

LXE

ADVANCED MODULAR PROGRAMMABLE NETWORKABLE CONSOLE





Meet the LXE Console/Control Surface

The LXE is designed to be *your* console. Every knob, every button, every display can be programmed to accommodate virtually any application you come up with. No need to compromise anymore.

LXE is our most modular console ever. Simply group the modules into bays and connect them to your network with a single CAT6 cable. This allows you to use them in tabletop frames, with or without a meterbridge, with no need to cut furniture. Or, you can flush mount them right into your table, easily splitting them as you need.

Full color OLEDs reflect your programming, and the touchscreen GUIs let you interact with your audio in fresh new ways to do everything from pinching and dragging EQ to setting up router crosspoints in your network. ScreenBuilder™ LXE is included so you can create your own touchscreens. And ConsoleBuilder™ is a GUI-based app that allows you to program and configure your hardware surface.

Simply put, there's never been a more customizable way to work.

the surface

set it up to be YOUR surface - this much control has never been this easy



Wheatstone's new LXE console brings control surface configuration to a new level. Going far beyond the usual "any source to any fader" network concept, the LXE is a fully flexible control interface, where every switch and rotary control is programmable to perform any desired function. This means console architecture is completely customizable to client requirements, and limitations to functionality are no longer a factor. Physically compact, the LXE is available in several different form factors including countertop, countertop sunken, and split frames (split sections are not confined to one room; they can actually be in different studios).

ConsoleBuilder™ software allows every switch on the surface to be programmed for function, mode, and even color (switches are RGB led illuminated). In fact, built-in software allows every button to be scriptable, letting you create powerful macros for as many controls as you want. Multiple full color OLED displays on each panel keep pace with ongoing operations, and event recall allows painless one touch console reconfiguration at the press of a button. With its inherent control flexibility and ability to access thousands of signals (sources and destinations are limited only by the size of the network), the LXE takes facility workflows and audio control to a new level.



pictured: Tabletop with meterbridge

The LXE can have up to 32 physical motorized faders, with full DSP processing available on all 32 channels. Surfaces interface seamlessly into the WheatNet-IP Intelligent Network, and utilize BLADE-3s for audio, control and associated logic data flowing on single CAT6 interconnecting cables. The system can ingest and convert virtually all audio formats: mic and line level analog, AES/EBU, SPDIF, AoIP, MADi, SDI and even AES67. Loudness metering, phase control, and full EQ/Dynamics are included.

LXE's new GUI is has pre-built screens for everything you normally use – metering, clocks, timers, dynamics, EQ, assigns, and more. All are touch-screen accessible with gestures you're used to using on your smart devices. And, the GUI is just as customizable as the LXE surface. Using our ScreenBuilder™ LXE software, you simply drag and drop objects and define their functions via a simple wizard interface. You can store multiple custom screens, if you like, to go with your custom LXE setups.

the surface

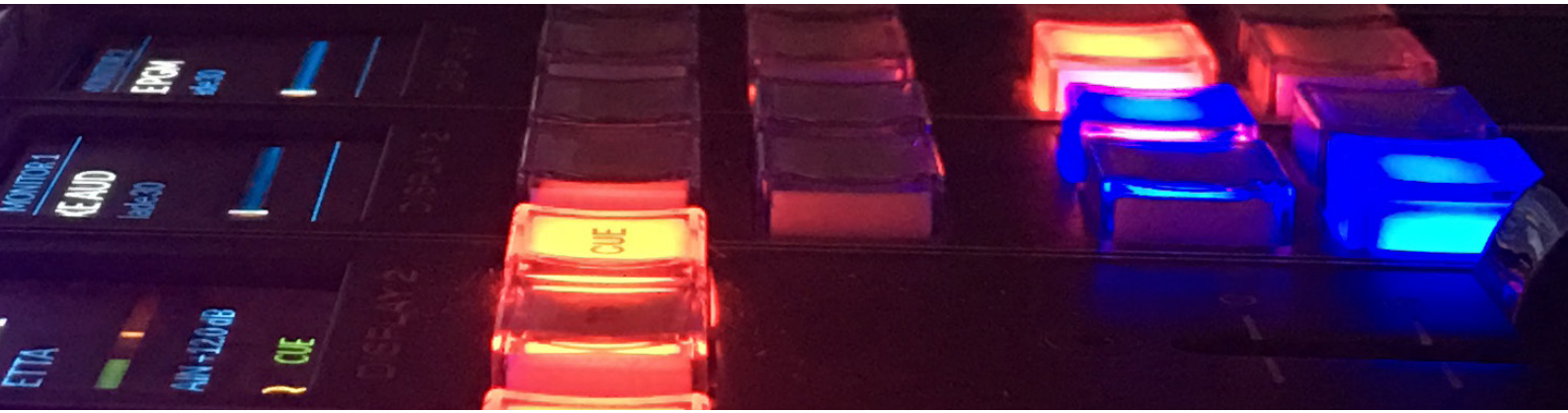
what can you do with it? dare we say it, you can rule the world!



Physical Surface:

- Several form factors available with mainframe configuration flexibility:
 - Tabletop with meterbridge
 - Wedge low profile (no meterbridge, pairs with separate HDMI monitor)
 - Countertop drop (flushmount)All three choices can be split consoles connected via network in same room or different rooms/locations
- Fully Programmable/Configurable via ConsoleBuilder™
 - Every button configurable via setup GUI, can be scriptable, or a variety of other functions
 - Every encoder/knob configurable from the setup GUI, Can be scripted (if X then Y) or assigned to other knob or encoder functions.
 - Fader is scriptable to control things via ACI like Utility mixer channels.
 - Multicolored fully programmable LED buttons throughout (blue, cyan, green, yellow, red, magenta)
 - Two full color OLED displays per channel configurable for contextual display
- Optional meterbridge for tabletop version with high-resolution LED meters and digital timer, all assignable from ConsoleBuilder™
- Built in Ethernet switch for plugging in accessories or other host panels

- True IP – connects directly to switch
- Four stereo Program busses
- Four stereo Aux busses
- Four mono or stereo Mix-Minus busses
- Headphone stream to surface - up to one per panel host
- Each input channel offers Phase control, Panning, Fader mode Left, Right, Mono, Stereo - each assignable to any knob/button
- Stereo or mono cue speaker depending on frame size
- Up to 32 physical faders (virtual faders can be controlled via ACI for third-party flexibility)
- Every fader has bus-minus or direct out and is configurable as stereo or mono
- Fader mirroring – allows faders to mirror one another in different locations
- Motorized fader option
- 8 layers (to accommodate up to 32 input fader channels) – completely customizable and configurable for each layer.
- 16 monitors (include Control Room, Headphones, Studio 1, Studio 2, etc), each with monitor dimming (all with friendly names)
- Monitor mix capable – mix all busses together for monitor output
- Monitor Linking (example: Headphone follow Control Room)
- Level lock for Monitors



- Dynamics, including Compressor, Expander, Gate, controlled via touchscreen or optional panel
- Full Parametric EQ controlled via touchscreen or optional panel (EQ GUI screen with color coded knobs), with high pass and low pass filters
- Flexible Metering Options:
 - Loudness metering
 - Phase Correlation metering
 - Input metering on each channel
- Info screen on surface for current status
- User management:
 - Logging in and out
 - User based access to controls
 - Vdip saved per user settings
- Unlimited number of events
- Support for remote mix engine (off premises, for use with At-Home systems)
- Time sync to NTP via mix engine
- Display brightness controls
- Accessory panels powered internally
- Tone generator
- Clip player option

Touchscreen GUI:

- Complete set of screens provided to allow control over every aspect of the LXE control surface
- ScreenBuilder™LXE with support for unlimited number of screens (which run one at a time) allows you to build any type of custom screen you need
- Configurable Home screen with up to 8 Monitor, 4 Aux, 4 Mix-Minus meters
- Linux based OS with touchscreen support accessible via HDMI video output
- Full screen XY controller built in
- Multiple Cue feeds if required
- Digital timer and clock on home screen
- Add custom logo to clock background
- Front end app can be used on Windows, Linux, or Mac for additional display of surface functions.
- Multi-touch Glass-E interface coming soon

layers = compact + huge

with layers, you can get up to 32 input channels with as few as four physical faders



pictured: low-profile tabletop wedge with eight physical faders



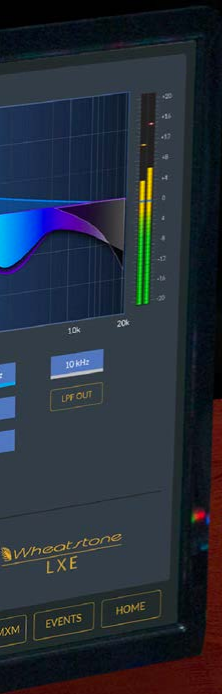
LXE has a cool feature called LAYERS.

With Layers, you can have, for example, 8 physical faders, each with four layers. So, you can have up to 32 actual input channels - 8 per layer. Push a button, and the motorized faders and your entire input channel are immediately reconfigured. Up to 8 layers are available to give you a maximum of 32 input channels. This gives you enormous power in a VERY compact space.

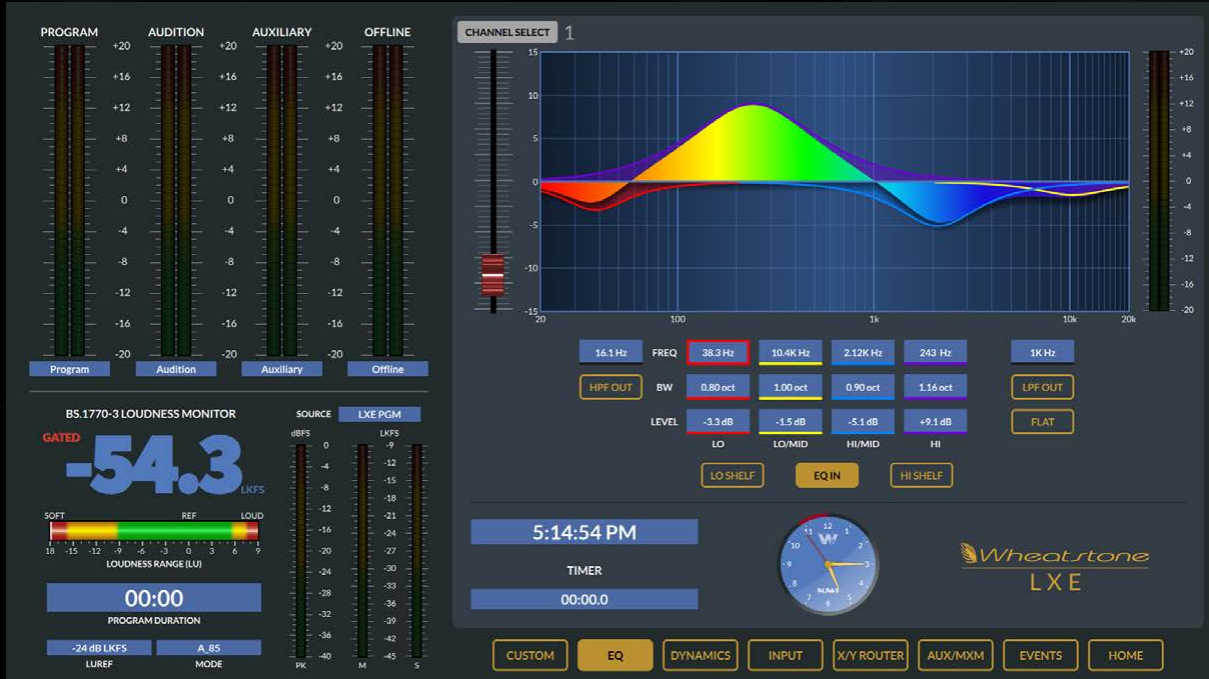
flush, for our global partners

a fully modular control
surface that's completely
customizable for your workflow





Different parts of the world have different ways of working. Popular around the world, split consoles allow you to position the different parts of the console wherever you like - even in different studios. LXE makes it easy. Simply group modules into bays, and connect those bays to the switch with standard CAT6 cables.



The LXE GUI features a “button” navigation architecture to easily access features with a minimum number of clicks. These Function buttons are located across the bottom of the function display area. You may access any desired screen by simply clicking or touching the appropriate buttons.

Custom Button

Launch custom built screens based on our popular ScreenBuilder™ product.

EQ Button

Set the available EQ settings for the selected channel. EQ In, High and Low Pass Filters, Lo and High Shelf settings are set based on the Input fader’s SET button.

Dynamics Button

Set the available dynamic settings for the selected channel. Expansion and Compression settings are set based on the Input fader’s SET button.

Input Button

Displays interactive Source, Mode, Phase, Pan, and Aux Send settings for the selected channel. Note you must press an Input fader’s SET button to show the settings for that channel, or click to access any fader.

X/Y Router Button

Gives you an overview of the network routing and the ability to alter crosspoints and routing.

Aux/MixMinus Button

Displays controls for the four Aux Master outputs and the Mix-Minus Outputs.

Events Button

The LXE can store a “snapshot” of the entire control surface in a file called an EVENT. The Event Pane is divided into two sections. The *Event Recall* section lets you recall previously saved Events. The *Event Editor* is a manager for creating, editing, and deleting Events.

Home Button

Displays Timer, Clock, Current Event, Switched Meter, Headphone Mode controls, and the External Source for monitors.

paint with numbers

build customized screens that give you enormous power to handle your specific needs



ScreenBuilder™ LXE

LXE's new GUI has pre-built screens for everything you normally use – metering, clocks, timers, dynamics, EQ, assigns, and more. All are touch-screen accessible with gestures you're used to using on your smart devices.

BUT, the GUI is just as customizable as the LXE surface. Using our ScreenBuilder™ LXE software, you simply drag and drop objects and define their functions via a simple wizard interface. You can store multiple custom screens, if you like, to go with your custom LXE setups.

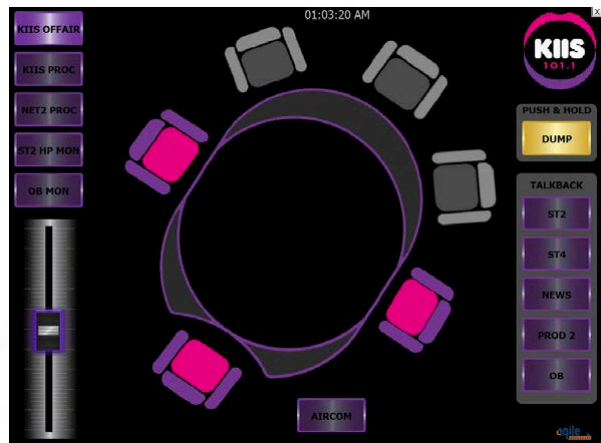
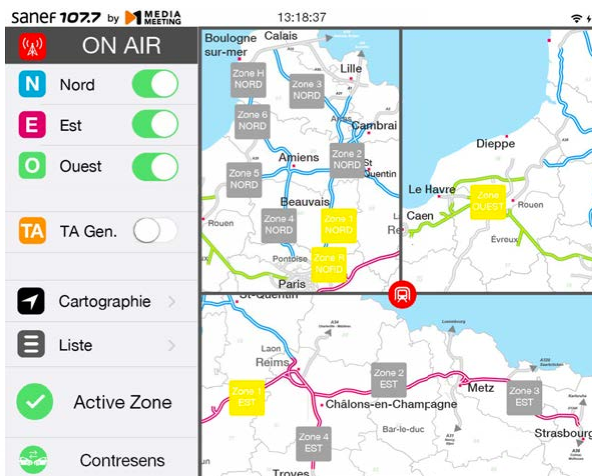
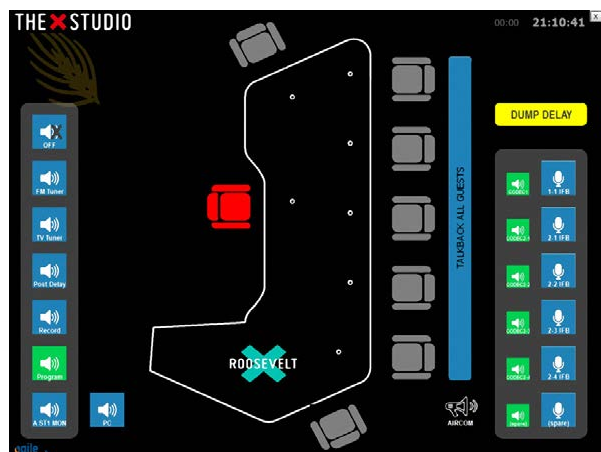
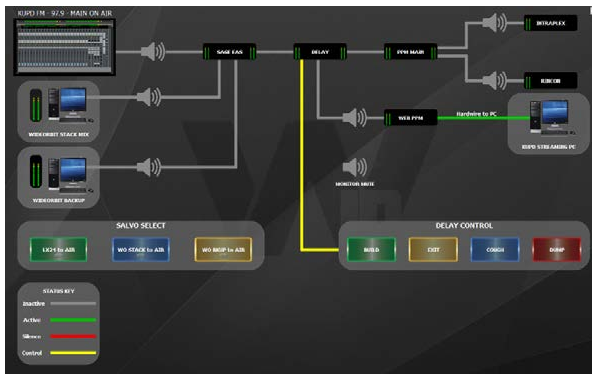
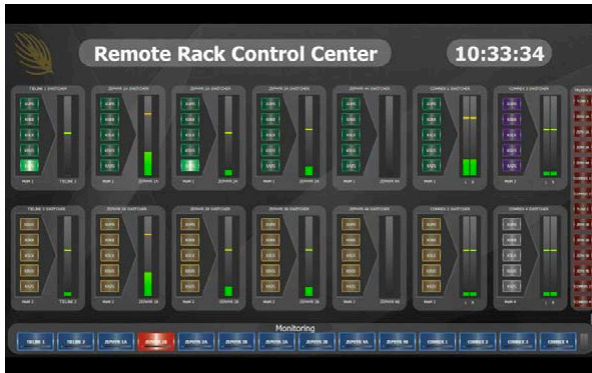
ScreenBuilder™ LXE comes stocked with meters, faders, knobs, buttons, tallies, etc. ready to drag, drop, and configure. You can also add your own graphics and assign functions to them using our script wizard. We've seen studio mic plots, maps of entire countries with transmitter locations, simple on/off talent panels – it's pretty much wide open. If you can conceive it, you can achieve it.

Across the page - over there on the right - are a handful of examples of the many diverse projects people have been crafting using ScreenBuilder™. Our customers continue to blow our collective minds.



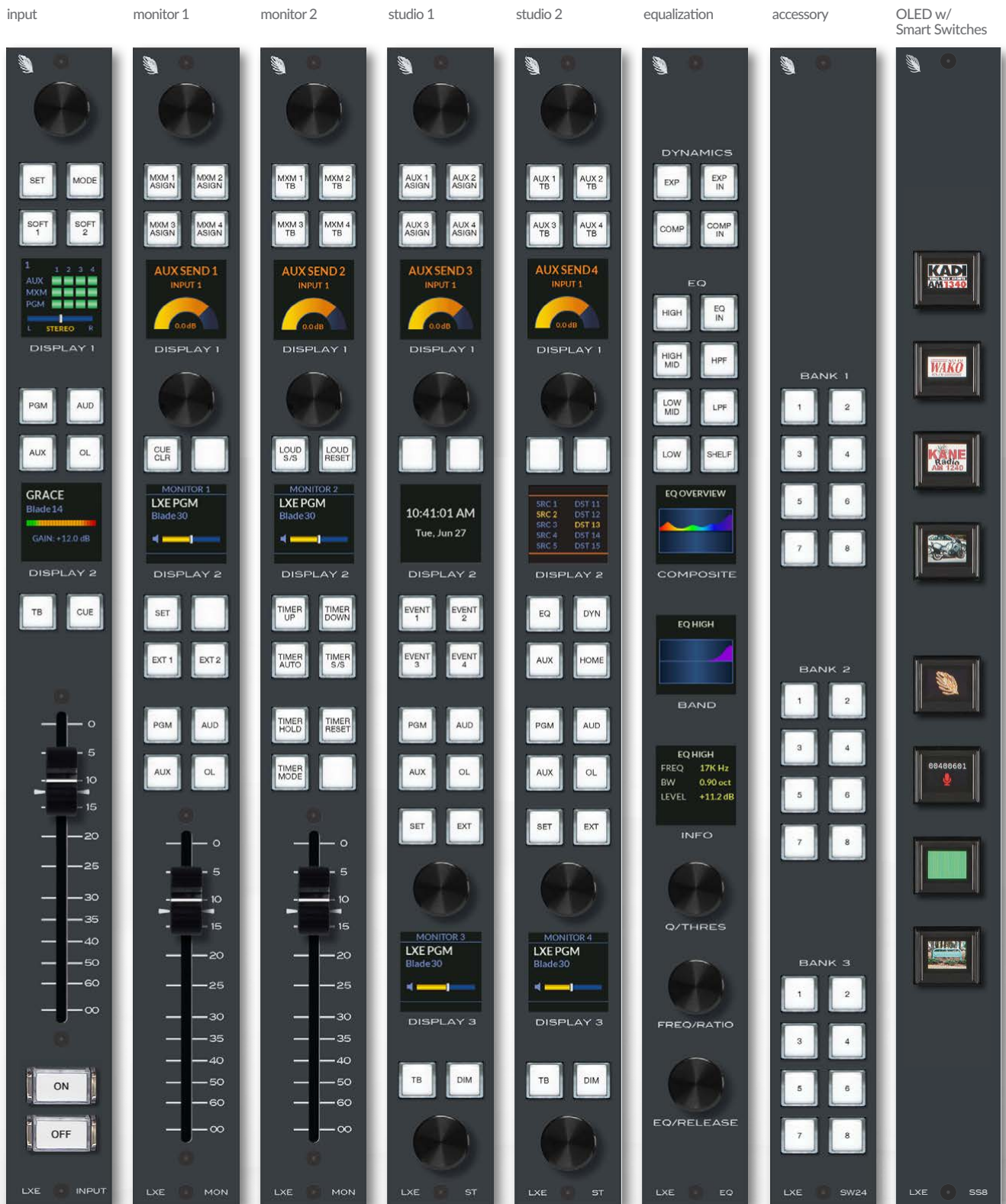
Cool feature: ScreenBuilder™ LXE lets you customize the clock on your home screen to add your logo...

ScreenBuilder™ Gallery - a collection of screenshots from builds around the world.



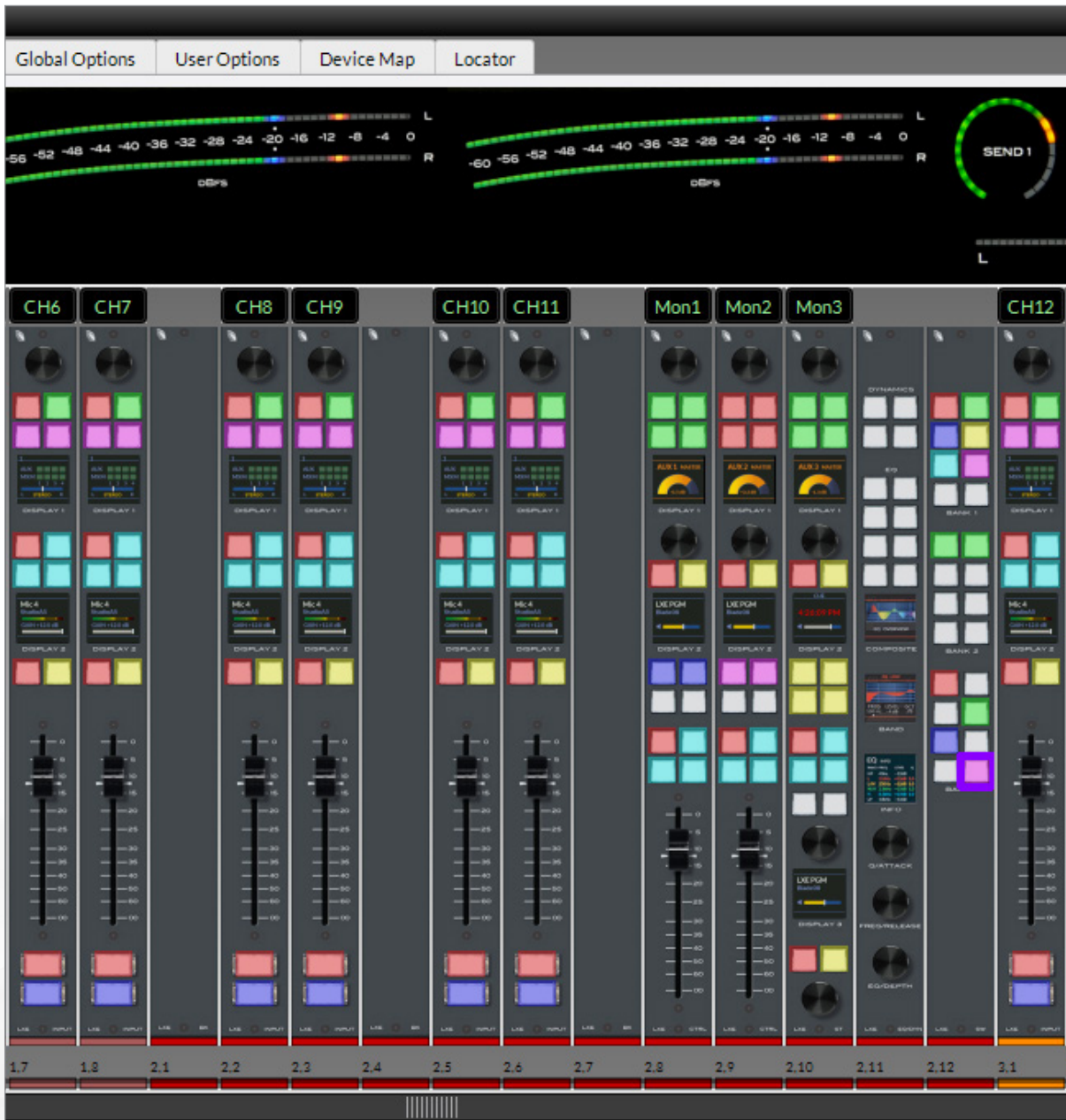
when you need to seize control...

all the panels - everything you need to mix - right there at your fingertips and a way to make them yours



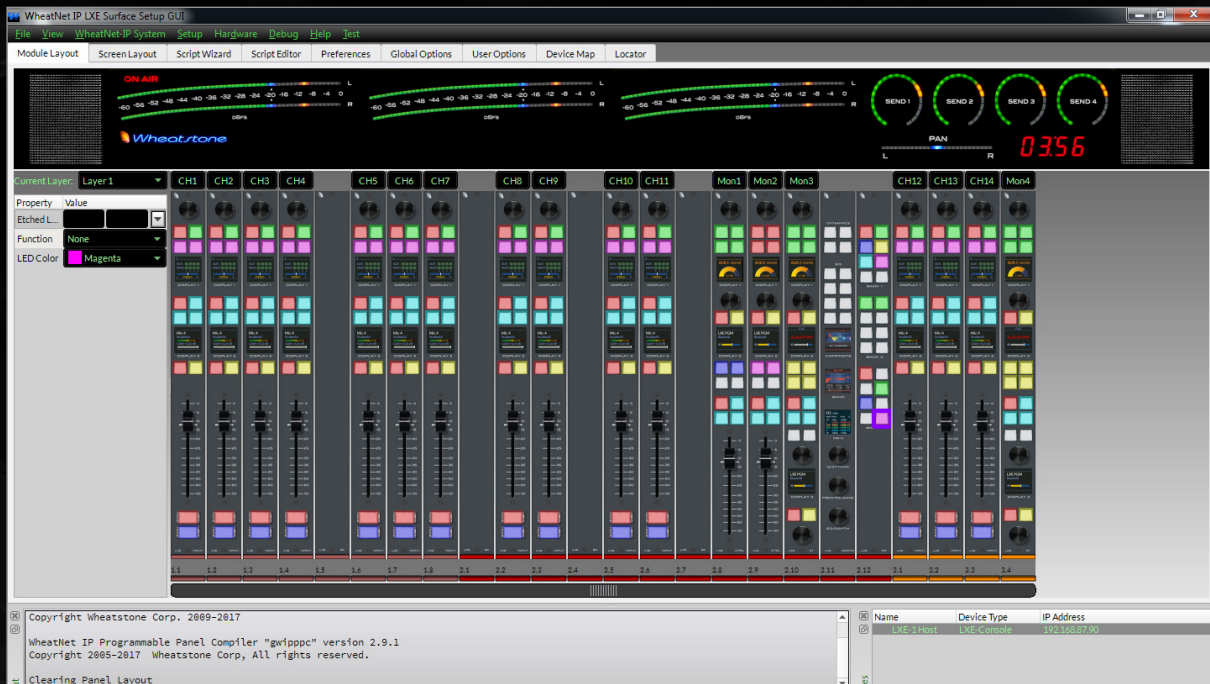
ConsoleBuilder™

The LXE comes ready to go, pre-configured to be useable for standard applications out of the box. But with broadcast audio becoming anything but 'standard', LXE's magic is revealed when you use ConsoleBuilder™ to configure and program the LXE to do exactly what you need it to do. ConsoleBuilder™ is a drag/drop/script GUI that puts an exceptional amount of power into an easy to use interface. PGM Assign, Set, EQ ON/Off, Talkback – any of over 25 functions can be assigned to just about any knob, button, or fader. Pretty amazing.

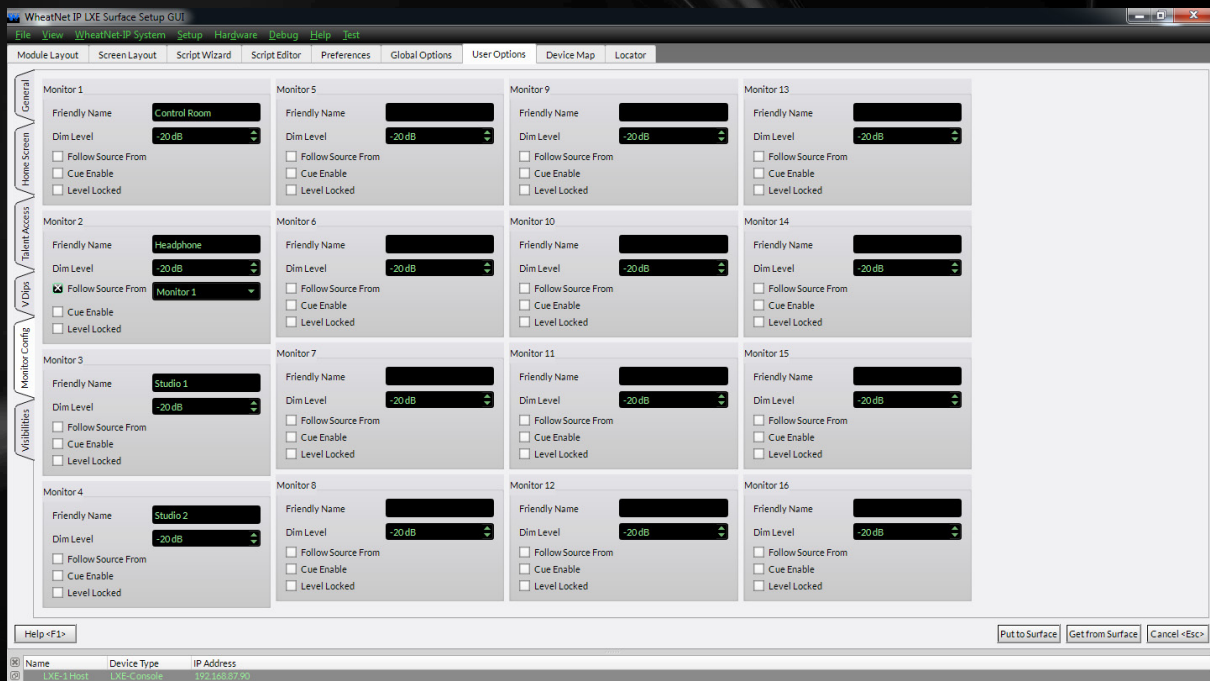


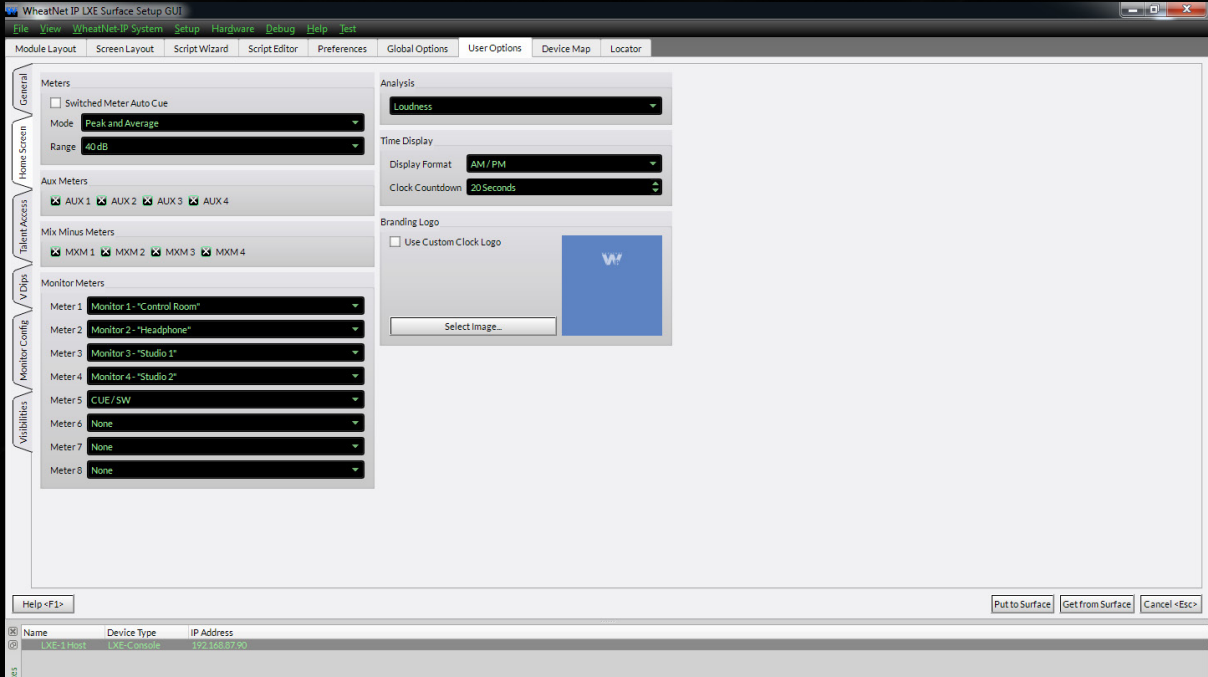
the flexible surface

ConsoleBuilder™ GUI lets you program and configure the LXE to accommodate virtually any application



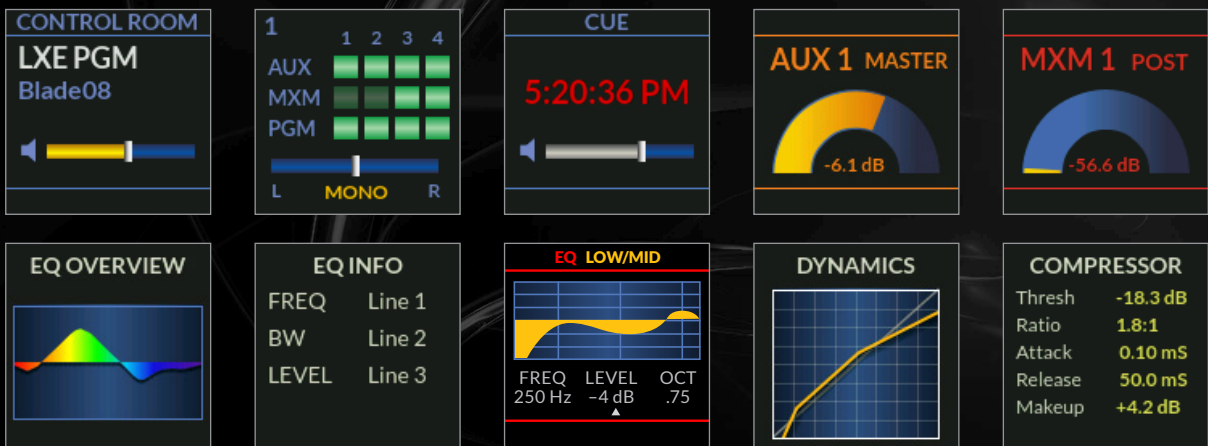
Here's how ConsoleBuilder™ works. Not surprisingly, it's an exceptionally powerful interface that's incredibly easy to use. A display shows you the layout of your console – just double click on the button, knob, or OLED you want to configure and a series of screens and tabs lets you program it to be what you need.





Above is an example of how easy it is to configure your console using ConsoleBuilder™. Simply pick a meter and select the function you'd like from a drop-down menu. For more complex things, you can script to achieve the control you need.

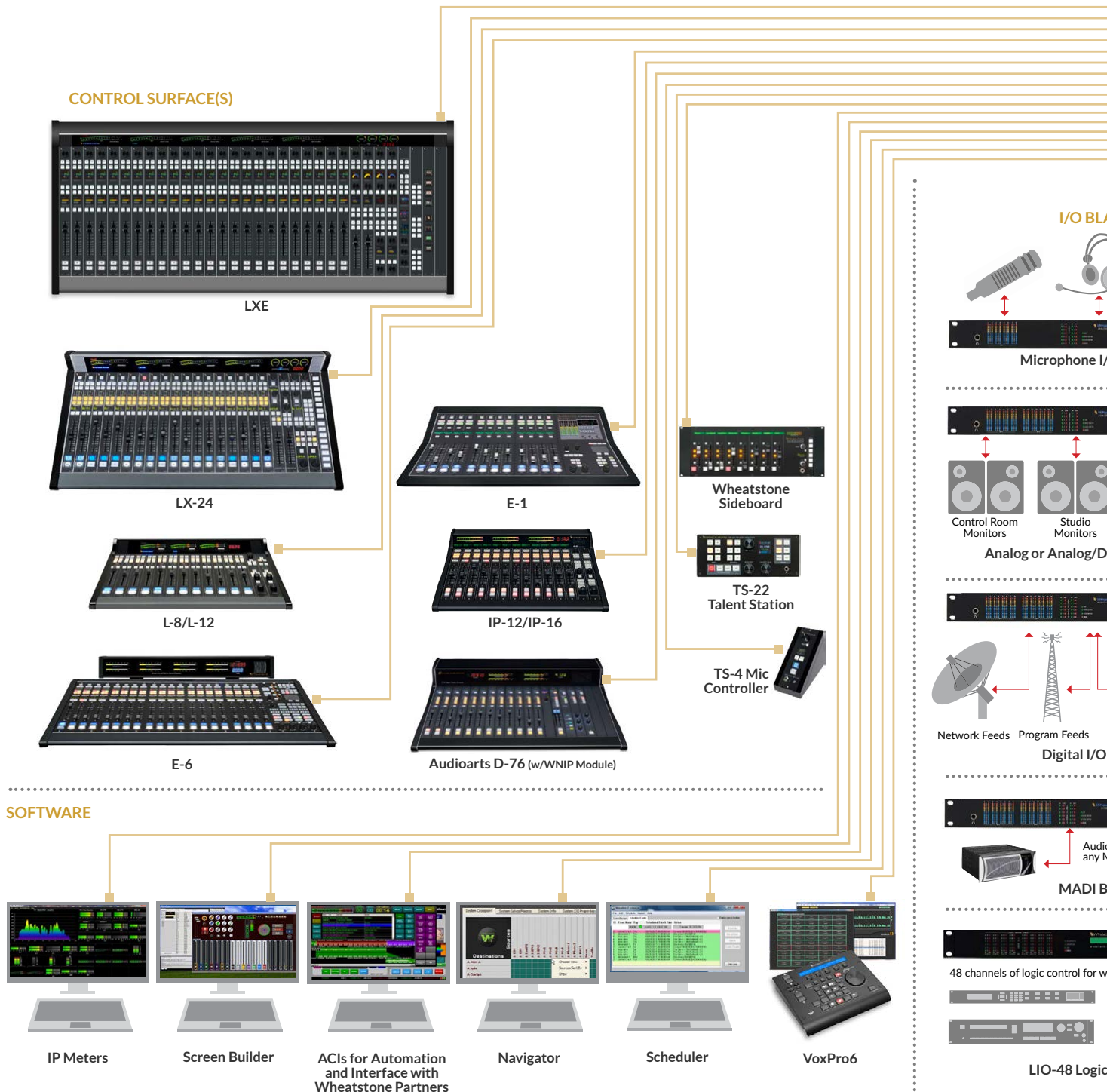
On-Board OLED Screens

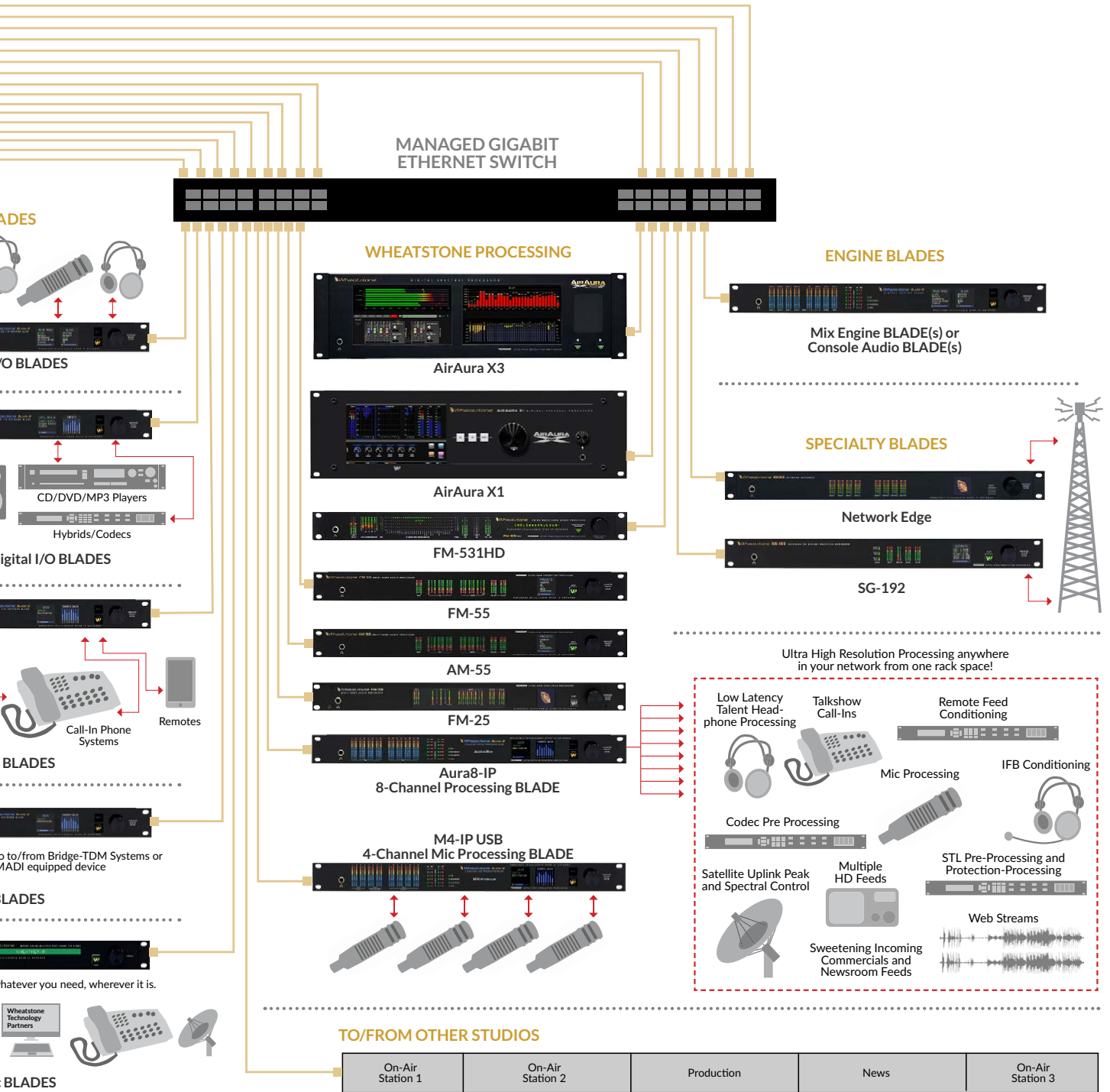


The small, full-color OLEDs in the modules on the surface provide whatever information is pertinent to what you are doing at any point in time. Turn a knob or push a button and a screen will provide the info you need. These are fully scriptable to present the data you need, when you need it.

the network

LXE is the front end to a vast network, all controllable from its surface





beyond the surface

there's a world of Wheatstone smart control panels, software, BLADE-3s and other surfaces 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.



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.



Mix Engine & Console Audio BLADE-3s

We have several BLADEs built to handle specific tasks. First are the Engine BLADEs: IP88E and IP88CB. The IP88E is a BLADE that houses all DSP power for an individual control surface or Glass-E virtual mixer, 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, they are available as sources and destinations anywhere. This creates an extremely flexible system, where program outputs from one surface can be a source on any other surface. For example, a news mixer's program bus can come up as a source on the air studio control surface. While the IP88E doesn't house audio I/O, it does include 12 universal logic (GPIO) ports.

The IP88CB provides powerful interface options, including four AES inputs, four stereo analog inputs, four AES outputs, and four stereo analog outputs on RJ45s; control room and studio stereo analog outputs on XLRs, two mic level inputs with gain trim and switchable phantom power on XLRs; cue and headphone outputs on both RJ45 and 1/4" TRS, and 12 GPI logic ports on RJ45.



Audio Processing BLADE-3s

Placing a processor everywhere you'd like one has been costly and impractical. Until now. A single 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 USB 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.

There are several other processors that are WheatNet-IP native as well. These include the AirAura X3, AirAura X1, FM-55, FM-25, AM-55, SG-192, and FM-531HD.

WheatNet-IP Overview & Planning Guide

Get a good overview of the Intelligent Network. Learn about all of your console options, details about all BLADEs and compatible processors, all accessories, details on WheatNet-IP technology, interface ideas and more.

This guide is downloadable from any WheatNet-IP product page on our website.

Or, just go to:
<http://wheatstone.com>





Small Control Surfaces

1. TS-4 Talent Station
Provides lighted on/off/cough and talkback switches for a single talent microphone. A rotary headphone source selector is provided along with an OLED display for identifying the selected source.

2. TS-22 Talent Station
This full featured Talent Station turret plugs into the WheatNet-IP intelligent network to provide microphone control, headphone (with built-in amplifier) and speaker levels, plus source select, programmable soft buttons and timer control. No outboard equipment required and no wiring it all together; a single CAT6 cable handles it all. Also available as a flushmount countertop panel.

3. Sideboard Control Surfaces
This small surface is available in 4 or 8 input, tabletop or rack versions and provides an extensive tool set yet simple operation. Includes built-in headphone amp and controls, source select, and programmable buttons. Just plug it into the WheatNet-IP network and go.



Controllers

HBX8-R Controller
An eight button rackmounted source controller for rapid access to eight preprogrammed sources. An encoder knob with associated display allows access to any signal on the network.

XYE-R IP Controller
A rackmount controller with full dialup source and destination control. Any signal accessible in a networked system is fully routable.



IP Meters GUI Software

Get a quick read of any audio source, destination or stream in your WheatNet-IP Intelligent Network. Our new IP Meters GUI app displays a “wall of meters” on your computer screen for ongoing monitoring of audio peak levels and average levels at selected points throughout the entire network. Included is a separate analysis meter for spectral readings plus visual alerts should a channel go dark.



Glass-E Software

Wheatstone’s Glass-E is the ultimate remote access tool. Use it where you don’t need a physical control surface, or to augment one that already exists. Think of it as a glass cockpit for your control room. With it, compatible control surfaces can be controlled remotely. Use GLASS-E to take command of the console from anywhere that has network access to the system – ideal for running the board from a remote or for assisting an unfamiliar operator from the engineer’s home!



GP Series Control Panels

GP8 and GP16 Panels
More than simple switch arrays, these 8 and 16 button panels come with their own scripting wizard. At the simplest level they can do source selection, push-to-talk, and preset/salvo activation. But the intelligence in each panel allows them to query the entire network and make switching decisions based on what they find. Conditional switching using Boolean logic functions allows for complex switching scenarios such as IF Studio B has requested the airchain, AND Studio A has acknowledged, THEN fire the Studio Change salvo.

GP3 Panel
A straightforward headphone panel with level control, 1/4” headphone jack and a switch with LED tally (typically used for the COUGH function, but can be custom wired). Connectorized with both RJ45 and Phoenix screw terminals.

GP4 Panel
A 4 button switch array for remote mic functions (typically ON, OFF, COUGH, TALKBACK). Interfaces with any available BLADE GPIO ports. Of course, all four switches can be custom wired for other functions as well.

GP Turret
A compact desktop turret designed to house up to three (or six in our double width version) GP Panels.

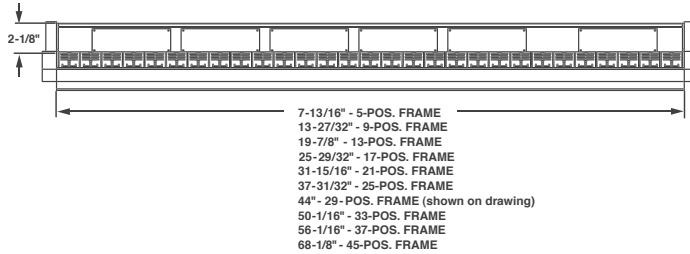
The Wheatstone Touch
Our protocol allows us to interface with commercially available third party touchscreens. You can create customized touch panels that are perfect for your application.

the nitty gritty

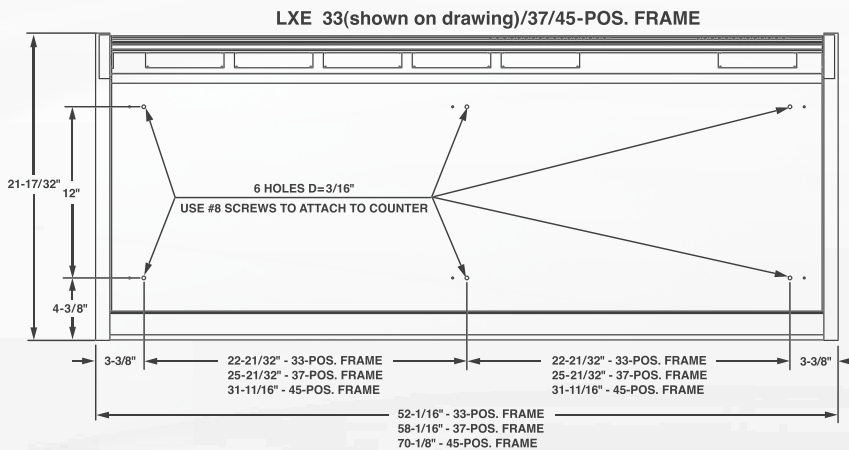
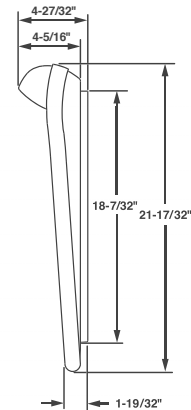
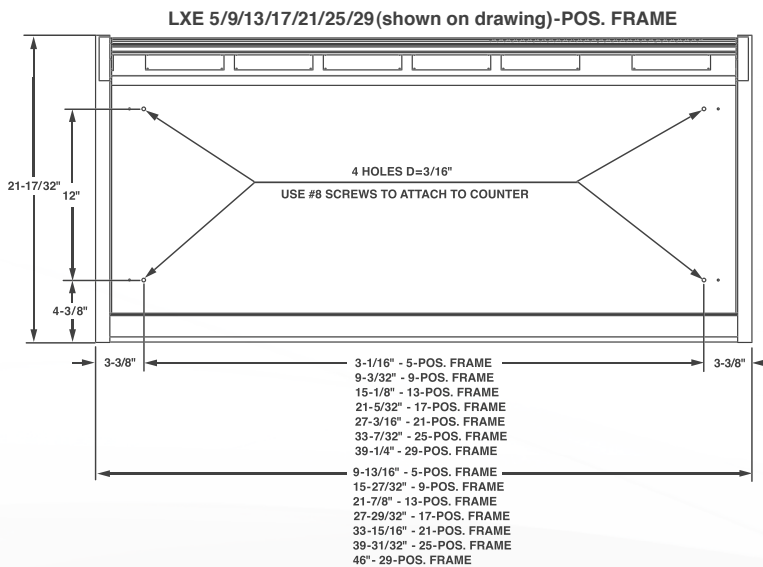
specifications and other important stuff you should know about

The LXE modular control surface is designed for countertop mounting or drop-in installation in counter top. Although the rubber feet on the bottom keep the surface from being easily moved when simply placed on the counter, pre-drilled holes have been provided so that screws may be used to mount the surface securely to the countertop.

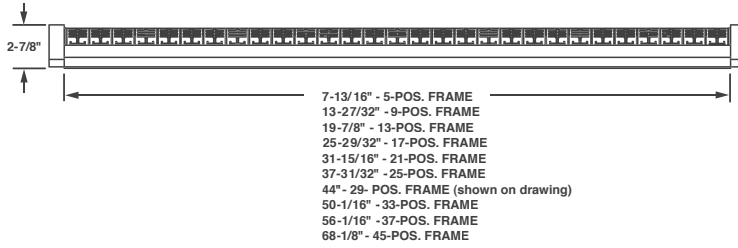
Countertop Frames



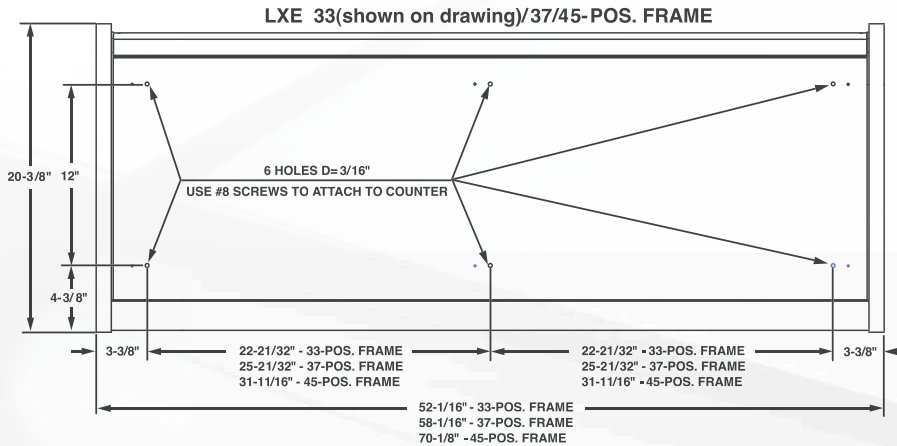
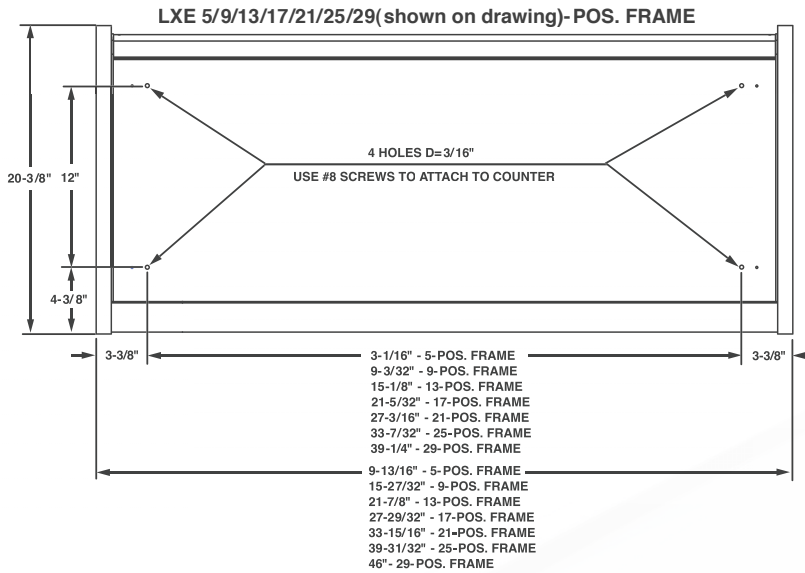
CUTOUT DIMENSIONS	
5-POS. FRAME	8-1/16" x 18-1/2"
9-POS. FRAME	14-3/32" x 18-1/2"
13-POS. FRAME	20-1/8" x 18-1/2"
17-POS. FRAME	26-1/4" x 18-1/2"
21-POS. FRAME	32-3/16" x 18-1/2"
25-POS. FRAME	38-7/32" x 18-1/2"
29-POS. FRAME	44-1/4" x 18-1/2"
33-POS. FRAME	50-3/8" x 18-1/2"
37-POS. FRAME	56-5/16" x 18-1/2"
45-POS. FRAME	68-3/8" x 18-1/2"



Wedges Frames



CUTOUT DIMENSIONS	
5-POS. FRAME	8-1/16" x 18-1/2"
9-POS. FRAME	14-3/32" x 18-1/2"
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stuff you should know

here is some stuff you should pay attention to...

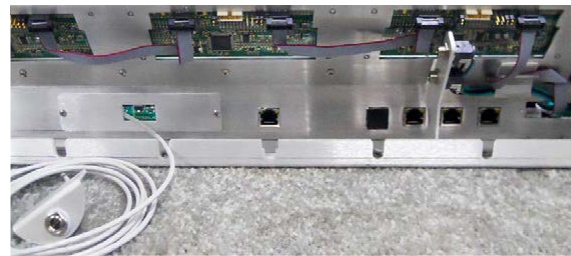


SPS-1600 Power Supply

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 LXE. But we don't. In order to maintain our high level of quality we've designed and built a dedicated separate rackmount supply. We recommend running two power supplies simultaneously as a redundant backup power source.

Headphone Pigtail

We know that headphone jacks are seldom located where you need them to be, so every LXE comes with this handy pigtail and heavy-duty flange with a TRS jack. Just plug it into the 3-pin JST plug that plugs into the Panel Host board. and mount the brushed steel flange where you need it (such as under your desk, as pictured above). Voila! Your headphone jack is exactly where you want it.



Connectors

There are several RJ-45 connectors on the rear of the LXE control surface. This number will vary depending on the size of the surface. Chose any open connector for the connection to a standard Ethernet network switch via a straight (pin to pin) CAT5e/6 cable.

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.

Specifications and features subject to change without notice



MONITOR 1
LXE AUD
Blade30

ZROCK 1
ZETA
GAIN +120 dB
m r/e

CUE

DISPLAY 2

DIS



Designed and built by
Wheatstone Corporation
600 Industrial Drive | New Bern NC 28562-5440 USA
phone 1.252.638-7000 | fax 1.252.635-4857
wheatstone.com | sales@wheatstone.com

 *Wheatstone*
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