









Game Changed

X32 changes the game by completely rethinking what is possible in a digital mixer. A fluid workflow coupled with a fully interactive user interface ensures immediate familiarity and instills confidence.

Advanced engineering and meticulous design deliver stellar sonic performance at an extremely affordable price - changing the game entirely.

What makes the X32 possible is – everything. BEHRINGER's experience spans 11 million mixers already in users' hands. We have delivered over 4 million DSP-based processors. Our vertically integrated factory produces over 5 million Pro Audio products a year with quality and reliability numbers that lead the industry. Nearly 25 years of relentless research, development with 250 of the world's best engineers plus complete control over the manufacturing process is what powers the X32.

Above all, X32 is designed to put the power of digital in your hands, without compromise. BEHRINGER's singular focus on a matchless value proposition means X32 integrates advanced features such as motorized faders, LCD scribble strips, integrated personal monitor mixing and true high-speed digital audio networking as standard features.

You win.



Intuitive. Immediate. Natural.

X32 is your mind-to-sound interface...the intersection of creativity and production. Whether you're accustomed to digital mixers or not, the X32's intuitive user interface offers a fluid mixing experience that instantly feels like home. From the first moments of use, the workflow unfolds in a way that strips away obstacles, distractions, and hesitation.

ELEMENTS OF FLOW





LCD Scribble Strips

X32's automated control surface is designed to present you with the control you need, when you need it. A total of 29 programmable LCD Scribble Strips offer channel/bus identification that mirrors what is being controlled. Use them to enter input/output tags, plus add icons you recognize at-a-glance. Then assign colors to create visual groups for immediate, on-the-fly recognition of similar inputs. Simple, elegant and effective – plus you'll never need masking tape again.



View Function

Across the X32 you'll find 11 strategically placed View buttons associated with various functions. These buttons enable immediate access to information about that specific function.

For instance, if you press the View button in the Equalizer section, information for that channel's EQ is instantly shown on the main display, providing in-depth editing of all related parameters. This direct access to visual fine-tuning gives the engineer a level of control previously available only on consoles costing exponentially more.



7" Main Display

X32's 7" day-viewable color TFT (Thin-Film Transistor) display shows the setting parameters you need when you need them. Selected for its high-contrast performance and outdoor visibility, TFT is ideal for concert and open festival venues. Flanked by high-precision, context-sensitive tactile encoders, the screen comes to life and immediately reports in high definition all adjustments applied to a wide range of parameters. Intelligent design puts control over vital functions such as Effects, Metering, Routing and much more just 1 or 2 button presses away.





DCA (Digitally Controlled Amplifier) groups allow control over several signals at once without actually mixing them into a subgroup bus. X32's 8 DCA groups let you control multiple signals via a single fader, such as the entire drum mix, the horn section, or the backup vocalists, etc. DCA control affects the FOH mix, while allowing the individual buses to remain unchanged. The result is a customizable workflow that provides maximum flexibility, but still allows individual buses and subgroups to serve the purpose they were intended for, such as zone sends, broadcast feeds, etc.



Sends On Fader

X32 brings the convenience of digital mixing to your Aux and output bus mixes too, thanks to its integrated Sends on Fader feature. This incredible function allows you to build powerful, dedicated sub-mixes for monitor, secondary zone feeds, and much more—all without affecting the front of house mix or levels. The X32 allows you to send your choice of signals to any Aux or output bus and then dial in the perfect mix via the channel faders. The console remembers where you set the faders and instantly recalls them when you select a bus for quick adjustments.



Assign Section

While some digital consoles offer a few user-definable controls, X32's Assign section sets a new standard by providing a total of 36 fully customizable controls on three separate layers. As with channels and buses, individual Scribble Strips are provided for immediate identification. Buttons can be defined to toggle parameters on/off, adjust timing of effects by tapping, or jump to specific screen views. Rotary encoders with LED collars can be assigned to specific channel parameters, or to additional parameters in the Dynamics section relevant to the current channel selection.



Motorized Faders

X32 serves the user a full complement of 25 long-throw, 100 mm motorized servo faders for primary mix control. Working in concert with the LCD Scribble Strips and TFT Display, the faders serve multiple functions while always keeping you informed. Separate fader sections for inputs and groups/buses allow for convenient assignments from inputs to groups/buses. With the ability to store up to 100 scenes, X32's motorized faders jump to life the moment a scene is recalled.





Channel Strip

All within reach. The design philosophy behind the X32.

Demanding mixes require focus and agility. Searching for the right control or adjustment parameter slows you down. The X32 channel strip puts the most important channel processing parameters into one section so that no matter which channel you are working on, the controls are always the same. Keeping these critical functions in one section keeps your eyes and hands focused, allowing a simple ergonomic motion as you adjust the channels and dial in the perfect mix. This highly-efficient layout stems from BEHRINGER's decades of console design and input from our users. Optimized control illumination ensures a clear indication of levels or status from any viewing angle. Illuminated rotary encoders and switches give you control of preamp settings, frequency shelving, dual dynamics sections, as well as multi-mode fully parametric EQ, bus sends, main, mono and stereo panning.



We Are Family

Three companies sharing a common vision – to engineer and build the very best sounding, technically advanced audio products for discerning professionals. Bringing together the engineering, manufacturing and application expertise of legendary console manufacturer MIDAS and iconic signal processing experts from KLARK TEKNIK, combined with BEHRINGER's unique ability to deliver a superior value proposition is the secret behind the X32.

The synergy between these three great companies runs deep in the X32. From the pristine, MIDAS-designed mic preamps to KLARK TEKNIK's rock-solid, ultra-low latency SuperMAC networking technology and BEHRINGER's completely re-engineered processing algorithms, X32 raises the bar on what a digital mixer can be. A singular passion for delivering advanced technology, unrivalled usability and true road-worthiness has enabled us to engineer a digital console that is the ideal vehicle for your creative expression.

TEKNOWLOGY





Gold From Beginning To End

X32's input topology – mic preamps, programmable gain controls and A/D stages were designed by a dedicated engineering team at MIDAS. Conceived as a single, cohesive system, and built around premium A/D converters, this proprietary preamp design captures every nuance of your input signal–ensuring superb sonic performance.

⊗ ☐ ☐ ☐ ☐ Designed Preamps

X32 programmable mic preamps process every audio signal to ensure a specifically airy sound with pinpointed localization. The preamp design eliminates typical imbalances of gain-setting stages, thereby improving the common-mode rejection ratio (CMRR) and reducing second level harmonic distortion to an almost immeasurable level.

Gain setting is fully programmable and covers a total range of 72 dB, with a precision resolution of 0.5 dB per step. Accommodating a maximum input signal level of +23 dBu, X32 turns analog VRs and pad switches into ancient history. Backing the analog input section are audiophile-quality Cirrus Logic multi-channel A/D converters, which boast a 114 dB dynamic range, ensuring impressively-low distortion and low-noise performance.





Audio Networking & Interfacing

X32 includes an array of control and networking capabilities as standard features. Dual-port AES50 digital networking supports up to 96 channels of audio over Cat-5e, allowing remote stage boxes and sharing signals among several connected X32s. On-board ULTRANET provides a 16-channel digital mix direct to P16 Personal Monitor Mixers, without added hardware, cost or latency. Ethernet, USB, FireWire, MIDI – all standard features on X32.



POWERPLAY 16

Personal Monitoring System

Easy as a handshake.
Plug the P16-M personal monitor mixer into
X32's ULTRANET port with a single
Cat-5 cable, and let the performer dial in



their ideal 16-channel personal monitor mix. You can daisy-chain additional P16-M units, or use the P16-D ULTRANET distributor to set up a plug and play monitor system that accommodates up to 48 individual P16-M units.



Leave That Heavy Analog Snake Behind

The S16 digital stage box closes the gap between stage and FOH (Front of House) by placing 16 fully-programmable, remotely controllable high-end mic preamps and 8 analog, balanced XLR returns at the stage end. Connecting over a single Cat-5 cable, up to three S16 stage boxes can be daisy-chained to deliver 48 channels in and 24 out to the stage. Dual AES50 ports on the X32 allow up to 96 input channels to be connected and routed in the same system.

- AES50 network ports featuring KLARK TEKNIK SuperMAC technology for ultra-low latency (in-ear compatible)
- Up to 100 m networking capability via CAT-5 cable (not included)
- Dual AES50 ports, each for cascading up to three S16 units no merger or router required
- Precise LED metering plus 7-segment displays for signal control on stage
- Phones output assignable to any of the inputs/outputs for on-stage monitoring
- Connectivity for BEHRINGER's P16-M Personal Monitoring System for in-ear applications (not included)
- Dual ADAT outputs for use in splitter mode and stand-alone digital multi-core applications
- MIDI in/out for bi-directional communication between FOH console and on-stage MIDI devices



SuperMAC from KLARK TEKNIK simultaneously provides high channel counts, extremely-low deterministic latencies, accurate phase-aligned networked clock distribution, error detection, network redundancy, simple deployment and ease of use to meet the needs of the live performance industry.

This unique combination also benefits both live and studio recording applications, as well as post-production, broadcasting and audio routing infrastructure. SuperMAC is a proprietary point-to-point digital audio connection technology operating over 100 Mbit/s Ethernet. Originally developed by Sony Pro-Audio Labs in Oxford, UK (and now owned by KLARK TEKNIK), it forms the basis of the Audio Engineering Society's AES50 open standard for digital audio networking – High Resolution Multi-channel Audio Interconnection (HRMAI), as published by the Audio Engineering Society, Inc.

- 48 bi-directional audio channels over Cat 5 cable (48 kHz)
- Single cable duplex interconnection for audio and sample clocks
- Ethernet physical layer audio data transmission
- High channel count and ultra-low deterministic latency (2x3 samples = 1/8 ms per node)
- Accurate phase-aligned clock distribution
- Comprehensive error detection and management
- Provision for redundant networking
- Minimal configuration total ease of deployment and use
- Ethernet TCP/IP protocol-compatible auxiliary data channel
- OEM modules available from developer partners



MIXPERIE

The X32 Experience

Whether you come from an analog mixing background, or are accustomed to using other digital consoles, your first experience with X32 has been engineered to be intuitive, fluid and straightforward. The brilliance of X32's workflow is its simplicity and total lack of clutter. Tactile controls allow smooth adjustments to critical elements as the mix progresses while the TFT screen keeps you informed every step of the way. This integration of tactile controls, motorized faders and the array of LCD and TFT displays makes the X32 experience the premiere solution for Live Sound, Broadcast, Studio Recording and Post Production applications.



















Expandability

Each X32 comes loaded with all of the connectivity, I/O and functionality you need, right out of the box – but it doesn't end there. Onboard USB 2.0 and FireWire connectivity delivers a full 32 x 32 channels of audio and MIDI to your DAW. Integrated multi-channel digital audio interfaces connect to remote stage boxes and/or the P16 Personal Monitor System. Native Ethernet control enables remote operation by computer, iPad or iPhone over a wired or wireless network, across the room – or across the planet!

Keeping all this power up-to-date is easy; just navigate to BEHRINGER.com for the latest enhancements, additions and features. Download new firmware onto a USB flash drive and insert it into the X32; then re-boot and start enjoying an endless array of new functionality and performance.



Virtual FX Racks

X32 includes an extensive array of onboard effects, rendering outboard processing racks a thing of the past. The Virtual FX rack features 8 true-stereo, studio-grade effects engines each assignable to any input, group or output mix bus. Choose from 37 high-end FX modules including a range of reverbs, delays, EQs, dynamics and much more.

Each FX algorithm has been completely re-imaged for stunning performance – typically costing several times the price of the X32. Custom-designed, and modeled after some of the most iconic and sought-after processors, all effects run inside the low-latency environment of the X32 mix engine, ensuring flawless performance, flexible routing and the end of cable faults forever!



EXCITERS increase presence and intelligibility in live sound applications and are indispensable for adding clarity, air and harmonic overtones in the recording studio. **ENHANCERS** let you emphasize the Bass, Midrange and Hi output at selectable frequencies. Generate maximum punch, clarity and detail, without turning up the overall volume with X32's enhancers. (Inspired by Aphex Aural Exciter* and SPL Vitalizer*)



Our **TruEQ STEREO GEQ** delivers musical and responsive signal processing—perfect for general room equalization, indispensable for monitoring. X32 provides up to 16 mono graphic EQs, in addition to the multi-band parametric EQs in all channels and buses, to cope with the most demanding stage monitoring situation. Plus, the X32's motorized faders can be switched to control the filter bands of the graphic EQ, with the channel LCDs showing the corresponding filter frequencies—and you can even put this on a user defined hot-key for immediate access. (Modeled after KLARK TEKNIK DN360)



VINTAGE ROOM stands out head and shoulders over other competing reverberation strategies in the way it models sound propagation in air and room resonances. Invented in the early '80s, the role model delivered believable room character from an algorithmic reverb long before convolution-based processing was available. It is an ideal reverb for mixes or sub-groups, as it adds space to complex signals and stays away from any sort of effect mush—highly valued in classical music and broadcasting environments. (Inspired by the Quantec QRS*)



PLATE REVERB emulates the characteristics of a plate reverb chamber with control over the damping pad, modulation depth and speed, and crossover.

X32's Plate Reverb will give your tracks the sound heard on countless hit records since the late 1950s. (Inspired by the Lexicon PCM70*)



Based on the legendary EMT250, X32's **VINTAGE REVERB** delivers a shimmering, bright reverb that won't drown out or overpower your live/recorded tracks. Use Vintage Reverb to sweeten vocals and snare drums without sacrificing clarity. (Inspired by the EMT250 Plate Reverb*)



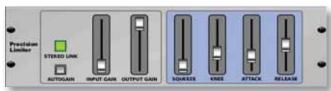
WAVE DESIGNER is a powerful tool for adjusting signal transients and dynamics such as attack and sustain. Use it to make a snare drum really "crack" in the mix or level out volume inconsistencies of slap bass tracks. (Inspired by the SPL Transient Designer*)



The **STEREO** and **TRIPLE DELAYS** in the X32 record the input signal and then echo it back after a user-definable period of time and number of repeats. What makes them specifically useful and outstanding is the linked tap-timing and musical choice of echo patterns. Use the Delay to fatten up vocals and instruments, or to add an enhanced spatial element to any performance.



Taking up only one FX slot, the **CHORUS & CHAMBER** effect combines the shimmer and doubling characteristics of a studio-grade Chorus with the sweet sound of a traditional Chamber reverb. (Inspired by the Lexicon PCM70*)



The **STEREO PRECISION LIMITER** is perfect for setting a precise volume limits, ensuring distortion-free and optimal signal integrity. Use X32's Stereo Precision Limiter to boost quiet signals or reduce the level of "hot" signals to prevent clipping. (Inspired by Sony Oxford Dynamics*)



The X32 **HALL REVERB** effect provides a broad spectrum of reverberation possibilities, from small room to large, or even cavernous proportions. When softly mixed with the original signal, Hall Reverb can be used to create a warm, more natural sound. (Inspired by Lexicon 480L*)



This handy dynamic **FLANGER & DELAY** duo blends the "whoosh" of soaring jet planes with classic Delay, and can be adjusted from mild to wild. This combination effect only takes up one FX slot. (Inspired by the Lexicon PCM70*)



The **DE-ESSER** is a must-have tool for reducing the amount of sibilance in vocal mics while adeptly preserving the natural "vocal-ness" of a performance. Use it to enhance the smoothness of the upper mid to high frequencies in vocals as well as drum overheads, strings and virtually any trebly element of a mix.



Recording

A versatile powerhouse of a live console, the X32 also provides robust studio functionality. Record and play back up to 32 tracks which run on Windows XP, Windows Vista, Windows 7, and Windows 8 operating systems or Mac computers via integrated FireWire 400 or USB 2.0 connectivity. X32 supports a variety of sample rates, allowing you to record up to 32 tracks of live audio directly to your computer for mixing down later. Take advantage of X32's built-in FX engines to augment your DAW's plug-in collection, or to free up valuable computer resources. X32's recall capability makes it easy for both project and professional studio engineers to stay organized by storing projects as scenes, either internally or externally on a USB stick.

DAW Ready—MIDI Plus Mackie Control* & HUI* Protocols

Thanks to its onboard MIDI ports, the X32 console can function as a high-level, large-format control surface, similar to Mackie Control and HUI, and integrates seamlessly with most popular DAW platforms. X32's motorized faders can be used to send position information to the onscreen DAW faders, while each bus' mute and solo buttons control their onscreen counterparts. This powerful control surface relationship, which functions bi-directionally between the X32 and your DAW, allows you to work more quickly and attend to the finer nuances of the overall mix. After all, mixing with your hands puts you in "touch" with your project, providing a level of finesse that can mean the difference between a good recording session—and a work of art! Or, would you rather use a mouse?







Remote Control

XControl Software for PC & Mac Computers

Just as in life, you can never have too many connections and this applies to controlling the console itself. Simply connect the X32 to a laptop or desktop PC or Mac Computer via LAN, wireless network or Ethernet cable. The XControl app gives you command of the X32 remotely via computer. Move a fader on the PC, it moves on the X32; press a button on the computer, the button toggles on the X32. You'll find this feature extremely helpful for stage-side monitor control, individual control of multiple installed X32s, as well as multiple remote control stations of the same X32. The XControl app also lets you create scenes on your PC beforehand to minimize the time required for sound checks. With the XControl app for PC, your computer becomes your virtual X32.







XiControl App for iPad

Front of House is wherever you and your iPad are—thanks to the new XiControl app for iPad. Just plug in a wireless router via Ethernet cable to the X32, and then wirelessly connect up to 10 iPad devices, which is especially handy for custom monitor mixes. The XiControl app lets you control all 32 mic inputs, 8 AUX inputs and 16 buses—plus the FX stereo returns and the Matrix, Main, and DCA levels. Select a fader bank on the iPad, slide the virtual faders and X32's motorized faders instantly mirror your action. Plus, with the Sends on Faders functionality, your iPad now controls 16 independent monitor mixes. The XiControl app gives you the flexibility and mobility to make running sound a breeze! Download the free XiControl app from Apple's App Store.

XiQ App for iPhone and iPod touch

XiQ is the perfect tool for setting up your personal monitoring mix with the BEHRINGER X32 Digital Mixing Console. Compatible with iPhone models and iPod touch devices, each artist can run their own XiQ app to adjust and tweak their personal wedge's mix. XiQ includes an assignable MCA (Mix Control Association) feature that makes monitor mixing simple enough to be adjusted during performance. Assign any input or combination of inputs to one of the 4 MCA controls inside XiQ and instantly get "more me", "less band", "more click track"... with a single sweep of your finger.











The operator interface of the X32 is so well laid out, however, that one does not need an instruction manual at all in order to fully operate the console... The X32 offers an almost unimaginable range of functions ... Anyone wishing to work at a higher level will have to pay significantly more.

Professional Partner | November 2012

and its capabilities. BEHRINGER **goes beyond what I expected** in a

small-format digital console with a sub-\$3,000

price. I would have no problem using the X32 in

any situation that required sound re- inforcement

or recording. The X32 will be quite a game

changer to the industry.

I was truly impressed with the X32

Front of House | September 2012

Mixing on the X32 always felt easy with the 40-bit floating point processing, giving the feeling of headroom to burn at the stereo bus. I really liked the mic pres and enjoyed their classy midrange depth and clarity ... What you do get in the BEHRINGER X32 is a console that **sounds great**, has **great effects**, a **brilliant layout/workflow** and is very versatile with its 40-input, 16-output framework... Already we are seeing some manufacturers lowering their retail prices as a result of the release of this console. **Does that mean the game has changed? I think it probably has.**

Audio Technology | November 2012

I think the X32
is an **astounding proposition**..The AES50
functionality alone is worth the cost of entry...the X32 is – as the marketing claims – **quite simply a game changer**.

Audiomedia | November 2012

SPECIFICATIONS



essing	
Number of processing channels	32 input channels, 8 aux channels, 16 buses, 6 matrices, main LRC
Internal effects engines, true-stereo / mono	8 / 16
Internal total recall scenes (inkl. preamp and fader)	100
Signal processing	40-bit floating point
A/D-D/A conversion (Cirrus Logic A/D CS5368, D/A CS4385)	24-bit @ 44.1 / 48 kHz, 114 dB dynamic range
Local I/O latency (local in > console processing** > local out)	0.8 ms
Networked I/O latency (stagebox in > console processing** > stagebox out)	1.1 ms

nnectors	
XLR inputs, programmable mic preamps, designed by MIDAS	16
Talkback mic input, XLR	1
RCA inputs/outputs	2/2
XLR outputs	8
Monitoring outputs XLR / 1/4" TRS balanced	2/2
Aux inputs/outputs, ¼" TRS balanced	6/6
Phones outputs, ¼" TRS	2 stereo
Digital AES/EBU output, XLR	1
AES50 ports, Supermac	2
Expansion card (optional)	32 channel audio input/output, various standards
P-16 connector, Ultranet (no power supplied)	1
MIDI inputs / outputs	1/1
Ethernet, RJ45, rear panel, for remote control	1
ADAT Toslink outputs (2x 8 Ch)	_
USB Type A, top panel, for audio and data export/import	1
USB Type B, rear panel, for system updates	1

^{**} incl. all channel and bus processing, excl. insert effects and line delays

Mic Input Characteristics	
Design	MIDAS
THD + noise, 20 dB gain, 0 dBu out	< 0.006% A-weighted
Input impedance XLR, unbal. / bal.	5 kΩ / 10 kΩ
Non clip maximum input level, XLR	+23 dBu
Phantom Power, switchable per input	48 V
Equivalent input noise level, XLR (input shorted)	-128 dBu
CMRR, XLR, @ 20 dB gain (typical)	> 70 dB
CMRR, XLR, @ 40 dB gain	> 80 dB

10 Hz - 22 kHz
106 dB
109 dB
108 dB
100 dB
+4 dBu / +21 dBu
75 Ω / 75 Ω
20 kΩ / 40 kΩ
+16 dBu
+4 dBu / +16 dBu
150 Ω / 300 Ω
40Ω / +25 dBm (stereo)
-87 dBu A-weighted

DIMENSIONS

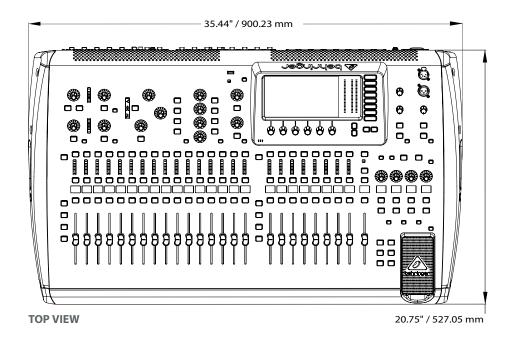
Main Screen	7", 800x480, 262k color TFT
Channel LCD Screen (29 pcs)	128 x 64, LCD with RGB color backlight
Display	_
Front Status LEDs	_
Main Meter	-57 dB, -54dB, -51 dB, -48 dB, -45 dB, -42 dB, -36 dB, -36 dB, -33 dB, -30 dB, -27 dB, -24 dB, -21 dB, -18 dB,-15 dB, -12 dB, -10 dB, -8 dB, -6 dB, -4 dB, -3 dB, -2 dB, -1 dB, Clip
Rear Panel	_
er	
Switch-mode autorange power supply	100-240 V (50/60 Hz)
Power consumption	120 W
ical	
Dimensions	35.4 x 20.8 x 7.9" / 900 x 528 x 200 mm
	45.4 lbs / 20.6 kg

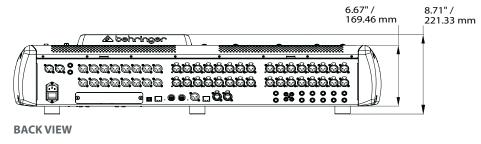
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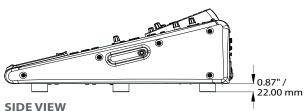
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BLOCK DIAGRAM

