

Datasat AP25



When Quality and Performance Matter

The AP25 from Datasat Digital Entertainment stirs the soul with accurate playback of intelligible dialog, each musical note and sound effect. Sonic clarity effortlessly lends realism to every experience, making movies more detailed and impactful for audiences of any size. The AP25 is based on the ground breaking AP20 audio processor and now features additional features including an improved Power Supply, HDMI 2.0 and HDCP2.2, 20 additional Memory presets and soon to be added AES67 output capabilities allowing for the most advanced, quality surround reproduction available today. The AP25 like the AP20 before has been recognized as the reference standard for cinemas around the world. With the optional feature of Dirac Live for room optimization, any cinema becomes the directors pallet and the audio artist's brush

Each of the 16 channels includes

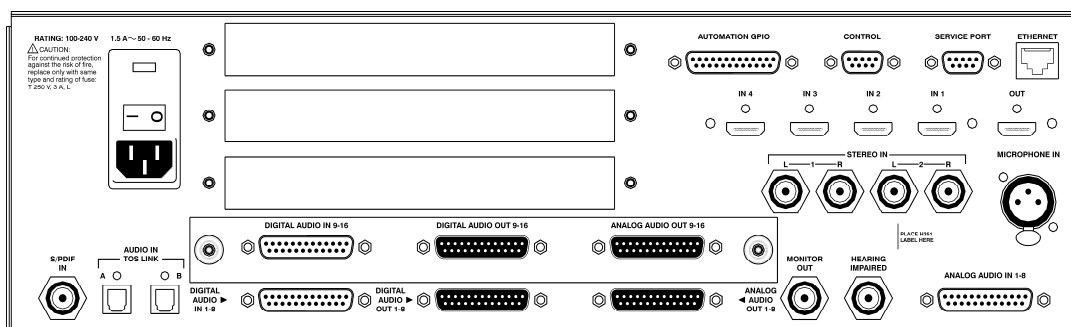
- Dirac Live® Room Optimization (optional)
- Level Adjustment
- Phase Adjustment
- 31 Bands of 3rd Octave Equalization
- 3 Band Parametric Equalization for Bass Shaping
- Hi Pass Variable Crossovers, 6, 12, 18, 24db per Octave
- Low Pass Variable Crossovers, 6, 12, 18, 24db per Octave
- Bass Shelving Equalization
- High Shelving Equalization
- Variable Delays Adjustable from 0ms to 1000ms
- Signal Routing to Multiple Outputs
- Ability to Save & Recall Multiple Channel Equalization Settings in 40 Memory Profiles for Inputs or Content Type
- Input level Metering

Engineered to Deliver

Engineered to deliver precise reproduction of both analog and digital sources, the AP25 leverages the power of six Analog Devices 400MHz DSP's. The processor offers 16 complete channels of processing power with 8 analog, 16 digital, 1 S/PDIF, 2 TOSLINK, 2 Stereo and 4 HDMI inputs (4-2.0 HDMI and 1-2.2 HDCP for Blu-ray, Cable, Satellite, DVD, Gaming, Computer or CD decoding. Along with 16 analog and digital outputs the AP25 provides outstanding flexibility and superior performance for today's and tomorrows immersive audio technologies.

In Room System Optimization

One of the most compelling options of the AP25 is the addition of Dirac Live® room optimization technology that improves the listener experience by correcting for room modes and anomalies using high-resolution filter technology. In addition, the processor also features 40 memory presets for complete control of various content—change from a feature film to a live concert to a sporting event with the flip of a virtual switch.



Digital Audio Decoders

- Dolby® AC3
- DTS® Master Audio / DTS® ES / DTS 5.1 / Neo:6

Digital Audio Inputs

- Channels: 16 Connector: DB25 (Female, 1ea. ch.1-8 & 9-16)
- Digital Format: AES/EBU Sample Rates: 44.1kHz, 48kHz, 96 kHz and 192kHz

Other Digital Audio Inputs

- Connector: Two TOSLINK (optical S/PDIF) and 1 coaxial (S/PDIF)

Analog Audio Inputs

- Channels: 8 balanced that are fully routable as to output, can be connected unbalanced
- Connector: DB25 (Female) Impedance: 10k ohms Sensitivity: 300mV rms

Other Analog Audio Inputs

- Channels: 2 stereo single ended and routable (non-sync) input pairs
- Connector: 4 RCA jacks Impedance: 10k ohms Sensitivity Adjustable: -16dBv to -4dBv

Microphone Input

- Single channel -68dBv to -8dBv input (XLR female connector) with switchable +48V phantom power

HDMI Inputs

- Audio Channels: Up to 8 (PCM, DTS-HD Master Audio & Dolby AC3) Connectors: 4 switched as inputs and 1 as output with video passed thru. HDMI 2.0 compliant on all connectors and HDCP 2.2 on one (#4) input and the one output.

Digital Audio Outputs

- Channels: 16 (fully routable as to input)
- Connectors: DB25 (Male, 1ea. ch.1-8 & 9-16)
- Digital Format: AES/EBU Sample Rates: 48kHz, 96 kHz and 192kHz

Analog Audio Outputs

- Balanced, unbalanced or single ended - Channels: 16 (fully routable as to input), common mapping with Digital Outputs
- Connectors: DB25 (Male, 1ea. ch.1-8 & 9-16) - Level: -10dBu with Fader at 7, +26dBu max (balanced) Connector: 1 single ended RCA output, channel-selectable to drive an external monitor.
- Adjustable Levels, to 300mV rms Connector: 1 single ended RCA output, summed output for Assistive Listening. - Fixed Level Out, 300mV rms

Dirac Live® Room Optimization (optional)

- 16-Channel Dirac Live® room optimization Installer kit required to install Dirac Live®

3rd Octave EQ

- 16 channels - 31 user-adjustable bandpass filters Adjustable in 0.5dB steps; total gain or loss of 6dB Frequencies range from 20Hz to 20kHz.

Parametric

- 16 channels with 3 user-adjustable parametric filters. Adjustable from 20 to 20k, gain +/-6dB in 0.1dB steps Q range from 0.7 to 5.

Hi/Low/Bandpass Active Crossovers

- Adjustable from 20Hz to 20kHz
- Adjustable slope of 6, 12, 18 or 24dB per octave

Bass/Treble tone controls

- Adjustable +/-6dB at 150Hz and 5.5kHz default or switchable from 50 to 300 and 1.5k to 12k .

Individual Channel Delays

- 0 - 1000ms

Global Delay

- 0 – 1000ms Note: Total delay per channel not to exceed 1000ms.

Automation Inputs/Outputs

- Connector DB25 (GPIO)
- 18 Bi-directional GPIO's

Remote Control

- 2 RS232 DB9s 10/100 Ethernet

Setup/Operation Profiles

- 40 Named profiles identifying inputs, output, filter and channel gain settings Touchscreen or automation format switching Export/Load of user profile to additional audio processors with identical room setups (via USB)

Power Requirements

- 100-240 VAC, 50-60Hz, auto-switching 60W power consumption

Hardware Dimensions

- 3U 19" rackmount standard Imperial - 5.25"(H) x 19.0"(W) x 15.0"(D) Shipping Weight: 30lbs
- Metric - 13.33 cm (H) x 48.25 cm (W) x 38.1 cm (D)
- Shipping Weight: 13.6kg

Regulatory Compliance

- UL CB Scheme, FCC Part 15, subpart B Class A, CE, RoHS compliant