

MINI MIXERS

2 BUS MIXERS

4 BUS MIXERS

RECORDING MIXERS

ZED
SERIES



ALLEN & HEATH

THE ZED RANGE IS THE PREMIUM CHOICE OF ANALOGUE MIXER FOR BANDS, SMALL RENTAL COMPANIES, SINGER SONGWRITERS AND STUDIO ARTISTS. ZED MIXERS OFFER MANY SOURCES TO THE MIX, UP TO 6 AUX SENDS, A USB SEND AND RETURN, A UNIQUE DUAL STEREO INPUT CAPABILITY AND SOPHISTICATED MONITORING FACILITIES. ZED'S FEATURE SET IS INCREDIBLY ADVANCED, OFFERING A GREAT MIXING SOLUTION WHEREVER YOU ARE, WHATEVER YOU'RE DOING—PLAYING LIVE, IN THE STUDIO, OR AT HOME, ZED WILL SUIT YOUR APPLICATION PERFECTLY.

SOLID CONSTRUCTION

All ZED mixers are built to the same exacting standards as our industry standard GL series, with individual, vertically mounted circuit boards and potentiometers securely bolted to the top panel. Compare a ZED to one of the many budget brands out there and you'll immediately feel the difference.

SOUND QUALITY

The innovative preamp designs used on ZED mixers were created by Mike Griffin and deliver phenomenal clarity, ultra-low noise and massive headroom.

The MusiQ 3 and 4 band British EQ designs employed across the range are widely acclaimed for their exceptional musicality and even, responsive control. Our in-house DSP gurus crafted the FX algorithms used by the ZED-FX mixers – these were tailor-made for the ZED series so you won't find them anywhere else. OK, we're biased, but we think you'd have to spend a lot of money on high-end outboard gear to get FX that come anywhere close.

VERSATILITY

ZED mixers are earning a living across the globe in every mixing role imaginable, including corporate and AV mixing, live performance mixing, live recording, studio recording or mixing down, or just capturing that song idea. The addition of USB makes it super-easy to hook your ZED up to a computer, and the wealth of signal routing options lets you fit ZED perfectly into your workflow.



CONTENTS

MINI MIXERS	4
ZED-10	6
ZED-10FX	7
ZED60-10FX	8
ZED60-14FX	9
2BUS MIXERS	10
ZED-12FX	12
ZED-14	13
ZED-16FX	14
ZED-18	15
ZED-22FX	16
ZED-24	17
4 BUS MIXERS	18
ZED-420	20
ZED-428	21
ZED-436	22
RECORDING	
ZED-R16	24

OUR HERITAGE

Allen & Heath started out as a boutique mixer manufacturer in 1969, hand-building consoles for the top bands of the era. Today Allen & Heath mixers can be found on tour, in studios and in venues across the globe, but our passion for pristine audio, rugged build quality and imaginative design is undiminished.

Development for the ZED series is led by Mike Griffin, ably supported by our in-house R&D team in Cornwall, Great Britain. Mike earned his mixer design stripes under the legendary Rupert Neve, and has design credits that include several industry standards, including our renowned MixWizard and GL consoles. Mike regularly mixes sessions with the ZEDs, so you'll appreciate the clever features and carefully considered control layouts that you only get from hands-on experience.

Whether you're on the road with our iLive pro touring series or using a ZED-10 in your project studio, when you invest in an Allen & Heath, you're investing in a professional mixer that's built to deliver outstanding performance for many years to come.

ZED MINI MIXERS

ZED-10 ZED-10FX ZED60-10FX ZED60-14FX

THE ZED MINI RANGE (ZED-10, ZED-10FX, ZED60-10FX AND ZED60-14FX) ARE AMAZING LITTLE DESKS FOR SMALL BAND MIXING. DON'T BE FOOLED BY THE SIZE – THESE MIXERS ARE BIG ON HIGH-END AUDIO AND BUILD QUALITY. THEY'RE ULTRA PORTABLE FOR CARRYING TO THE GIG, AND CAN BE USED FOR RECORDING LIVE OR IN THE STUDIO. GUITARS CAN BE PLUGGED IN DIRECTLY TO THE MIXER USING THE SPECIALLY DESIGNED HIGH-IMPEDANCE INPUTS, WHILE EACH MIXER HAS TWO STEREO INPUTS FOR MP3/CD PLAYERS OR KEYBOARDS. ALL ARE EQUIPPED WITH PROFESSIONAL XLR MAIN STEREO OUTPUTS AND A FLEXIBLE MONITORING SECTION WITH HEADPHONE AND SPEAKER FEED OUTPUTS. THE FX VERSIONS ADD A SET OF FABULOUS EFFECTS TO ENHANCE YOUR SOUND WITH SHIMMERING REVERBS.



TECH SPECS

Operating Levels: Inputs

Mono channel (XLR) Input -10 to -60dBu for nominal (+11dBu in max)

Mono channel Line Input (Jack socket) +10 to -40dBu (+31dBu maximum)

Stereo Input (Jack or phono sockets) 0dBu nominal (control = Off to +15dB)

Outputs

L/R Outputs (XLR) 0dBu nominal. +21dBu maximum.

Aux & FX Outputs (Jack sockets) 0dBu nominal. +21dBu maximum.

Record & Monitor Outputs (phono sockets) 0dBu nominal. +21dBu maximum.

Frequency Response

Mic in to Mix L/R Out, 30dB gain +0.5/-1dB 10Hz to 30kHz.

Line in to Mix L/R out 0dB gain +0.5/-1dB 10Hz to 30kHz.

Stereo in to Mix L/R out +0.5/-1dB 10Hz to 30kHz.

THD+n

Mic in to Mix L/R Out, 10dB gain 1kHz +10dBu out 0.002%

Mic in to Mix L/R Out, 30dB gain 1kHz 0.01%

Line in to Mix L/R out 0dB gain 0dBu 1kHz 0.003%

Stereo in to Mix L/R out 0dB gain +10dBu 1kHz 0.002%

Gtr Input to Mix L/R Out, 0dBu, Boost OUT 0.015%

Gtr Input to Mix L/R Out, 0dBu, Boost IN 2% Second Harmonic

Headroom

Analogue Headroom from nominal (0Vu) 21dB.

USB in & out headroom from nominal (0Vu) 14dB.

Noise

Mic Pre EIN @ max gain 150R input Z 22-22kHz -127dBu

Mix L/R out, L/R faders = 0, Levels min, 22-22kHz -96dBu

Mix L/R out, L/R faders = 0, Levels min, 22-22kHz -96dBu

USB Audio CODEC (Coder/Decoder)

USB Audio In/Out USB 1.1 compliant 16bit.

Sample Rate 32, 44.1, or 48kHz



GUITAR DI

The preamp for ZED-10, 10FX, ZED60-10FX and ZED60-14FX is an evolution from the design employed on our MixWizard series, but with a twist. Two of the channels have a high impedance jack input capable of taking either a normal line level or a low level input from a guitar pickup. These Guitar DI inputs replicate the sound of a classic guitar or instrument tube preamp in a combo or head amp. An extremely high input impedance ensures loading on pickups is minimal and a Class A FET (field effect transistor) circuit powered from 48V is employed to give the valve-like gain stage. There is a gain Boost switch associated with the guitar inputs which boosts gain by 26dB to cater for instruments with very low level outputs and the overdrive characteristics of the guitar inputs are very similar to a valve circuit, being asymmetric and soft. All this makes for a wonderfully warm, natural tone that conveys the full character of the instrument.



MUSIQ – 3 BAND

ZED Mini mixers feature a responsive 3-band British EQ with sweepable mid frequency that is acclaimed for its musicality, even when applying extreme creative or corrective equalisation. All EQ controls have been carefully calibrated for responsiveness and smooth, precise adjustment.



USB AUDIO FLEXIBILITY

ZED makes it easy to get audio to and from your computer for live sound and music production. The way this has been implemented on ZED is super-flexible and super-easy. No longer do you need to fiddle around the back of your PC to get to the soundcard inputs, only to find that the levels are all wrong and noisy. Just plug in a USB lead, select the USB routing on the mixer and the device on your computer and that's it! CD quality audio to and from your PC or Mac. Switches and connection through jack socket terminals provide different send/return configurations.

ZED-10FX / ZED60-10FX / ZED60-14FX

Send options:

- 1) Main Mix Left + Right (Post master Level)
- 2) Aux + FX bus (Aux is a pre-fade send, FX is a post-fade send)
- 3) Record Bus Left + Right (Separate stereo bus to Main Mix)

Return options:

- 1) To Playback input (through jack socket break contacts)
- 2) To Stereo 2 channel (through jack socket break contacts)

ZED-10

Send options:

- 1) Main Mix Left + Right (Post master Level)
- 2) Aux + FX bus (Aux is a pre-fade send, FX is a post-fade send)
- 3) Record Bus Left + Right (Separate stereo bus to Main Mix)

Return Options:

- 1) To Playback input (through jack socket break contacts)
- 2) To Stereo 2 channel (through jack socket break contacts)



ZED-FX

ZED-10FX, ZED60-10FX and ZED60-14FX have an essential selection of 16 time-delay effects, designed for performers who don't want to carry an effects unit with their gear but who still want great quality FX at their gigs and on their recordings. Our DSP engineers worked hard, crafting and refining beautiful reverb algorithms to enhance every performance. These effects are available nowhere else —this quality and integration is only available from the ZED-FX. ZED effects are easily controlled using 3 buttons with 9 display LEDs. For example, the ideal delay time can be quickly tapped-in, or the perfect amount of reverb on the lead vocal can be dialled-in. There is one-stop navigation and editing—in fact, it's just as easy as using FX pedals.



ZED 10



4 MIC/LINE INPUTS

2 STEREO INPUTS

2 AUXES

FEATURES

- 4 mic/line inputs, 2 with Class A FET high impedance inputs
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- 3 band EQ with MusiQ
- 2 auxes
- Sound image pan
- Illuminated PFL indicator
- Stereo returns & playback
- All inputs with level control
- 12 bar meters
- Responsive 3-band, swept mid EQ with MusiQ
- 2 stereo sources with MP3 player compatibility
- Separate 2-track record outputs
- Stereo playback input for 2-track replay
- XLR main stereo outputs with inserts
- Comprehensive monitoring
- Configurable USB stereo audio in/out
- Stereo monitor outs
- 48V microphone phantom power
- DI level switching for sub mixing



ZED 10FX



4 MIC/LINE
INPUTS

2 STEREO
INPUTS

1 AUX +
1 FX SEND

ON BOARD FX

FEATURES

- 4 mic/line inputs, 2 with Class A FET high impedance inputs
- 16 internal FX
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- 3 band EQ with MusiQ
- 1 pre-fade Aux send
- 1 FX send
- Sound image pan
- Illuminated PFL indicator
- Stereo returns & playback
- All inputs with level control
- 12 bar meters
- Responsive 3-band, swept mid EQ with MusiQ
- 2 stereo sources with MP3 player compatibility
- Separate 2-track record outputs
- Stereo playback input for 2-track replay
- XLR main stereo outputs with inserts
- Comprehensive monitoring
- Configurable USB stereo audio in/out
- Stereo monitor outs
- 48V microphone phantom power
- DI level switching for sub mixing



ZED

SIXTY 10FX



4 MIC/LINE INPUTS

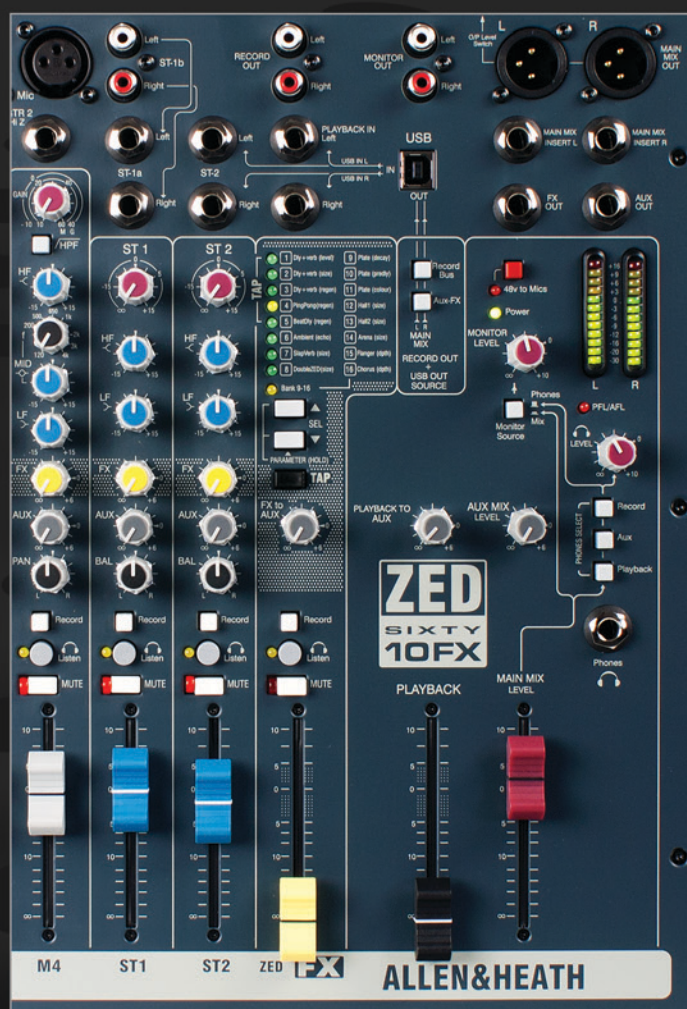
2 STEREO INPUTS

1 AUX + 1 FX SEND

ON BOARD FX

FEATURES

- 4 mic/line inputs, 2 with Class A FET high impedance
- 60mm professional quality faders
- 3-band, swept mid EQ with MusiQ
- Configurable USB stereo audio in/out
- 1 pre-fade Aux send
- 1 FX send
- 2 stereo inputs
- Separate 2-track record outputs
- 16 Internal Effects
- XLR main stereo outputs with inserts
- Comprehensive monitoring
- 48V microphone phantom power
- DI level switching with Gain Boost
- Neutrik XLRs and 1/4 inch jacks



ZED

SIXTY 14FX



8 MIC/LINE
INPUTS

2 STEREO
INPUTS

1 AUX +
1 FX SEND

ON BOARD FX

FEATURES

- 8 mic/line inputs, 2 with Class A FET high impedance
- 60mm professional quality faders
- 3-band, swept mid EQ with MusiQ
- Configurable USB stereo audio in/out
- 1 pre-fade Aux send
- 1 FX send
- 2 stereo inputs
- Separate 2-track record outputs
- 16 Internal Effects
- XLR main stereo outputs with inserts
- Comprehensive monitoring
- 48V microphone phantom power
- DI level switching with Gain Boost
- Neutrik XLRs and 1/4 inch jacks



ZED 2 BUS MIXERS

ZED-12FX ZED-14 ZED-16FX ZED-18 ZED-22FX ZED-24

THESE ARE FANTASTIC MIXERS FOR SMALL BANDS, VENUES AND HIRE COMPANIES. IN A MARKET FULL OF 'ME TOO' MIXERS THESE CONSOLES STAND OUT FROM THE PACK WITH THEIR COMPREHENSIVE FEATURES, FINE LINES AND QUALITY CONSTRUCTION. EACH MODEL IS PROVIDED WITH BETWEEN 6 AND 16 MIC/LINE INPUTS, 3 OR 4 STEREO INPUTS WITH EQ, AND 3 OR 4 AUXILIARY SENDS. THE FX VERSIONS ARE IDEAL FOR GROUPS WHO NEED TO TRAVEL LIGHT. LARGER MODELS CAN EASILY ACCOMMODATE VOCALS, DRUMS, GUITAR, BASS AND KEYS WHILST ALSO PROVIDING A DEDICATED FX BUS AND 16 INTERNAL EFFECTS TO GIVE THE WHOLE MIX EXTRA AMBIENCE.



TECH SPECS

Operating Levels: Inputs

Mono channel (XLR) Input +6 to -63dBu for nominal (+17dBu in max)
 Mono channel Line Input (Jack socket) +10 to -26dBu (+30dBu maximum)
 Insert point (TRS Jack socket) 0dBu nominal +21dBu maximum
 Stereo Input (Jack sockets) 0dBu nominal (control = Off to +10dB)
 Stereo input (phono sockets) 0dBu nominal (control = Off to +10dB)

Outputs

L, R & Mono Outputs (L&R XLR, Mono Jack) 0dBu nominal. +21dBu maximum
 Aux Outputs (Jack sockets) 0dBu nominal. +21dBu maximum
 Alt Outputs (phono sockets) 0dBu nominal. +21dBu maximum
 Rec Outputs (phono sockets) 0dBu nominal. +21dBu maximum

Frequency Response

Mic in to Mix L/R Out, 30dB gain +0.5/-1dB 20Hz to 20kHz
 Line in to Mix L/R out 0dB gain +0.5/-1dB 10Hz to 30kHz
 Stereo in to Mix L/R out +0.5/-1dB 10Hz to 30kHz

THD + n

Mic in to Mix L/R Out, 0dB gain 1kHz +10dBu out 0.004%
 Mic in to Mix L/R Out, 30dB gain 1kHz 0.014%
 Line in to Mix L/R out 0dB gain 0dBu 1kHz 0.005%
 Stereo in to Mix L/R out 0dB gain +10dBu 1kHz 0.003%

Headroom

Analogue Headroom from nominal (0Vu) 21dB
 USB in & out headroom from nominal (0Vu) 14dB

Noise

Mic Pre EIN @ max gain 150R input Z 22-22kHz -127dBu
 Mix L/R out, L/R faders = 0, 22-22kHz -88dBu (ZED-14)
 Mix L/R out, L/R faders = 0, 22-22kHz -84dBu (ZED-24)

USB Audio CODEC (Coder/Decoder)

USB Audio In/Out USB 1.1 compliant 16bit.
 Sample Rate 32, 44.1, or 48kHz



DUOPRE

Based on the proven preamps from the hugely successful PA series, ZED 2-bus and 4-bus mixers have DuoPre preamps, which use a two stage design with carefully controlled amounts of gain in each stage. When amplifying the signal from the XLR input, the gain range is huge—69dB of range to be exact—and is very evenly distributed around the gain control, meaning better control of signal level. Most of the gain comes from the first stage, so unwanted noise is kept to a minimum. Line level signals are simply plugged into the second stage of the preamp by using the line input jack socket, which has the great advantages of less noise and matching to a higher input impedance.



MUSIQ – 3 BAND

ZED 2-bus consoles feature a responsive 3-band British EQ with sweepable mid frequency that is acclaimed for its musicality, even when applying extreme creative or corrective equalisation. All EQ controls have been carefully calibrated for responsiveness and smooth, precise adjustment.



USB AUDIO FLEXIBILITY

ZED makes it easy to get audio to and from your computer for live sound and music production. The way this has been implemented on ZED is super-flexible and super-easy. No longer do you need to fiddle around the back of your PC to get to the soundcard inputs, only to find that the levels are all wrong and noisy. Just plug in a USB lead, select the USB routing on the mixer and the device on your computer and that's it! CD quality audio to and from your PC or Mac. Switches and connection through jack socket terminals provide different send/return configurations.

ZED-12FX / ZED-16FX / ZED-22FX

Send options

- 1) Main Mix Left + Right (Post-fade)
- 2) Main Mix Left + Right (Pre-Fade)
- 3) Auxes 1-2
- 4) Auxes 3-FX

Return options:

- 1) To Stereo 3 channel

ZED-14 / ZED-18 / ZED-24

Send options:

- 1) Main Mix Left + Right (Post-fade)
- 2) Main Mix Left + Right (Pre-Fade)
- 3) Auxes 1-2
- 4) Auxes 3-4

Return options:

- 1) To Stereo 3 channel



ZED-FX

The ZED-12FX, ZED-16FX and ZED-22FX have an essential selection of 16 time-delay effects, designed for performers who don't want to carry an effects unit with their gear but who still want great quality FX at their gigs and on their recordings. Our DSP engineers worked hard, crafting and refining beautiful reverb algorithms to enhance every performance. These effects are available nowhere else—this quality and integration is only available from the ZED-FX. ZED effects are easily controlled using 3 buttons with 9 display LEDs. For example, the ideal delay time can be quickly tapped-in, or the perfect amount of reverb on the lead vocal can be dialled-in. There is one-stop navigation and editing—in fact, it's just as easy as using FX pedals.



SONAR X1 LE - PROVIDED FREE!

We've included Cakewalk Sonar X1 LE with ZED 2-bus mixers, so you can immediately start to use it to create your own music—just add a PC and it couldn't be easier to get going. You'll be able to record from your ZED mixer, create tracks and arrange songs, then play back to ZED via the USB port. You can use Sonar and your mixer together in many ways—e.g. straightforward recording of a stereo mix, recording 2 tracks individually to build up a song, or using the USB port and software as an FX loop.



ZED 12FX



6 MIC/LINE
INPUTS

3 STEREO
INPUTS

**3 AUXES +
1 FX SEND**

ON BOARD FX

FEATURES

- 6 mono channels
- 3 stereo channels with 2-band EQ and inputs for extra sources
- 16 internal time-delay effects
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain mic/line input
- 3 band EQ with MusiQ
- 2 pre-fade Aux sends
- 1 post-fade Aux send
- 1 internal FX send
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- Stereo returns & playback
- All inputs with level control
- 12 bar meters
- Mono/stereo function on auxes 1&2
- Monitor output section
- Alt stereo output source
- Configurable USB stereo audio in/out
- Cakewalk SONAR X1 LE bundled with mixer
- Rack ears available



ZED 14



6 MIC/LINE
INPUTS

4 STEREO
INPUTS

4 AUXES

FEATURES

- 6 mono channels
- 4 stereo channels with 2-band EQ and inputs for extra sources
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain mic/line input
- 3 band EQ with MusiQ
- 2 pre-fade Aux sends
- 2 post-fade Aux sends
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- Stereo returns & playback
- All inputs with level control
- 12 bar meters
- Mono/stereo function on auxes 1&2
- Monitor output section
- Alt stereo output source
- Configurable USB stereo audio in/out
- Cakewalk SONAR X1 LE bundled with mixer
- Rack ears available



ZED 16FX



10 MIC/LINE
INPUTS

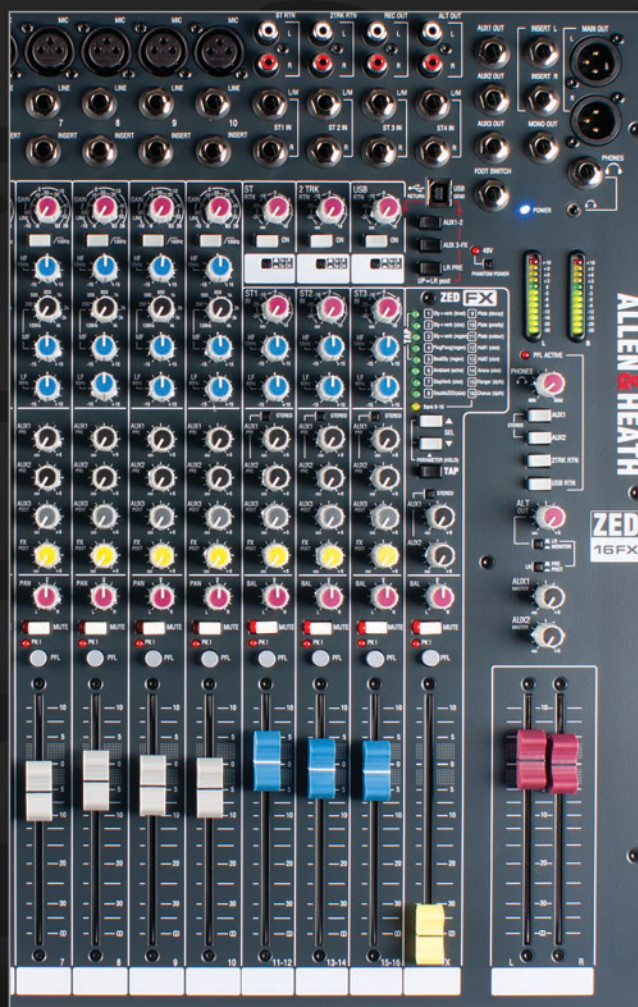
3 STEREO
INPUTS

3 AUXES +
1 FX SEND

ON BOARD FX

FEATURES

- 10 mono mic/line inputs
- 3 stereo channels with 2-band EQ
- 16 internal time-delay effects
- Neutrik mic XLRs
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain mic/line input
- 3 band EQ with MusiQ
- 2 pre-fade Aux sends
- 1 post-fade Aux send
- 1 internal FX send
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- Stereo returns & playback
- All inputs with level control
- 12 bar meters
- Mono/stereo function on auxes 1&2
- Monitor output section
- Alt stereo output source
- Configurable USB stereo audio in/out
- Cakewalk SONAR X1 LE bundled with mixer
- Rack ears available



ZED 18



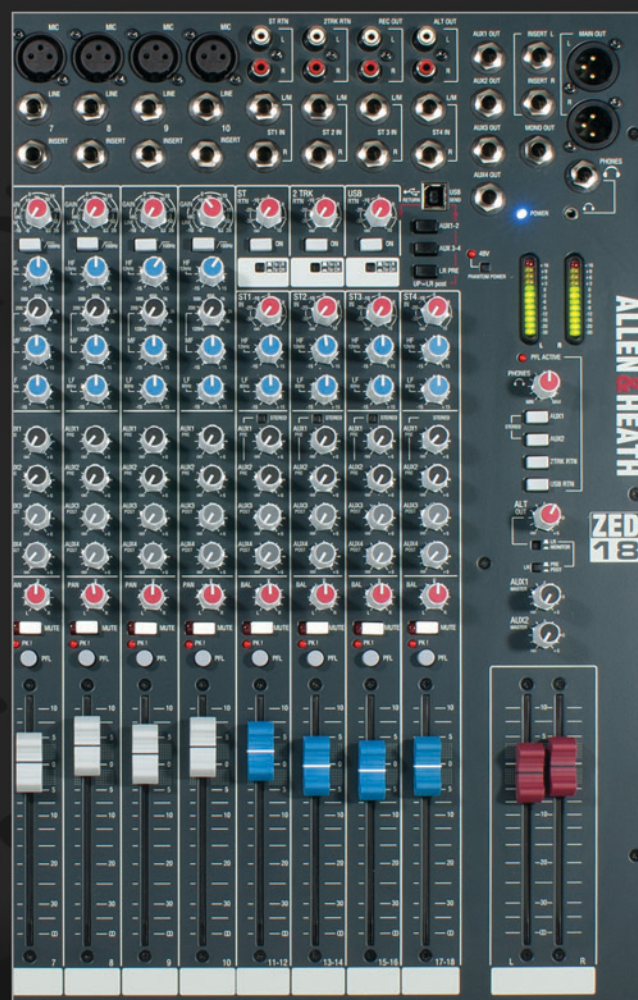
10 MIC/LINE
INPUTS

4 STEREO
INPUTS

4 AUXES

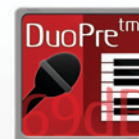
FEATURES

- 10 mono channels
- 4 stereo channels with 2-band EQ
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain mic/line input
- 3 band EQ with MusiQ
- 2 pre-fade Aux sends
- 2 post-fade Aux sends
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- Stereo returns & playback
- All inputs with level control
- 12 bar meters
- Mono/stereo function on auxes 1&2
- Monitor output section
- Alt stereo output source
- Configurable USB stereo audio in/out
- Cakewalk SONAR X1 LE bundled with mixer
- Rack ears available



ZED

22 FX



16 MIC/LINE
INPUTS

3 STEREO
INPUTS

ON BOARD FX

3 AUXES +
1 FX SEND

FEATURES

- 16 mono channels
- 3 stereo channels with 2-band EQ and inputs for extra sources
- 16 internal time-delay effects
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain mic/line input
- 3 band EQ with MusiQ
- 2 pre-fade Aux sends
- 1 post-fade Aux send
- 1 internal FX send
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- Stereo returns & playback
- All inputs with level control
- 12 bar meters
- Mono/stereo function on auxes 1&2
- Monitor output section
- Alt stereo output source
- Configurable USB stereo audio in/out
- Cakewalk SONAR X1 LE bundled with mixer



ZED 24



16 MIC/LINE
INPUTS

4 STEREO
INPUTS

4 AUXES

FEATURES

- 16 mono channels
- 4 stereo channels with 2-band EQ and inputs for extra sources
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain mic/line input
- 3 band EQ with MusiQ
- 2 pre-fade Aux sends
- 2 post-fade Aux sends
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- Stereo returns & playback
- All inputs with level control
- 12 bar meters
- Mono/stereo function on auxes 1&2
- Monitor output section
- Alt stereo output source
- Configurable USB stereo audio in/out
- Cakewalk SONAR X1 LE bundled with mixer



ZED 4 BUS MIXERS

ZED-420 ZED-428 ZED-436

ZED 4 BUS MIXERS ARE A FAVOURITE CHOICE FOR LARGER BANDS, HOUSES OF WORSHIP AND THEATRES. THEY ARE ALSO APPRECIATED BY AV AND PA RENTAL COMPANIES LOOKING FOR A GOOD RETURN ON INVESTMENT WITH MINIMAL MAINTENANCE. AVAILABLE WITH 16, 24 OR 32 MIC/LINE INPUTS PLUS 2 DUAL STEREO INPUTS WITH EQ, 4-BAND EQ, 4 SUB-GROUPS, 6 AUXILIARY SENDS AND A 7X2 MATRIX, THEIR TRULY PROFESSIONAL FEATURE SET WILL FIT ANY SOUND REINFORCEMENT SCENARIO.





TECH SPECS

Operating Levels: Inputs

Mono channel (XLR) Input +6 to -63dBu for nominal (+17dBu in max)
 Mono channel Line Input (Jack socket) +10 to -26dBu (+30dBu maximum)
 Insert point (TRS Jack socket) 0dBu nominal +21dBu maximum
 Stereo Input (Jack sockets) 0dBu nominal (control = Off to +10dB)
 Stereo input (phono sockets) 0dBu nominal (control = Off to +10dB)
 2 Track Input (phono sockets) 0dBu nominal +21dBu maximum

Outputs

L, R & Mono Outputs (XLR) +4dBu nominal. +27dBu maximum.
 L, R & M Insert (TRS Jack socket) -2dBu nominal +21dBu maximum
 Group Outputs (Jack sockets) +4dBu nominal. +27dBu maximum.
 Group Insert (TRS Jack socket) -2dBu nominal +21dBu maximum
 Aux Outputs (Jack sockets) -2dBu nominal +21dBu maximum (Bal Option +4)
 Matrix Outputs (TRS Jack socket) -2dBu nominal. +21dBu maximum. (Bal Option +4)
 2 Track Output (phono sockets) 0dBu nominal. +21dBu maximum.
 Direct Out (TRS Jack socket) 0dBu nominal. +21dBu maximum.

Frequency Response

Mic in to Mix L/R Out, 30dB gain +0.5/-1dB 20Hz to 20kHz.
 Line in to Mix L/R out 0dB gain +0.5/-1dB 10Hz to 30kHz
 Stereo in to Mix L/R out +0.5/-1dB 10Hz to 30kHz

THD + n

Mic in to Mix L/R Out, 0dB gain 1kHz +10dBu out 0.004%
 Mic in to Mix L/R Out, 30dB gain 1kHz 0.014%
 Line in to Mix L/R out 0dB gain 0dBu 1kHz 0.005%
 Stereo in to Mix L/R out 0dB gain +10dBu 1kHz 0.003%

Headroom

Analogue Headroom from nominal (0Vu) 21dB
 USB in & out headroom from nominal (0Vu) 14dB
 USB Audio CODEC (Coder/Decoder)
 USB Audio In/Out USB 1.1 compliant 16bit.
 Sample Rate 32, 44.1, or 48kHz

Noise

Mix Noise, LR out, 16 channels routed, Ref +4dBu, 22-22kHz -90dB (-86dBu)
 Mix Noise, LR out, 24 channels routed, Ref +4dBu, 22-22kHz -89dB (-85dBu)
 Mix Noise, LR out, 32 channels routed, Ref +4dBu, 22-22kHz -88dB (-84dBu)
 Mic Pre EIN @ max gain 150R input Z 22-22kHz -127dBu

USB Audio CODEC (Coder/Decoder)

USB Audio In/Out USB 1.1 compliant 16bit.
 Sample Rate 32, 44.1, or 48kHz



DUOPRE

Based on the proven preamps from the hugely successful PA series, ZED 4-bus mixers have DuoPre preamps, which use a two stage design with carefully controlled amounts of gain in each stage. When amplifying the signal from the XLR input, the gain range is huge—69dB of range to be exact—and is very evenly distributed around the gain control, meaning better control of signal level. Most of the gain comes from the first stage, so unwanted noise is kept to a minimum. Line level signals are simply plugged into the second stage of the preamp by using the line input jack socket, which has the great advantages of less noise and matching to a higher input impedance.



MUSIQ – 4 BAND

All ZED 4-bus mixers employ a tuned 4-band EQ, taken from our acclaimed GL2400 mixer, utilising MusiQ British EQ with musical response. The two mid bands are swept and in/out switching allows instant comparison of the pre/post EQ signal.



USB AUDIO FLEXIBILITY

ZED makes it easy to get audio to and from your computer for live sound and music production. The way this has been implemented on ZED is super-flexible and super-easy. No longer do you need to fiddle around the back of your PC to get to the soundcard inputs, only to find that the levels are all wrong and noisy. Just plug in a USB lead, select the USB routing on the mixer and the device on your computer and that's it! CD quality audio to and from your PC or Mac. Switches and connection through jack socket terminals provide different send/return configurations.

ZED-14 / ZED-18 / ZED-24

Send options:

- 1) Main Mix Left + Right (Post-fade)
- 2) Main Mix Left + Right (Pre-Fade)
- 3) Auxes 1-2
- 4) Auxes 3-4

Return options:

- 1) To Stereo 3 channel

ZED 420



16 MIC/LINE
INPUTS

2 DUAL STEREO
INPUTS

4 SUB GROUPS

6 AUX SENDS

FEATURES

- 16 mono channels
- 2 dual stereo inputs with 4-band EQ
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain mic/line input
- 4-band EQ with 2 swept mids and in/out switch
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- 6 auxiliary sends (2 pre, 2 post, 2 pre/post)
- 4 sub groups fed from each channel
- All inputs with level control
- 12 bar meters
- L, R and M main mix outputs
- 2 matrix sections available; can send output to USB
- Individual channel 48V phantom power
- Direct output on every mono channel
- Peak and signal indication on every channel
- Configurable USB stereo audio in/out
- Master level controls on all outputs
- Easy to use layout – all connections and controls on top surface



ZED 428



24 MIC/LINE
INPUTS

2 DUAL STEREO
INPUTS

4 SUB GROUPS

6 AUX SENDS

FEATURES

- 24 mono channels
- 2 dual stereo inputs with 4-band EQ
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain mic/line input
- 4-band EQ with 2 swept mids and in/out switch
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- 6 auxiliary sends (2 pre, 2 post, 2 pre/post)
- 4 sub groups fed from each channel
- All inputs with level control
- 12 bar meters
- L, R and M main mix outputs
- 2 matrix sections available; can send output to USB
- Individual channel 48V phantom power
- Direct output on every mono channel
- Peak and signal indication on every channel
- Configurable USB stereo audio in/out
- Master level controls on all outputs
- Easy to use layout – all connections and controls on top surface



ZED 436



32 MIC/LINE
INPUTS

2 DUAL STEREO
INPUTS

4 SUB GROUPS

6 AUX SENDS

FEATURES

- 32 mono channels
- 2 dual stereo inputs with 4-band EQ
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain mic/line input
- 4-band EQ with 2 swept mids and in/out switch
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- 6 auxiliary sends (2 pre, 2 post, 2 pre/post)
- 4 sub groups fed from each channel
- All inputs with level control
- 12 bar meters
- L, R and M main mix outputs
- 2 matrix sections available; can send output to USB
- Individual channel 48V phantom power
- Direct output on every mono channel
- Peak and signal indication on every channel
- Configurable USB stereo audio in/out
- Master level controls on all outputs
- Easy to use layout – all connections and controls on top surface





ZED R16



ZED-R16 COMBINES AN ANALOGUE RECORDING MIXER WITH A FIREWIRE SOUNDCARD, MIDI CONTROLS AND INGENUOUS 'HOME-STUDIO' ROUTING SO YOU CAN BUILD TRACKS IN THE STUDIO, RECORD LIVE GIGS, MIX-DOWN, REMIX... ALL THROUGH WARM ANALOGUE CIRCUITRY, 4 BAND FULLY PARAMETRIC CLASSIC BRITISH EQ AND OUT TO CRISP, PRECISE DIGITAL FORMAT.

FEATURES

IN THE STUDIO

ZED-R16 combines an imaginative feature set with professional build quality to create the ideal centrepiece for any project studio with big ideas, or larger studios with dedicated live rooms. Control room speaker and alternate speaker outputs, plus two separate artist monitor feeds are provided. In addition to the digital interface, two analogue recording outputs are also available. The ZED-R16 even has a dedicated internal condenser talkback mic. Features such as the dual function audio/MIDI faders and built in sequencer transport were dreamed up by engineers here at A&H who have home studios themselves, so they've made sure they've built in features they really need.

SOUNDCARD

The internal soundcard features 18 FireWire inputs and 18 outputs plus 16 ADAT I/O. Each channel on the mixer has its own independent soundcard channel so instruments can be recorded simultaneously (pre or post EQ) and into the sequencer separately. To minimise clock jitter and provide synchronicity between the ZED-R16 and other devices, the mixer is equipped with the professional JetPLL™ digital audio chipset.

MIX-DOWN AND LIVE

In addition to multi-track recording, the ZED-R16 allows mixing down in analogue, then recording back into the computer in digital. The bundled SONAR X1 LE software makes this a breeze. The story doesn't stop here however - ZED-R16 can be a versatile live FOH mixer too. In this mode, its 4 aux buses become foldback feeds and FX sends, and the main XLR outputs feed the PA system. Recording the live gig is straightforward; the record feed signal can be easily assigned using the four buttons next to the faders.



16 CHANNEL FIREWIRE RECORDING MIXER

AUXILIARY SENDS

Two pre and two post aux buses can be used as feeds for headphone amplifiers in the studio, FX sends anywhere, or wedge foldback live. The talkback function is either routed to the aux or studio outputs, so it's ideal for any environment.

FIREWIRE FLEXIBILITY

The digital audio connections are all present on the rear of the desk. Two FireWire connectors allow the ZED-R16 to be connected to a computer whilst the second socket daisy chains devices. Two switches change the sample rate and routing selection, while 4 connectors allow input and output to ADAT equipment.

ADAT

In addition to the Firewire input and output, the ZED-R16 has 4 ADAT optical sockets. The I/O routing on the ZED-R16 is identical for the Firewire channels and the ADAT optical connection. With a combination of panel switches, the mixer is capable of an incredible 26 simultaneous inputs and outputs. Feed the ZED-R16 from ADAT lightpipe equipment, or record directly out from 16 channels to 2 ADAT machines, or to another soundcard.

MIDI SOFTWARE CONTROL

The MIDI section on the ZED-R16 has been designed to control software transport, with extra mappable controllers ready to be user-assigned. In addition to the ZED-R16's dedicated MIDI controls, all of the channel faders can be switched to become MIDI controllers.

MONITOR SECTION

The ZED-R has two signal paths for monitoring: an output for main control room monitors and outputs for an alternative set of monitors for checking mixes. The control room mix can follow either of the two main analogue outputs or the digital main mix, allowing access to all main audio outputs.

SONAR X1 LE – PROVIDED FREE!

We've included Cakewalk SONAR X1 LE with ZED-R16 so you can immediately start to use it to create your own music.

Key Sonar Features

- Powered by SONAR X1
- 32 audio tracks
- 64 MIDI tracks
- 8 simultaneous inputs and outputs
- 24-bit/96 kHz audio quality
- 24 simultaneous effects
- 8 simultaneous virtual instruments



Operating Levels

Inputs

Mono channel (XLR) Input -6 to -60dBu for nominal (+14dBu in max)
 Mono channel Line Input (Jack socket) +14 to -40dBu (+34dBu maximum)
 Insert point (TRS Jack socket) 0dBu nominal +21dBu maximum
 Stereo Input (Jack sockets) 0dBu nominal (control = Off to +10dB)
 Stereo input (phono sockets) 0dBu nominal (control = Off to +10dB)
 2 Track Input (phono sockets) 0dBu nominal +21dBu maximum

Outputs

Min (2 Track 1) L-R (XLR) +4dBu nominal. +27dBu maximum.
 L-R Insert (TRS Jack socket) 0dBu nominal +21dBu maximum
 2 Track 2 Outputs (Jack sockets) 0dBu nominal. +21dBu maximum.
 All other analogue outputs 0 nominal +21dBu maximum

Frequency Response

Mic in to Mix L/R Out, 30dB gain +/-0.5dB 20Hz to 140kHz.
 Line in to Mix L/R out 0dB gain +/-0.5dB 20Hz to 20kHz
 Stereo in to Mix L/R out +/-0.5dB 20Hz to 40kHz

THD+n

Mic in to Mix L/R Out, 6dB gain 1kHz +10dBu out 0.0025%
 Mic in to Mix L/R Out, 30dB gain 1kHz 0.0045%
 Line in to Mix L/R out 0dB gain +10dBu 1kHz 0.003%
 Stereo in to Mix L/R out 0dB gain +10dBu 1kHz 0.004%

Headroom

Analogue Headroom from nominal (0Vu) 21dB
 Digital converter headroom from nominal analogue (0Vu) 16dB

Digital Performance

Analogue to Digital conversion 24bit 114dB dynamic range (A wtd)
 Digital to Analogue conversion 24bit 118dB dynamic range (A wtd)
 Sample Rate 44.1, 48, 88.2, 96kHz

Noise

Mix Noise, LR out, 16 channels routed, Ref +4dBu, 22-22kHz -88dB (-84dBu)
 Mix Noise, Aux 1-4 out, sends minimum, masters at unity 22-22kHz -86dBu
 Mic Pre EIN @ 60dB gain 150R input Z 22-22kHz -128.5dBu

MIDI

Fader and Rotary values 0-127
 MIDI switches Note on/note off
 Transport control MIDI machine control
 MIDI channel Default 16. User settable

Power consumption 48W







ALLEN & HEATH

AP7205 ISSUE 5

WWW.ALLEN-HEATH.COM



ALLENANDHEATHUK



ALLENHEATHOFFICIAL



ALLEN_HEATH