



IP AUDIO FOR TELEVISION

P R O D U C T I O N & B R O A D C A S T

 **Wheatstone**
 BROADCAST AUDIO PERFECTIONISTS®

OVERVIEW/PRODUCT PLANNING GUIDE

FULL ACCESS NETWORK

opening new networking opportunities to the TV audio world. Any source, anywhere, any time.



With all I/O managed through a separate rack unit, Wheatstone control surfaces have no limitations with fixed connection points on the console chassis itself. Any channel can connect to any audio source, using any preferred audio format at any time, whether it's HD/SDI, AES, MADI, AoIP, Analog or TDM.

The result is the first audio console that are so truly universal, they can fit into almost any TV production environment, anywhere -- whether it's a Wheatstone TDM routed studio, a MADI-equipped stadium, a remote truck or even the newest space in studio networking based on IP connectivity using BLADEs on our WheatNet-IP network.

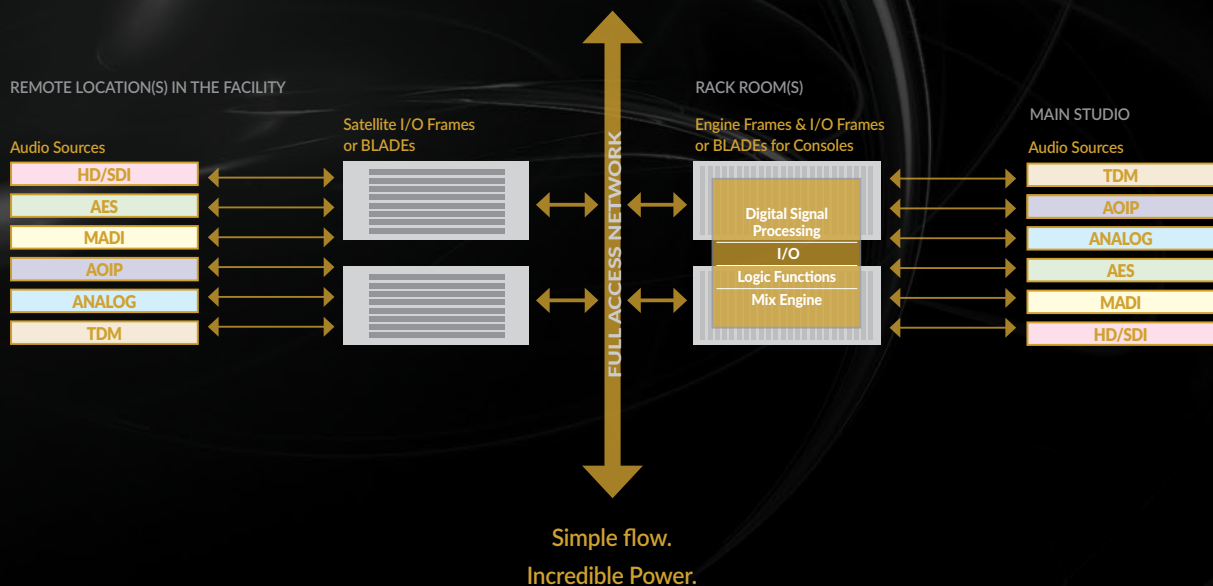
With our Network First approach, everything essential to audio routing, logic and processing is situated in racks located wherever you like, accessible via the network. This provides facility-wide access to all of your audio, regardless of where it's coming from. You can route any audio source to any fader on any control surface within your network. And, because we've designed our rack cages with front access and full hot-swappability, you'll never need to tear apart a console or rack to upgrade, repair or otherwise access its components. This all translates to 100% uptime and unprecedented expandability.

Because the entire system is modular, its components can live wherever you need them. Multiple control surfaces can access ANY audio from ANYWHERE on the network. No more making concessions in the form of dedicated input strips or physically rerouting inputs for different applications. The following shows a typical television operation in which the operator has access to some 1,024 channels of digital signal processing through one control surface.

With Gibraltar IP Mix Engine, you are now open to the world of IP Audio Networking with access to powerful, cost-effective BLADE units for I/O, logic and processing functions.



The true advantage of a fully modular router-based network system is ultimate flexibility



ARCUS

IP Networkable Advanced Modular Surround Sound Television Audio Console/Control Surface



The Arcus large-format mixing console with IP audio networking is a solid, intuitively laid out control surface that doesn't require a week of console school to learn how to operate. This digital mixing console is a dream machine with IP networking, operator prompts, and even a touchscreen interface that recognizes smartphone gestures.

Wheatstone's top-of-the-line digital mixing console includes AES67 compatibility, touchscreen control, and WheatNet-IP networking for routing and controlling audio anywhere within a TV facility. Available in 16-fader frame sizes on up, the Arcus owes its ease of use to several advances in design and technology not found in other fixed-location audio consoles:

- AES67 compatible IP audio network with all the necessary broadcast audio tools and controls integrated into one robust, distributed network.
- Simple tabbed menu on a touchscreen panel, which eliminates a "sea of knobs" for basic functions such as setting talkback, configuring bus matrices, muting mic groups, and managing sources.
- Touchscreen interface that lets board ops use "pinching" and other familiar smartphone gestures to easily make changes. Adjust audio EQ by moving a bargraph with your finger, or pinch the waveform to make it narrower.
- With all I/O managed through the IP network, Arcus has no limitations with fixed connection points on the console chassis itself. Any channel can connect to any audio source, using any preferred audio format at any time, whether it's HD/SDI, AES, MADI, AoIP, Analog or TDM.
- Operator prompts that provide helpful instructions for guiding board ops through function changes in order to fast-track live productions.
- Per-channel OLEDs for displaying all relevant editing and operating functions at a glance. In addition, all OLEDs across the board can be grouped together in Expanded Mode to present parameters side-by-side for comparison and adjustment.
- Drill-down interrogation of functions and settings to show sources, levels and muting or for a quick view of the entire mix-minus matrix in one glance. Useful for interrogating specific or groups of busses and any sources or outputs associated with them.
- IP network access to all sources in the network, as well as every destination visible from the console.
- Arcus can be pre-configured with any combination of sub-mixes, aux sends and mix-minuses based on available resources and provides an impressive list of capabilities such as a bus-minus (N-1) output for every input channel, in addition to two stereo and two 5.1 surround master busses. It offers up-mixing and down-mixing between stereo and 5.1 surround, plus a full complement of stereo and 5.1 surround panning with EQ and dynamics processing available for each input, each subgroup and each program bus. For overall control, this digital mixing console uses motorized faders, each of which controls two sources that can be mono, stereo, or full 5.1. Faders can be "paged" together or separately. Each fader also has a "spill" function, which allows its individual channels to spill out onto adjacent faders (two for stereo or six for 5.1 sources).



- IP networked console
- AES67 compatibility
- Touchscreen interface (multi-touch) on every meterbridge display screen
- OLED displays for editing by the channel, or for side-by-side comparison of settings across the board
- IP network access to any source: HD/SDI, AES, MADI, AoIP, Analog or TDM
- Flexible I/O layering and profiling of channels
- Native IP interface to major production automation systems
- Built-in audio clip player
- USB interface for Flash drives
- Loudness Metering with large LKFS readout and momentary, short-term peak reading and program duration level history display
- Pre-configurable with custom combination of sub-mixes, AUX sends, track outputs, and mix-minuses
- Bus-minus (N-1) output for every input channel
- Two 5.1 surround master output busses
- Two stereo master output busses
- Up/down mixing between 5.1 and stereo
- Motorized faders, each controlling two mono, one stereo or 5.1 sources
- Faders can be paged together or separately
- Spill function on each fader, allowing its signal components to spill out onto adjacent faders (two for stereo, six for 5.1 sources)
- Full digital audio processing on all inputs and major output busses (EQ, comp/limiter, expander/gate, high/low pass filters)
- Programmable delay applicable to inputs and outputs
- Automatic microphone mixing (AutoMix) for multi-guest panel discussions features variable weighting assignment for each individual speaker
- 4 programmable soft knobs per input – can be assigned any control function on the console
- 8 fully programmable switches per input for implementing custom routing and switching functions
- 2 full color OLED displays per input for showing programmable function settings and parameters
- 4 user presets for programmable controls and on-the-fly recall at the touch of a button
- Function Expand feature for mapping EQ, dynamics, AUX and mix-minus functions to physical controls at the touch of a button
- Interrogate function for at-a-glance visibility of channel settings and assignments
- Full color OLED display above every fader for showing channel status and source names
- Layer function (with isolate) for working with fader channel numbers greater than the physical fader count
- 99 show presets for complete recall of console setups
- Offline setup software for pre-configuration of console functions
- AES67 compatibility

STRATA 32

Compact customizable surround sound control surface – AoIP networkable for television audio



Wheatstone's Strata 32 audio console packs 64 channels and the latest IP audio innovation into a 40-inch frame that fits most television applications and budgets under US \$75,000.

Equally at home in news rooms, remote vans or sports venues, this compact IP audio console has dedicated faders for eight subgroups and two masters along with 32 physical faders that can be layered for 64 channels.

Strata 32 integrates seamlessly with all the major production automation systems and comes with our IP audio mix engine and optional stagebox.

It is the latest in a family of consoles powered by Wheatstone's award-winning WheatNet-IP audio network, an AES67 compatible IP audio ecosystem with online mixing, audio processing and virtual development tools as well as SIP/VoIP and codec appliances.

Strata 32 provides access to all resources in the network through a powerful touchscreen interface with intuitive menu for adjusting EQ, dynamics, setting talkback, configuring mix-minus feeds and bus matrices, muting mic groups, and managing sources and destinations. Per-channel OLEDs display all relevant editing and operating functions at a glance.

With all I/O managed through the WheatNet-IP audio network, this compact board has no limitations with fixed

connection points on the console chassis itself. Strata 32 has access to all sources in the network and any channel can connect to any audio source or destination, using any preferred audio format at any time, whether it's HD/SDI, AES, MADI, AoIP, Analog or TDM. Unrestricted routing means being able to have all faders available to dial up whatever source you need; the days of having to block out channels based on input type are a thing of the past, as is having to repurpose inputs because of physical chassis limitations.

Its Gibraltar IP Mix Engine handles digital signal processing and provides advanced specialty features, such as our new automixer with four separate automix groups and onscreen weight control.

The optional 4RU StageBox One is for extending console I/O, providing 32 mic/line inputs, 16 analog line outputs, and 8 AES3 inputs and 8 AES3 outputs as well as 12 logic ports and dual Ethernet ports. StageBox One works with all WheatNet-IP audio networked consoles.



- 32 Physical Input faders on 2 Control Layers, providing 64 mix channels
- 8 Subgroups (Mono, Stereo, or 5.1)
- 8 VCA Groups
- 8 Dedicated faders to control Subs and VCAs
- 16 Aux Sends
- 16 Dedicated Mix Minus Busses (in addition to the individual channel mix minuses)
- Master 5.1 Output Buss
- Master Stereo Output Buss
- Control Room, Studio 1, and Studio 2 Monitor Outputs, each with 16 Source Presets
- Routable Mix Minus Output w/ TB Interrupt for each Input Channel
- Routable Track Output for each Input Channel
- Programmable (Wild) Switches – 2 per input, 3 Global (in Central Panel)
- Processing, applicable to all inputs and buss outs:
 - 4 Band Parametric EQ
 - Hi/Lo Pass Filters
 - Compressor/Limiter
 - Expander Gate
 - Programmable Delay (up to 20 Frames per channel)
 - Central TouchScreen for all parameter adjustments, with context sensitive hardware controls
- Metering
 - Prefader Input Level Meter on each Channel OLED
 - Peak/Average Metering on Central TouchScreen for all Buss Outputs
 - BS1770-3 Loudness Meter on Central TouchScreen
 - Gain Reduction metering on Master Outputs
- 8 Subgroups (Mono, Stereo, or 5.1)
- 8 VCA Groups
- Automixing – 16 Channel Automixer with 4 Group Assigns
- Automation Control – interfaces with all major newsroom automation systems
- Integrated Audio Clip Player
- IP Networking – complete integration with Wheatstone AoIP Network (WheatNet-IP)
- AES67 and SMPTE 2110 ready
- Compact Footprint - 40" w x 27.5" d

DIMENSION THREE/TOUCH

IP Networkable Modular Surround Sound Television Audio Console/Control Surface



The Dimension Three TV audio console provides the best of all possible worlds, combining capabilities such as I/O layering and profiling of channels into any configuration on the surface with unlimited access to sources at any time, from anywhere and in just about any format from the network. A touchscreen option for Wheatstone's IP networked Dimension Three TV audio console brings out the best in board ops during live productions.

Unlike traditional broadcast consoles with all sources wired to the board, the Dimension Three puts mixing, I/O and processing where a modern network puts them: in a separate network unit unrestricted by tight spaces and limited access.

With all I/O managed through a separate rack unit, the Dimension Three has no limitations with fixed connection points on the console chassis itself. Any channel can connect to any audio source, using any preferred audio format at any time, whether it's HD/SDI, AES, MADI, AoIP, Analog or TDM.

The result is the first large-format audio console that is so truly universal, it can fit into almost any TV production environment, anywhere – whether it's a Wheatstone TDM routed studio, a MADI-equipped stadium, a remote truck or even the newest space in studio networking based on IP connectivity.

The touchscreen option features a simple tabbed menu that eliminates a "sea of knobs" for basic functions such as setting talkback, configuring bus matrices, muting mic groups, and managing sources. There's an interrogation feature for drilling down into function settings, such as a quick view of the entire mix-minus matrix in one glance. In addition, operator prompts provide helpful instructions for guiding board ops through function changes in order to fast-track live productions.

This newest design in the Wheatstone Dimension console series offers easy layering of channels and mixes from a menu display or offline through a network connection, and includes a convenient USB interface on its meterbridge for playback

of audio clips or for saving and recalling configuration settings. The Dimension Three is freelance-friendly, too! Freelancers can bring in their USB Flash drives week after week or show after show for instant recall of console settings, configurations and layering preferences – plus audio files for the built-in audio clip player.

Based on Wheatstone's powerful Gibraltar mixing engine capable of 1,024 channels of simultaneous digital signal processing, the Dimension Three can handle the most challenging productions for fixed or remote installations. It offers specialty features such as automatically crossfading between inputs as the switcher or automation system cuts or dissolves between video sources and optimizing levels of group microphones during a dialogue. In addition to Audio-Follow-Video (AFV) switching, the Dimension Three includes audio processing on every input channel and on all major output busses – all with resource sharing throughout the network and virtually no routing restrictions.

Unrestricted routing means being able to have all faders available to dial up whatever mix you need; the days of having to block out channels based on input type are a thing of the past, as is having to re-purpose inputs because of physical chassis limitations.

Dimension Three provides an impressive 16 dedicated mix-minus busses and 16 stereo AUX sends plus a bus-minus (N-1) output for every input channel (up to 128 input channels on two pages; 64 physical faders) – in addition to two stereo and two 5.1 surround master busses. It offers up-mixing and



down-mixing between stereo and 5.1 sources, plus a full complement of stereo and 5.1 surround panning with EQ and dynamics processing available for each input, each subgroup and each program bus. For overall control, this control surface uses motorized faders, each of which can be mono, stereo, or full 5.1. Each fader also has a “spill” function, which allows its individual channels to spill out onto separate faders (two for stereo or six for 5.1 sources).

The Dimension Three is built to be rugged, yet is beautifully crafted with backlit buttons and oversized wide-screen displays for easy setup and monitoring, including LKFS readout for monitoring CALM compliance.

With the Dimension Three, you can:

- Assign any source of any type to any fader
- Hot-swap components without powering down or disassembling
- Share I/O with other networked control surfaces
- Switch live, on the fly, between air and protect sources on the same fader
- Connect into Gibraltar Network or WheatNet-IP audio networking

Wheatstone's Dimension Three audio console accepts analog, AES, MADI and HD/SDI input signals and delivers any source or console bus to any audio network destination over its Wheatstone network.

- A touchscreen option brings out the best in board ops during live productions.
- Network access to audio in all major formats: HD/SDI, AES, MADI, AoIP, Analog or TDM
- Flexible I/O layering and profiling of channels
- Built-in audio clip player
- USB interface for Flash drives
- Loudness Metering with large LKFS readout and momentary, short-term, peak reading and program duration level history display
- 16 dedicated mix-minus busses
- 16 stereo AUX sends
- Bus-minus (N-1) output for every input channel
- Two 5.1 surround master output busses
- Two stereo master output busses
- Up/Down mixing between 5.1 and stereo
- Full digital audio processing on all inputs and major output busses (EQ, comp/limiter, expander/gate, high/low pass filters)
- Programmable delay applicable to inputs and outputs
- Automatic microphone mixing (AutoMix)
- Audio-follow-video switching (AFV)
- Two programmable soft knobs per input – can be assigned any control function on the console
- 4 fully programmable switches for implementing custom routing and switching functions
- 99 show presets for complete recall of console setups
- Control interface for major automation systems
- AES67 compatibility

D-8EX

IP Networkable Surround Sound Television Audio Console/Control Surface



Get twice the channels without increasing control surface size! The D-8EX packs more value per square inch than other consoles in its class, making it an ideal companion in your remote truck or secondary on-air/production room.

The D-8EX incorporates an incredible amount of functionality. Up to 32 channels of mix-minus / N-1 outputs, surround panning, and per-channel delay are just a few of the functions rarely found in consoles at this price. This console also includes an intuitive touchscreen for metering and for lesser used, set-and-forget controls.

A PAGE button on each channel of the D-8EX lets you access a second channel with full, immediate recall of that channel's settings, bringing the total number of channels to 48. The D-8EX features 24 motorized input faders, true surround, four submasters, two main busses, two AUX sends, and extensive processing: 4-band parametric EQ, filters, compressor/limiter, and de-esser.

Metering, and control of all secondary functions, is via the large touchscreen. The softbuttons at the top of every screen will take you instantly HOME to the MAIN screen, to INPUT setup (level, EQ, dynamics), MIX-MINUS, BUS-MINUS, HELP, or INFO. Every function is no more than two or three clicks away.

A direct bus-minus feed with IFB from each channel plus four front panel assignable mix-minus busses ensure that all IFB needs are more than covered. The common bus selection function provides tremendous flexibility in how IFB is managed.

Through its Automation Control Interface (ACI), the Series Four integrates seamlessly with production automation systems so operators can, for example, change routing or automatically crossfade between inputs as the switcher or automation system cuts or dissolves between video sources. Faders can be mono, stereo or surround. What's more, all the mixes generated by the D-8EX can be routed to any available outputs on the audio network, including input faders on other network-connected control surfaces.

Like other Wheatstone television consoles, the D-8EX is a control surface; all audio I/O is housed in the Wheatstone WheatNet-IP audio network.



Input Channels

- 24 motorized input faders
(48-channels of audio via the PAGE buttons)

Bus Structure

- Main Busses: One 5.1 Program, One Stereo Program
- Submasters: 4 Stereo
- Mix-Minus: 8 Mono with automatic confidence feed switching
- Auxiliary Sends: 2 Stereo (direct rotary control from each fader channel)
- Bus Minus: Direct mix-minus feed from every input fader channel

Outputs

- Outputs from all busses and bus-minus are configured within the Gibraltar Network router matrix and can be analog and/or digital, or not fitted
- AES67 compatibility

Monitor Feeds

- One 5.1 (Audio Booth), Two Stereo Studio feeds, One Stereo Headphone feed

Signal Processing (per input channel)

- Phase Reverse
- Surround Pan / Balance Control and Blend
- Stereo Mode Control
- 4-Band, Parametric Equalizer with Variable High & Low Pass Filter
- Compressor / Limiter
- Expander / Gate
- Variable Delay on all input faders

Display

- Loudness Metering with large LKFS readout and momentary, short-term, peak reading and program duration level history display

SERIES FOUR

IP Networkable Compact Surround Sound Television Audio Console/Control Surface



Our Series Four answers the industry's need for a professional audio console for today's automated television studio. It's made to work with all the popular automation systems, yet has the size, feel and features that are conducive to fast-paced live production.

The Series Four features 24 motorized input faders, two main mix busses, four subgroups, up to 48 channel mix-minuses, four mix-minus busses, and two AUX sends, plus extensive processing. All input channels have 4-band parametric EQ sections, tunable high and low pass filters, compressor/limiters, plus expander/gate and programmable delay for lip-sync correction.

And unlike sound reinforcement consoles, the Series Four mixing console offers a direct bus-minus feed with IFB from each channel plus four front panel assignable mix-minus busses. With a possible total of 52 outputs, all IFB needs should be more than covered, and the common bus selection function provides tremendous flexibility in how IFB is managed.

Through its Automation Control Interface (ACI), the Series Four integrates seamlessly with production automation systems so operators can, for example, change routing or automatically crossfade between inputs as the switcher or automation system cuts or dissolves between video sources. Faders can be mono, stereo or surround. What's more, all the mixes generated by the Series Four can be routed to any available outputs on the audio network, including input faders on other network-connected control surfaces.

The Series Four is priced comparably to a semi-pro live sound/recording mixer, and it won't paint broadcasters into a corner should they ever want to add I/Os, mix-minus feeds, or any number of broadcast-specific functions.

Like all Wheatstone television audio consoles, the Series Four is a control surface; all audio I/O is housed in the Wheatstone Gibraltar Network rackmount router/mixer.



- 24 motorized input faders
- 2 main mix busses: one 5.1 program, one stereo program
- Submasters: 4 stereo
- With Gibraltar IP Mix Engine you have access to powerful, cost-effective BLADE units for I/O, logic and audio processing
- Mix-Minus: 4 mono with automatic confidence feed switching
- Auxiliary sends: 2 stereo (direct rotary control from fader channel)
- Bus minus: direct mix-minus feed from every input fader channel
- 4 mix-minus busses in addition to bus-minus system
- Outputs from all busses and bus-minus are configured within the Gibraltar Network router matrix and can be analog and/or digital, or not fitted
- Monitor outputs: one 5.1 (audio booth), two stereo studio feeds
- Loudness Metering with large LKFS readout and momentary, short-term, peak reading and program duration level history display
- Phase reverse
- Surround pan / balance control and blend
- Stereo mode control
- 4-band, parametric equalizer with variable high & low pass filter
- Optional paging
- Compressor / Limiter
- Expander / Gate
- Variable delay on all input faders
- Any source, anywhere networking
- Any audio source can connect with any kind of signal, including analog line level, analog mic level, AES digital, MADI, SDI, and GPIO
- AES67 compatibility

SERIES TWO

IP Networkable Super-Compact Surround Sound Television Audio Console/Control Surface



Series Two offers a broadcast ready feature set in a compact dual layer 16 channel control surface, compatible with our IP based router platform.

Unlike semi-pro recording or live reinforcement consoles, the Series Two is an IP networked console that has the size, feel and module width that are conducive to fast-paced live production. Available in a 16-fader frame, the Series Two has a complete tally system, motorized faders, and true surround with up/down mixing between 5.1 and stereo, plus busses and mix-minuses galore (two main mix busses, four subgroups, up to 32 bus-minuses (N-1), 4 mix-minus busses, and two aux sends).

Like its slightly larger sibling, the 24-fader Series Four, this console is made to work with today's production automation systems. Yet it has all the important broadcast-specific features, such as automatic studio muting, machine control logic, de-embedding inputs, 5.1 surround capability, balanced or unbalanced AES inputs, router integration, and flexible monitoring capability.

All input channels for the Series Two have 4-band parametric EQ sections, tunable high and low pass filters, and compressor/limiters, plus expander/gate and programmable delay for lip-sync correction.

The Series Two digital mixing console, unlike sound reinforcement consoles, offers a direct bus-minus feed with IFB from each channel plus four front panel assignable mix-minus busses.

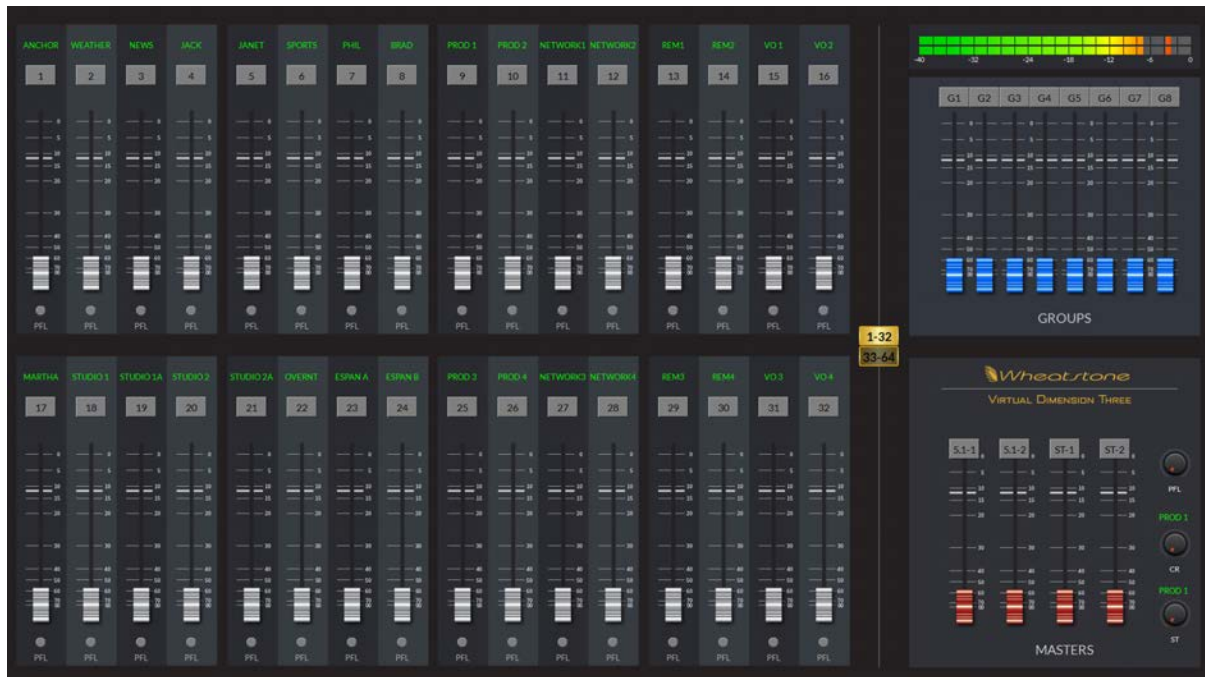
An IP networked console, the Series Two integrates seamlessly with production automation systems for changing routing or automatically setting a crossfade between inputs as the switcher or automation system cuts or dissolves between video sources. Faders can be mono, stereo or surround, unlike some semi-pro mixers.



- 16 input fader frame (32 channels of audio using PAGE function)
- Multifunction, high resolution touchscreen display
- Motorized input faders
- 2 main mix busses: one 5.1 program, one stereo program
- Submasters: 4 stereo
- Mix-Minus: 4 mono with automatic confidence feed switching
- Auxiliary sends: 2 stereo (direct rotary control from fader channel)
- Bus-minus: direct mix-minus feed from every input fader channel
- 4 mix-minus busses in addition to bus-minus system
- Loudness metering with large LKFS readout and momentary, short-term peak reading and program duration level history display
- Outputs from all busses and bus-minus are configured within the WheatNet-IP network matrix and can be analog and/or digital, or not fitted
- Monitor outputs: one 5.1 (audio booth), two stereo studio feeds
- Seamless integration with all major production automation systems
- Phase reverse
- Surround pan / balance control and blend
- Stereo mode control
- 4-band, parametric equalizer with variable high & low pass filter on each input channel
- Optional paging
- Compressor / limiter on each input channel
- Expander / gate on each input channel
- Variable delay on all input faders
- Any source, anywhere networking
- Any audio source can connect with any kind of signal, including analog line level, analog mic level, AES digital, MADi, SDi, and GPIO
- AES67 compatibility

REMOTE/VIRTUAL DIMENSION THREE

Virtual Television Audio Console



Virtual Dimension Three Touch is a multi-touch virtual TV audio console with 64 faders onscreen that seamlessly interfaces into major production automation systems, including those by Ross Video, Grass Valley and Sony.

“Automation and virtualization are fundamental to being able to produce more content. With Virtual Dimension Three, we’re complementing what is being automated in the control room with the easy accessibility of a virtual interface so that operators can make immediate, precise adjustments as needed,” says Wheatstone Senior Sales Engineer Phil Owens.

As a standalone user interface into the WheatNet-IP audio network, Virtual Dimension Three can be used anywhere there’s a PC touchscreen or several touchscreens connected over the audio network. Similar in feel and function to the popular Dimension Three hardware surface, Virtual Dimension Three includes familiar buttons, knobs and multi-touch navigation and menuing for adjusting EQ curves, filtering and other custom settings.

Virtual Dimension Three comes with a rackmount mix engine to handle mixing and processing as part of the WheatNet-IP audio network, which provides direct connectivity into major production automation systems. Ross Video, Grass Valley and Sony have a longtime vendor partnership with Wheatstone’s WheatNet-IP audio network, making for a fully integrated user experience between automation and console functions.

Also available is Remote Dimension Three Touch software which is the software component mentioned above, but works with your existing physical Dimension Three Touch surface to provide complete remote access to it.

Virtual/Remote Dimension Three Touch is available in two configurations:

Virtual Dimension Three Touch Package

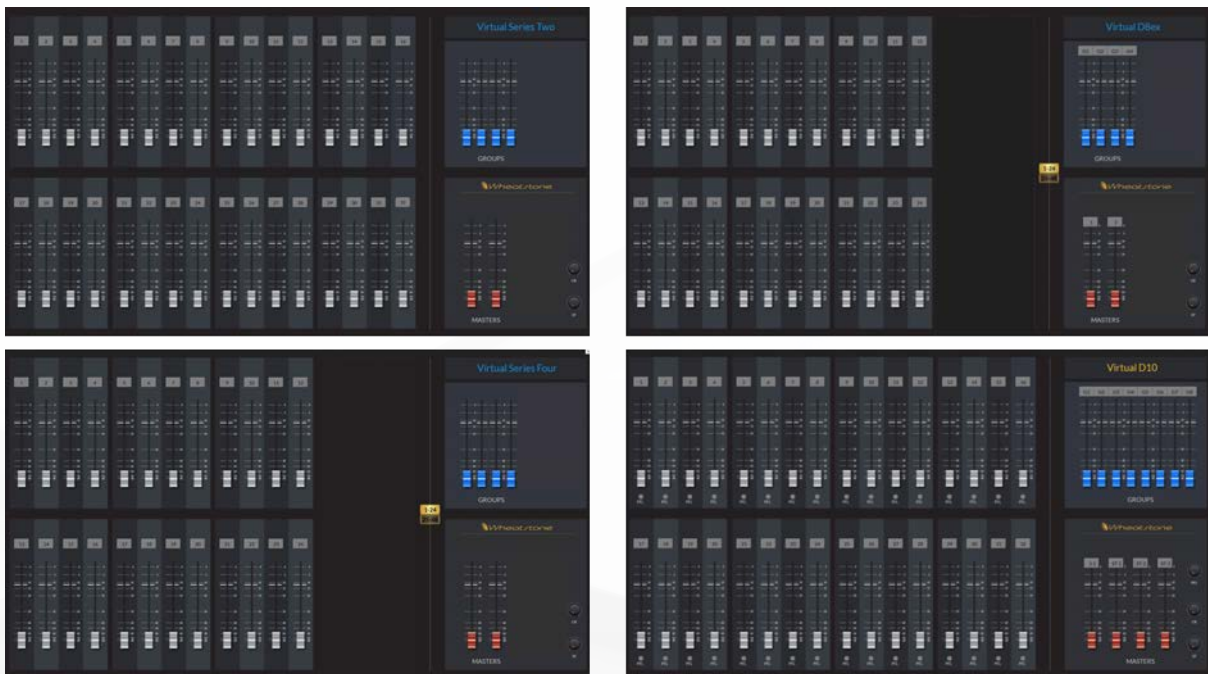
This is a standalone virtual surface that includes Remote Dimension Three Touch software and special hardware - both a “surface in a 1RU box” and a GNE frame. This hardware replaces the physical Dimension Three Touch control surface hardware. So with this package you can do everything that a regular Dimension Three Touch can do, but without a physical surface.

Remote Dimension Three Touch Software

This is the software referenced above. It requires connection to an existing physical Dimension Three Touch surface. Remote Dimension Three Touch software displays two screens – the main screen is the fader bank and masters section; the second screen is a software replication of the Dimension Three Touch’s touch screen interface. Provides full remote control over your existing Dimension Three Touch control surface.



REMOTE SOLUTIONS FOR OTHER TV AUDIO CONSOLES



Wheatstone offers virtual mixers for our Series 2, Series 4, D8-EX and legacy D-8, D-9, and D-10 consoles. Control varies depending upon your mixer.

GIBRALTAR IP MIX ENGINE

Add the modern, intelligent WheatNet-IP audio network to your Wheatstone consoles

The Gibraltar IP Mix Engine provides Wheatstone's line of audio consoles with direct connectivity into WheatNet-IP, an AES67 compatible IP audio network with all the necessary broadcast audio tools and controls integrated into one robust, distributed network. Among the benefits of WheatNet-IP networked audio consoles are:

- With all I/O managed through the IP network, the IP console has no limitations with fixed connection points on the console chassis itself. Any channel can connect to any audio source, using any preferred audio format at any time, whether it's HD/SDI, AES, MADI, AoIP, Analog or TDM.
- No soundcards needed. Listen to any crosspoint in the network and move audio around the studio, without a single soundcard.
- Share VTRs, mics and mixing consoles across one common IP platform, whether for live broadcast or post-production.
- Based on native IP, for directly transferring multiple stereo channels from the audio workstation to the console with no A/D/A conversion required.
- Direct connectivity to automation. Talks IP to all of the commonly used production automation systems. No serial data conversions needed.
- 24/7/365 reliability. Each amazing I/O BLADE in the WheatNet-IP network is self-aware, and can reconfigure itself in an emergency. In fact, each BLADE in the network can recover settings for your entire studio operation!
- Changes are a lot easier. Reuse studios for multiple purposes. Instantly change mic feeds, IFB connections and processing settings, either on the fly or using presets.
- Finally, a way to control audio. Logic controls follow audio on the same cable. Pick up a mic feed and the processing settings for that mic in Studio A same as in Studio B.
- All sources in the network are accessible, and every destination visible from the console.
- AES67 compatible.

Gibraltar IP Mix Engine features:

- IP network interface and mix engine for Wheatstone's IP networked consoles
- Up to 1024 DSP processing signal paths (any combination of 5.1, stereo, and mono channels)
- Talks native IP to standard production automation systems. No serial data conversions required.
- Can apply processing functions to 768 input paths and 256 mix output paths simultaneously
- Flexible mixing architecture allows over 500 mix busses
- 4 band fully parametric EQ with HF/LF peaking or shelving
- 3 parametric filters
- Parametric compression, limiting, and gating
- 16 control channels for keying/ducking/sidechain applications
- Panning and surround imaging control
- Individual input and output delay capability; up to 660mS per path
- AES67 compatible



Why WheatNet-IP Audio Networking?

WheatNet-IP is more than just an IP network that routes audio within a TV facility. It is a full system that combines a complete audio tool kit, an integrated control layer, and a distributed intelligent network that takes full advantage of IP audio.

By combining these three components seamlessly into one system, we can deliver the following:

- A distributed network of intelligent I/O devices to gather and process audio throughout your facility
- Control, via both hardware GPI and software logic ports, that can be extended throughout the plant as well
- Rapid route changes via both salvos and presets to instantly change audio, mic control, and tallies between sets
- A suite of software apps and third party devices that all communicate via the common gigabit IP interface
- True plug-and-play scalability – devices are easily added to the IP network
- Triggered crosspoints to create routable IFB throughout the facility

EXTENDING YOUR NETWORK

There's a world of Wheatstone BLADEs for you to put to work.



I/O BLADEs

I/O BLADEs are access points on the WheatNet-IP Intelligent Network, converting each hardware physical input – audio or logic – to a data stream on the network, and converting data streams to hardware digital outputs. They provide the means of interfacing and controlling all of the audio equipment on your network.

The IP88A (analog), IP88D (digital), IP88AD (analog/digital) and IP88M (mic level) BLADEs handle your standard audio I/O requirements. Each has 8 stereo channels, 16 mono channels, or any combination totaling 16 discrete channels. The A/D versions are half analog, half digital. And the mic BLADE has 8 XLR inputs with high-quality mic preamps.

All are AES67 compatible.



Audio Processing BLADEs

Placing a processor everywhere you'd like one has been costly and impractical. Until now. One Aura8-IP gives you up to eight processors to use as you wish. Use it as a standalone processor with analog and digital inputs or make it a part of your WheatNet-IP network. Either way, the Aura8-IP is a powerhouse.

The M4-IP Microphone Processor BLADE combines four high-quality microphone preamps, four channels of Voris embedded microphone processing, and a WheatNet-IP BLADE interface, allowing you to place four microphone inputs anywhere in your WheatNet-IP Intelligent Network. The preamps and processors are accessed and controlled from any point on the network via its Windows-based GUI.



Special Purpose BLADEs

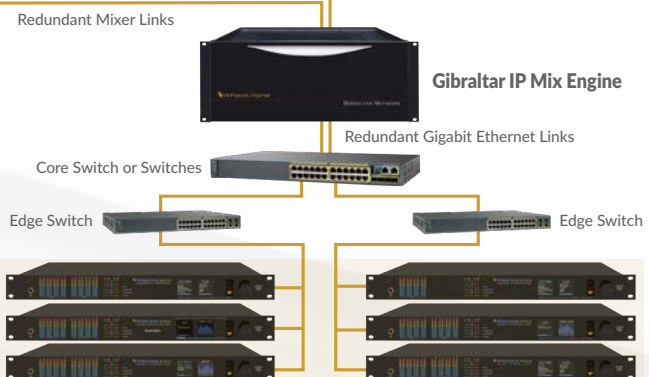
Another I/O BLADE is the MADI BLADE, which converts a 64-channel MADI input to data streams on the network, and converts data streams to 64-channel MADI outputs.

The LIO-48 Logic BLADE provides 48 universal logic I/O ports, each individually configurable, for turning devices on or off by time or event, for automatically adjusting the audio processing settings when a certain mic turns on, and for any other logic control you need in your studio operation.

Our HD-SDI BLADE de-embeds multiple audio channels from HD-SDI streams so you can mix, process or simply route audio to your console for final broadcast. It is capable of de-embedding up to four HD-SDI streams, and up to 8 AES/EBU pairs (16 audio channels) per stream.

Wheatstone Television Audio Console(s)

Arcus, Stratus 32, Dimension Three, D-8EX, Series Four, Series Two



AES67
COMPATIBLE

FAILSAFE REDUNDANCY

it's all about staying on the air - every second of every day - without fail

Wheatstone's experience in designing audio consoles for all broadcast realms as well as pioneering networking comes together in the Dimension Three. More power to handle modern needs with a user interface that is pure joy to get your hands on. And with Wheatstone's built-in safeguards, you can rest assured that you'll always be on the air...with or without fail.

Failsafes: Keeping you live

Redundant Sources



With Preset 1 and Preset 2 source selectors provided on each fader, if the primary feed goes silent, an operator need simply press the second source to recover audio. Because the system supports such a vast number of inputs, there's room to provide these redundancies without the need for patching or external switching.

Redundant Components



If a DSP chip fails in a traditional console, it tends to take the entire card with it, leaving the board dead. Thus, having a backup DSP chip on the same card is not really a solution. With Wheatstone, a hot-spare DSP card can be utilized with automatic failover in the event of a problem with the primary engine. Because any source can be assigned to any fader, even catastrophic damage to a fader module on the console (as from a drink spill or falling object) only means that the damaged faders are out of action. The sources can be rerouted to other faders, and the show goes on.

Redundant Power



Gibraltar Network cage utilizes internal modular power supplies and can accommodate up to two units for redundancy.

PLENTY OF I/O WHEREVER YOU NEED IT

in TV, there are never enough inputs...but now there are



The optional 4RU StageBox One is for extending console I/O, providing 32 mic/line inputs, 16 analog line outputs, and 8 AES3 inputs and 8 AES3 outputs as well as 12 logic ports and dual Ethernet ports. StageBox One works with all WheatNet-IP audio networked consoles.



The SR-8 provides eight XLR inputs and four XLR outputs in a stage-box configuration. It interfaces to the Gibraltar Network via CAT-6 cables and comes with dual internal power supplies for redundancy.



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BROADCAST AUDIO PERFECTIONISTS®