ALLEN & HEATH
WORLD CLASS MIXING

www.allen-heath.com/zed
sales@allen-heath.com

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LARGE FORMAT
LIVE SOUND MIXERS

SMALL FORMAT
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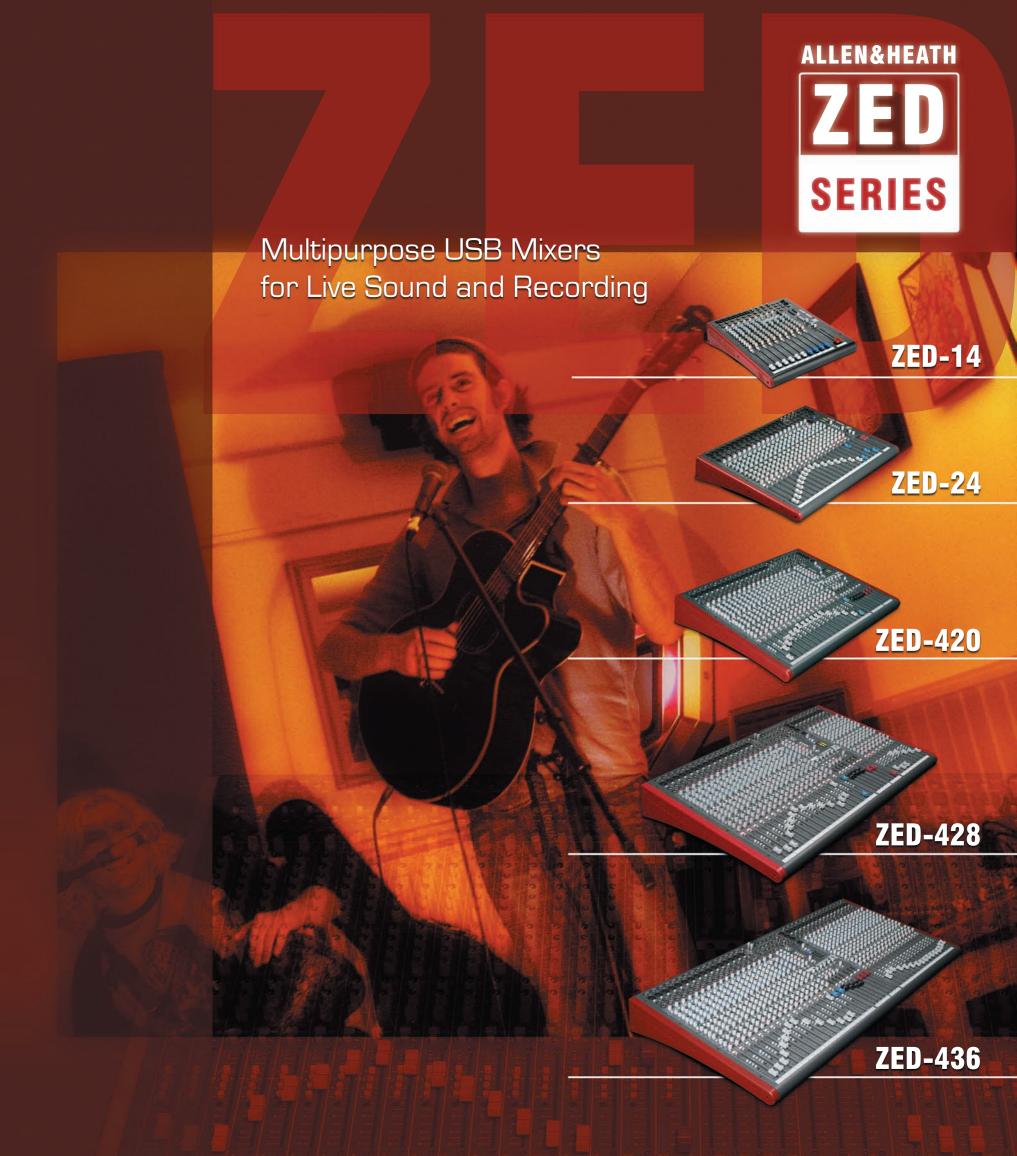
xone:92
PROFESSIONAL DJ MIXER

DJ PRODUCTS

Allen & Heath
Fri 13:04:48

SOUND MANAGEMENT
SYSTEMS

DIGITAL LIVE SOUND
SYSTEMS

AP7205

ALLEN & HEATH
ZED
SERIES

Multipurpose USB Mixers
for Live Sound and Recording

ZED-14

ZED-24

ZED-420

ZED-428

ZED-436

GET INTO YOUR
ZED SPACE
LIVE & STUDIO

Allen & Heath has been in the mixer business for nearly 40 years, so we understand what elements make a good mixer – such as fantastic sound, rugged build quality and imaginative feature sets. We've brought all these principles together to produce the ZED series, a range of competitively-priced mixers for musicians and sound engineers which will last a lifetime, and make mixing a real pleasure.

FEATURE SET

Comprising both stereo and 4-bus versions, ZED's feature set is incredibly advanced for mixers at this level. ZED mixers offer many sources to the mix, 4 or 6 aux sends, 4 groups on the 4 bus versions, a USB send and return (for PC/Mac recording, playback and effects), a unique dual stereo input capability and some very advanced monitoring facilities.

SOLID CONSTRUCTION

This impressive feature set is complemented by 100mm faders for accurate control, the connectors are placed on the top surface for easy plug-in and patching, and the construction, with individual vertically-mounted circuit boards nutted to the top panel, is identical to Allen & Heath's professional touring mixers.

SOUND QUALITY

Our chief designer, Mike Griffin, has been at the forefront of audio innovation for many years and has developed the designs for our spectacularly successful MixWizard, PA and GL series professional live mixers.

Mike is always striving to produce the best possible sound for our products, so ZED mixers utilize MusiQ 3 or 4 band EQ, and incorporate the 'DuoPre™', a mic preamplifier which will not colour or distort your sound, will give you lots of headroom and a truly professional feel.

VERSATILITY

Bundled with Cakewalk's superb SONAR LE production software, ZED mixers can be used for many different tasks:-

- Straightforward live performance mixing, utilizing plug-in effects via USB.

- Mixing sources and managing outputs for AV presentations

- Live recording via USB and digital audio workstation such as **SONAR LE**

- Studio recording or mixing down to produce 2-track recordings.

SONAR LE
DIGITAL AUDIO WORKSTATION

Learn more at cakewalk.com

ZED-14 / ZED-24

ZED-14 is fantastic entry-level mixer for small bands, solo performers or AV applications. Its comprehensive feature set, compact size and fine lines combine to make it one of the best small mixers around. Provided with 6 mic or line inputs, 4 stereo inputs with EQ, there are an incredible 153 controls on the front panel of the ZED-14. The ZED-24 adds a further 10 mono mic/line inputs for more demanding applications.

- 6 mic/line inputs / 16 mic/line inputs
- DuoPre™ mic preamps
- Responsive 3-band, swept mid EQ with MusiQ
- 4 stereo line inputs with gain and 2-band EQ
- 4 aux sends
- Rack-mountable with optional rack-ears, fits into a 11U space
- 100mm professional quality faders
- Flexible dual input options

6 mic/line inputs

16 mic/line inputs

ZED-420 / ZED-428 / ZED-436

Zed 4 bus mixers are excellent for bands, houses of worship, theatres or AV applications. It's got a truly professional feature set, which will fit any sound reinforcement application and professional PA hire stock. Available with 16, 24 or 32 mic or line inputs plus 2 dual stereo inputs with EQ, it boasts 4-band EQ with MusiQ, 4 sub-groups, 6 auxiliary sends and a 7x2 matrix.

- 4 groups
- 16/24/36 mono mic/line inputs with DuoPre™ preamps
- 2 dual stereo channels with gain
- 4-band, 2 swept EQ with MusiQ
- Direct outputs on each mono channel
- Separate L, R & M main buses
- 100mm professional quality faders
- 2 matrix outputs
- Talkback facility to auxes or LRM
- Flexible dual input options

16 mic/line inputs

24 mic/line inputs

32 mic/line inputs

ZED Design Essentials

DuoPre™

Based on the proven pre-amps from the hugely successful PA series, all ZED series mixers have new DuoPre™ pre-amps, 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 pre-amp by using the line input jack socket, which has the great advantage of less noise when using the line input and also matching to a higher input impedance.

MusiQ

ZED-14 and 24 feature a responsive 3-band, swept mid frequency design, while ZED 4-Bus mixers have instead a responsive 4-band EQ taken from the acclaimed GL2400 mixer. Both designs utilise MusiQ – with optimised slope (or Q factor) for equalising individual instruments.

ZED-14, ZED-24 | ZED-420, ZED-428, ZED-436

Lo-Cut Filter | HF

HF | HF Mid

Mid | LF Mid

LF | LF

USB audio flexibility

Getting audio to and from a computer easily is now a common requirement 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 to your ZED, select the USB routing on the mixer and the device on your computer and that's it! Quality audio to and from your PC or Mac. Three switches provide different send/return configurations:-

Option 1 – LR Post-Fader to USB - with all USB switches up, the main output from the LR is sent through the USB connection to record the main mix to software.

Option 2 – LR Pre-fader to USB – the LR prefade signal is sent via USB to record the mix independent of the master faders.

Option 3 – Aux 1-2 to USB – 2 separate record feeds from Aux 1 and 2, independent of the main LR mix and channel fader position, are sent to PC.

Option 4 (ZED-14/24) – Aux 3-4 to USB used to create post channel fader sends to USB for use as effects sends. The USB return acts as the effects return.
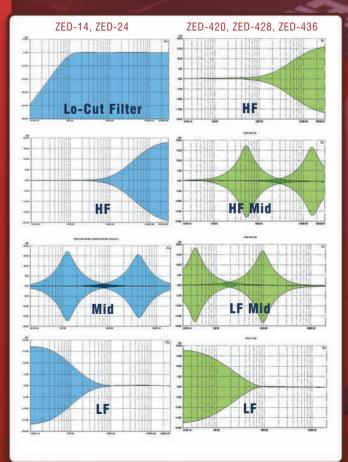
Option 5 (4-bus only) – Auxes 5-6 send a postfade mix for FX sends.

Option 6 (4-bus only) – Matrix 1-2 outputs are sent to the USB port enabling a combination of LRM and Groups to be recorded. Ideal for adding backline to the record mix.

SONAR LE - provided Free!

We've included Cakewalk SONAR LE with all ZED mixers so you can immediately start to use it to create your own music – just add a PC and a it couldn't be more straightforward 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 LE and your ZED mixer together in many ways – for example, straightforward recording of a stereo mix, recording tracks individually to build up a song, or sending a postfade mix from ZED and inserting an effects plug-in from SONAR LE, returning the post-effects signal to the mix in ZED.
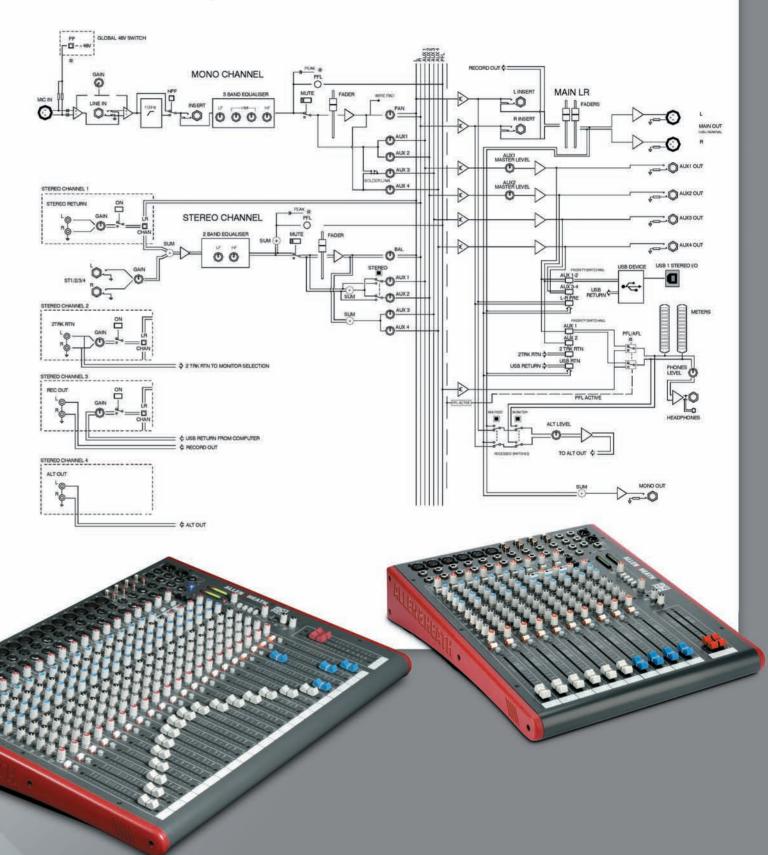
The package also includes 2 instruments, 6 MIDI effects and 14 audio effects. It's been updated with new features from the acclaimed SONAR 6, making SONAR LE the first native Digital Audio Workstation for Windows XP/Vista – and has support for up to 64 tracks and 24 track effects, 8 physical input/outputs at up to 24bit/192kHz. SONAR LE is the perfect digital audio workstation to work with ZED.

ZED 14 ZED 24

Block Diagram

Multipurpose Mixers for live sound & recording
- 6 or 16 mono channels
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain 'DuoPre' mic line input
- 3 band EQ with MusiQ
- 4 auxes
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- 4 stereo channels with 2-band EQ and inputs for extra sources
- 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 LE bundled with mixer
- Rack ears available
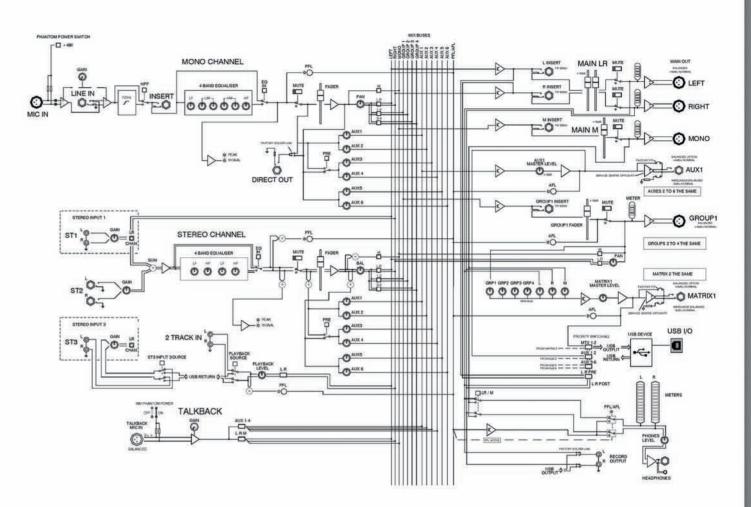
![ZED 420 / ZED 428 / ZED 436]

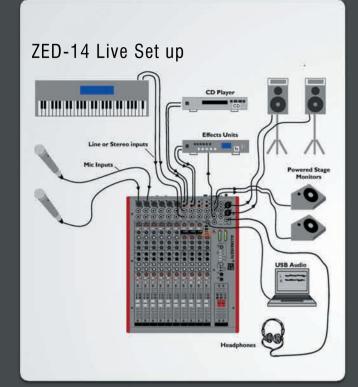## Block Diagram

4 Bus Mixer for live sound and recording

- 16, 24 or 32 mono channels
- 2 dual stereo inputs with 4-band EQ
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain 'DuoPre' 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
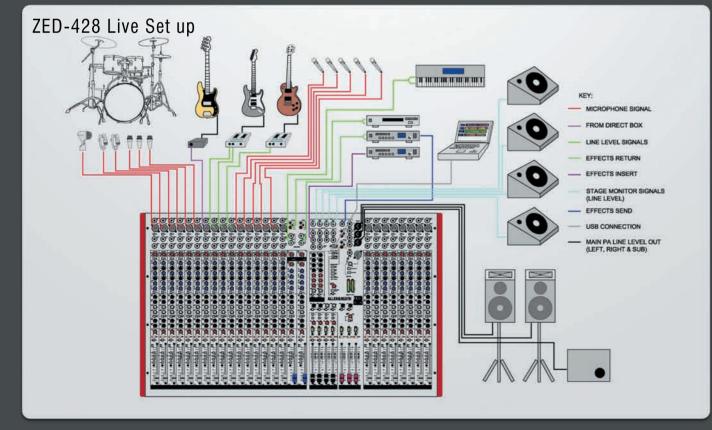- Cakewalk SONAR LE bundled with mixer

Applications

ZED-14 Live Set up

ZED-14 Recording Set up

ZED-428 Live Set up

KEY:

- MICROPHONE SIGNAL
- FROM DIRECT BOX
- LINE LEVEL SIGNALS
- EFFECTS RETURN
- EFFECTS INSERT
- STAGE MONITOR SIGNALS (LINE LEVEL)
- EFFECTS SEND
- USB CONNECTION
- MAIN PA LINE LEVEL OUT (LEFT, RIGHT & SUB)

Technical Specs

ZED-14, ZED-24

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

USB Audio CODEC (Coder/Decoder)

USB Audio In/Out USB 1.1 compliant 16bit.

Sample Rate 32, 44.1, or 48kHz

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)

ZED-420, ZED-428, ZED-436

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

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This impressive feature set is complemented by 100mm faders for accurate control, the connectors are placed on the top surface for easy plug-in and patching, and the construction, with individual vertically-mounted circuit boards nutted to the top panel, is identical to Allen & Heath's professional touring mixers.

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• Mixing sources and managing outputs for AV presentations

• Live recording via USB and digital audio workstation such as **SONAR LE**

• Studio recording or mixing down to produce 2-track recordings.

SONAR LE
DIGITAL AUDIO WORKSTATION

Learn more at cakewalk.com

ZED-14 / ZED-24

ZED-14 is fantastic entry-level mixer for small bands, solo performers or AV applications. Its comprehensive feature set, compact size and fine lines combine to make it one of the best small mixers around. Provided with 6 mic or line inputs, 4 stereo inputs with EQ, there are an incredible 153 controls on the front panel of the ZED-14. The ZED-24 adds a further 10 mono mic/line inputs for more demanding applications.

- 6 mic/line inputs / 16 mic/line inputs
- DuoPre^{tm} mic preamps
- Responsive 3-band, swept mid EQ with MusiQ
- 4 stereo line inputs with gain and 2-band EQ
- 4 aux sends
- Rack-mountable with optional rack-ears, fits into a 11U space
- 100mm professional quality faders
- Flexible dual input options

6 mic/line inputs

16 mic/line inputs

ZED-420 / ZED-428 / ZED-436

Zed 4 bus mixers are excellent for bands, houses of worship, theatres or AV applications. It's got a truly professional feature set, which will fit any sound reinforcement application and professional PA hire stock. Available with 16, 24 or 32 mic or line inputs plus 2 dual stereo inputs with EQ, it boasts 4-band EQ with MusiQ, 4 sub-groups, 6 auxiliary sends and a 7x2 matrix.

- 4 groups
- 16/24/36 mono mic/line inputs with DuoPre^{tm} preamps
- 2 dual stereo channels with gain
- 4-band, 2 swept EQ with MusiQ
- Direct outputs on each mono channel
- Separate L, R & M main buses
- 100mm professional quality faders
- 2 matrix outputs
- Talkback facility to auxes or LRM
- Flexible dual input options

16 mic/line inputs

24 mic/line inputs

32 mic/line inputs

ZED Design Essentials

DuoPre™

Based on the proven pre-amps from the hugely successful PA series, all ZED series mixers have new DuoPre^{tm} pre-amps, 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 pre-amp by using the line input jack socket, which has the great advantage of less noise when using the line input and also matching to a higher input impedance.

MusiQ

ZED-14 and 24 feature a responsive 3-band, swept mid frequency design, while ZED 4-Bus mixers have instead a responsive 4-band EQ taken from the acclaimed GL2400 mixer. Both designs utilise MusiQ – with optimised slope (or Q factor) for equalising individual instruments.

ZED-14, ZED-24 | ZED-420, ZED-428, ZED-436

Lo-Cut Filter | HF

HF | HF Mid

Mid | LF Mid

LF | LF

USB audio flexibility

Getting audio to and from a computer easily is now a common requirement 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 to your ZED, select the USB routing on the mixer and the device on your computer and that's it! Quality audio to and from your PC or Mac. Three switches provide different send/return configurations:-

Option 1 – LR Post-Fader to USB - with all USB switches up, the main output from the LR is sent through the USB connection to record the main mix to software.

Option 2 – LR Pre-fader to USB – the LR prefade signal is sent via USB to record the mix independent of the master faders.

Option 3 – Aux 1-2 to USB – 2 separate record feeds from Aux 1 and 2, independent of the main LR mix and channel fader position, are sent to PC.

Option 4 (ZED-14/24) – Aux 3-4 to USB used to create post channel fader sends to USB for use as effects sends. The USB return acts as the effects return.
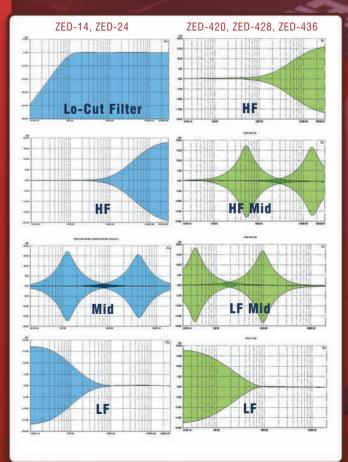
Option 5 (4-bus only) – Auxes 5-6 send a postfade mix for FX sends.

Option 6 (4-bus only) – Matrix 1-2 outputs are sent to the USB port enabling a combination of LRM and Groups to be recorded. Ideal for adding backline to the record mix.

SONAR LE - provided Free!

We've included Cakewalk SONAR LE with all ZED mixers so you can immediately start to use it to create your own music – just add a PC and a it couldn't be more straightforward 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 LE and your ZED mixer together in many ways – for example, straightforward recording of a stereo mix, recording tracks individually to build up a song, or sending a postfade mix from ZED and inserting an effects plug-in from SONAR LE, returning the post-effects signal to the mix in ZED.
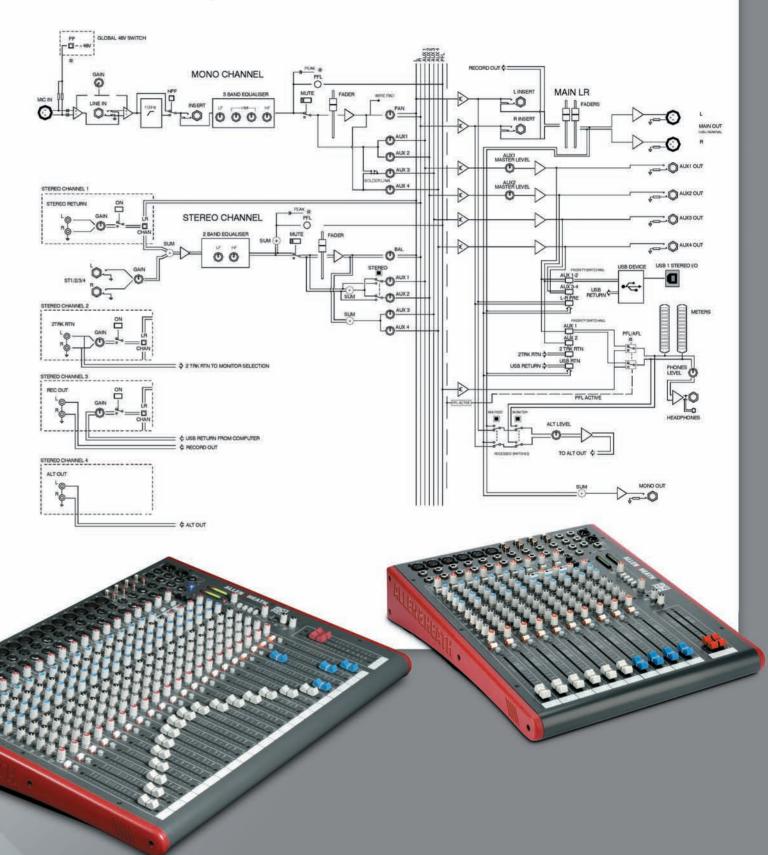
The package also includes 2 instruments, 6 MIDI effects and 14 audio effects. It's been updated with new features from the acclaimed SONAR 6, making SONAR LE the first native Digital Audio Workstation for Windows XP/Vista – and has support for up to 64 tracks and 24 track effects, 8 physical input/outputs at up to 24bit/192kHz. SONAR LE is the perfect digital audio workstation to work with ZED.

ZED 14 ZED 24

Multipurpose Mixers for live sound & recording

- 6 or 16 mono channels
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain 'DuoPre' mic line input
- 3 band EQ with MusiQ
- 4 auxes
- Illuminated mute
- Sound image pan
- Illuminated PFL & peak warning indicator
- ALPS 100mm faders
- 4 stereo channels with 2-band EQ and inputs for extra sources
- 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 LE bundled with mixer
- Rack ears available

Block Diagram
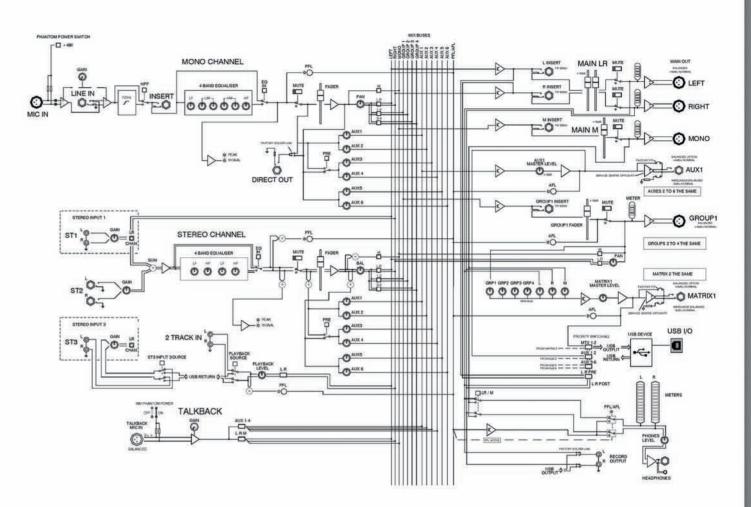
ZED 420 **ZED 428** **ZED 436**

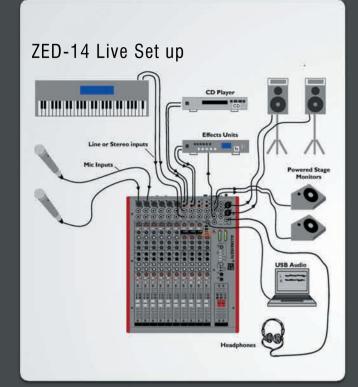# Block Diagram

4 Bus Mixer for live sound and recording

- 16, 24 or 32 mono channels
- 2 dual stereo inputs with 4-band EQ
- Neutrik mic XLR
- Neutrik 1/4 inch jacks
- Channel insert
- Super wide gain 'DuoPre' 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
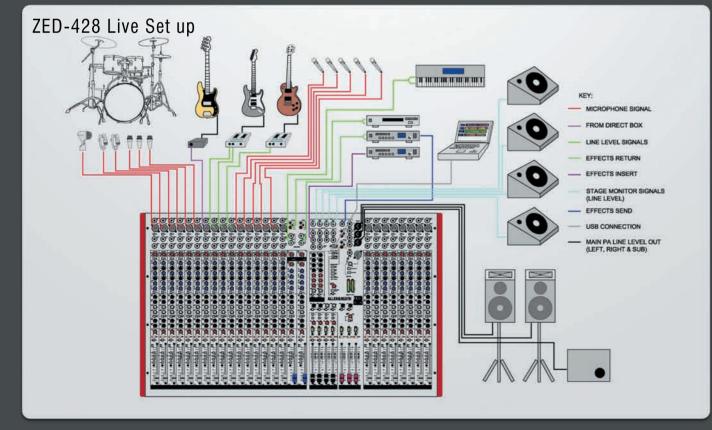- Cakewalk SONAR LE bundled with mixer

Applications

ZED-14 Live Set up

CD Player
Effects Units
Line or Stereo inputs
Mic Inputs
Powered Stage Monitors
USB Audio
Headphones

ZED-14 Recording Set up

Main Studio Speakers
KT-88
Alt Studio Speakers
Amp
Effects Units
Mic Inputs
Line Inputs
Powered Monitor
USB Audio
Headphones

ZED-428 Live Set up

KEY:
— MICROPHONE SIGNAL
— FROM DIRECT BOX
— LINE LEVEL SIGNALS
— EFFECTS RETURN
— EFFECTS INSERT
— STAGE MONITOR SIGNALS (LINE LEVEL)
— EFFECTS SEND
— USB CONNECTION
— MAIN PA LINE LEVEL OUT (LEFT, RIGHT & SUB)

Technical Specs

ZED-14, ZED-24

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

USB Audio CODEC (Coder/Decoder)

USB Audio In/Out USB 1.1 compliant 16bit.

Sample Rate 32, 44.1, or 48kHz

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)

ZED-420, ZED-428, ZED-436

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