Wheatstone
BROADCAST AUDIO PERFECTIONISTS℠

Wheatstone consoles and control surfaces

Wheatstone has long been the leader in audio consoles and networking for the radio and television audio industries. Wheatstone consoles built 25 years ago are still in service. They are known for their rock-solid reliability and superior performance, and we bring these qualities to the table whenever we design something new.

Our E-Series is no exception. Designed to take full advantage of everything our WheatNet-IP Intelligent Network has to offer, the E-Series can handle whatever you need - day in, day out, for as long as you need it and beyond.

WheatNet-IP: The Intelligent Network

We looked at the world of AoIP Networking and thought long and hard before jumping in. The stuff that was out there was OK, but left a LOT of room for improvement. For starters, the way the workload was distributed had to change. Rather than having a single point call the shots, we thought it important to have distributed intelligence built into WheatNet-IP. What this means is that every BLADE (or node) has the DNA of the entire network and can operate in any position on the network. It means that the network can configure itself, as every BLADE is self-aware. It means the network can heal itself - if a BLADE fails (fat chance) just put a new one in its place and watch it set itself up. We also incorporated gigabit ethernet speed throughout the entire network, giving you 10 times the bandwidth of the common stock.

WheatNet-IP's Intelligent Network is what the industry has been waiting for – WheatNet-IP is what YOU'VE been waiting for!

the range

programmability – tweakability – lockability – perfect control

Flexible, powerful and, at the same time, very easy to use. That defines the E-Series – the culmination of Wheatstone's 30+ years of experience in designing consoles for broadcasters. Whether you're producing, on-air or reporting it from where it happens, Wheatstone's control surfaces are your best investment for increased productivity and imaginitive programming.

E-6

The flagship of our E-Series consoles, the E-6 does it all. When paired with an optional monitor, its intuitive interface gives you all the power you need for an on-air or production studio.

E-1

With its small footprint, the E-1 can be a self-contained console when paired with our ip88cb Console Audio BLADE. It also becomes a fully functional station on our WheatNet-IP Intelligent Network.

the surfaces: E-6

the industry standard for the intelligent network, sized to fit *your* studios

E-Series E-6 is a console control surface that interfaces with Wheatstone's WheatNet-IP networking and routing system via a single CAT6 cable. No audio is routed or mixed in the surface itself. As a networked system, the console can access any source in your entire complex, sharing remote codecs or bringing up another studio's program bus on the console.

A user-supplied high-resolution graphic display monitor can provide vivid VU and peak level indication, as well as in-depth control and programming of the console.

The E-6, the top of the line Wheatstone control surface, provides power and functionality for any radio on-air or production requirement, whether fast-action news, talk, and network origination, or major market music.

The E-6 is also designed from the ground up for mixing surround sound for radio (or even TV). Its master panel provides comprehensive control of module functionality as well as monitoring and talkback for two studios. A popular feature is Vorsis-quality EQ, filtering, and dynamics processing on every fader!

The E-6 is also ideal for smaller market facilities, news and voice tracking booths, production rooms where the primary focus is on the digital workstation, and even major-market strictly-music operations.

The E-6 surface provides extensive functionality for telephone talk and news formats, with four console-wide mix-minus busses as well as a dedicated mix-minus output from each channel with a talkback button right above the fader.

E-6 surfaces can be intermixed with all other surfaces in the same system, such as our LX-24, L-8, E-1, Sideboard or our Talent Stations. All surfaces include event save and recall. Set events for the morning show, normal programming, special events, remotes, weekly shows, whatever you desire. Easily recall the event to completely reconfigure the console: sources, bus assignments, and settings. Set levels of access so that the more experienced operators can accomplish even the most complex tasks, while keeping the part-time weekend op out of trouble.

E-6 shown with optional meterbridge. Software runs on your standard VGA monitor, controllable from touchpad on console.

- Touchpad for control of functions on the VGA monitor
- Dynamics, EQ, high- and low-pass filtering
- Four AUX output busses
- Control of source select, pan, mix-minus assign, and AUX 1-4 send level from the master panel – accessed by the SET switch on each input channel strip
- Two programmable buttons per input channel strip — use for source select or mode change
- Mode display on each input channel strip – stereo, left, right, mono, 5.1
- Control Room, Headphone, Studio 1 and Studio 2 monitoring controls
- 14 general-purpose programmable buttons
- Surfaces from 4 to 24 input faders
- Graphic VGA display with comprehensive metering, clock and timer, less frequently accessed control functions, and for console programming
- LED display of active source on every input channel strip

- Four program busses
- Four assignable global mix-minus busses
- Individual channel mix-minus outputs
- Talkback to mix-minus button on every channel strip
- SET switch to access secondary functions such as source selection, mix-minus assign, panning
- EVENT console snapshot recall and save from the front panel
- Passcode-protected access for four levels: Intern, Operator, Production, and Engineering
- Front-panel timer control
- Low-profile design drops into a countertop cutout – about 2"/4cm above counter top and 3"/8cm below
- Optional Wheatstone GLASS-E software to control the console from a remote PC
- External rack-mounted power supply; add a second for redundancy
- Works with the WheatNet-IP Intelligent Network

the details: E-6

everything you need to mix - right there at your fingertips
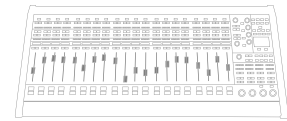
Input Channel Strip (individual modules)

SET Assigns the channel strip for programming of pan, mix-minus assign, and input source on the Master Panel and for less frequently used controls on the monitor screen

PROGRAMMABLE Can be programmed on the monitor display for a wide range of functionality; typically used for hot source select, mode change, or EQ/filter/compression insertion

CHANNEL MODE Displays channel strip's source mode, as set on the monitor screen

PROGRAM ASSIGN Assigns the source to the four program output busses

MXM ASSIGN LEDs that indicate which mix-minus busses the source is feeding; assignment is set on the Master Panel

SOURCE DISPLAY Displays the source currently assigned to the channel strip, or scrolls the available sources when changing input source

CUE Assigns the source to the CUE bus, pre-switch, pre-fader

TB BUS− Interrupts the channel mix-minus output with talkback, typically using the console mic

FADER 100mm full-throw professional fader

ON-OFF Source to program bus on/off; fires programmed logic (start/stop)

Monitor Panel

PAN Controls the source on the input channel strip activated by its SET button; PAN (if a mono, left-only or right-only source), BALANCE (if a stereo source)

MXM ASSIGN Assigns the source on the input channel strip activated by its SET button to the four mix-minus busses

MXM TB Interrupts the mix-minus bus with talkback, typically from the console mic

INPUT SOURCE Selects a new source on the input channel strip activated by its SET button; available sources are displayed on the strip's LED source display and on a full source menu on screen; the console can be programmed with a separate source visibility list per channel strip to show only desired sources

AUX Dual function: AUX bus send level when a channel strip's SET button is pressed; when no SET button is active, is an AUX master send level control; TB interrupts the aux bus with talkback

CUE Level control for the output to the external cue speaker

HDPN MODE SPLIT sends L+R sum of the selected program to the right ear, CUE to the left ear

EQ routes the audio through a saved preset using the console's internal processing

PROGRAMMABLE 14 buttons — eight at the upper right, two above HDPN MODE, four above TIMER — to perform virtually any system function: fire salvos, activate events, trigger logic/GPI, etc.

EVENT (UPPER RIGHT) Snapshot save and recall; can be passcode protected

**SCREEN SELECT** Four buttons above the panel's trackpad that activate various GUI monitor functions

TIMER Controls for the on-screen timer; AUTO enables timer restart on pre-programmed input strips when the strip is turned on

CONTROL ROOM
HEADPHONE
STUDIO 1 & 2 Source select — 4 PROGRAM busses, 2 EXTERNAL pre-programmed (any system sources), 4 MIX-MINUS busses, 4 AUX SEND busses — and level control; both studios have TALKBACK buttons

the big picture: E-6

## this is where you get to see what you are hearing
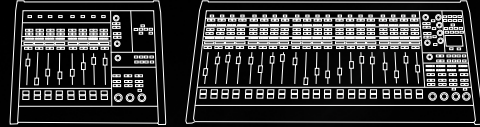
The full power of the E-Series consoles is accessed through the Graphic Display: Easy to understand even for the less experienced board op; power tools for the experienced production guru; setup and programming for the facility engineer. The VGA driver and software is embedded in the console surface so no external PC is required.


Main Screen

Displays all critical information to the operator including program bus names, high-resolution program level meters (average/peak or PPM), switchable meter, analog and digital clock, timer, and current event. Tabs allow access to lesser-used functions.
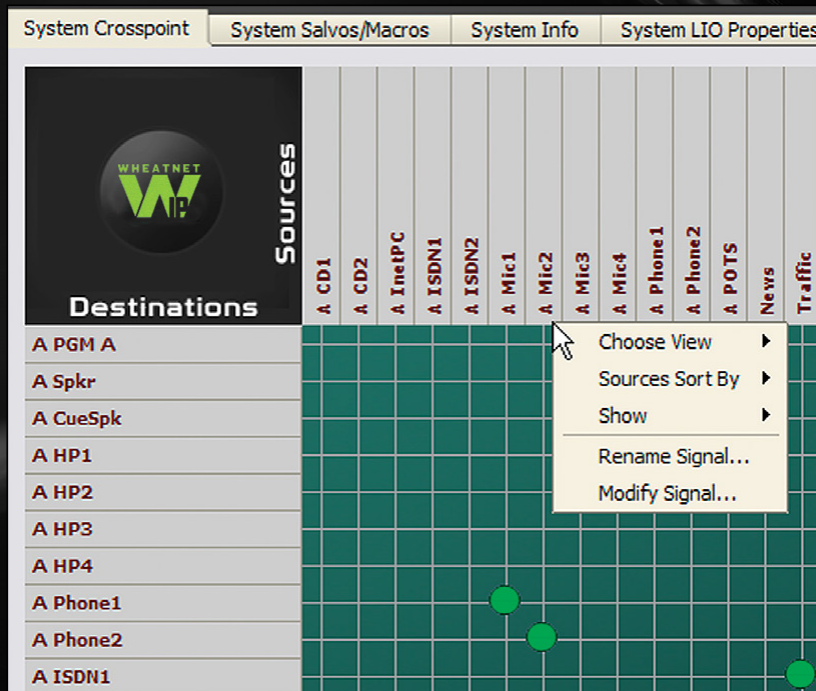
Router

Powerful full system routing, not limited to just the console's I/O. Route any system source to any system destination directly from the console. The screen can be programmed to show only those desired sources and destinations.
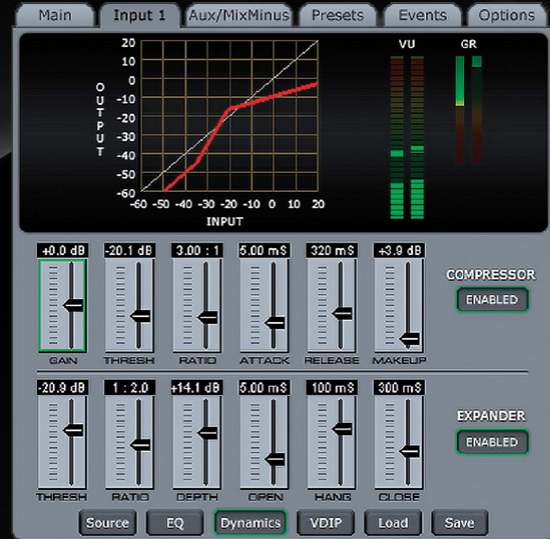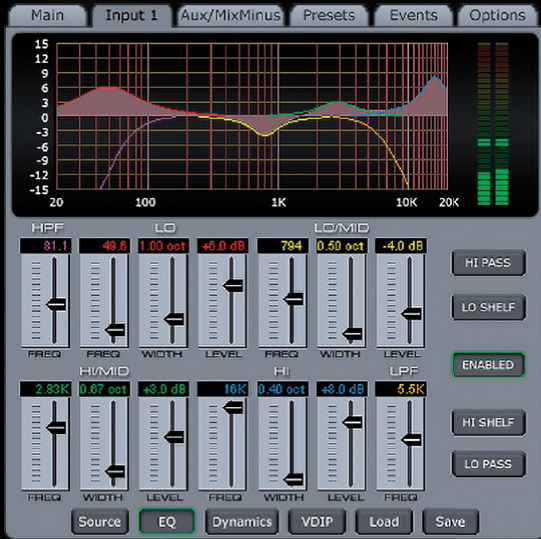
EQ & Dynamics

The E-6 offers comprehensive Vorsis-grade processing for great sounding voices, cleanup of remote feeds, and sweetening in the production environment. Includes 4-BAND PARAMETRIC EQUALIZER with top and bottom bands switchable peak/shelf (the display shows the resulting curve); HIGH- AND LOW-PASS FILTERS, 24db/ octave, adjustable frequency 16-500Hz and 1-20kHz; SOFT-KNEE COMPRESSOR with adjustable threshold, ratio, attack, release, makeup level; and EXPANDER/NOISE GATE with adjustable threshold, ratio, depth, and time constants.

Events

Create and recall console configurations for your different shows, functions, remotes, and even for different announcers (recalling mic processing optimized to their voice).

User Permissions

The engineer can set up four levels of access, each with its own passcode: INTERN, OPERATOR, PRODUCTION, ENGINEER. For example, the INTERN setting could lock the display to only the MAIN screen, keeping them out of trouble.
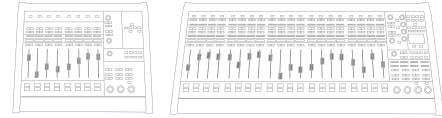
Source

At a glance display and control of all attributes of the selected input channel strip. On the E-6, shows the function of the programmable buttons and the four AUX sends.

the nitty gritty: E-6

specifications and other important stuff you should know about

Recessed Installation

The E-6 flushmounts to your counter top as the chassis extends below the counter surface to provide easy connection and a clean installation.

CONNECTORS

Monitor	VGA DB15
Ethernet	RJ45, for use in a WheatNet-IP network, or for external computer control and programming of the console
Mixer	RJ45, for use with E-Series SAT cage (Bridge, E-Sat, WheatNet systems)
Keyboard	PS-2
Mouse	USB
Headphone	DB9, line level stereo
Power	Two 5-pin for redundant power supplies

POWER SUPPLY PSE-1

19"/48.3cm wide,
1-3/4"/4.5cm high,
12-1/4"/31.1cm deep

Redundancy: use two PSE-1s
Power Requirements: 120 VAC, 50-60Hz, 180 Watts

PHYSICAL DIMENSIONS

E-Series frames accommodate from 2 to 8 panels, each panel 6.26"/15.9cm wide: 4-input channel INPUT panel, MASTER panel, phone panel, accessory pushbutton panel.

All frames, surface
17 7/8"/45.3cm deep
1"/0.3cm high at front
1 7/8"/4.4cm high at rear
3 1/4"/8.2cm max depth below countertop

All frames, cutout: 14 1/8"/36.0cm deep

2 panel frame	surface 14 1/2"/36.9cm	cutout 13"/32.8cm wide
3 panel frame	surface 20 7/8"/52.9cm	cutout 19 1/8"/48.7cm wide
4 panel frame	surface 27"/68.7cm	cutout 25 1/2"/64.6cm wide
5 panel frame	surface 33 3/8"/ 84.6cm	cutout 31 3/4"/80.5cm wide
6 panel frame	surface 39 1/2"/100.5cm	cutout 38"/96.4cm wide
7 panel frame	surface 45 7/8"/116.4cm	cutout 44 1/4"/112.3cm wide
8 panel frame	surface 52 1/8"/132.3cm	cutout 50 1/2"/128.2cm wide

IP-88E Engine BLADE

The IP88E BLADE houses all DSP 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. While the IP88E doesn't house audio I/O, it does include 12 universal logic (GPIO) ports.

PSE-1 Power Supply

Clean and proper power is key to the great performance you've come to expect from Wheatstone. It would be easy to just purchase over-the-counter power supplies for our E-Series Consoles. But we don't. In order to maintain our high level of quality we've designed and built a dedicated separate rackmount supply for our E-6 surfaces.

E-6 Optional Meterbridges

Sized to house three or four level meters, along with a clock and timer functions and a speaker, these meterbridges mount directly to an E-6 console.

Wheatstone & WheatNet-IP Are Automation and Control Ready

The power of Wheatstone's advanced mixing router includes handshaking technology with many of the broadcast industry's leaders: Agile, Audioarts, AudioVault, Audio Compass, AVT, Burli, BSI, Calliope, Crestron, Dalet, Davicom, DE Broadcast Shop, Digital Jukebox, Enco, Eventide, FLEX, Genesys, Grass Valley, iMediaTouch, Macromedia, Miranda, Moseley, MRZ Broadcast, Netia, NewsBoss, Op-X, Pulsar Multimedia, RCS, Reality Check Systems, Rivendell, Ross, SkyView, Sony, StreamSolution (XDEVEL corp.), Tieline, Utah Scientific, Vorsis, VoxPro, WideOrbit, WinMedia, Wire Ready, and Zenon X Media. And more are partnering with us every day.

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