









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.

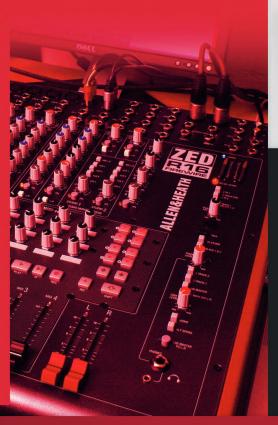
### **SOUND QUALITY**

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** 2 BUS MIXERS **ZED-14** ZED-16FX **ZED-18** ZED-22FX **4 BUS MIXERS** RECORDING

## **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 = 0ff 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 OUT 0.015%

#### leadroom

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

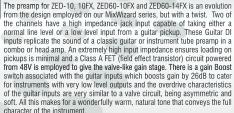
#### Noise

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







### 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 ontions:
- 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 Ontions:

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

### ED-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-stoo navigation and editing—in fact, it's just as easy as using FX pedals.





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



### **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







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



### **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 = 0ff to +10dB)

Stereo Input (Johono sockets) 0dBu nominal (control = 0ff to +10dB)

#### Outnute

L, R & Mono Outputs (L&R XLR, Mono Jack) 0dBu nominal. +21dBu maximum Aux Outputs (Jack sockets) 0dBu nominal. +21dBu maximum Altoputs (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%

#### leadroom

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

### oise

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 US ZEI

### **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.









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

12 bar meters

ALPS 100mm faders Stereo returns & playback All inputs with level control Mono/stereo function on auxes 1&2 Monitor output section Alt stereo output source Configurable USB stereo audio in/out Rack ears available



### **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

Rack ears available







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

Rack ears available



### **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

Rack ears available







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



### **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



# **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

### HD+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%

### Headroon

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

#### DUUPRE

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.

### MUSIO - 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













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



DuoPre"

Musi(









## **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





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

















## **16 CHANNEL FIREWIRE RECORDING MIXER**

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 AND OUT TO CRISP, PRECISE DIGITAL FORMAT.

### **FEATURES**

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 BAND FULLY PARAMETRIC CLASSIC BRITISH EQ Signal and all substance of the state of t 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.

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.

### **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

### 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.



### 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 = 0ff to +10dB)
Stereo input (phono sockets) 
0dBu nominal (control = 0ff 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

Mio 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



