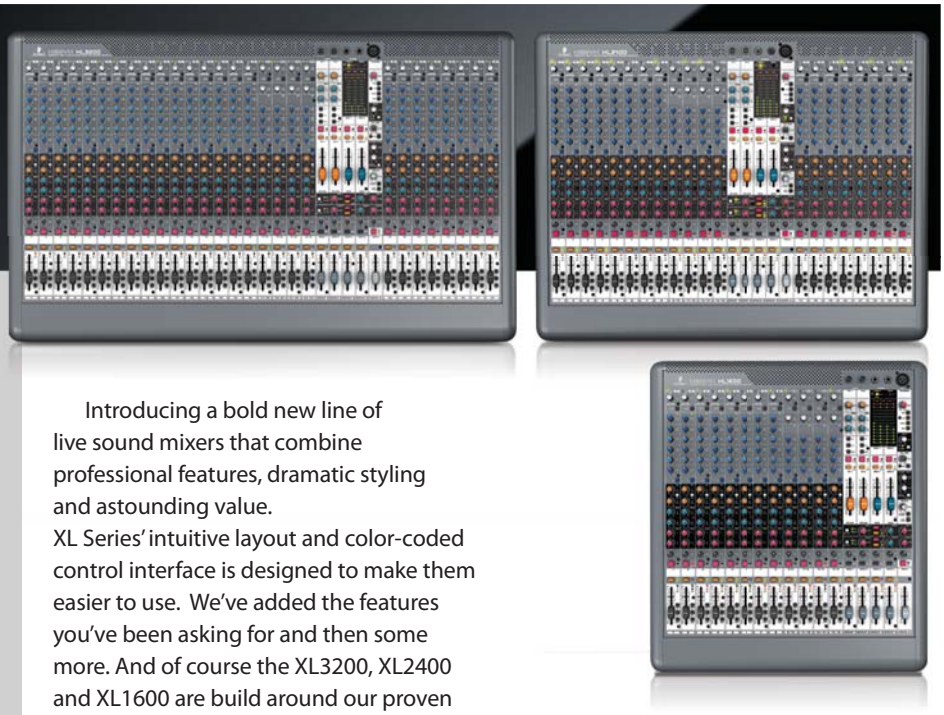
Large Format Mixers

XENYX XL3200/XL2400 XL1600



XENYX — Premium 16/24/32-Input 4-Bus Live Mixer with XENYX Mic Preamps and British EQs

- Ultra-low noise, high-headroom analog mixer for live, front-of-house, monitor, corporate and touring audio applications
- 8 (XL1600) / 16 (XL2400) / 24 (XL3200) Mono channels each feature:
  - State-of-the-art XENYX Mic Preamps
  - Neo-classic "British" 4-band EQs
- 4 stereo channels each feature:
  - Line inputs with ultra-high RFI suppression designed for live application
  - 4-band shelving-type EQ
  - Switchable to Mic input
- 4 Subgroup outputs with inserts plus 2 independent main outputs with inserts on Main A
- Mute, Solo, Subgroup and Main routing switches on all channels
- 2 multi-functional stereo FX returns with comprehensive routing options
- 2 Headphone and Speaker outputs with selectable Main/CD/Tape inputs
- Solo-In-Place with PFL/AFL function
- Full featured Talkback function with XLR input and Level control is assignable to Mon/Aux/Group/Main
- 14-LED ladders for Main and Monitor level metering
- Separate pre/post Main B output
- Long-wearing 60 mm logarithmic-taper faders and sealed rotary controls
- Internal autorange power supply for maximum flexibility (100 – 240 V~), noise-free audio, superior transient response plus low power consumption for energy saving

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Introducing a bold new line of live sound mixers that combine professional features, dramatic styling and astounding value.
XL Series' intuitive layout and color-coded control interface is designed to make them easier to use. We've added the features you've been asking for and then some more. And of course the XL3200, XL2400 and XL1600 are build around our proven XENYX high-headroom, low noise mic preamps and warm, musical EQ.

The Ins and Outs

Some manufacturers can be sneaky when they tell you how many inputs their mixers have, counting features like CD/TAPE IN as an input. But the XL series really gives you 8 (XL1600), 16 (XL2400) and 24 (XL3200) mono channels and four stereo channels (with two ¼" inputs apiece—an additional 8 line-level inputs (which can also be used for 4 additional mono mic channels), making it easy to accommodate a wide variety of live performance configurations. Depending on which XL mixer you choose, that means you can connect up to 8, 16 or 24 microphones (or other mono instruments) and up to four stereo instruments (keyboards, for example). You also get four buses, allowing you to assign multiple channels—say all the mics on a drum kit or all the backup singers' mics—to a single fader.

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Best of all, you don't need a black belt in engineering to operate the XL series. To get started, assign all mics and instruments to their channels by connecting them to the corresponding jacks on the back panel. Now, get ready to quickly become acquainted with the XL series' incredibly user-friendly design.

Plenty of channels, all in living color

All dials on the XL series are assigned to colors that not only allow you to easily locate each function, but to also quickly identify corresponding faders.

At the top of each mono channel strip, you'll find a TRIM dial (white) for adjusting input gain and an 80 Hz switch that can eliminate unwanted infrasonics such as mic-handling noise.

Each mono channel has a 4-band EQ (High, High Mid, Low Mid, Low). High Mid and Low Mid dials (blue) are each paired with a FREQ control (lighter blue) that allows you to select the frequency boosted or cut. Directly below the EQ, there's an EQ switch allowing you to switch between processed and unprocessed signals.

What the heck is "British EQ"?

British EQ is a smashing thing to have on your side when you start reaching for those channel equalization knobs at a live concert or in the studio.

The EQ's on British consoles from the 60's and 70's are what many engineers believe does their sound the best justice. When it comes to tweaking your sound, they're kind, gentle and above all, musical. It's like drinking a fine scotch instead of fortified wine—or maybe receiving a warm hug instead of a kick to the crotch.

British EQ's distinct configuration of wider curves/lower Q and harmonic phase characteristics allows you to add or subtract EQ more generously than you can with conventional EQ circuit designs. When you add low midrange, you get a firmer sound instead of a nasty bonk. When you back high frequencies off a bit, treble backs off just a hair instead of turning muffled.

Back to the Strip

Controls for the channel's FX (orange), MON (blue) and AUX (red) sends are directly below the EQ section. Use these to assign a channel to an outboard FX processor or monitor and auxiliary channels. Further down the channel strip, the PAN control (black) determines the signal's position in the stereo mix. The channel fader (black) adjusts the level of the channel signal as part of the main mix. Press the 1-2 or 3-4 switches to assign the channel to a bus.

Stereo channels are configured in the same way, but with a fixed-frequency 4-band EQ (blue). They are equipped with ¼" stereo inputs, as well as XLR mono inputs, providing 4 additional Mic channels.

Rockin' Bureaucracy

Once all mics and instruments are connected, it's time to take a look at the MAIN, subgroup, MONITOR and FX sections.All four subgroups' controls are

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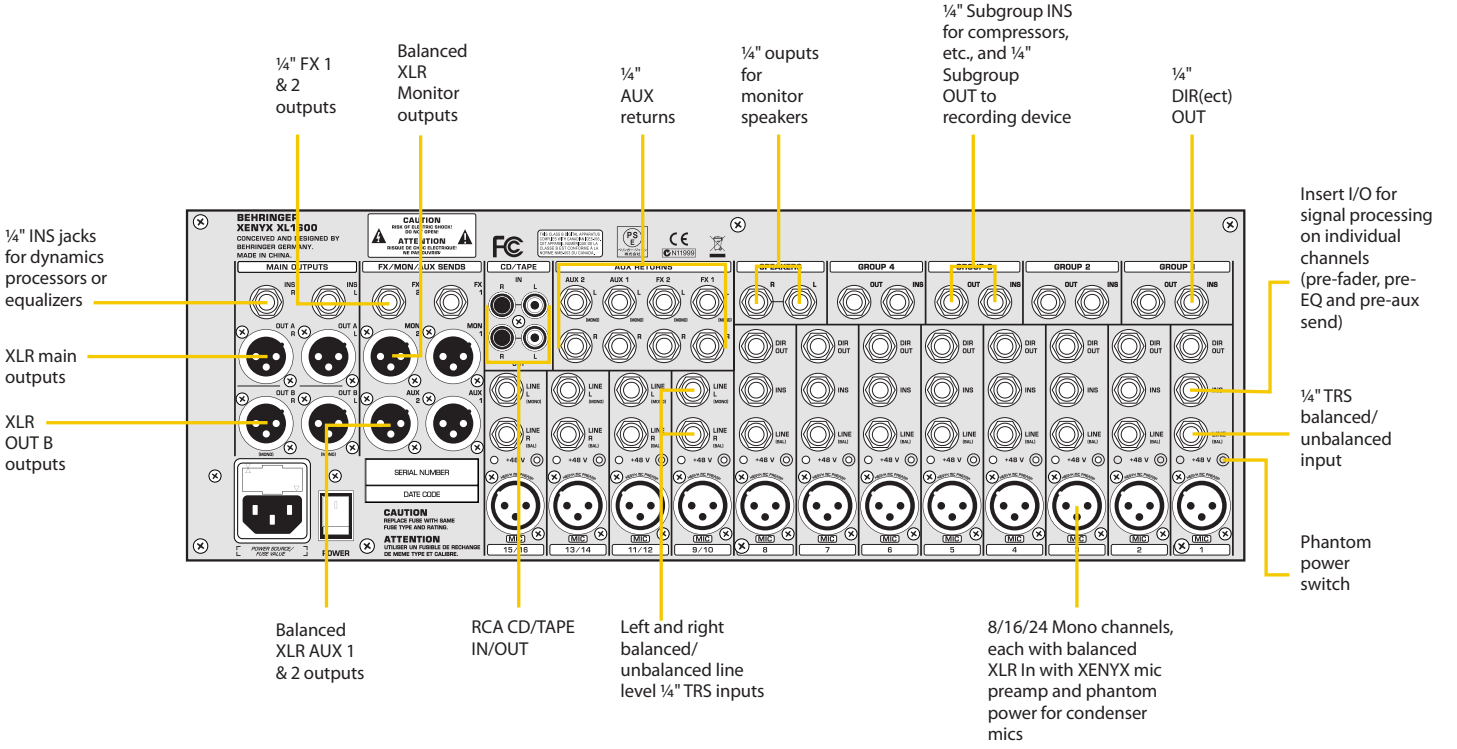

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positioned in the lower right corner of the mixer. They feature individual faders with CLIP LEDs, SOLO switches and PAN controls to adjust the signal's position in the stereo image.

The FX section is positioned on the middle right section of the console. Both FX 1 and FX 2 signals have orange faders; SOLO and MUTE switches; 1-2 and 3-4 switches that assign the signal to subgroups; MAIN switches to route the signals to the main outputs; MON dials (blue) that determine the level of FX heard in Monitor sends 1 & 2; and SEND dials (orange) for adjusting the volume of all FX send signals.

Both monitor sends also have their own dedicated faders (blue), as well as MUTE and SOLO switches.

The MAIN A section lies in the bottom right section of the board. It gives you a channel fader (light grey); a 13-LED master level meter in the top right corner gives you a dynamic visual gauge of overall output; a MUTE switch (red) mutes all input channels except CD/TAPE inputs; and a BAL control (black) adjusts the mix of the left and right output signal before they are routed through the MAIN A output. Above, you'll find the MAIN B section, which governs the signal sent through the MAIN B outputs on the back panel. Use the MAIN B section and outputs to connect to a separate power amplifier and multiple loudspeakers, or to a stereo recording system.

Talking back, listening up

The XL series features a Talkback section in the upper right corner with its own XLR input, LEVEL control (red), and switches that allow you to send its signal to either the MON, AUX, GROUP or MAIN outputs.

Finally, a pair of headphone outputs at the top of the board allows you to personally monitor your mix, and a pair of BNC lamp outputs ensures you'll never have to mix in the dark.

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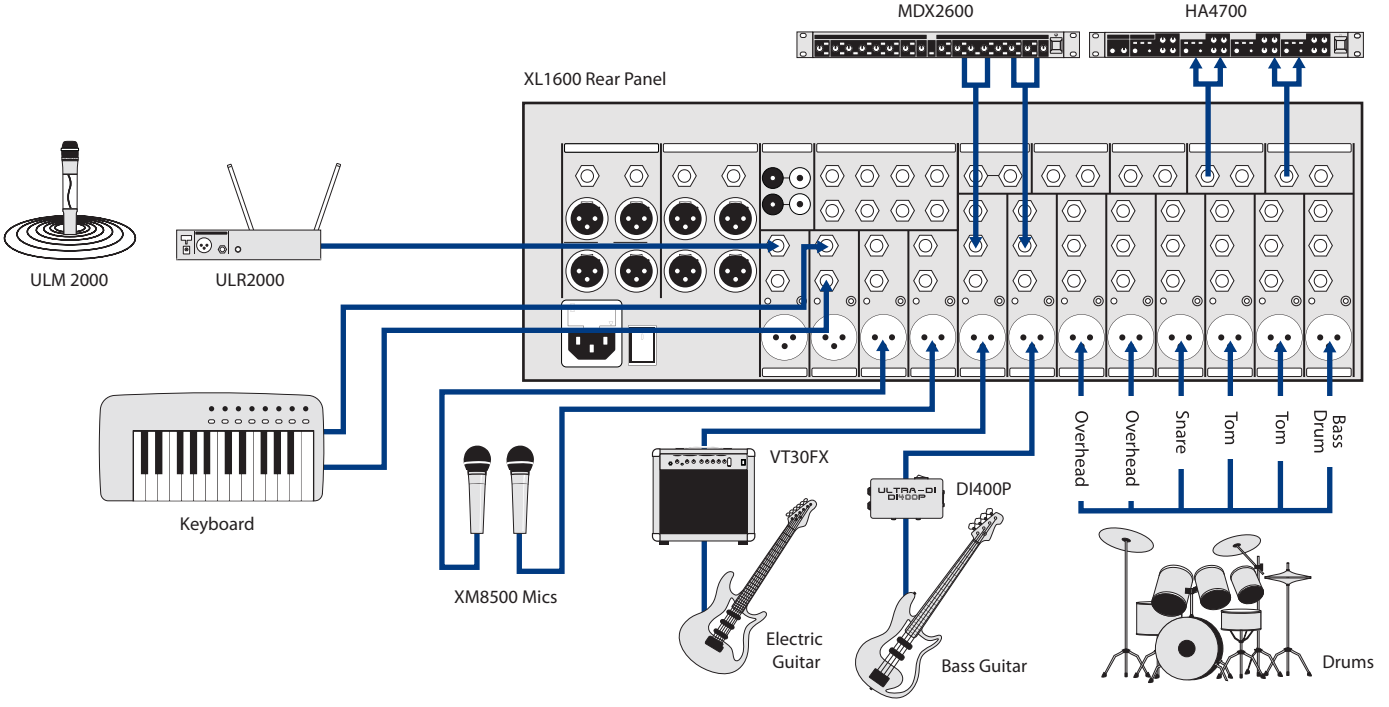
Input Wiring



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The back story

The back panel of XL series mixers features an intuitive patch bay that gives you tons of flexibility in configuring a live show. In the upper left corner you'll find the MAIN OUTPUTS section. There's left and right XLR outputs for connecting to PA speakers, as well as dual ¼" inserts for connecting a dynamics processor or equalizer to further tweak the main signal. There's also dual OUT B jacks governed by the MAIN B dial on front.

Next door to the MAIN OUTPUTS section is the FX/MON/AUX SENDS section. The FX 1 and FX 2 ¼" outputs send signal to outboard effects processors. MON 1 and MON 2 XLR outputs send signal to monitors, and AUX 1 and AUX 2 XLR outputs can be used for either effects processors or monitors.

The next section to the right contains the AUX RETURNS. Stereo AUX inputs 1 & 2 allow you to connect more effects processors or submixers, while stereo FX 1 & 2 returns accept processed signals sent from the FX 1 and FX 2 outputs.

Left and right SPEAKER ¼" outputs allow you to connect monitor speakers that provide the same signal as the headphone outputs.

Each subgroup has its own INSERT and OUT ¼" jacks. The inserts allow you to connect noise gates, compressors or equalizers, while the OUT jacks send the subgroup signal to, for example, a multi-track recorder.

Along the bottom of the back panel, you'll find the mono and stereo channel inserts. Mono channels feature both a ¼" and XLR input, as well as an INSERT jack for applying outboard equipment and a DIRECT OUT jack for sending signal to a device such as a multi-track recorder. Stereo channels feature a single XLR input and dual ¼" inputs.

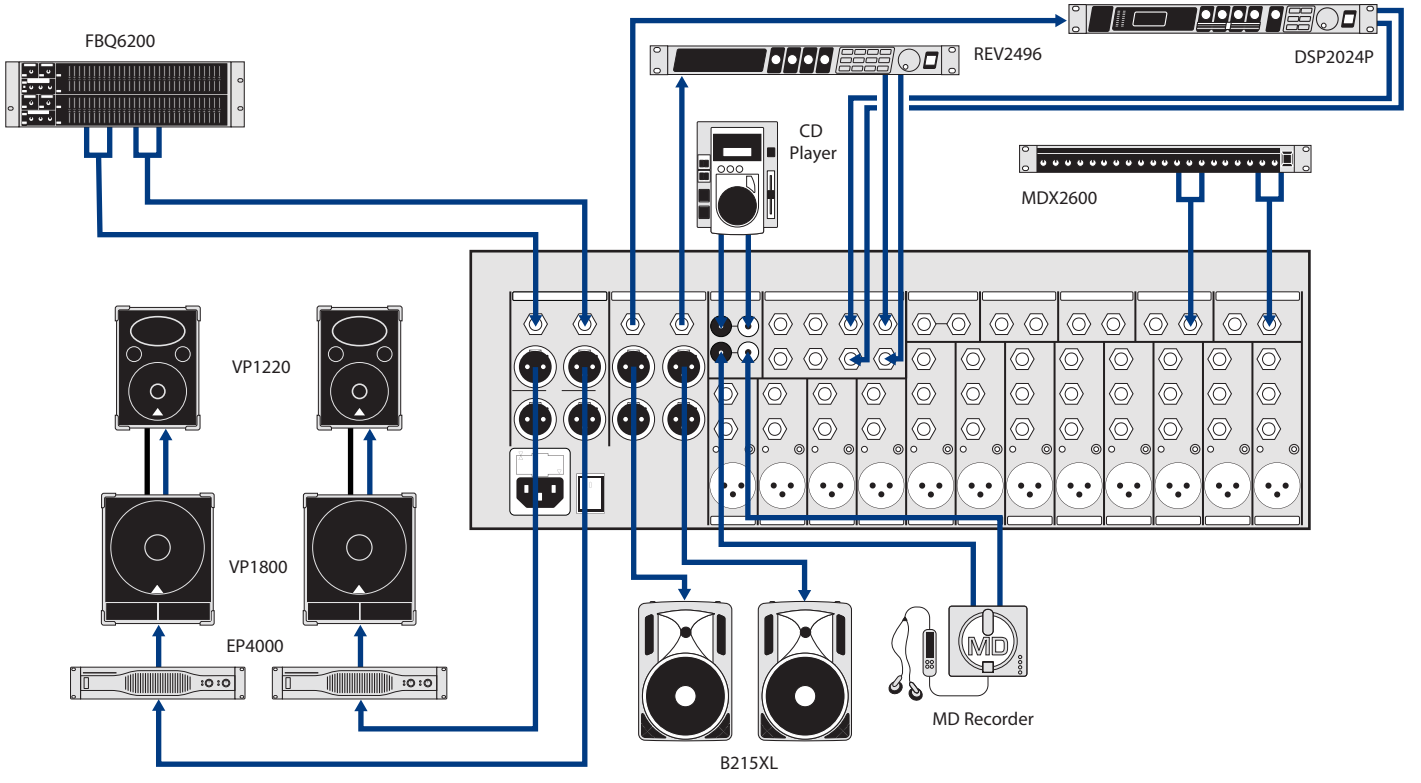
Take On The World

Not every town on the planet uses the same voltage common in yours. Unfortunately, this sometimes doesn't occur to jet-setting sound technicians until they're 5,000 miles from home. With the XL series mixers, this is never an issue. The internal autorange power supply can run on anything from 100 to 240 V with noise-free audio, top-quality transient response and low power consumption.

Incredible features, outstanding sound, unbelievable price

The XL series mixers pack all the most desirable features—British EQ, XENYX mic preamps, etc.—into the most affordable, easy-to-learn choice on the market. You could always pay for a name, but wouldn't you rather grab a badass mixer and still have enough money left over to start purchasing other essentials?

Input Wiring



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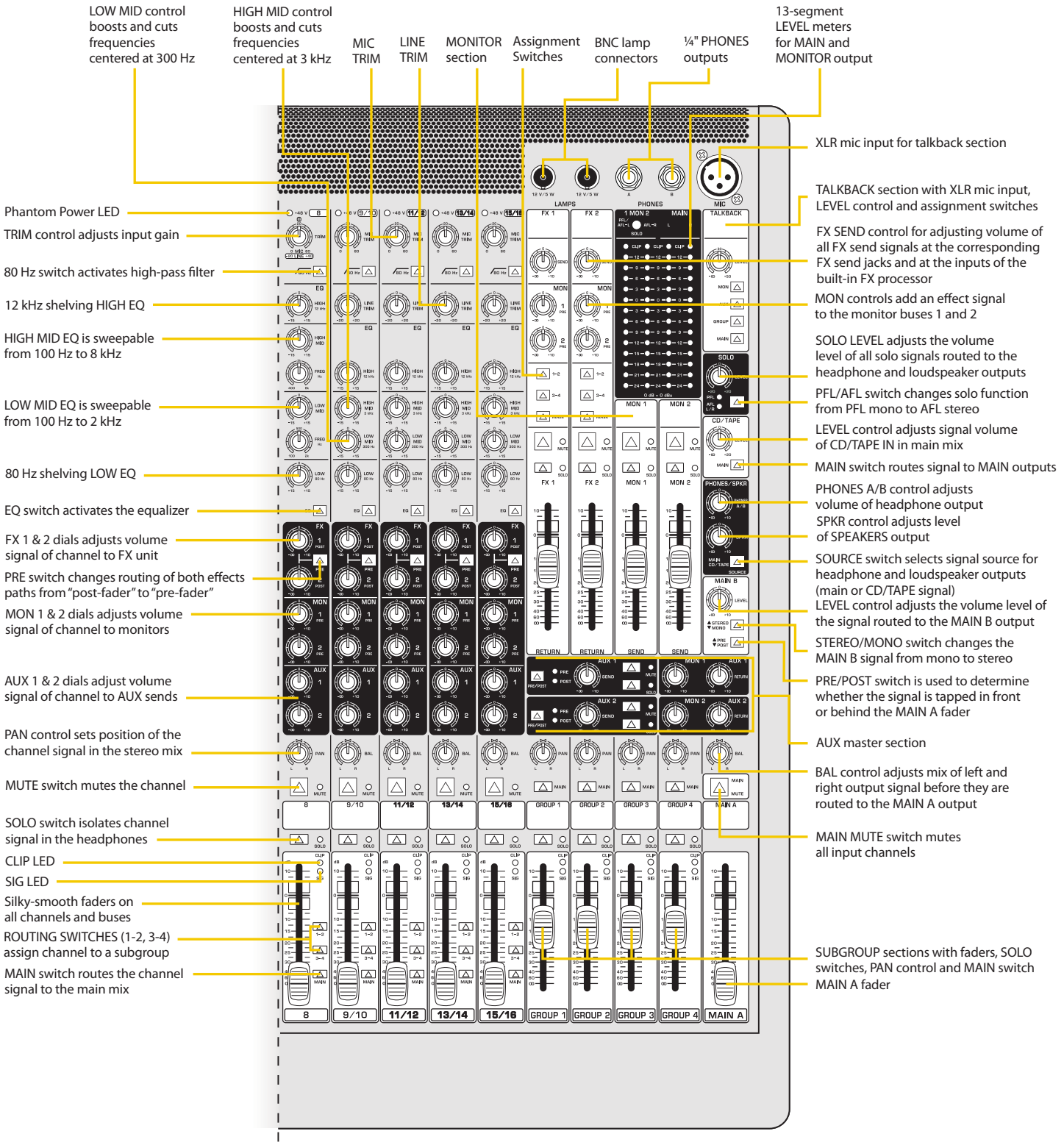

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MONO INPUTS

Microphone inputs (XENYX Mic preamp)

Type	XLR connector, electronically balanced, discrete input circuit RF rejection filters

Mic E.I.N.[1] (20 Hz - 20 kHz)

	@ 0 Ω source resistance -127 dB / 129.7 dB A-weighted
	@ 50 Ω source resistance -126 dB / 128.3 dB A-weighted
	@ 150 Ω source resistance -125 dB / 126.5 dB A-weighted

Frequency response

To Direct Out	<10 Hz - 50 kHz (-1 dB) <10 Hz - 100 kHz (-3 dB)
To Insert Send	<10 Hz - 90 kHz (-1 dB) <10 Hz - 170 kHz (-3 dB)
Gain range	0 dB to +60 dB
Max. input level	+24 dBu @ 0 dB Gain
Impedance	approx. 2.6 kΩ balanced
Signal-to-noise ratio	120 dB / 122 dB A-weighted (0 dBu In @+22 dB Gain)
Distortion	(THD+N) typ. 0.0008 %

Line input

Type	¼" TRS jack, electronically balanced
Impedance	approx. 20 kΩ balanced, approx. 10 kΩ unbalanced
Gain range	-10 dB to +40 dB
Max. input level	+22 dBu @ 0 dB Gain

Channel inserts

Type	¼" TRS jack, unbalanced
Max. input level	+22 dBu

Channel direct outs

Type	¼" TRS jack, balanced
Impedance	75 Ω balanced
Max. input level	+22 dBu

Crosstalk[2]

Main fader closed	100 dB
Channel muted	90 dB
Channel fader muted	85 dB

Frequency response (Mic In → Main Out)

	<20 Hz - 20 kHz +0 dB / -1 dB <10 Hz - 160 kHz +0 dB / -3 dB

STEREO INPUTS

Type	2 x ¼" TRS jack, balance
Impedance	approx. 20 kΩ balanced, 10 kΩ unbalanced
Gain range	-20 dB to +20 dB
Max. input level	+22 dBu @ 0 dB Gain

CD/TAPE IN

Type	RCA connector
Impedance	approx. 10 kΩ
Max. input level	+22 dBu

EQUALIZER

EQ mono channels

LOW	80 Hz / ±15 dB
HIGH MID	100 Hz to 2 kHz / ±15 dB
LOW MID	400 Hz to 8 kHz / ±15 dB
HIGH	12 kHz / ±15 dB
LOW CUT	80 Hz, 12 dB/oct.

EQ stereo channels

LOW	80 Hz / ±15 dB
LOW MID	300 Hz / ±15 dB
HIGH MID	3 kHz / ±15 dB
HIGH	12 kHz / ±15 dB

Channel inserts

Type	¼" TRS jack, unbalanced
Max. input level	+22 dBu

AUX/MON SEND

Type	XLR connector, electronically balanced
Impedance	approx. 75 Ω
Max. output level	+22 dBu

FX send

Type	¼" TRS jack, balanced
Impedance	75 Ω
Max. output level	+22 dBu

AUX/FX Returns

Type	¼" TRS jack, unbalanced
Impedance	approx. 20 kΩ
Max. input level	+22 dBu

Subgroup outputs

Type	¼" TRS jack, unbalanced
Impedance	approx. 75 Ω
Max. output level	+22 dBu

Group inserts

Type	¼" TRS jack, unbalanced
Max. output level	+22 dBu

MAIN OUTPUTS A/B

Type	XLR connector, electronically balanced

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Impedance	approx. 240 Ω balanced, 120 Ω unbalanced
Max. output level	+25 dBu

MAIN INSERTS

Type	¼" TRS jack, unbalanced
Max. input level	+22 dBu

SPEAKERS

Type	¼" TRS jack, unbalanced
Impedance	75 Ω
Max. output level	+22 dBu

PHONES A/B OUTPUT

Type	¼" TRS jack, unbalanced
Max. output level	+22 dBu / 600 Ω

CD/TAPE OUTPUT

Type	RCA connector
Impedance	approx. 1 kΩ
Max. output level	+15 dBu

Main mix system data[3] (Noise)

Main mix @ -∞, channel fader @ -∞	-110 dB / -114 dB A-weighted
Main mix @ 0 dB, channel fader @ -∞	-95 dB / -98 dB A-weighted
Main mix @ 0 dB, channel fader @ 0 dB	-92 dB / -95 dB A-weighted

POWER SUPPLY

XL1600

Power consumption	60 W

XL2400

Power consumption	65 W

XL3200

Power consumption	70 W

FUSE

(100 - 240 V~, 50/60 Hz) T 2,0 A H 250 V
Mains connector Standard IEC receptacle

PHYSICAL/WEIGHT

XL1600

Dimensions (H x W x D)	11.7" x 23.1" x 25.25" (298 mm x 587 mm x 641 mm)
Weight (net)	26.5 lbs (12 kg)

XL2400

Dimensions (H x W x D)	11.7" x 31.3" x 25.25" (298 mm x 796 mm x 641 mm)
Weight (net)	35.3 lbs (16 kg)

XL3200

Dimensions (H x W x D)	11.7" x 39.5" x 25.25" (298 mm x 1004 mm x 641 mm)
Weight (net)	43.5 lbs (19.7 kg)

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