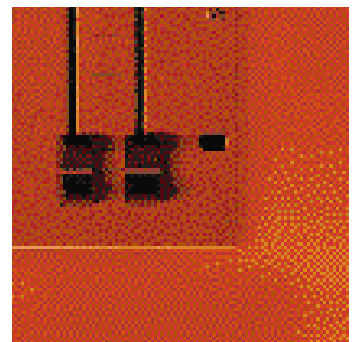
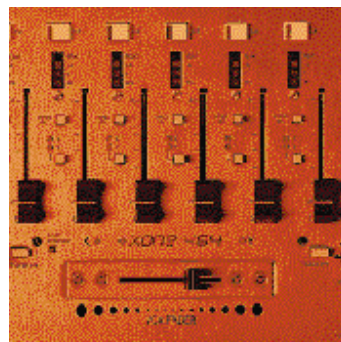
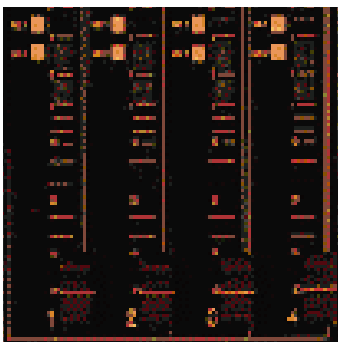
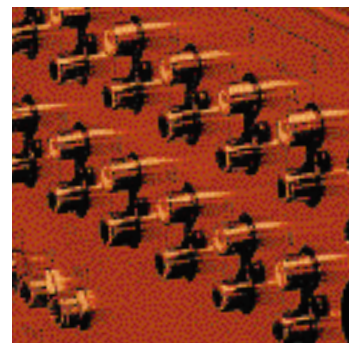
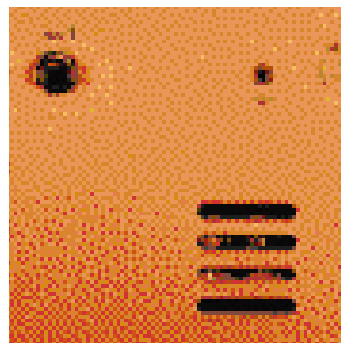
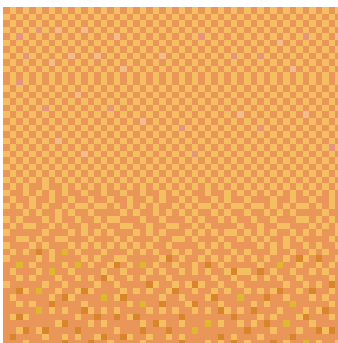
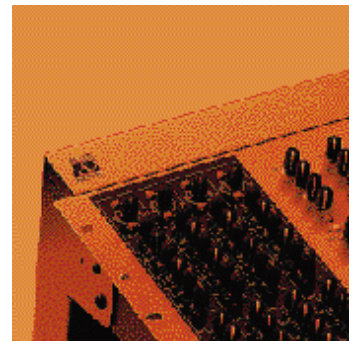
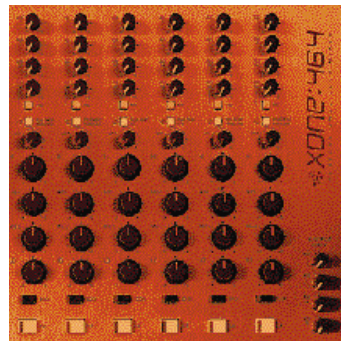
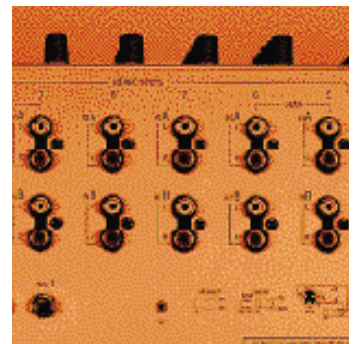
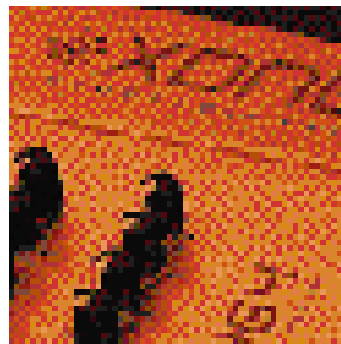


XONE:464

PROFESSIONAL CLUB MIXER

- 16 input, 5 output club mixer
- Live + DJ performance features
- 4 band EQ
- VCA crossfade
- VCF filters



The Concept

If you've been into recording, live or installed sound over the last 3 decades, you'll already know the Allen & Heath mark. After thousands of requests, we've finally arrived in the club mixer market. The idea behind XONE:464 is pretty straightforward: make it bullet-proof, give it studio quality sound, give the club everything it needs for live performers and DJ's - and pack it with cool features for the DJ himself. Most club mixers seem like live mixers with a crossfader, or like DJ mixers with a couple of minimal mic inputs. XONE:464 is different - I've worked hard to balance the needs of live and DJ performance without compromising either. You'll find killer features here that you won't find elsewhere - VCF analogue filters for retro synth effects, ultra powerful 4 band EQ, VCA crossfade and more. I've had a great time designing it - I hope you enjoy using it just as much.

Andy Rigby-Jones

Design Engineer



The DJ Xone

The DJ Xone is like a mixer within a mixer - providing you with the best DJ features and some neat extras to get the crowd really turned on. Every control has been placed and spaced to give you intuitive control and quick changes, so it's perfect for getting really creative. There's nothing tacky or gimmicky here - just a serious DJ toolkit.

Stereo Channels

- 6 dual stereo channels, 4 with RIAA equalisation for your turntables. All stereo channels have dual A and B inputs (RIAA/LINE or LINE/LINE), so you can hook up 12 stereo sources at once.
- 4 band EQ - something no other club mixer gives you. Why 4 bands? The 4 frequencies are set at 10kHz, 1kHz, 250Hz, and 100Hz. The 100Hz band is used for normal bass cut and boost. That extra band at 250Hz means you can really sculpt the quality and texture of the bass sound, sweeping from soft and booming to rock hard. Each band provides a speaker-friendly +6dB of boost and a massive -23dB of cut for slicing a frequency out of your mix.
- Stereo channels can be individually routed to your cross-fade or stereo Mix1. Colour coded led's show you exactly where the channel is being sent, so you'll never get lost. You also get large illuminated Cue switches, a 4 bar signal level meter and a smooth 60mm fader.
- There's an extra external stereo input in the master section, sent individually to Mix1 or Mix2, or used as an external input monitor.

VCA (Voltage Control Amplifier) Crossfade

Why do you need a VCA crossfade? The rugged 45mm fader controls a DC voltage, not an audio signal. This means no clicks, bangs or crackles - no matter how much punishment you give it.

- The VCA system means we can give you different fader responses. The crossfade will normally dip the signal level by 6dB as it is centred - great if you're into seamless beat mixing, giving a constant level as the two tracks are mixed. Press the response switch in and the level will not dip as the cross-fade is centred, giving the sharp response that you'll want for scratch mixing.
- If your fader does wear out, you can replace it from the front panel - all you need is a couple of minutes and a small screwdriver.
- Crossfader output can be fed to the Aux system, which means that you can monitor zone feeds or send your mix to an external FX unit or sampler. If an MC/Rapper needs to hear his own vocal and the DJ sound, the aux system can provide the perfect mix for his own local monitor. Alternatively, two mono and two stereo zones can be set up on these controls, each with level control.
- A crossfade output Pan control positions the mix in the stereo image, giving speaker placement correction and another exciting dynamic effect.
- Colour coded X / Y lights by the crossfader clearly show channel assignments.

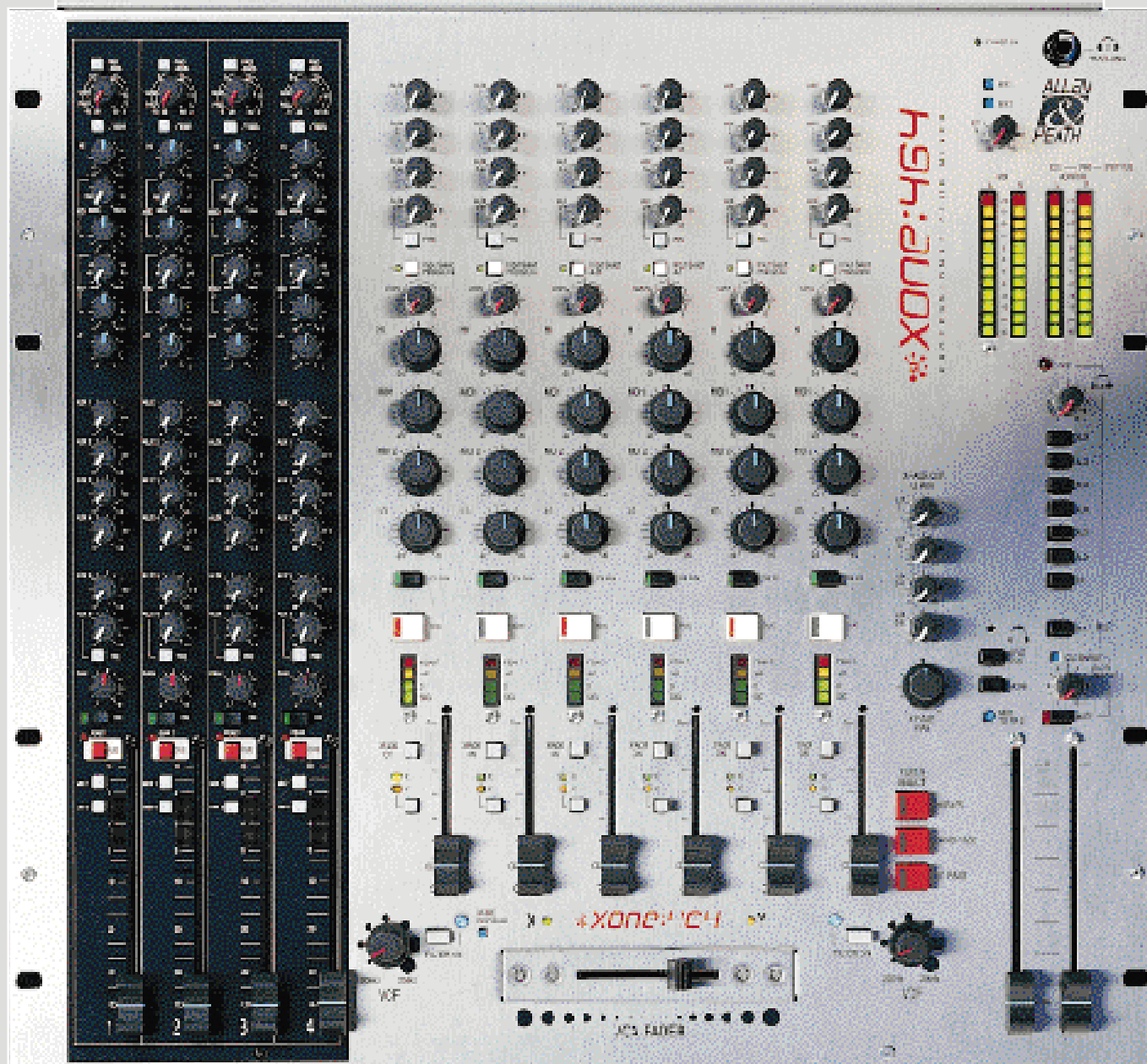
VCF Filters - Retro Synth Sound in a Club Mixer

This killer feature is unique to Xone:464 - two stereo, state variable Voltage Control Filters. These are like the filters you find on classic analogue synths, but with modern quiet, stable operation.

- 3 filter types: High-Pass - 200Hz to 10kHz, Band-Pass - 200Hz to 10kHz, and Low-Pass - 200Hz to 20kHz.
- Press switches together to create new filter types. E.g. Low-pass and High-pass results in a Notch filter.
- A resonance knob changes the "Q" or sharpness of the filter effect - from subtle to extreme.
- All controls can be used live, adding a whole new dimension to DJ mixing.
- Each VCF has an in/out switch with blue led and can be toggled in/out for extra effect.



XONE:464
PROFESSIONAL 464 CHANNEL MIXER



4 Mic/Line Inputs

- Balanced TRS jack and balanced XLR inputs
- TRS insert jack
- -30dB pad
- gain control
- 100Hz hi pass filter
- 4 band EQ with 2 sweepable mids
- 6 aux sends
(1-2 pre-fade, 3-4 post 1-4 pre and 5-6 switchable pre/post)
- Channel ON switch and led
- Peak reading led
- CUE switch
- Routing to Mix1 +/-or Mix2
- 100mm smooth travel fader ho'oui

6 Dual Stereo Inputs

- RCA phono and TRS jack inputs
- RIAA preamps for turntables on channels 5-6 and 9-10
- 6 Aux sends (1-4 pre, 5-6 pre/post)
- Input selector switch with 2 colour led
- Gain control
- 4 band, fixed frequency EQ with in/out switch
- Large CUE switch
- 4 segment led meter
- Xfade On switch
- Routing switch to X or Y crossfade with led indication
- 60mm fader

The Live Xone

The 4 mic/line inputs are ideal for live performances, or for your MC, DJ and presenter mics. Xone's serious Aux system lets you provide artists with individual stage monitors, helping them to give their best performance.

- 4 band, 2 sweep EQ section for studio quality sound control.
- Insert jacks mean convenient connection for your individual graphic EQ's, FX units or compressors.
- The Aux sends are ideal for routing signals to an external effects processor.
- To route your mono inputs to the crossfader, use the Direct outs to patch signals back into a stereo channel. You can also use the Direct outs as sends to a multi-track recorder.
- We use 100mm sealed ALPS input faders for their smoothness, precision control and reliability.

The Master Xone

Xone:464's master section gives you ultimate flexibility, and its clear layout makes it quick and easy to use.

- Mix1 and Mix2 are independent stereo mixes on balanced XLR's. Use Mix1 as a pre/post fade subgroup to Mix2. You can also use them as completely different mixes - great for situations where you want to do things like create a microphone stage mix and a DJ mix, feeding independent rigs. The mix outputs have 100mm stereo ALPS faders.
- Mix1 and Mix2 have recording feeds - great for making your mix tapes.
- A Mono output on balanced XLR can be set to follow Mix1 or Mix2. This is designed as Mono Zone, Sub-Bass system or light feed.
- Each mix has twin 12 point led meters for easy visual monitoring of mix levels. When you select a Cue, a warning led lights and Mix2's meters show your pre-fade levels.
- Xone:464 gives you 2 powerful headphone sockets. A Split Cue switch lets you hear a Cue in your left ear and the main mix in your right - essential for matching tracks without the luxury of good booth monitors. Split Cue is also monitored on Mix2's meters. Your post-fade Aux levels can be monitored individually or as stereo pairs.
- The Booth Monitor output has its own level control and can be switched to stereo or mono. An illuminated Dim switch lets you mute this output. The booth output normally monitors your mix output, but follows the cue system if you press an under-panel switch.

Side Bars

XONE:464 and the Modern Performer

The barriers between dance music and other genres are crumbling - live acts work with DJ's and DJ's work with live instruments. A new breed of performer is standing on the other side of the mixer, creating their sound from samples, drum loops, live instruments and vocals, vinyl, CD's and anything else that feels right. With all its live and DJ features, XONE:464 is the choice for the next generation of performance artists.

Build Quality

Xone:464 feels professional because it is professional - and we've built it to last. Xone:464 is internally modular - so each channel has its own vertically mounted circuit board for durability and ease of service/modification. We bolt the knobs to the panel with steel nuts, so the rugged all-metal chassis absorbs any blows. We have decades of experience building mixers for the road - not for the bedroom.



Specifications

0dBu = 0.775 Volts rms +4dBu = 1.23V rms
 0dBu = 1 Volt rms -10dBV = 316mV rms

Console Specification

Maximum output level	XLR	+26dBu into >2k ohm load
	TRS jack	+21dBu into >2k ohm load
	RCA Phono	+15dBu into >10k ohm load
Internal headroom	Channels	+21dB
	Mix to output	+23dB
Peak indicators	Turn on 5 dB before clipping	
Meters	MIX 1.2/MONITOR Peak reading 12 led 3 colour	
Frequency response	=0/-1dB 10Hz to 40kHz	
Distortion	< 0.006% THD+noise measured at +14dBu 1kHz	
Crosstalk	< 90dB Channel shutoff measured at 1kHz	
Noise	Measured rms 22Hz to 22kHz	
MIC EIN	-128dB referred to 150 ohm source	
Residual output noise	XLR	-90dBu (-94dB S/N)
	TRS jack	-84dBu (-84dB S/N)
Mix noise, ch routed	XLR	-87dBu (-90dB S/N)
	TRS jack	-83dBu (-83dB S/N)
	RCA Phono	-91dBu (-91dB S/N)

Power Supply

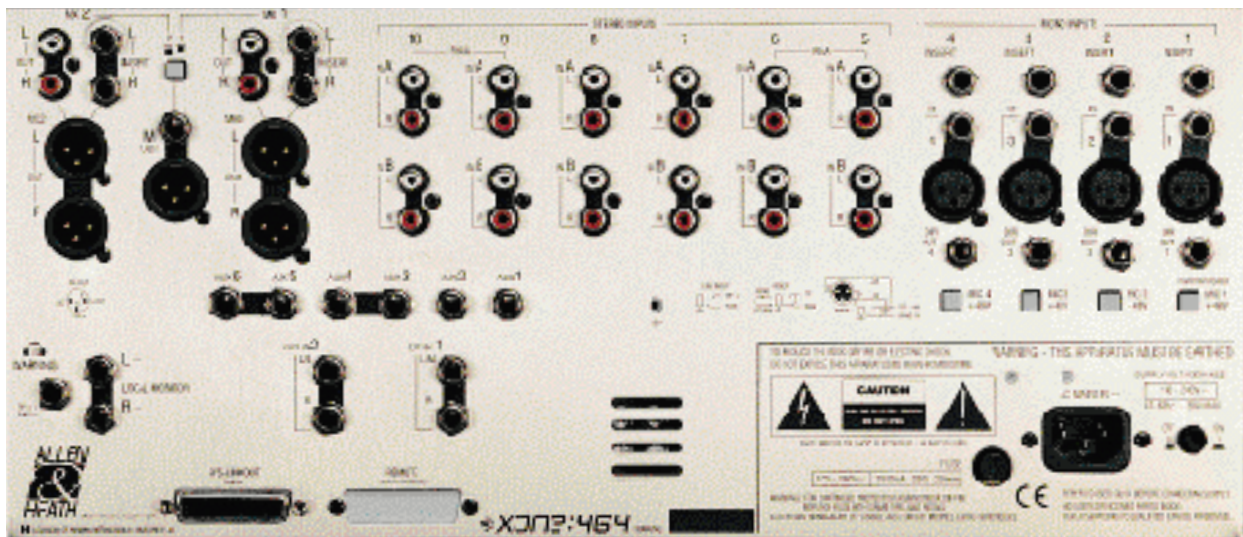
Internal switch mode power unit with auto sensing mains input.

MAINS IN socket	IEC 3 pin
Power lead	Country dependent with moulded mains plug supplied
AC mains	100 to 240V AC @ 50/60Hz
Consumption	35W max
Mains fuse rating	100-240V AC T500mA 20mm

Dimensions and Weights

The connector pod can be rotated and fixed in one of two positions to allow either desktop operation with rear facing connectors, or 19" rack mounting with underside connectors in 10U space.

XLR connections are	Pin 2=hot(+) Pin 3=cold(-) Pin 1=GND
TRS input and output connections are	Tip=hot(+) Ring=cold(-) Sleeve=GND
TRS insert connections are	Tip=SEND Ring=RETURN Sleeve=GND



Connections

Input Connections

MONO IN (XLR)	Balanced XLR female	2k ohm	-60 to -20dBu PAD out
		>10k ohm	-30 to +10dBu PAD in
MONO IN (TRS)	Balanced TRS jack	>10k ohm	-30 to +10dBu
STEREO IN A	RIAA Equalisation		
Ch 5-6/9-10	RCA phono	47k ohm	2 to 100mV
STEREO IN A	RCA phono	>15k ohm	-20 to 15dBu
STEREO IN B			
Ch 6-9	Unbalanced TRS jack	>10k ohm	-20 to 15dBu
EXT IN 1,2	Balanced TRS jack	>10k ohm	-10dB(+4dBu option)

Inserts

MONO Channel	Unbalanced TRS jack	SEND	<75 ohm	0dBu
		RETURN	>3k ohm	
MIX OUT 1,2	Unbalanced TRS jack	SEND	<75 ohm	-2dBu
		RETURN	>7k ohm	

Output Connections

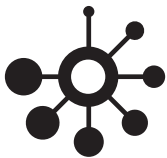
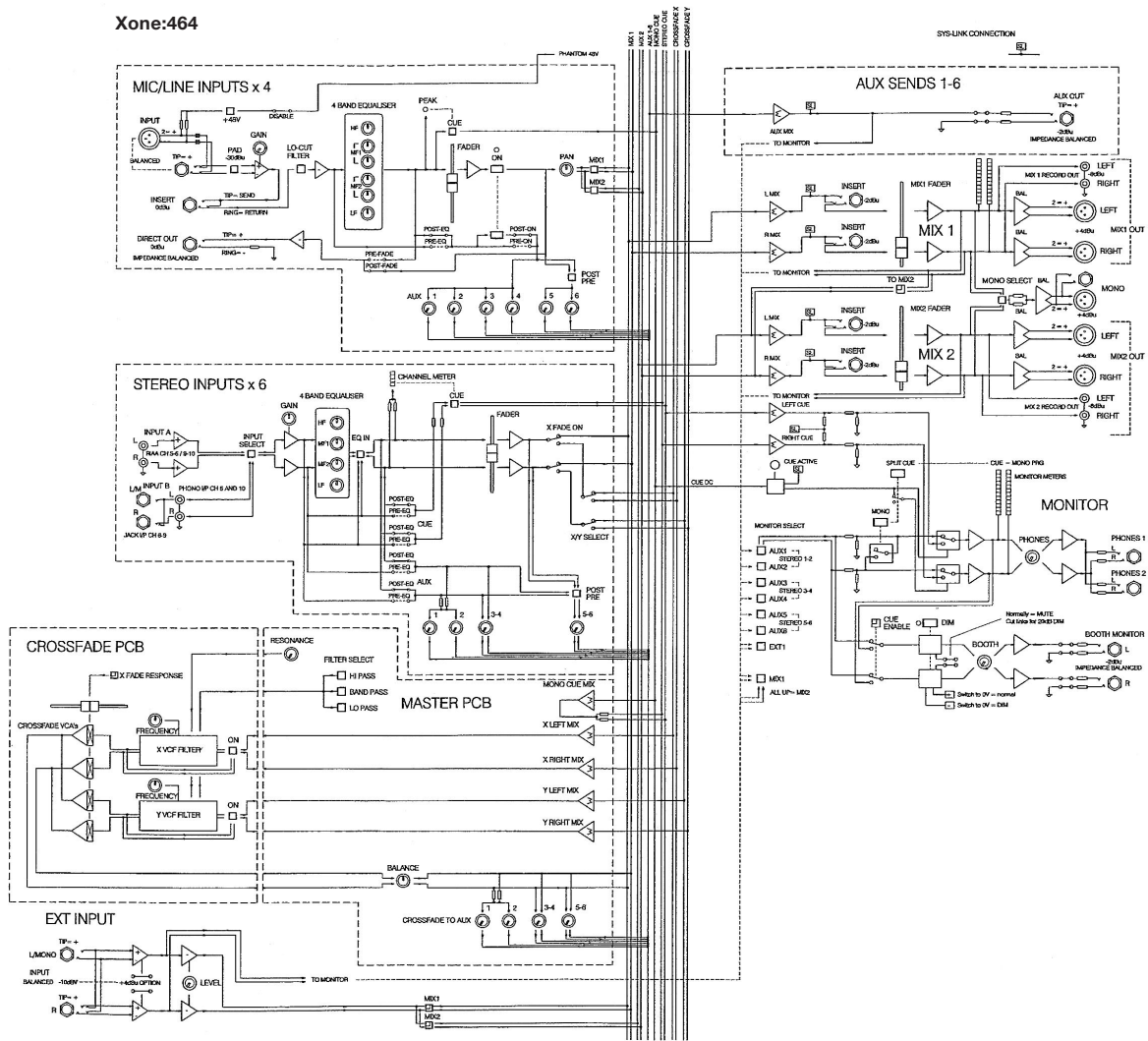
DIR OUT 1-4	Impedance balanced TRS jack	<75k ohm	0dBu
MIX OUT 1,2 (XLR)	Balanced XLR male	<75k ohm	+4dBu
MIX OUT 2 (TRS)	Impedance balanced TRS jack	<75k ohm	-2dBu
MONO OUT	Balanced XLR male	<75k ohm	+4dBu
AUX OUT 1-6	Impedance balanced TRS jack	<75k ohm	-2dBu
HEADPHONES	1,2Tip=L Ring=R	30 to 600 ohm recommended	

Dimensions

	Width	Height	Depth
Desktop	483 mm (19")	192 mm (7.6")	530 mm (20.9")
Rack mounted	483 mm (19")	444 mm (17.5") 10U	135 mm (5.3")
Packed	590 mm (23.2")	260 mm (10.2")	610 mm (24")
	Unpacked	Packed	
Weight	10kg	13kg	

Block Diagram

Xone:464



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