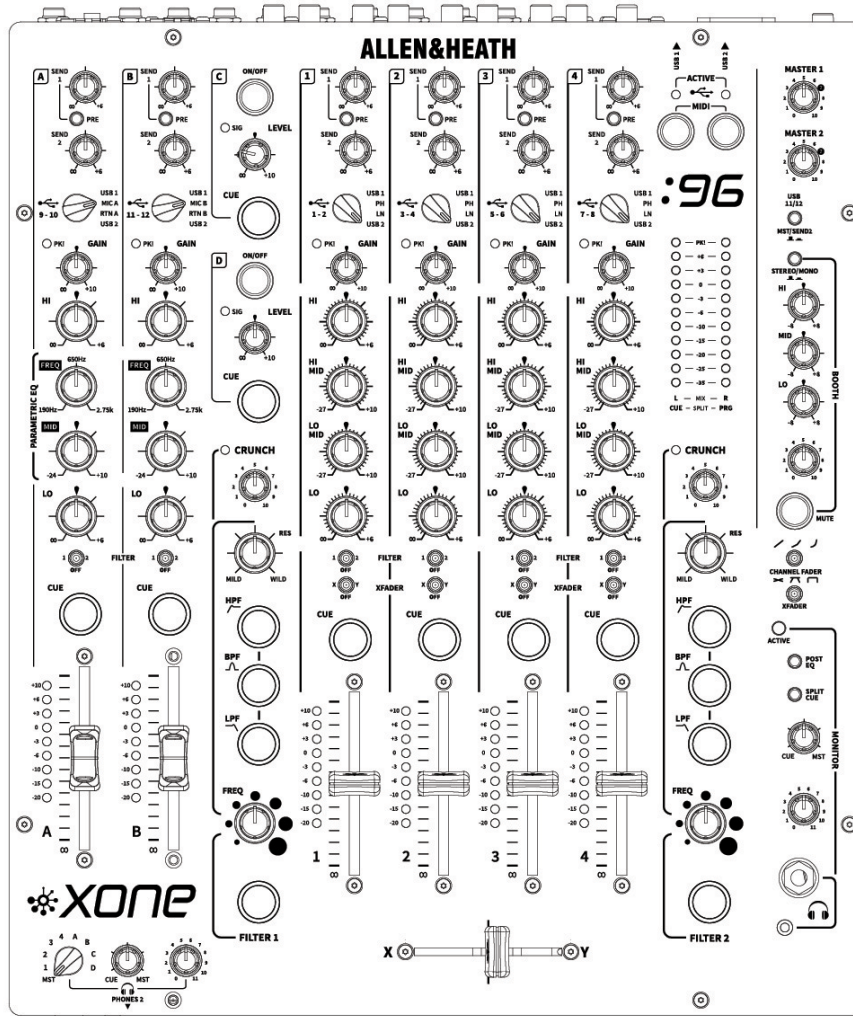




# XONE:96

## QUICK START GUIDE



Thank you for purchasing the Allen & Heath XONE:96, 6+2 Analogue DJ mixer, featuring:

Dual 24 channel, 32Bit/96kHz, Hi-Speed USB internal soundcards with MIDI Control & X:Link connectivity

Classic dual XONE:VCF Voltage Controlled Filters now with added CRUNCH

Four stereo input channels with refined XONE 4-BAND EQ

Two stereo input channels with new 3-BAND parametric EQ for detailed creative control + two auxiliary stereo return channels

innoFADER cross-fader and new custom designed 60mm linear VCA performance channel faders

PHONES 2, a second independent Cue system allows two DJ's to monitor independently

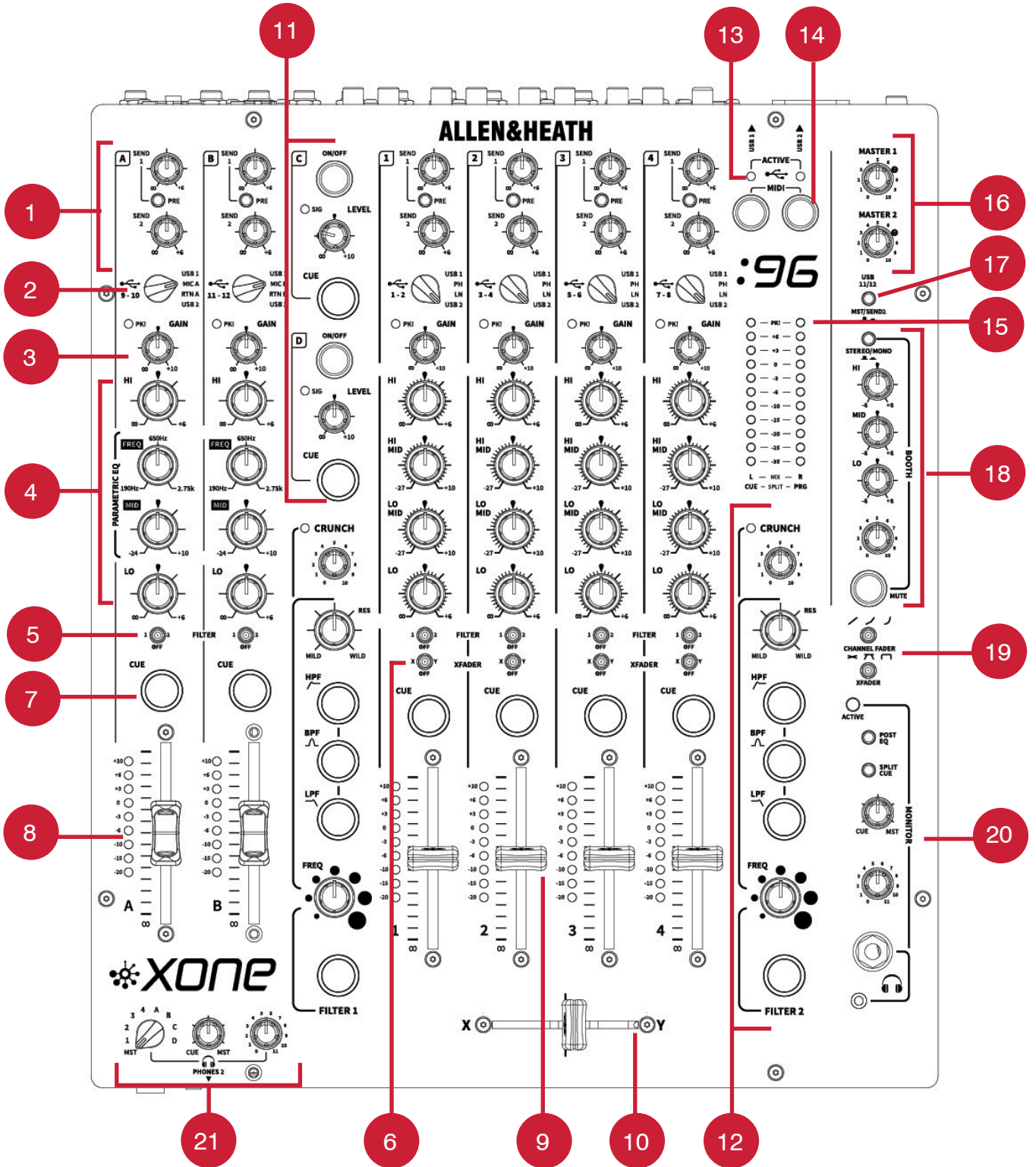
Please take the time to read this guide and the full user manual available on the Allen & Heath website:

[www.allen-heath.com/ahproducts/xone96/](http://www.allen-heath.com/ahproducts/xone96/)

# ALLEN & HEATH

Publication AP11255

# Front Panel Overview

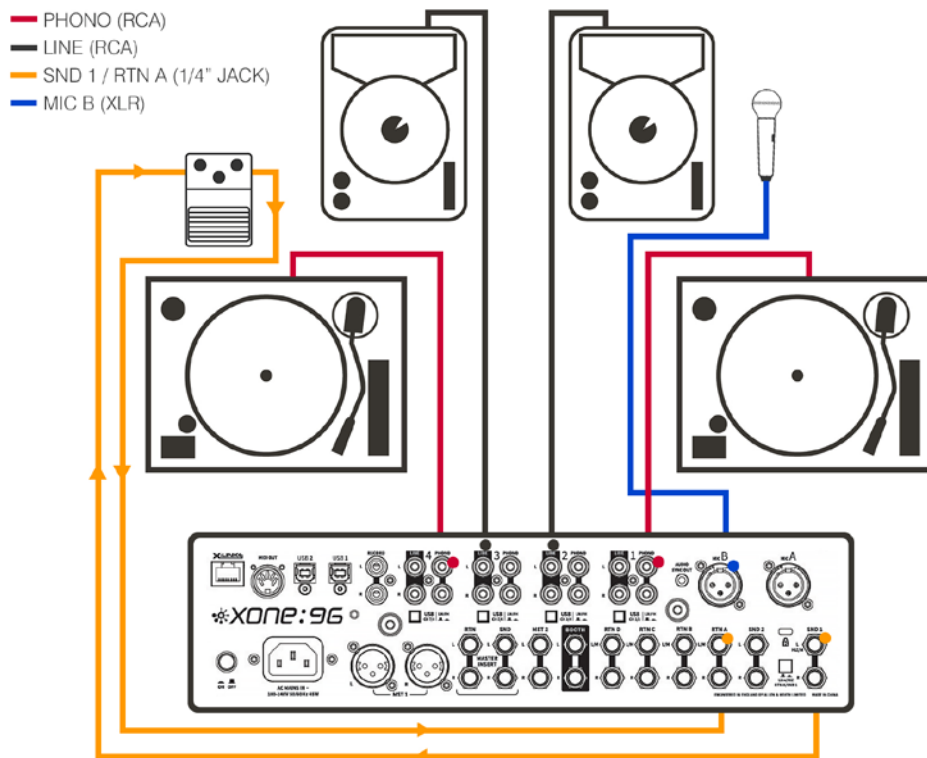


# Front Panel Overview cont.

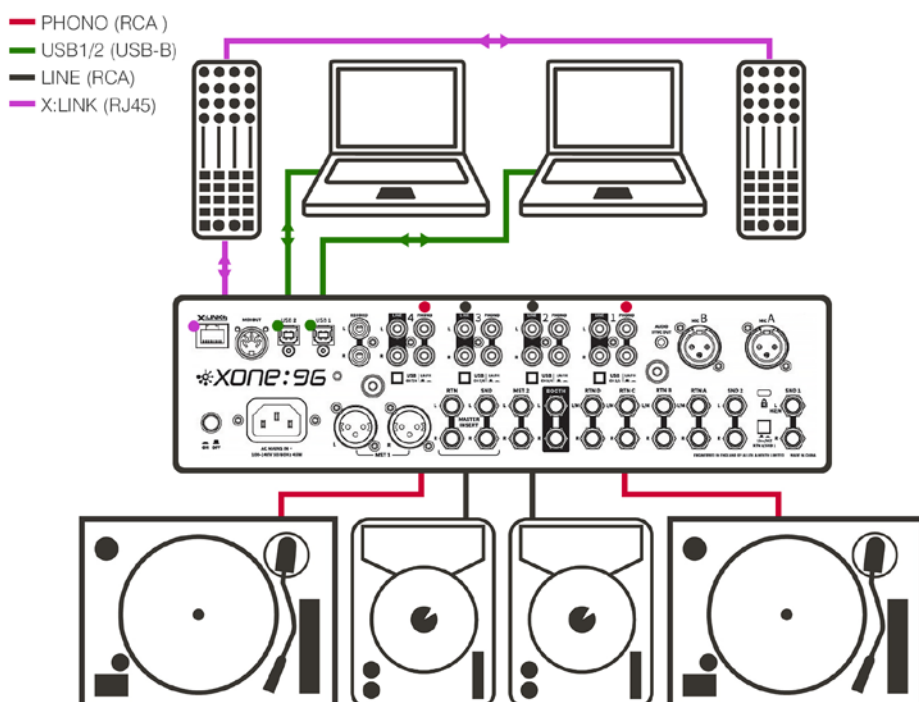
- 1 SEND 1 & SEND 2 Controls, CH A / CH B / CH 1 - 4**  
Control the levels of channel audio sent to external effects hardware connected via rear panel SND 1 and SND 2 outputs. SEND 1 also routes audio to USB 9/10 and is switchable pre/post-Fade. SEND 2 is fixed post-Fade, with a switched option for routing to USB 11/12.
- 2 Channel Input Select Switches, CH A / CH B / CH 1 - 4**  
Switch CH A and CH B inputs between USB 1, MIC, RTN, or USB 2 sources. Switch CH 1 - 4 inputs between USB 1, PHONO, LINE, or USB 2 sources. Switches can also send MIDI NOTE ON/OFF messages to USB and MIDI OUT ports.
- 3 Channel GAIN Controls, CH A / CH B / CH 1 - 4**  
Adjusts the channel input sensitivity to compensate for different audio signal source levels. If a PK! LED illuminates, turn the corresponding channel GAIN down.
- 4 Channel Equalizer, CH A / CH B**  
Auxiliary Channels A and B are equipped with new extended asymmetric 3-BAND EQ, providing +6dB boost and full attenuation ('kill') for HI and LO frequencies and +10dB boost/-24dB cut, swept parametric MID for detailed and creative frequency control.  
**Channel Equalizer, CH 1 - 4**  
Stereo Channels 1 - 4 are equipped with a refined asymmetric XONE 4-BAND EQ, providing +6dB boost and full attenuation ('kill') for HI and LO frequencies and with powerful +10dB boost/-27dB cut for HI MID and LO MID frequencies.
- 5 Channel FILTER Assign Switches, CH A / CH B / CH 1 - 4**  
Switch to route post-GAIN / post-EQ / post-Fade level channel audio to FILTER 1 or FILTER 2.
- 6 X-FADE Assign Switches, CH 1 - 4**  
Switch to route post-GAIN / post-EQ / post-Fade level channel audio to X (left) or Y (right) side of the cross-fader, or direct to the LR MIX (OFF).
- 7 CUE Switches, CH A - D / CH 1 - 4**  
Press to listen to the channel audio levels from MONITOR HEAD PHONES outputs and to view pre-LR MIX levels on the main MIX meters. Press switches together to CUE multiple channels, or press and hold active CUE switches when selecting another channel CUE. Switches can also send MIDI NOTE ON/OFF messages to USB and MIDI OUT ports.
- 8 Channel Meters, CH A / CH B / CH 1 - 4**  
Channel audio input is metered post-EQ / pre-Fade to display the effect of EQ adjustments on channel levels before routing to the LR MIX.
- 9 Channel Faders, CH A / CH B / CH 1 - 4**  
New custom designed 60mm stereo linear faders adjust the channel audio levels from fully off to fully on. CH A and CH B faders are fully analogue. CH1 - 4 faders are VCAs and can also send MIDI CC messages to USB and MIDI OUT ports.
- 10 X-FADER**  
New standard innoFADER VCA crossfader. Fade between audio from CH 1 - 4 assigned to the X (Left), or Y (Right) side of the cross-fader. The cross-fader can also send MIDI CC messages to USB and MIDI OUT ports.
- 11 Auxiliary Return Channels, CH C / CH D**  
Route signals from hardware connected via RTN C or RTN D inputs direct to the LR MIX at pre-MST levels, with independent ON/OFF and CUE switches, LEVEL controls and bi-colour SIG LED indicators. LEDs illuminate GREEN to show audio input level is present. If a SIG LED illuminates RED, turn the corresponding LEVEL control down.
- 12 XONE VCF, FILTER 1 / FILTER 2**  
Classic dual analogue XONE Voltage Controlled Filters: RES (MILD to WILD) and FREQ (sweep) controls, HPF/BPF/LPF select and FILTER ON with redesigned soft-switching, and new CRUNCH system for VCF controlled harmonic signal distortion. Turn CRUNCH clockwise to add harmonic distortion (CRUNCH!) into the pre-FILTER signal path. Set to 0 the audio is clean. Set to 10 the signal distorts dramatically. Use FILTER controls and switches to tune the post-FILTER output to your taste. For optimum CRUNCH system drive, maintain VCF assigned channel levels between +/-6dB. HPF/BPF/LPF select and FILTER ON switches can also send MIDI NOTE ON/OFF messages to USB and MIDI OUT ports.
- 13 USB 1 / USB 2 Active Indicators**  
LED illuminates BLUE when a computer connected to the mixer's corresponding USB 1 or USB 2 port is enabled.
- 14 MIDI 1 / 2 Switches**  
Switch the MIDI connection between the mixer and corresponding USB 1 or USB 2 ports ON/OFF. Does not affect MIDI sent between USB 1 & USB 2 ports, or to MIDI OUT.
- 15 MIX / MONITOR Meters**  
The main MIX meters follow the selected monitor source. When CUE is active, the MIX meters display CUE channel levels. When no channel CUE is active, meters display the LR MIX at pre-MST 1 control level. In SPLIT CUE mode, Left (L) meter displays levels of active CUE channels and Right (R) meter displays PRG (LR MIX) output level.
- 16 MASTER MIX Level Controls, MST 1 / MST 2**  
MST 1 and MST 2 controls adjust levels for the LR MIX feeding MST 1 (XLR) and MST 2 (1/4" Jack), outputs. . MST 1 adjustment does not affect LR MIX meters, MST 2, BOOTH, MONITOR, or PHONES 2 levels. MST 2 does not affect LR MIX meters, BOOTH, MONITOR, or PHONES 2.
- 17 USB 11/12 Source Select Switch**  
Select the audio source routed to USB 11/12 on the internal soundcards between MST or SEND2 outputs.
- 18 BOOTH Controls**  
Dedicated STEREO/MONO and MUTE Switches, independent 3 band EQ (+/-8dB) and LEVEL control adjusts output to BOOTH. This does not affect levels routed to MONITOR or PHONES 2 headphone outputs.
- 19 FADER Curve Switches, CH1 - 4 / X-FADE**  
Sets the response for VCA faders CH 1 - 4 and the innoFADER cross-fader. Choose settings to best suit your performance style.
- 20 MONITOR Section**  
Stereo 1/4" Jack and 3.5mm mini-Jack sockets with CUE ACTIVE indicator, Pre-/Post-EQ and SPLIT CUE switching and independent CUE/ADD MIX and LEVEL controls to feed main the main Headphone outputs. MONITOR section controls do not affect BOOTH, or PHONES 2 levels.
- 21 PHONES 2**  
Stereo 1/4" Jack and 3.5mm mini-Jack sockets with independent LEVEL and CUE/ADD MIX controls and 9-way source select switch. This does not affect channel CUE assignments, or BOOTH and MONITOR outputs.

# Setup Examples

CLASSIC : VINYL & MEDIA PLAYER (RCA) / EXT FX (SND-RTN) / MIC B (XLR)



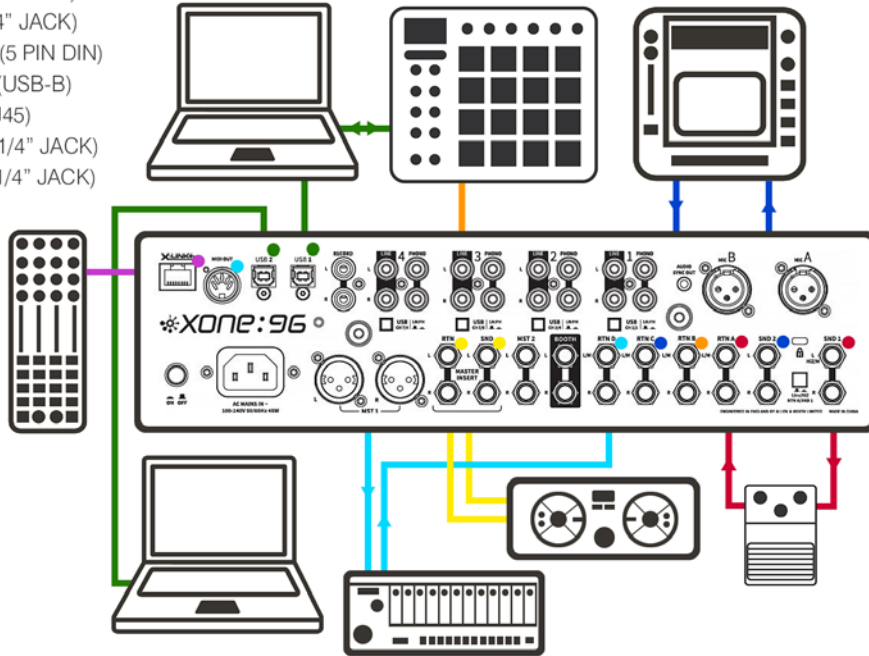
DIGITAL : VINYL & MEDIA PLAYER (DVS) / LAPTOP (USB1 + USB2) / X:LINK



# Setup Examples

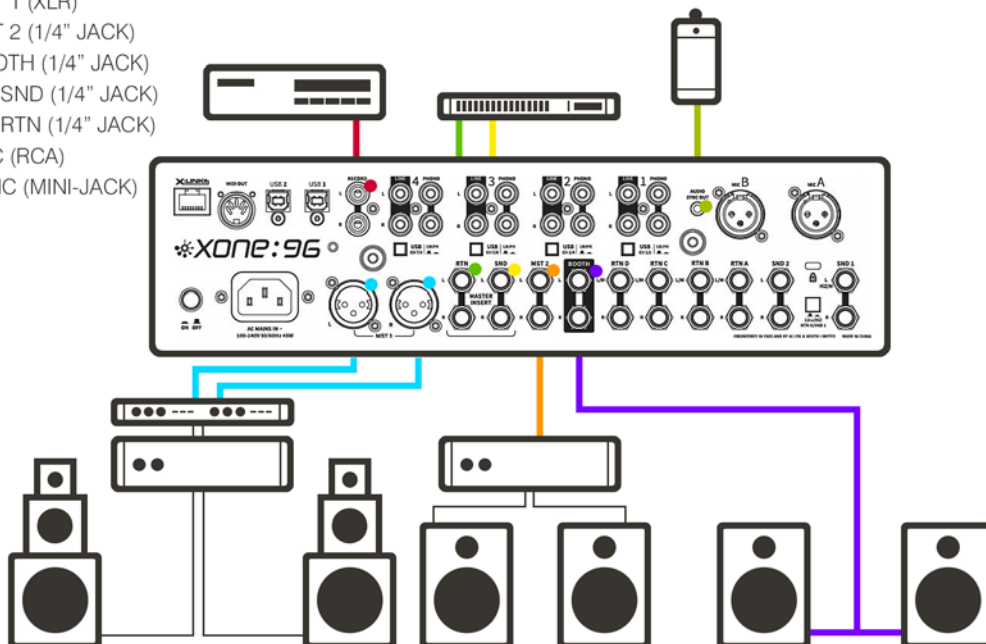
## SND & RTN : EFFECTS & AUXILLARY DEVICE CONNECTIONS

- SND 1 / RTN A (1/4" JACK)
- SND 2 / RTN C (1/4" JACK)
- RTN B (1/4" JACK)
- RTN D (1/4" JACK)
- MIDI OUT (5 PIN DIN)
- USB 1 / 2 (USB-B)
- X:LINK (RJ45)
- INS SND (1/4" JACK)
- INS RTN (1/4" JACK)

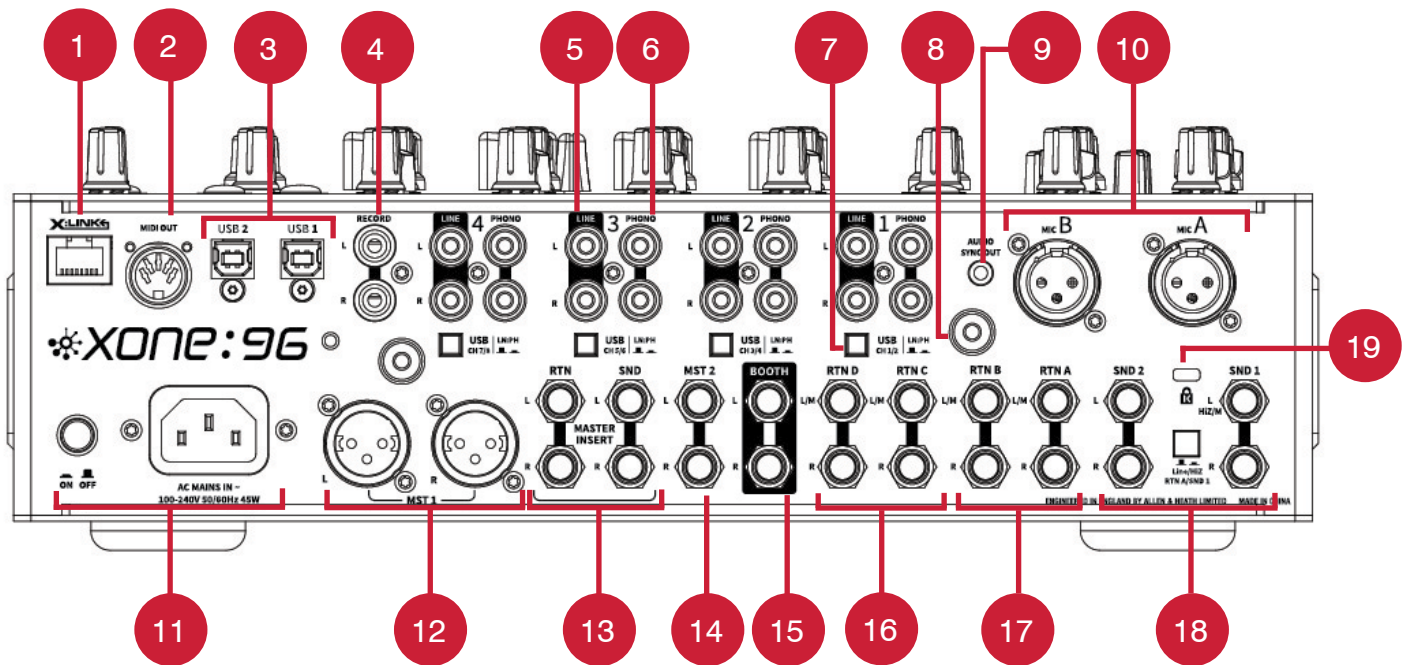


## OUTPUT CONNECTIONS

- MST 1 (XLR)
- MST 2 (1/4" JACK)
- BOOTH (1/4" JACK)
- INS SND (1/4" JACK)
- INS RTN (1/4" JACK)
- REC (RCA)
- SYNC (MINI-JACK)



# Rear Panel Overview



# Rear Panel Overview cont.

- 1 X:LINK**  
Connect XONE:K Series Controllers to the XONE:96 for remote software MIDI control and saving use of computer USB ports. RJ-45, Ethernet.
- 2 MIDI OUT**  
MIDI signal output for syncing to external MIDI hardware. 5-pin DIN.
- 3 USB 1 and USB 2 Soundcards**  
Dual 24 Channel (6 Stereo IN/6 Stereo OUT), 32Bit/96kHz, internal Hi-Speed USB soundcards. macOS class compliant. Direct full-duplex MIDI between USB 1 & USB 2. USB-B.
- 4 RECORD Outputs**  
Pre-Master (MST) level, LR MIX output for connection to external hardware recording devices. Unbalanced RCA.
- 5 LINE Inputs, CH 1 - 4**  
Connect stereo LINE level media players to the LINE inputs. Do not connect turntables requiring RIAA equalisation. Unbalanced RCA.
- 6 PHONO Inputs, CH 1 - 4**  
Connect turntables with magnetic cartridges requiring RIAA equalisation to PHONO inputs. For non-RIAA turntables plug into the LINE input instead. Unbalanced RCA.
- 7 USB LINE / PHONO Select Switches, CH 1 - 4**  
Set CH1 - 4 USB sources to LN or PH for LINE or RIAA signal level input to internal soundcards. For DVS (CD/Vinyl timecode) control, or recording CH1 - 4 inputs via USB.
- 8 Chassis Earth Terminals**  
2 x Screw terminals are provided for connecting the earth straps from turntables to prevent ground hum.
- 9 Audio Sync Out**  
Enables future Allen&Heath accessories to be easily connected to the XONE:96. Alternative Secondary Record Output, pre-MASTER level, LR MIX output for connection to external devices. Stereo 3.5mm mini-jack.
- 10 MIC A / MIC B Inputs**  
Use superior quality low impedance dynamic mics. Do NOT use high impedance or unbalanced mics, or condenser mics requiring phantom power. Balanced XLR, wired; Pin1=Ground, Pin2=Hot [+], Pin3=Cold [-].
- 11 AC Mains Input**  
Connect (supplied) IEC cable with moulded plug compatible to local AC mains supply. Turn AC supply to the mixer ON / OFF.
- 12 MST 1, MASTER Outputs**  
Main stereo LR MIX outputs that feed the club PA system, or active speakers. Balanced XLR (female), wired; Pin1=Ground, Pin2=Hot [+], Pin3=Cold [-].
- 13 MASTER INSERT SND / RTN**  
Provides INSERT points for LR MIX output to connect hardware dynamics processors such as a limiter, compressor, or graphic equaliser. Or connect effects hardware in-line with the LR MIX for external MASTER INSERT FX processing. INSERTS route via MAIN LR bus affecting MST1, MST2 and BOOTH outputs  
INSERT SND: Balanced (TRS) ¼"Jack, wired; Tip=Hot [+], Ring=Cold [-], Sleeve=Ground. INSERT RTN: Unbalanced (MONO) ¼"Jack, wired; Tip=Hot [+], Sleeve=Ground.
- 14 MST 2 Outputs**  
Alternative stereo MIX output to feed additional zone, consumer amplifier, or active speakers. Balanced (TRS) ¼"Jack, wired; Tip=Hot [+], Ring=Cold [-], Sleeve=Ground.
- 15 BOOTH Outputs**  
Balanced LINE level stereo output feed to DJ's local monitor system, or active speakers. Balanced (TRS) ¼"Jack, wired; Tip=Hot [+], Ring=Cold [-], Sleeve=Ground.
- 16 RTN C / RTN D, Auxiliary Return Inputs**  
Connect auxiliary LINE level music sources, or external effects outputs to route direct to LR MIX. Connect MONO devices via the L/M socket. Use RTN C / RTN D top panel controls to adjust signal levels sent to the mix. Unbalanced (MONO) ¼"Jack, wired; Tip=Hot [+], Sleeve=Ground.
- 17 RTN A / RTN B, LINE Inputs**  
Connect auxiliary LINE level music sources, or external effects device outputs to RTN A and RTN B LINE inputs to route to CH A and CH B. Connect MONO devices via L/M. Balanced (TRS) ¼"Jack, wired; Tip=Hot [+], Ring=Cold [-], Sleeve=Ground.
- 18 SND 1 / SND 2, LINE Outputs**  
Connect your external FX inputs to SND 1 or SND 2 outputs and use SEND 1 / SEND 2 controls to send Channel audio to the FX unit. Connect MONO devices via L/M. Switchable SND 1 input and RTN A output impedance for external FX between LN, or Hi-Z suitable for guitar FX pedals or legacy hardware. Balanced (TRS) ¼"Jack, wired; Tip=Hot [+], Ring=Cold [-], Sleeve=Ground.
- 19 K-Slot**  
Security slot to connect locking, Kensington® type, anti-theft cable.

## NOTES

**IMPORTANT:** Read the Safety Instructions Sheet and Safety Warning information printed on mixer's rear panel and base panel **BEFORE** operating.

For full details, please refer to the XONE:96 User Guide online at: [www.allen-heath.com](http://www.allen-heath.com)

Register your XONE:96 with Allen & Heath online at: [www.allen-heath.com/register](http://www.allen-heath.com/register)

A limited one year manufacturer's warranty applies to this product, the conditions of which can be found in the XONE:96 User Guide, and online at: [www.allen-heath.com/legal](http://www.allen-heath.com/legal)

By using software designed for use for and with this Allen & Heath product you agree to be bound by the terms of the relevant End User Licence Agreement (EULA), a copy of which can be found at: [www.allen-heath.com/legal](http://www.allen-heath.com/legal)

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