



## High-Density, Comprehensive Audio Management

The JetStream Plus brings space savings with configuration flexibility to audio networking and routing, with 240 channels in only four rack units. Fifteen card slots are provided for analog inputs, digital inputs, analog outputs, digital outputs, SDI inputs and microphone preamps as well as Dante® I/O. A drop-down front panel makes access to cards easy, and redundant power supplies ensure robust performance.

Up to three Logitek consoles (dependent on number of faders) may be operated via a single JetStream Plus, including Logitek's Helix Surface virtual console. In addition to standard console functions, the JetStream Plus handles routing, mix-minus generation (24 busses), profanity delay, frame delay, audio processing and other functions. The unit interfaces directly to popular TV routers, edit systems and program automation control systems. It also allows for direct transfer of audio from and to Radio hard-disk playout systems, additional JetStream devices and external devices via its JetNet network conduit, without using computer sound cards. Audio connections are made via DB-25 connectors (BNC for SDI); consoles and Dante I/O are connected via RJ-45 connectors.

When configured for Television operation, the JetStream Plus offers insert points for Dugan automixers (up to eight faders are supported).

### KEY FEATURES

- Ultra-high-density I/O in only 4 rack units
- One JetStream Plus can handle up to 240 digital or analog inputs/ outputs of your choice
- Supports the latest IP and Ethernet protocols
- I/O cards available for analog, AES or S/PDIF, SDI, Mic preamp
- 12 GPI inputs and 12 GPI outputs on 2 DB-25 connectors
- 24 mix-minus busses
- Embedded microprocessor for operation of system and Logitek virtual applications
- Direct network transfer of audio from hard-disk playout systems via JetNet network conduit instead of sound cards
- Interfaces to TV program automation control systems
- Insert points for Dugan™ automixers (TV console configuration only)
- Dante® I/O (included) provides 64 inputs and 64 outputs; automatically updates list of sources from the network
- Smooth digital mixing, one-button triggers, multiple busses
- Livewire™ connectivity
- Redundant power supplies

### VERSATILE

- Full X-Y audio routing capability
- Built-in profanity delay and audio processing
- Supports all Logitek digital consoles

### EASY ACCESS TO MODULES

- Front panel drops down for quick access to I/O, DSP card, power supplies and on-board computer

### PLUG-IN CARD TYPES:

- 8 stereo or 16 mono analog inputs
- 8 stereo or 16 mono analog outputs
- 8 mic preamps with phantom power and remote 1st stage gain adjust
- 8 AES/EBU inputs (S/PDIF may be connected)
- 8 AES/EBU outputs (S/PDIF may be connected)
- 1 SDI input (accepts SD, HD and 3G SDI); 16 audio channels de-embedded)

### Interior view





## Networked Console Systems

5403 Bissonnet Street, Suite B  
Houston, TX 77081 USA  
713.664.4470  
Toll Free: 800.231.5870  
Fax: 713.664.4479  
www.logitekaudio.com

## Specifications

## JetStream PLUS

Specifications are subject to change without notice

### DIMENSIONS AND WEIGHT

- 19" W x 15.5" D x 7.0" H (48.2 x 39.4 x 17.8 cm) - 4 RU
- Fully loaded weight 25 Lbs (11.34 kg)

### GENERAL

- Card slots: 1 Audio & Network processor, 1 GPIO, 15 Audio I/O, 1 PC, 2 PSU
- Local audio I/O: 240 channels max (mono) on 15 I/O cards
- Power: 95 - 120 volt or 220-240 volt, 47-63 Hz single phase (50W max)
- Backup power: 2 internal PSU with individual mains connections
- Start up time: 3 sec to local audio, 30 sec to networked audio
- Cooling: Low noise, low vibration fan
- Environmental: 10°C - 38°C, 10 - 90% RH (non-condensing)

### AUDIO PROCESSOR / AoIP INTERFACE CARD

- DSP: 32 bit floating point processing
- Mixing: Stereo channels are shared between 1 to 3 consoles. See Console Fader Support
- EQ & Dynamics: 24 channels allocated to either inputs or outputs
- Profanity delay: 2x delays, 12 sec stereo each
- Mix-Minus outputs: 24 channels mono, may be combined for stereo
- 0 VU Reference Level: -20 or -18 dBFs
- Internal sampling rate: User selectable 44.1K or 48K
- External sync: AES3, pulse-per-sec, analog video
- Surface and Utility connections: 7 serial ports with activity indicators
- Ethernet: 2 wired Gigabit ports
- Simultaneous audio streams: 240
- System size: 2000 streams total
- Network delay: 2.8 mSec max
- Fault tolerance: dual redundant networks when using two network switches
- Snake mode: up to 3 JetStream units can be directly connected without a switch
- Streaming protocols: RTP, multicast and unicast
- Network sync: Automatic system master selection, automatic failover; network can be locked to house sync input via a single JetStream

### GPIO CARD

- Inputs: 12 channels
- Input level: +3.3 V, ground to activate, reverse voltage and over voltage protected
- Outputs: 12 channels
- Output format: optical isolated relay, non-polarized (50 V, 500 mA max load)
- Functionality: assigned in setup program

### MICROPHONE INPUT CARD

- Number of Channels: 8 microphones
- Connectors: 1 DB-25
- Phantom power: +48 V switched via software
- Normal input level: -65 to -30 dBu
- First stage gain control: via software or control surface
- Input impedance: 2 K ohms balanced
- Common mode rejection ratio: -90 dB @ 1 kHz
- THD+N: 0.15% (35 dBu input, +4 dBu output, 20 Hz - 20 kHz)
- Frequency response: (20 Hz to 20 kHz) +/- .2 dB
- Equivalent input noise: <-124 dB (-60 dBu input, +4 dBu output, 20 Hz - 20 kHz)
- Conversion resolution: 24 bits

### ANALOG INPUT CARD

- Number of Channels: 16 mono inputs, may be combined for stereo
- Connectors: 2 DB-25 (consumes two slots in card cage)
- Signal format: Balanced or unbalanced
- Maximum input level: +24 dBu
- Normal input level: +4 dBu, +20 dB headroom
- Input impedance: 50k ohms balanced or 25k ohms unbalanced
- Common mode rejection ratio: -90 dB @ 1 kHz
- THD+N: .008% (+4 dBu input, -20 dBFs output, 20 Hz - 20 kHz)
- Frequency response: (20 Hz to 20 kHz) +/- .2 dB
- Conversion resolution: 24 bits

### ANALOG OUTPUT CARD

- Number of Channels: 16 mono outputs, may be combined for stereo
- Connector: 2 DB-25 (consumes two slots in card cage)
- Signal format: Balanced or unbalanced
- Maximum output level: +24 dBu into 600 Ohms
- Normal output level: +4 dBu, +20 dB headroom
- Output impedance: 60 Ohms
- THD+N: .008% (-20 dBFs input, +4 dBu output, 20 Hz - 20 kHz)
- Frequency response: (20 Hz to 20 kHz) +/- .2 dB
- Signal to Noise Ratio: >80 dB (+4 dBu input, +4 dBu output, 20 Hz - 20 kHz)
- Conversion resolution: 24 bits
- Stereo separation: >80 dB (+23 dBu input, +23 dBu output, 20 Hz - 20 kHz)
- Inter-channel crosstalk: >90 dB (+23 dBu input, +23 dBu output, 20 Hz - 20 kHz)

### DIGITAL INPUT CARD

- Number of channels: 8 inputs, stereo input may be split into 2 mono

- Connector: 1 DB-25
- Digital format: AES3-2003 or S/PDIF
- Rate conversion: All inputs, 24 bit resolution, 24 kHz to 96 kHz, switchable in or out
- Input sample rate: same as audio processor card when rate conversion turned off
- Precision: up to 24 bits
- Input impedance: 110 Ohms, transformer balanced and isolated
- Frequency response: (20 Hz to 20 kHz) +/- .1 dB
- THD+N: <.004% (-20 dBFs input, -20 dBFs output, 20 Hz - 20 kHz)
- Dynamic range: 140 dB
- Subcode detection: validity bit, audio/no audio bit

### DIGITAL OUTPUT CARD

- Number of channels: 8 outputs, 2 mono may be combined into 1 output
- Connector: 1 DB-25
- Digital format: AES3-2003 or S/PDIF, user switchable
- Sample rate: same as audio processor card
- AES output compliance: 24 bits
- Output impedance: 110 ohms, transformer balanced and isolated
- Frequency response: (20 Hz to 20 kHz) +/- .1 dB
- THD+N: <.004% (-20 dBFs input, -20 dBFs output, 20 Hz - 20 kHz)
- Dynamic range: 140 dB
- Subcode generation: copyright not asserted when in S/PDIF mode

### DANTE I/O CARD

- 64 inputs, 64 outputs
- List of sources is automatically updated from the network; no need for external PC
- Connectors: RJ-45 (Dante standard)

### EMBEDDED PC

- Embedded processor: Intel Atom, 1.6 GHz, 1 Meg DDR3
- Bulk memory: SSD
- OS: Windows® 7 embedded standard
- Video: 1 VGA, 1280 x 1024 resolution, 1 HDMI
- Video application: vMix+ user configurable meter bridge replacement GUI
- USB: 4 ports for pointing devices or memory sticks
- Ethernet: 1 wired Gigabit port for connection to business network

### CONSOLE FADER SUPPORT

- Television: one console of up to 38 faders (up to 32 physical, remainder via automation or vMix+)
- Other consoles: (A) Port 1: 18 faders; Port 2: 16 faders; Port 3: 6 faders OR (B) Port 1: 24 faders; Port 2: 16 faders; port 3 N/A