



THE INTELLIGENT NETWORK



Wheatstone BROADCAST AUDIO PERFECTIONISTSSM

OVERVIEW/PRODUCT PLANNING GUIDE



THE INTELLIGENT NETWORK

Yesterday's IP audio network just doesn't cut it anymore. You need a modern, smarter audio network. It's all in the WheatNet-IP Intelligent Network: audio routing, mixing, processing, silence detection, logic control, 24/7/365 reliability, and third-party equipment integration, from your program automation to your transmitter link. Only WheatNet-IP distributes intelligence across all access points in one unified, robust Gigabit Ethernet network for reliability, scalability and extreme studio programmability. Best of all, WheatNet-IP is the driving engine under the hood for a wide range of control surfaces made by Wheatstone, which you'll also need for your modern network.

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MEET BLADE-3

Everything you need to put music on the air... all the way from audio input to your transmitter, in a single box.

When we invented modern radio audio networking, we vowed to build the first truly intelligent IP audio system. One where every interface held the DNA of the entire system for recovery. A system with true Gigabit connectivity. One that required only a single CAT-6 cable to interface any network piece – to carry audio AND control information. A system that could actually be up 24/7/365 and handle everything you need, yet so simple to interface as to be virtually foolproof. Well, here ya go...

Gigabit Connectivity

All BLADE-3s use Gigabit Ethernet. This makes all the difference in network capacity, near-zero latency, throughput, reliability – in short, everything.

Virtually All Audio Formats

BLADEs are built to handle native analog, microphone, AES/EBU, SPDIF, AOIP, MADI, SDI and AES 67. Once any type of audio is ingested into the WheatNet-IP network, any type of audio input can be converted to any other type of output. Example: analog to digital, AES to IP, MADI to AES 67, mics to AOIP, etc.

Two 8x2 Utility Mixers

Each BLADE has two 8x2 utility mixers that can be configured in many different formats. Two 8x2, four 4x1, etc. These internal mixers are full featured and include panning, channel ON/OFF, fader levels, and access to any source signal in the system. They also include a full ACI (Automation Control Interface) allowing remote control, ducking, auto fade, channel on/off, levels, source assign, etc.

Audio & Control Routing Matrix

You can take any audio input and route it to any output or all outputs. You can take any GPI and send to multiple GIO's or you can marry GPIO's to an audio source and have it follow that source through the system. All through one RJ45 connector for each device.

Source & Destination Control

Each BLADE has the ability to route any source to the destinations on that BLADE.

Dual OLED Displays*

Each BLADE has two small full color displays for monitoring and control of most functions right from the front panel. Setup, monitoring, network information, alarm status, enabling and operating utility mixes, setting input and output gain, enabling audio processing – and whatever else we can think of in the years to come.

Silence Detection

In case of an operator error, this can be programmed as a “source” or “input” for the failover. If an operator misses a cue or leaves a fader down when the system senses silence it can take the automation system directly to air or use the integral clip player to play music and ads until the operator catches up. Every single audio output channel can be programmed with a silence detection and automatic switch-over function.

Built-in Audio Clip Player*

There is an optional built-in audio clip player that can be used to put emergency audio on the air. The files are managed in Navigator where you can add files, organize the playlist, and fire playback with a logic port. Silence or LIO can trigger this playback or it can be manually controlled from Navigator.

Front Panel Logic Indicators*

Status indicator for active logic and the direction (in or out) of the BLADE.

12 Universal GPI/O Ports

Each BLADE is equipped with RJ45 connectors to provide 12 Universal Logic Ports which can be individually designated during set up as inputs or outputs. These ports are used to interface the various external switches, indicators, and control functions you need.

128 Software Logic Ports*

Used to interface with software switches, indicators, and control functions throughout the system.

LIO/SLIO Logging*

This logging app tracks LIO/SLIO activity throughout the system and shows the user when any input comes into the system and when it is sent, via multicast, across the network and to the output. A comprehensive Sort Section and Activity Visualizer let the user see a detailed view of what happened in the system.

Stereo Audio Processor*

Each BLADE-3 has a stereo multiband processor with the following: 4-band parametric equalizer, 3-way crossovers, 3 compressors, 3 limiters, and a final lookahead limiter. This is a “routable processor,” meaning it is not limited to the local I/O on the BLADE – it can be considered a network resource.

Associated Connections*

This is a great feature in BLADEs for callers, codecs, networks, remote broadcast & live talk shows that require a mix-minus. You can create a predetermined back haul, IFB feed or mix-minus for each device based on its location in the system or on a fader. If you have a shared resource connected to your system, such as a codec, the software will “automagically” give the proper return feed to the codec based on its destination. When a base connection is made, up to ten additional connections can be made. This significantly helps streamline studio routing, phone and codec selection.

Aliases*

Allows the same source to be identified by different names. A signal can now be given an alias(es) which can be a more friendly name that operators understand. Multiple aliases can be used so different operators can share logic functions, source feeds, routing, etc.

AES67*

Ability to support AES67 compliant devices. Allows WheatNet-IP system to synchronize to IEEE1588 from a PTP grandmaster clock and ingest/stream AES67 compliant packets.

44.1, 48K, External Sync or AES 67 Operation*

This is the overall clocking for your digital system. The system clock rate can be either 44.1K, 48K, External Reference or AES 67.

Clock/Sync Indicators*

The 1588 Clock Loss Indicator notifies the user when the AES67 clock source has been lost.

The AES Sync Loss Indicator notifies the user when an AES input has lost its clock source. Also generates Alarms for any AES3 input that becomes disconnected.

Onboard Intelligent OS

Each BLADE has its own intelligence/operating system that allows it to be a powerful standalone router, be part of a larger system, or control the entire routing system. WheatNet-IP is an embedded system that does not require outside intervention or control from 3rd party software running on PC's. The configuration of the entire network is stored in each BLADE.

44.1K or 48K Sampling Rates

System operates at 44.1K or 48K while converting incoming signals up or down as needed.

Auto Mono Summing

Any stereo signal sent to a mono output is automatically summed: If you route a stereo source or stereo mix to a mono destination such as hybrid or codec, the system will automatically “sum” the left and right channels together.

Signal Splitting

The BLADE can take any Stereo AES/EBU or Analog input or output and split it into two mono channels.



Gain Control on Every Input & Output

Gain control on every input and output. This allows the user to calibrate the input level for each source or destination.

Balance Control

There is a balance control on every stereo input and output.

Flexible Signal Configuration

Signal can be defined as up to 16 mono, 8 stereo or any combination of mono and stereo totaling 16 channels.

Studio Bypass

With the push of a button or a command from the automation system, this output can feed the transmitter, freeing the on-air studio up for production or voice tracking.

Front Panel Input and Output Metering

There is metering for every input and output on the system – 12-segment, multi-color LEDs that can be used for metering inputs and outputs as 8 pairs or 16 mono signals.

Front Panel Headphone Jack and Source Selection

This is a self-powered headphone jack with volume control. It allows you to select and monitor any source or mix on that BLADE or in the entire system.

Salvos/Macros

There are an unlimited number of salvos and macros, used when more than one route needs to take place. These are preprogrammed events or a series of switched events that can happen within a BLADE or throughout an entire WheatNet-IP network.

Automation Control Interface (ACI)

This is a “tool box” in every BLADE that allows full control functions such as routing, ducking, panning, full logic control, mixing and silence detection. Each BLADE supports up to 20 ACI connections which can be used with devices like Talent Stations, GP panels, Sideboards, etc. It also allows control of our partners’/third party equipment.

Screen Builder*

While not built into a BLADE, the screen builder app offers the scripting capability of a GP16, the control of GlassE, monitoring and metering of the IP Meters app, and ACI protocol. This will allow a user to build a custom screen to fit many needs in specific applications. Will work with any version BLADE.

SNMP

Wheatstone’s enhanced Simple Network Management Protocol (SNMP) management systems use SNMP to monitor network attached devices such as BLADEs for conditions that may require action by the end user. This tool gives you centralized monitoring over large distributed systems. You can configure alarms and set thresholds to get notified if and when a problem occurs. The instant alarms and notifications help you take quick corrective actions through e-mail, SMS, and executing custom scripts.

Connection Choices

Has both DB25 to make transitional wiring easy for existing BRIDGE TDM customers and RJ45 – Studio Hub compatible RJ connectors for input and output.

Info Screen

Each signal has a new info screen allowing the user to add text to signals such as wire numbers, termination locations, etc.

LIO Test

LIO Outputs can be tested from the front panel of each BLADE.

Backup

Due to its distributed intelligence, the system has automatic backup capability.

Alarm Notification

Using Alarm doc or LED status, BLADEs can report on a wide variety of error and alarms.

NTP

System can lock to a NTP server on the network for time of day synchronization.

Front Panel Locking

All BLADEs’ front panels can be locked for security

Version Checker

Built in version checker to aid in update process.

Crosspoint Save

Can save a current copy of all crosspoints in the system. This is done in Navigator.

Debugging

A comprehensive logging application is included for every BLADE to aid in system debugging.

No Cooling Fans

They don’t need them!

Specific Functions for Specific BLADES

Mic Pre

Using the 88m you have 8 Mic preamps

Mic Processor

using the M4 you have 4 Mic preamps, but also 4 M1 mic processors.

Eight Audio processors

The Aura8-IP has 8 stereo processors that allow user to process any audio in the WNIIP system and route that processed audio to any output.

High density ingest

Using a MADI BLADE user can connect to a variety of 3rd party devices and ingest up to 64 channels of audio over a single coaxial cable.

External Clock reference

88d, 88ad, Aura8-IP BLADEs can accept an AES reference into port 8 to use a master clock reference for the system.

* indicates features available only in BLADE-3s

I/O BLADE-3s

IP-88A Analog, IP-88D Digital, IP-88AD Analog/Digital and IP-88M Microphone



IP88A Analog I/O BLADE-3

The IP88A is an analog input/output BLADE. It handles input and output, each with 8 stereo channels, 16 mono channels, or any combination totaling 16 discrete channels.



IP88D Digital I/O BLADE-3

The IP88D is an AES digital input/output BLADE. It handles input and output, each with 8 stereo channels, 16 mono channels, or any combination totaling 16 discrete channels.



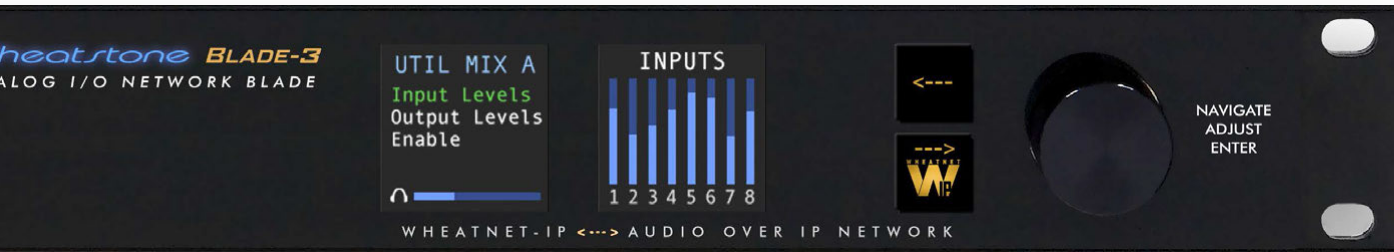
IP88AD Analog/Digital I/O BLADE-3

The IP88AD is a combined analog and AES digital input/output BLADE. It handles input and output, each with 8 stereo channels, 16 mono channels, or any combination totaling 16 discrete channels. Half of these are analog, the other half AES digital.



IP88M Microphone I/O BLADE-3

The IP88M is an analog input/output BLADE with microphone-level inputs. It has eight built-in microphone preamplifiers complete with pad, phase switch, and phantom power. It provides eight analog line-level outputs.



I/O BLADEs are far more than mere access units connecting studios, elements and Wheatstone control surfaces in the WheatNet-IP Intelligent Network. Yes, I/O BLADEs convert audio and logic inputs to data streams on the network and convert outgoing data streams to hardware outputs. But these 1RU I/O units – which come in analog, digital and analog/digital I/O units – also have intelligence inside. Each I/O BLADE comes with a CPU and operating system so you can do amazing things with your audio network, starting with routable mixing, logic-follow-audio and a whole lot more.

BLADE I/O access units make up the audio routing backbone of the WheatNet-IP Intelligent Network and use RJ45 StudioHub+ compatible connectors for input and output, and also have DB25 connectivity for transitioning from BRIDGE TDM networks.

But there's more inside their sleek, all-metal housing than mere I/O. The I/O BLADE has its own CPU and operating system; no additional PC required. It can operate alone or as part of a network, and can be located anywhere in the studio (no noisy fans inside). Each BLADE has a 1000-base-T (Gigabit) network interface. This single network connection is used to send and receive audio, logic, and communications from the I/O BLADE to the rest of the WheatNet-IP network. Gigabit Ethernet provides very low latency while allowing the use of readily-available switches and infrastructure for connectivity. Connect automation and production PC's, codecs, audio processors, controllers, and other devices directly to the network without installing specialized sound cards, A/D-D/A converters, audio wiring, or control connections. The I/O BLADE communicates at the speed of Gigabit Ethernet connectivity for optimum network QoS and reliability, and includes logic control, onboard utility functions and the dedicated controller that is at the core of its intelligence. Each individual I/O BLADE can hold the brain trust of the entire system's operation for exceptional network redundancy and scalability.

- CPU with OS and standalone operation
- 24-bit A/D and D/A converters
- 1RU, no fans
- AES67 compatible
- One Gigabit Ethernet port
- Two stereo 8x2 utility mixers
- Stereo multiband processor
- Embedded audio playback (optional)
- Silence sensing can be applied to any outputs
- 16 analog input channels
- 16 analog output channels
- RJ45 connectors for audio (8 in, 8 out)
- Four D-Sub connectors for audio (2 in, 2 out)
- 12 universal logic ports (GPIO) on 2 RJ45 connectors
- 128 software logic ports
- Front panel headphone jack
- Two full color OLED displays on front

MIX ENGINE BLADE-3

IP-88E



Every nerve center needs a brain. For many Wheatstone control surfaces, the IP88E Mix Engine BLADE-3 is it. This is the unit that handles the audio mixing for most E-Series control surfaces and the Wheatstone Glass-E Virtual Console.

Unique to Wheatstone's console engine approach is its true IP connectivity. The control surface networks directly into the network switch itself, giving it access to mix engine functions as well as direct access to automation systems, network applications and other control surfaces that make true system interoperability possible. Other IP audio systems tie the control surface and the console engine together using CAN bus, thereby filtering all outside communications through the console engine first and isolating the control surface from other elements and functions in the network.

The IP88E BLADE-3 houses all the DSP processing power for an individual control surface and distributes the four stereo PGM busses, four stereo AUX sends, per-channel mix-minus feeds, monitor outputs, and other bus signals to the network. Once on the network, bus signals are available as sources and destinations anywhere. This creates an extremely flexible system in which program outputs from one surface can be sources on any other surface; for example, a news mixer's program bus can be brought up as a source on the air studio surface. While the IP88E doesn't house audio I/O, it does include 12 universal logic (GPIO) ports for interfacing various external switches, indicators and devices for control purposes.

The IP88E is AES67 compatible for use with other AES67-compatible devices and signals in the WheatNet-IP Intelligent Network.

- True IP connectivity: Includes DSP processing
- 12 universal logic ports (GPIO) on 2 RJ45 connectors
- AES67 compatible
- Front panel headphone jack
- OLED front panel display with graphical menu
- One Gigabit Ethernet port

CONSOLE AUDIO BLADE-3

IP-88CB



Console Audio BLADE-3s provide audio I/O and DSP mix engine functions for WheatNet-IP control surfaces through the network switch. Unique to Wheatstone's console engine approach is its true IP connectivity. The control surface connects directly into the network switch itself, giving it access to mix engine functions as well as direct access to automation systems, network applications and other control surfaces that make true system interoperability possible.

The IP88CB Console Audio BLADE-3 comes standard with L-8, L-12, E-1, IP-12 and IP-16 control surfaces. A single Console Audio BLADE-3 is all that is needed for most studio operations, but busy studios often require additional I/O BLADEs or an upgrade to Wheatstone's newer 2RU model with double the I/O.

At double the I/O, the new 2RU Console Audio BLADE-3 comes with 8 AES inputs, 8 stereo analog inputs, 8 AES outputs, and 8 stereo analog outputs on StudioHub+ RJ45s, plus 4 mic level inputs with gain trim and switchable phantom power on XLRs. 1RU Console Audio BLADE-3s are also available for the same control surfaces, and come with standard I/O (4 AES inputs, 4 stereo analog inputs, 4 AES outputs, 4 stereo analog outputs, and 2 mic level inputs).

Both the 2RU and 1RU Console Audio BLADE3 provide control room and studio stereo analog outputs on XLRs as well as cue and headphone outputs on both RJ45 and 1/4" TRS and 12 GPI logic ports on RJ45.

Paired with Wheatstone's L-8, L-12, E-1, IP-12 or IP-16 control surface consoles, the IP88CB provides an economical standalone/networkable solution.

With XLRs for mic inputs and monitor outputs, 1/4" TRS for sends to headphone and cue amps, and StudioHub+ compliant RJ45's for all the general purpose analog and digital I/O, the Console Audio BLADE-3 is essentially a plug-and-play console system in a box. Just plug the Console Audio BLADE-3 and the related WheatNet-IP control surface into an Ethernet switch and you're ready to go.

All Console Audio BLADEs are AES67 compatible for use with other AES67-compatible devices and signals in the WheatNet-IP Intelligent Network.

There are three types of IP-88 Console Audio BLADEs:

- CB:** Used with IP-12 and IP-16 consoles
- CBE:** Used with E-1; includes DSP processing
- CBL:** Used with L-8 and L-12 consoles

- True IP connectivity
- 24-bit A/D and D/A converters
- 12 Universal Logic ports (GPIO) on 2 RJ45 connectors
- Integrated I/O Mix Engine BLADE
- AES67 Compatibility
- Cue and headphone outputs on RJ45 and 1/4" jack
- Control room and studio monitor outputs on XLRs
- OLED front panel displays with graphical menu
- Gigabit Ethernet port

I/O STANDARD 1RU ENCLOSURE:

- 2 Mic Preamps w/ XLR inputs, phantom power and gain trim
- 4 Stereo (8 Mono) Analog Line inputs on RJ45
- 4 AES inputs on RJ45
- 4 Stereo (8 Mono) Analog Line Outs on RJ45
- 4 AES Outputs on RJ45

I/O CB32 2RU ENCLOSURE:

- 4 Mic preamps w/ XLR inputs, phantom power and gain trim
- 8 Stereo (16 Mono) analog line inputs on RJ45
- 8 AES inputs on RJ45
- 8 Stereo (16 Mono) analog line outs on RJ45
- 8 AES outputs on RJ45

* NOTE: Control Room, Studio, Cue and Headphone outputs are part of the total of AES and stereo analog outputs. These may be reassigned for use as other outputs as desired.

SPECIALTY BLADE-3s



MADI BLADE-3

The MADI BLADE-3 is a high-density multichannel I/O BLADE for converting a 64-channel MADI input to data streams on the WheatNet-IP Intelligent Network, and converting network data stream to 64-channel MADI outputs.

With this, you can now ingest into WheatNet-IP audio from any system that utilizes MADI. You don't need a full blown control surface to use the MADI BLADE-3, either. With WheatNet-IP NAVIGATOR, you can control routing all of your MADI gear in ways that can breathe new life into your existing infrastructure. Or, use our SideBoard control surface to take advantage of the MADI BLADE-3's built-in utility mixers.

As a bridge to the WheatNet-IP audio network, this 1RU box interfaces to intercom systems, TDM routers, ProTools systems and DAWS that are MADI-capable. It provides 64 bidirectional channels (AES 10) between the WheatNet-IP audio network and a TDM or intercom system over one coaxial cable.

The MADI BLADE-3 uses BNC connectors for coaxial MADI inputs and outputs (1 each), and an SFP (small form-factor pluggable) transceiver slot for fiber connectivity. It has a 1000-base-T (Gigabit) network interface for optimum network QoS and reliability, and includes logic control, onboard utility functions and the dedicated controller that is at the core of its intelligence.

Like all BLADE-3s, the MADI BLADE-3 has its own CPU and operating system, is AES67 compatible, and has two built-in 8x2 stereo mixers as well as a stereo multiband processor with 4-band parametric equalizer, 3-way crossovers, 3 compressors, 3 limiters, and a final, look-ahead limiter. It comes with 12 universal logic (GPIO) ports for interfacing various external switches, indicators and devices for control purposes – as well as 128 software logic ports for routing and controlling devices anywhere on the network.

- 64-channel bidirectional MADI interface
- BNC connectors for coaxial MADI inputs and outputs (1 each)
- One SFP transceiver slot for fiber connectivity
- CPU with OS
- 24-bit A/D and D/A converters
- 1RU, no fans
- AES67 compatible
- One Gigabit Ethernet port
- Two stereo 8x2 utility mixers
- Silence sensing can be applied to any output
- 12 universal logic ports (GPIO) on 2 RJ45 connectors
- 128 software logic ports
- Two full color OLED displays on front
- Front panel headphone jack



LIO-48 LOGIC BLADE

The LIO-48 is a high-density logic BLADE that can be added to any WheatNet-IP audio network to give you more of what you need in a modern studio: control. The LIO-48 Logic BLADE provides 48 universal logic I/O ports, each individually configurable, for machine control of devices and elements in the network.

LIO-48 logic ports can output to closures for machine control of on-air lights, mic tallies, transmitter remote control and the like. The LIO-48 also can receive machine closures from external devices like satellite receivers, remote mic panels or the automation system for triggering channels ON/OFF.

The LIO-4's logic I/O meter provides drill-down information for each of the 48 ports.

- 48 universal logic ports, individually configurable
- Front panel LED status indicators
- Ethernet port



HD-SDI BLADE-3

The HD-SDI BLADE-3 is a specialty BLADE for extracting encapsulated audio from a serial digital interface (SDI). With the HD-SDI BLADE-3, you can ingest audio into the WheatNet-IP Intelligent Network from video production automation systems, routers, and other professional video equipment that use HD-SDI.

Our new specialty HD-SDI BLADE-3 for the WheatNet-IP Intelligent Network de-embeds multiple audio channels from HD-SDI streams so you can mix, process or simply route audio to your console for final broadcast. This 1RU is capable of de-embedding up to four HD-SDI streams, and up to 8 AES/EBU pairs (16 audio channels) per stream.

The HD-SDI BLADE-3 has four BNC connectors for coaxial input, and includes logic control, onboard utility functions and the dedicated controller that is at the core of its intelligence. Like other BLADEs, the HD-SDI BLADE-3 has its own CPU and operating system and provides a 1000BaseT (Gigabit) network interface for optimum network QoS and reliability. The HD-SDI BLADE-3 is AES67 compatible for interoperability with other AES67 compatible systems and devices, and has two built-in 8x2 stereo mixers. It comes with 12 universal logic (GPIO) ports for interfacing various external switches, indicators and devices for control purposes – as well as 128 software logic ports for routing and controlling devices anywhere on the network.

- De-embeds audio from four HD-SDI streams
- De-embeds 8 AES/EBU pairs (16 audio channels) per stream
- 4 BNC connectors for coaxial input and 4 BNC loop connectors
- CPU with OS
- 1RU, no fans
- AES67 compatible
- One Gigabit Ethernet port
- Two stereo 8x2 utility mixers
- 12 universal logic ports (GPIO) on 2 RJ45 connectors
- 128 software logic ports
- Front panel headphone jack

M4-IP BLADE-3

Four Channel Mic Processing BLADE



The M4-IP BLADE-3 combines four high-quality microphone preamps, four channels of Vorsis embedded microphone processing, and a WheatNet-IP BLADE interface, allowing you to place four microphone inputs anywhere in your WheatNet-IP Intelligent Network (although it also works just fine as a standalone processor). The preamps and processors are accessed and controlled from any point on the network via its Windows-based GUI.

The M4-IP is a great way to maximize your investment in on-air talent by combining four mic processors into a single rack space, accessible from anywhere.

The M4-IP microphone processor is equipped with four matched Super-Quiet (SQ) microphone preamplifiers featuring extremely low noise floor, very wide dynamic range, faithfully accurate transient response, and ruler flat frequency response. Operating in harmony with high quality 24-bit A/D converters and a 96kHz base sample rate, the M4-IP adds absolutely no undesired coloration to the signal and faithfully preserves the sound of any microphone and talent combination. It also features a four-section equalizer with high and low shelving EQ and two bands of fully parametric EQ, high and low pass filters, and de-esser and expander functions.

The M4-IP has four analog stereo line-level outputs, ideal for feeding headphone amplifiers associated with talent or studio monitoring systems, and four stereo AES digital outputs.

The signal path of the M4-IP includes four completely independent channels of Wheatstone's smooth-sounding Vorsis dynamics processing. Adjustable from anywhere on your network the M4-IP offers the security of password protected TCP/IP-based remote control and no front panel controls.

Like all WheatNet-IP BLADE-3s, the M4-IP BLADE-3 is AES67 compatible.

Wheatstone-designed Equalization

Based on great-sounding designs built for Wheatstone's high performance professional audio applications, the M4-IP's equalization section operates predictably and adds no noise, ringing, phasiness or other undesirable coloration to the sound.

Wheatstone-designed Dynamics Processing tools

A high performance and fully adjustable downward expander, de-esser, and smooth sounding broadband compressor and selectable low distortion final Lookahead limiter round out the M4-IP to create powerful and authoritative presence to production or on-air microphones.

Processing Presets

A variety of ready-to-use factory processing presets are provided, carefully tailored for different processing goals and formats. You can select a factory preset, confident that it will sound great just as it is. Or use a factory preset as a starting point and create a custom sound for each announcer, then save the new settings as a personalized user preset. In a facility with multiple microphone processors, presets saved in one unit can be easily copied to the others.

Wheatstone Talent Control Interface

The Wheatstone Talent Control Interface software can reside on an air studio/control room PC and gives talent the ability to recall presets from any Vorsis microphone processor without allowing processing adjustments.

All parameters of the M4-IP are controlled using the included Windows-based GUI. Voice talent can activate his or her own personal sound at the press of a button using the Talent Control Interface, a special GUI designed for preset recall only.



- Extremely high performance microphone preamplifiers with 48V phantom power
- Four completely independent processing channels
- Four stereo analog line level outputs
- Four stereo AES outputs
- All digital, field proven Wheatstone-designed advanced processing algorithms
- Phase Scrambler to correct asymmetrical voice waveforms
- High- and low-pass filters
- Fully adjustable downward expander
- Precision de-esser sibilance controller
- Four-bands of EQ: low-frequency shelving, two-band parametric, high-frequency shelving

- Broadband compressor
- Final precision peak limiter – can be defeated if desired for lower latency
- AES67 compatible
- TCP/IP-based remote control from anywhere via M4-IP Remote Control Software
- Talent Control Interface software for preset recall without processor control
- Password controlled access and control-less front panel for keeping settings secure
- Full color OLED front panel display
- Front panel metering of input and output levels

Recommended Applications:

- AM Analog
- FM Analog
- FM HD
- AM HD
- Television
- Webcasting
- Podcasting
- Mastering & Production
- Live Sound

NOTE: An original BLADE version of the M4-IP is still available. Contact your Wheatstone sales engineer for details.

AURA8-IP BLADE-3

Vorsis Eight-Channel Audio Processing BLADE



Rack up eight audio processors in one networkable unit. Convenient, cost-effective, and more than able enough, the Aura8-IP audio processing BLADE-3 has I/O onboard and eight fully independent Vorsis multiband stereo audio processors. This 1RU BLADE-3 offers processing control and network connectivity through the WheatNet-IP Intelligent Network and full AGC, compression and limiting functions for HD, streaming or podcasting separate channels of programming in one unit.

The Aura8-IP BLADE-3 audio processor brings two of Wheatstone's core technologies together: Vorsis ultra-high resolution audio processing and the WheatNet-IP Intelligent Network. Merging these technologies in a single product provides a convenient and cost effective way to access audio processing wherever you need it on your WheatNet-IP network. The Aura8-IP occupies a single rack space, but packs in an impressive eight fully independent Vorsis® multi-band stereo audio processors.

Each processing chain consists of a 4-band parametric equalizer followed by a crossover and three bands of compression. The compressors each feed their own limiters, whose outputs are then fed to a broadband lookahead limiter for tight peak control. The Aura8-IP has its own local I/O, with four stereo pairs of AES digital audio and four stereo pairs of analog line level audio in and out, and can function as a standalone processing engine. Because it's a BLADE-3, it can also instantly configure itself as part of a new or existing WheatNet-IP Intelligent Network, making its processing power available throughout that network.

Like all BLADE-3 access units, the Aura8-IP BLADE-3 is AES67 compatible.

The Aura8-IP is configured and controlled over Ethernet using a laptop or desktop computer. Included with the unit is Wheatstone's acclaimed "Guru" GUI software, which allows easy setup of the processing using familiar, straightforward controls. Also available is a more sophisticated control interface called "GUI Pro," which provides access to every individual processing parameter for expert-level adjustments.

NOTE: An original BLADE version of the Aura8-IP is still available. Contact your Wheatstone sales engineer for details.

- Highest performance 24-bit A/D and D/A convertors
- 8 complete Vorsis multiband processors, each with:
 - 4-band parametric equalizer
 - 3-way crossover
 - 3 compressors
 - 3 limiters
 - Final lookahead limiter
- Two 8-channel utility mixers
- 4 AES digital inputs on RJ45 and "D" connectors
- 4 stereo analog inputs on RJ45 and "D" connectors
- 4 AES digital outputs on RJ45 and "D" connectors
- 4 stereo analog outputs on RJ45 and "D" connectors
- Built-in router control
- AES67 compatible
- Full color OLED front panel displays
- Front panel headphone jack
- Front Panel Metering
- Rugged Power Supply
- Can be used standalone or as part of a WheatNet-IP Intelligent Network
- Silence sensing can be applied to any outputs
- One Gigabit Ethernet port



Designed and built by
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 **Wheatstone**
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