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

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

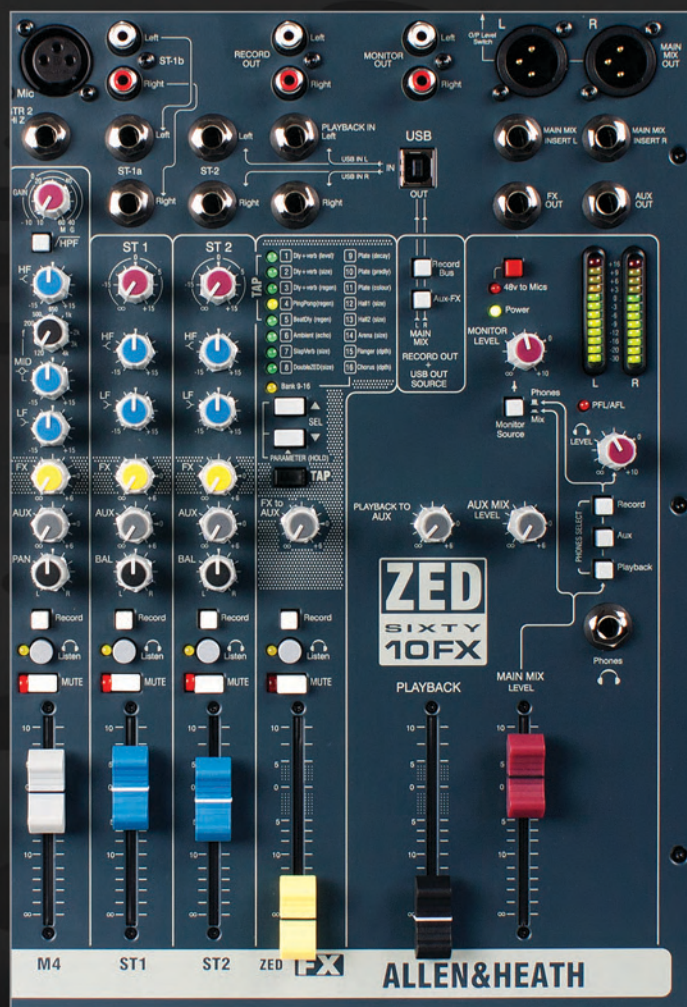DI level switching for sub mixing

ZED
SIXTY
10FX

ON BOARD
FX

di

MusiQ

USB

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

ON BOARD FX

MusiQ

USB

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
12 FX

DuoPre™

ON BOARD FX

MusiQ

USB

SONAR LE
cakewalk

| **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

DuoPre™

ON BOARD FX

MusiQ

USB

SONAR LE
cakewalk

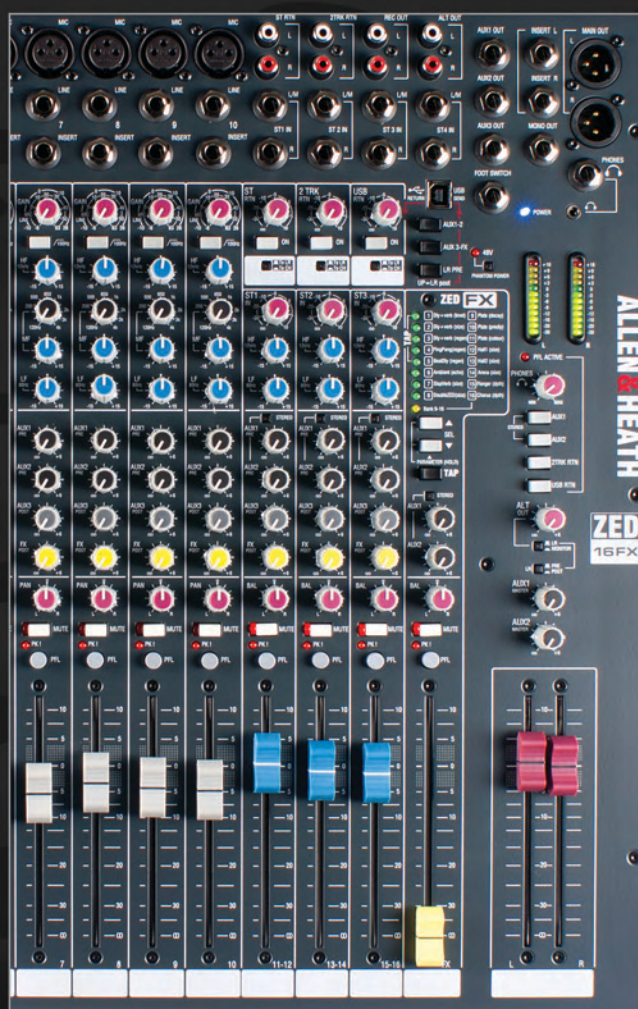**10** MIC/LINE INPUTS　　**3** STEREO INPUTS　　3 AUXES + 1 FX SEND　　ON BOARD FX

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

DuoPre™

MusiQ

USB

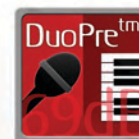**SONAR LE** cakewalk

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

DuoPre ™

ON BOARD FX

MusiQ

USB

SONAR LE cakewalk
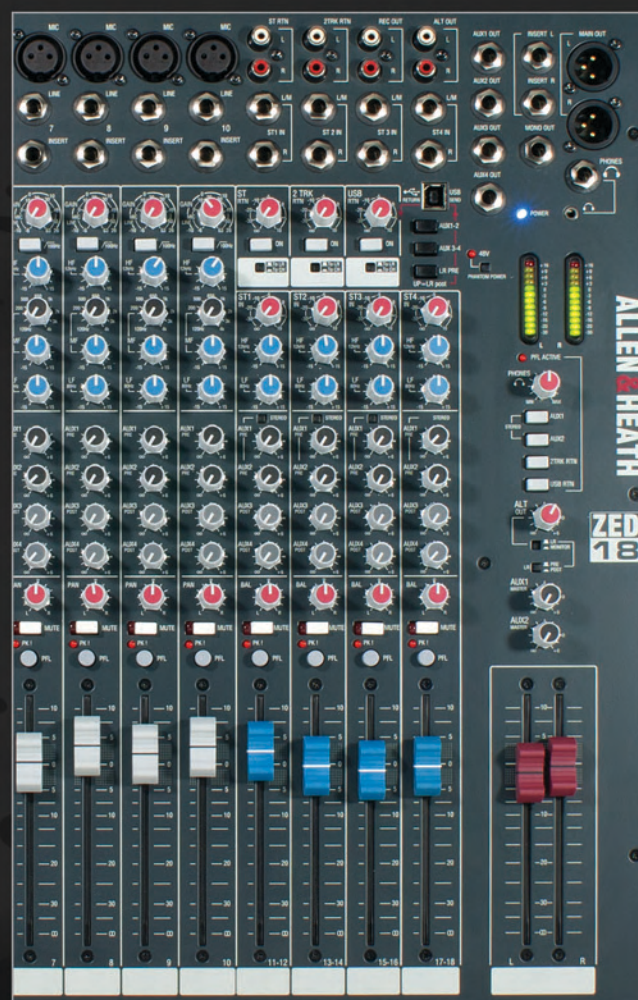
16 MIC/LINE INPUTS   **3** STEREO INPUTS   ON BOARD FX   3 AUXES + 1 FX SEND

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

DuoPre™

MusiQ

USB

SONAR LE cakewalk

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.
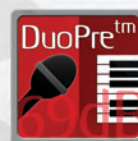
ZED-14 / ZED-18 / ZED-24
Send options:
1) Main Mix Left + Right (Post-fade)
2) Main Mix Left + Right (Pre-Fade)
3) Auxes 1-2
4) Auxes 3-4
Return options:
1) To Stereo 3 channel

19

ZED 420

DuoPre™

MusiQ

USB

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
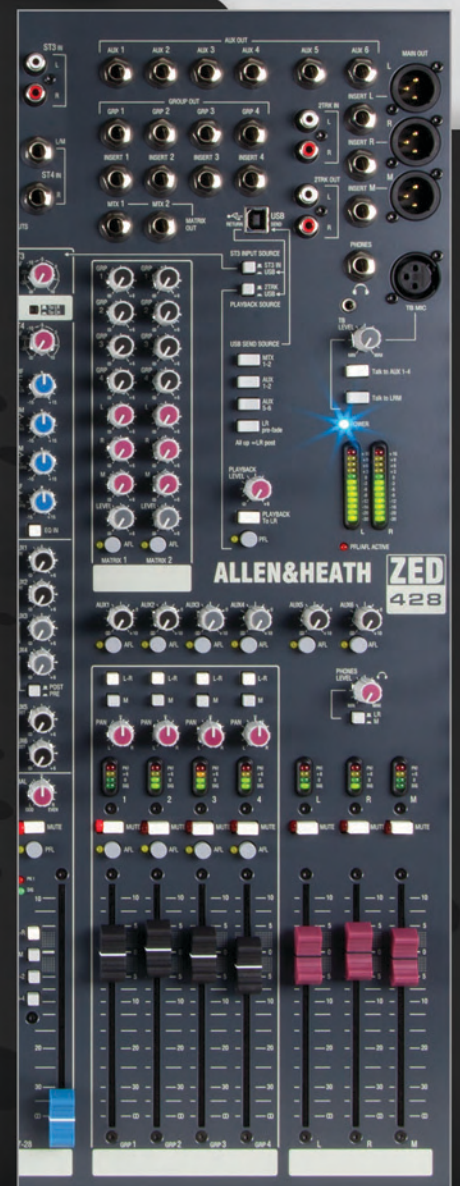
ZED 428

| **24** MIC/LINE INPUTS | **2** DUAL STEREO INPUTS | **4** SUB GROUPS | **6** AUX SENDS |

FEATURES

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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
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L, R and M main mix outputs
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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

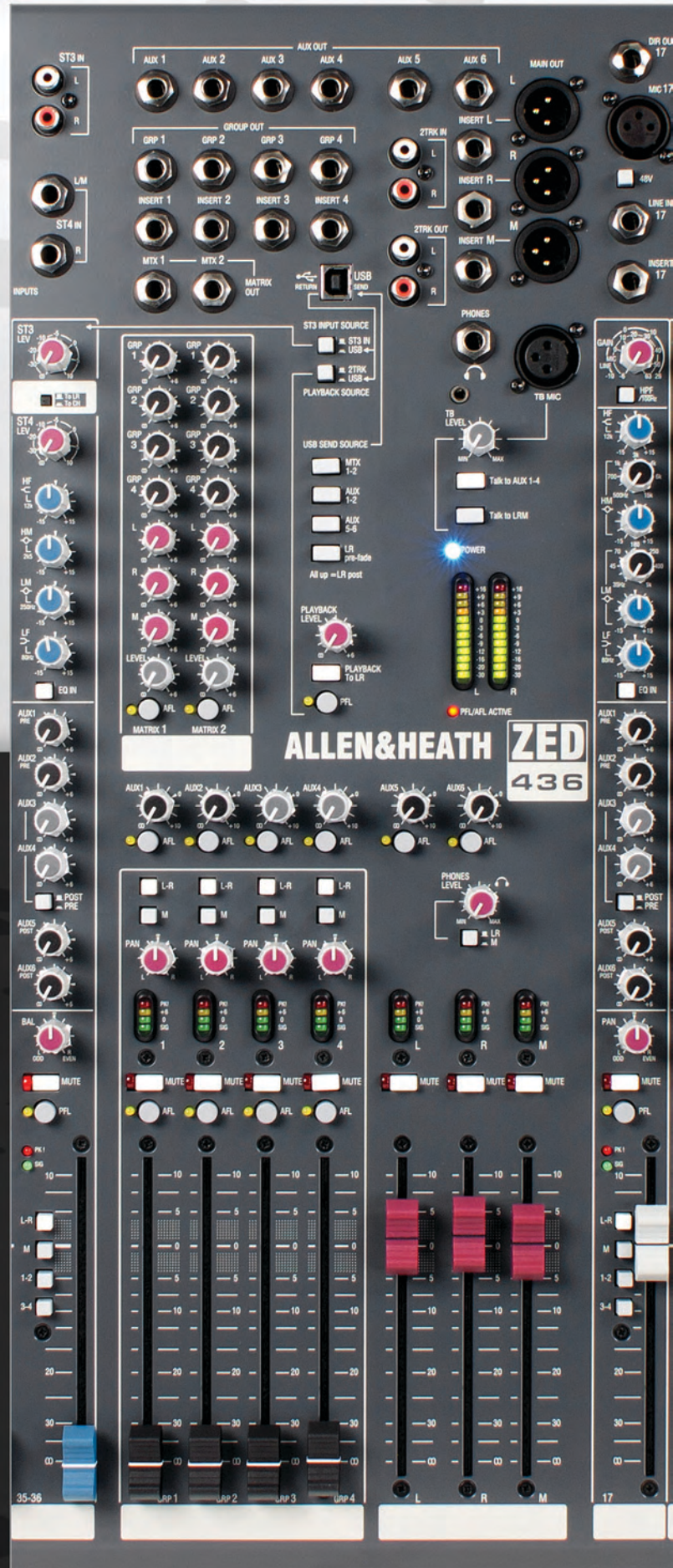| **32** MIC/LINE INPUTS | **2** DUAL STEREO INPUTS | **4** SUB GROUPS | **6** AUX SENDS |

FEATURES

32 mono channels

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ALLEN&HEATH **ZED 436**

23

ZED R16

ZED-R16 COMBINES AN ANALOGUE RECORDING MIXER WITH A FIREWIRE SOUNDCARD, MIDI CONTROLS AND INGENIOUS '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

ZED R16

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