graphical user interface

Powering your digital cinema experience

AIB-3000 Back Panel

1. Power input [100-240VAC, 50-60Hz]
2. Backup power input [DC12V/4A]
3. Ethernet port [100Mbps]
4a. AES inputs [2xRJ45]
4b. Aux AES inputs [1xRJ45]
5. MIC-IN input (XLR connector)
6. Non-sync input [RCA L-R connectors]
7a. Analog outputs for HI/VI-N [RCA L-R connectors]
7b. Analog outputs for external monitor [RCA connector]
7c. Redundant CH1-16 analog output [2x male HD-25 connectors]
8. Analog outputs for CH1-16 [16x 3-pos Phoenix terminals]
9. Bass management outputs [2x 3-Pos Phoenix terminals]

Graphical user interface

Key Features of AIB-3000 Cinema Audio Processor

The AIB-3000 cinema audio processor achieves precise auditorium sound system calibration by supporting:

- State-of-the-art DTS Surround tuning practices
- Surround bass management
- 1/3-octave graphic EQ with independent bass and treble controls (non-LFE channels)
- Parametric EQ (LFE channel)
- 3-way crossovers with selectable filter type and configurable slope
- Fader (gain adjustment), global and individual channel delay
- Booth monitor output
- Built-in signal generator, mute with configurable fade-in/fade-out times, wide dynamic range
- Audio input level display, easy configuration backup and restore
- Channel routing & duplication

Key Benefits of DTS Surround Cinema

With the AIB-3000 cinema audio processor, it's now possible to design a certified "DTS Surround Cinema" with a speaker layout following DTS Surround Cinema guidelines featuring full-range surrounds and DTS target curve. A certified DTS Surround Cinema requires onsite certification by an authorized technician.

Using Standard DCP Formats
Certified DTS Surround Cinema auditoriums can play standard 5.1/7.1 DCPs.

Every Movie will Sound its Best
- Optimized X-curve targets and state-of-the-art tuning practices deliver stunning sound quality with the DTS Surround Cinema solution.
- Featuring extended frequency range to significantly improve the overall quality of presentation in surround sound theatre.

A Stepping-stone to DTS:X for IAB
A certified DTS Surround Cinema serves as a stepping stone to DTS:X for IAB theatre, enabling seamless upgrades while preserving existing speakers and positions.

Strong Identity to Moviegoers
Marketing materials including a theatre plaque are provided to promote DTS Surround Cinema.

Specifications

PERFORMANCE		
Balanced analog output	THD+N	<0.005%
	Frequency response	+/-0.5dB (20 Hz - 20K Hz)
	Dynamic range	>105dB

INPUT		
AES3 input	Connector	3 x RJ-45 balanced
	Impedance	110 Ohms
	Input level	0.5 - 10 Vpp
Non-sync input	Connector	2x RCA unbalanced
	Maximum input level	+8.2dBu
	Impedance	10K Ohms
Microphone input	Connector	Female XLR balanced or unbalanced
	Maximum gain	+32 dB
	Phantom supply	+48 V switchable
	Impedance	750 Ohms (balanced) or 375 Ohms (unbalanced)

OUTPUT		
Analog output CH1-16 & surround bass channel BM1-2	Connector	18x 3-pin Phoenix Balanced
	Frequency range	20 Hz - 20,000 Hz
	Impedance	100 Ohms (balanced) or 50 Ohms (unbalanced)
	Maximum output level	+13 dBu
Redundant analog output CH1-16	Connector	2x Male HD-25 balanced
	Frequency range	20 Hz - 20,000 Hz
	Impedance	100 Ohms (balanced) or 50 Ohms (unbalanced)
	Maximum output level	+13 dBu
Hi/Vi-N	Connector	2x RCA unbalanced
Monitoring output (L+C+R summed)	Connector	1x RCA unbalanced
Booth monitor speaker	Selectable source	LCR mix or a specific channel*

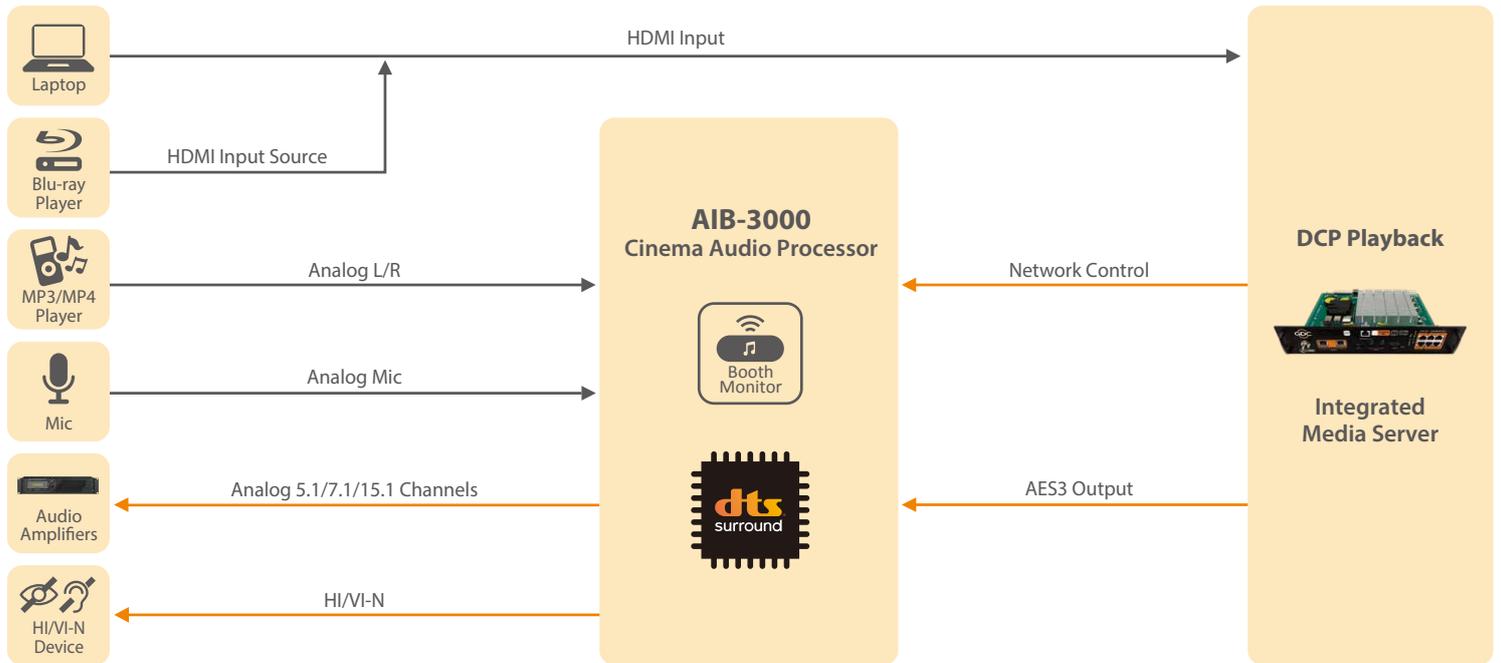| POWER	
Main power input	AC 100V-240V 50/60Hz
Backup power input	DC +12VDC, 4A
Maximum power	<50W

OPERATION CONDITION	
Standard operating temperature	0°C to 40°C (32°F to 104°F)
Non-operating temperature	-10°C to 60°C (14°F to 140°F)
Standard operating humidity	20% to 80% non-condensing
Non-operating humidity	20% to 80% non-condensing

GENERAL	
Dimensions (WxHxD)	483 x 88 x 300 mm (19" x 3.5" x 11.8")
Net weight	3.9 kg (8.6 lbs)
Shipping dimensions (WxHxD)	526 x 130 x 430 mm (20.7" x 5.1" x 16.9")
Shipping weight	4.8 kg (10.6 lbs)

* Note: In the 5.1/7.1 configuration, it is possible to choose a specific channel. In the 15.1 configuration, the channel is fixed to the LCR mix.

GDC dts surround

Powering your digital cinema experience

Schematic of AIB-3000 with External Audio Equipment*

HDMI Input

Laptop

HDMI Input Source

Blu-ray Player

Analog L/R

MP3/MP4 Player

Analog Mic

Mic

AIB-3000
Cinema Audio Processor

Booth Monitor

dts surround

Analog 5.1/7.1/15.1 Channels

Audio Amplifiers

HI/VI-N

HI/VI-N Device

DCP Playback

Network Control

AES3 Output

Integrated Media Server

* The actual system configuration may vary depending on specific application requirements. Please contact GDC for further details.

Dimensions

300mm

483mm

88mm