

STRATA

COMPACT CUSTOMIZABLE SURROUND SOUND CONTROL SURFACE
AOIP NETWORKABLE FOR TELEVISION AUDIO



The Surface

A customizable surface that you can tailor to your working style



Wheatstone's Strata 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 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 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 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 Blade-4 TVE 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



Strata packs 64 channels and the latest IP audio innovations into a 40" frame.



The Details

Everything you need to mix - right there at your fingertips

Input Module

ADJUST – Adjust knob provides both source select and gain trim functions for each input channel

SEL – this switch Selects the channel for editing / parameter changes

TB – this switch interrupts the channel mix-minus output with the designated talkback microphone

CUT – the channel **ON/OFF** switch

AUTO – assigns the channel to the onboard 16 channel Automixer

PFL – the Pre-fader listen switch (AKA Cue)

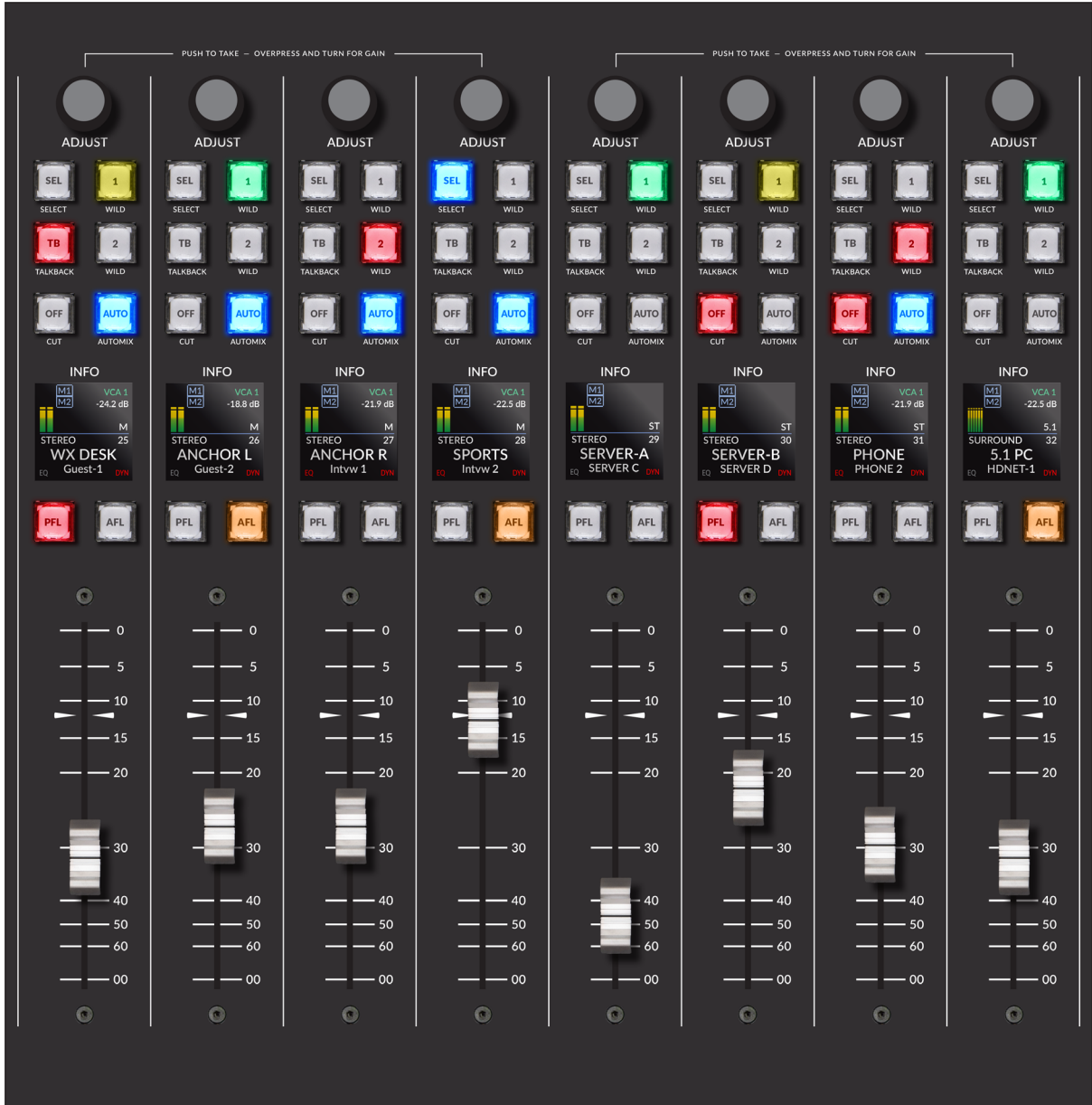
AFL – the after fader listen switch

WILD 1 & 2 – two programmable switches that can invoke a number of different surface functions

OLED display – provides channel specific information:

- Layer 1 Source
- Layer 2 Source
- Prefader Input level Meter
- VCA Group Assignments
- Gain Setting
- Channel Mode
- Channel Muting Status
- Master Buss Assignments
- EQ/Dynamics In/Out Status

100mm Motorized Input Fader



The Details

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Center Panel

The Integrated central Touchscreen provides both metering and parameter control for all Strata Functions. Tabbed Navigation allows for easy switching between functions. An on screen fader is provided for parameter adjustment.

Switches/Knobs below Screen:

Context sensitive **ADJUST** knobs (3) and **WILD** Switches (3).

Each provides parameter adjustments via hardware in addition to the onscreen parameter fader.

Knobs are color coded to match a corresponding screen function.

Onscreen functions assigned to switches are labeled with the corresponding switch number.

Layers 1 & 2 provide switching between the two input channel control layers

Wild Switches (3) are programmable to control a large number of both Strata and Audio Network functions

Spill – invokes the spill mode for a selected input channel. Channels with 5.1 sources will spread the 6 surround channels onto a temporary layer on the adjacent six channels (normal functions of those channels are unaffected), providing the ability to rebalance a surround signal. Stereo channels will spill onto two adjacent channels, providing quick Left/Right balance adjustment.

FTF (Function to Faders) allows a function with multiple level adjustments (for example, Aux Master level Control for Aux 1 thru 16) to display those levels on channels faders. This provides an easy way to visualize the full set of level controls.

Query – performs an interrogate function to quickly see what sources are assigned to any given output buss. Assignments and Deassignments may be made on this screen as well.

Play Clip – Starts and Stops the internal Audio Clip Player

Copy/Paste – allows the user to copy a channels parameters and Paste them to another channel or channels.

Sub Group / VCA Switches – control the functions of the 8 dual purpose faders immediately to the right of these switches on the Master panel. Faders switch between controlling Sub Group levels and VCA Group levels.



The Details

Everything you need to mix - right there at your fingertips

Master Module

SUBGROUP/VAC Faders:

ADJUST – provides Destination control for the Subgroup Output signal

SEL – Selects this subgroup for editing / parameter changes

TB – Interrupts the subgroup output with the designated talkback mic.

CUT – the Subgroup ON/OFF Switch

PFL – Pre Fader Listen for this Subgroup

100mm Motorized Fader

Master Faders:

ADJUST – provides Destination control for the Master Output signal

SEL – Selects this Master for editing / parameter changes

CUT – ON/OFF switch for this Master

OLED Display – shows parameters related to this Master

PFL – Pre Fader Listen for this Master

100mm Motorized Fader

Monitor Section:

CR SEL – selects this monitor for parameter changes, invokes Monitor pop up screen on touchscreen

OLED – displays current monitor source, monitor mode, muting status

AFL/PFL Clear – clears all inputs to the PFL/AFL system

ADJUST – used for parameter changes on the Monitor pop up screen

PFL/AFL – level control for the PFL/AFL output

CR – the Control Room Volume control

DIM – Reduces the CR output by a programmable amount

USB ports – used for saving configurations and storing audio files for the Integrated Clip Player

SEL – selects the Studio Monitor (1 or 2) for parameter changes, invokes monitor pop up screen

TEST – activates the Test Tone and invokes the Test Tone Screen for parameter changes

OLED – displays both ST1 and ST2 Sources and Mode settings

Monitor preset buttons – for quick source changes to the monitors, works in conjunction with the 12 presets on the monitor pop up screen

Studio 1 and 2 level controls

Studio 1 and 2 TB – interrupts the normal Studio output with the designated talkback mic signal



Strata's Large Center Display is Dynamic and Touchscreen Enabled

The center display on Strata is a touch-enabled LED that gives you dynamic information about any and all functions. This reflects whatever actions you are applying to the console and updates in real time with lightning fast refresh rates. This touchscreen allow you to use standard pinch and zoom gestures you are familiar with.



-7.4 dB

INPUT 2
COMP
THRESH

DYNAMICS

GATE IN	OPEN: 3.50 mS	CLOSE: 100 mS	THRESH: -34.9 dB	HANG: 100 mS	DEPTH: +5.9 dB
COMP IN	ATTACK: 30.0 mS	RELEASE: 150 mS	THRESH: -7.4 dB	RATIO: 3.0:1	MAKEUP: +3.4 dB

BS.1770-3 LOUDNESS MONITOR

-27.3 LKFS

PROGRAM DURATION: 00:00

-24 dB LKFS A/85 MASTER 1

MASTER 1

EQ

PAN

AUX SENDS

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

BL01UMXA

MASTER 2

CLIP PLAYER
AUTO MIX
INPUT
EQ
DYN
5.1 PAN
AUX
REVERSE ROUTE
BUS MINUS
X/Y ROUTER
MXM MASTERS
AUX MASTERS
BUS ASSIGN
EVENTS
SELECT
HOME
?

STEREO 28

DELAY: OFF GAIN: 0 dB

MASTER ASSIGN: MSTR 1 MSTR 2

EQ

DYNAMICS

AUX SENDS

SPORTS

V+ L R

PHANTOM

STEREO

LEFT

RIGHT

MONO

BLEND

MODE 2

GAIN 0.0 dB

DELAY 0 mS

PAN/BLEND

BUS MINUS 28

NoDest DESTINATION

Default BASE MIX

-10.3 dB

BUS +

DIR OUT

PRE FADER

PRE ON

OUT AFL TALKBACK

TRACK 28

NoDest DESTINATION

+1.3 dB

PRE FADER

PRE ON

MONO SUM

ON AFL TALKBACK

MASTER 1

CLIP PLAYER
AUTO MIX
INPUT
EQ
DYN
5.1 PAN
AUX
REVERSE ROUTE
BUS MINUS
X/Y ROUTER
MXM MASTERS
AUX MASTERS
BUS ASSIGN
EVENTS
SELECT
HOME
?

Extending Your IP audio network

There's a world of Wheatstone BLADE-3s for you to put to work.



I/O BLADE-3s

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.

Audio Processing BLADE-3s

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 Vorsis 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.

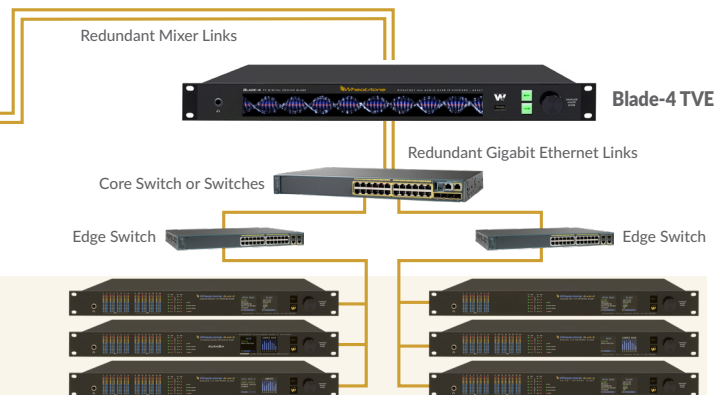
Special Purpose BLADE-3s

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)



Distributed BLADE Network:

Analog I/O BLADE	AES I/O BLADE
Mic Level Input BLADE	HDI/SDI De-embedder BLADE
Combo Analog Digital BLADE	Aura-8IP-3 Audio Processing BLADE
WNIP Software Driver BLADE	MADI BLADE

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 Strata. 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.

Strata's Mix Engine Taps the Power of WheatNet-IP AoIP Networking

Strata is paired with a new addition to the Blade 4 product line, the Blade 4 TVE. This powerful yet compact (1RU) Blade handles all the mixing and processing required by the Strata control surface. The large front panel display provides metering and status displays, while the rear panel has redundant network connections, redundant AC power, HDMI / USB touchscreen ports, and 12 GPI ports. It's fanless design allows for studio quiet operation.



WheatNet-IP Extends Strata's Reach

With WheatNet-IP BLADE-3s, you get a virtual rack room in a 1-rack space box. They handle all the I/O (AES/EBU, SPDIF, AOIP, MADI, SDI and AES 67) and provide full routing capabilities. Each BLADE-3 gives you two 8x2 utility mixers, 12 universal GPI/O ports, 128 software logic ports, silence detection, built-in audio clip player, stereo multi-band audio processing, and much more, assignable anywhere on the network. With it you can create workflows that would require a ton of third-party gear.

Plenty of I/O Available Wherever You Need It



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.

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

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