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 SOPHISTICATION 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.

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
- ZED-10
- ZED-12FX
- ZED-16FX
- ZED-22FX
- ZED-24

2 BUS MIXERS
- ZED-22FX
- ZED-10
- ZED-14
- ZED-16FX
- ZED-22FX
- ZED-24

4 BUS MIXERS
- ZED-32
- ZED-436

RECORDING
- ZED-R16

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 (line) input: 0 dBu nominal + 1 dBu in max
  - Stereo channel (line) input: 0 dBu nominal + 13 dBu in max
  - Stereo input (Jack or phone sockets): 0 dBu nominal (control = Off to +15 dBu)
- **Outputs**
  - L/R Outputs (XLR): 0 dBu nominal + 21 dBu maximum
  - Aux & FX Outputs (Jack sockets): 0 dBu nominal + 21 dBu maximum
  - Record & Monitor Outputs (phone sockets): 0 dBu nominal + 21 dBu maximum
- **Frequency Response**
  - Mic in to Mix L/R, Out: 0.25 Hz to 30 kHz
  - Mic in to Mix L/R, Out: 0 dBu input 0.002% THD
  - Line in to Mix L/R, Out: 0 dBu input 0.01% THD
  - Mic in to Mix L/R, Out: 0 dBu input 0.001% THD
  - Mic in to Mix L/R, Out: 0 dBu input 0.002% THD
- **Noise**
  - Analog Headroom from nominal line input 21 dB
  - USB in & out headroom from nominal line 14 dB
- **Main Mic**
  - Dynamic input: 0 dBu input 150 Hz: 22–22 kHz: 0.02% THD
  - Dynamic input: 0 dBu input 150 Hz: 22–22 kHz: 0.02% THD
- **USB Audio CODEC (Codec/Encoder)**
  - USB Audio In/Out USB 1.1 compatible 192 kHz Sample Rate 32, 44.1, or 48 kHz

**GUITAR DI**

The preamp for ZED-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 handling either a normal level input of a line level input from a guitar pick-up. These 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 FX (foot effect transistor) circuit powered from 48 V is employed to give the valve-like gain stage. There is a gain Boost switch associated with the guitar inputs which boosts gain by 25 dB 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 EQ with switchable 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 in 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. EQ quality audio in and from your PC or Mac. Switches and connections through jack socket terminals provides 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 buses 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 buses 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 fingertips and on their recordings. Our DSP engineers worked hard, crafting and refining beautiful reveal 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.
**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 input
- 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 input
- 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
60mm professional quality faders
3-band, swept mid EQ with MusiQ
Configurable USB stereo audio input
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: +4 dBu nominal (+8 to +30dBu for nominal (+13dBu in max)
- Mono channel: Line Input (Jack socket): +10 to +30dBu (+35dBu maximum)
- Insert point (TRS Jack socket): Off nominal (+5dB to +10dB)
- Stereo Input (Jack sockets): Stereo nominal (center = -10dB to +10dB)

Output
- L, R & Mono Outputs (L/R, Mono Jack): Off nominal (+21dBu maximum)
- Aux Outputs (Jack sockets): Off nominal (+21dBu maximum)
- Alt Outputs (phone sockets): Off nominal (+21dBu maximum)

Frequency Response
- Mic in to Mix L/R, +0.004% @ 25kHz to 20kHz
- Line in to Mix L/R and Out dB gain = +0.04 to -10dB, 10kHz to 30kHz
- THD =
  - Mic in to Mix L/R out, +0.004@ 1kHz to 20kHz
  - Line in to Mix L/R out, +0.004@ 1kHz to 20kHz

Headroom
- Analog line headroom from nominal to 84dBu (+2dB)
- USB in/out headroom from nominal to 84dBu (+4dB)

Noise
- Mic Pre EN @ max gain 100Hz input 0.22-22kHz = -120dBu
- Mic L/R in: L/R: +0.004% @ 1kHz to 20kHz
- Mic L/R, +0.004% @ 1kHz to 20kHz

USB Audio CODEC (Codec/Decoder)
- USB Audio Codec USB 1.1 compliant HiBit
- Sample Rate 32, 44.1, or 48kHz
ZED 2 BUS MIXERS

**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
- Monophonic function on auxes 1 & 2
- Monitor output section
- All stereo output source
- Configurable USB stereo audio in/out
- Rack ears available

**ZED 12 FX**

![ZED 12 FX Image]

**ZED 14**

![ZED 14 Image]

- 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
- Monophonic function on auxes 1 & 2
- Monitor output section
- All stereo output source
- Configurable USB stereo audio in/out
- Rack ears available
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 meter
Sound image pan
Illuminated PFL & peak warning indicator
ALPS 100mm faders
Stereo returns & playback
All inputs with level control
12 bar meters
Monostereo function on auxes 1 & 2
Monitor output section
All 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 meter
Sound image pan
Illuminated PFL & peak warning indicator
ALPS 100mm faders
Stereo returns & playback
All inputs with level control
12 bar meters
Monostereo function on auxes 1 & 2
Monitor output section
All stereo output source
Configurable USB stereo audio in/out
Rack ears available
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
All stereo output source
Configurable USB stereo audio input
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
Mute channel (XLR) input +4 to -63dBu for nominal (+17dBu in max)
Mute channel, line input (Jack socket) +6 to -20dBu (+30dBu maximum)
Insert point (TRS Jack socket) 0dBu nominal +27dBu maximum
Stereo input (Jack socket) 0dBu nominal (control = Off to +15dB)
Stereo input (phones sockets) 0dBu nominal (control = Off to +15dB)
2 Track input (phones sockets) 0dBu nominal +27dBu maximum

Outputs
L, R & Mono Outputs (XLR) +4dBu nominal, +27dBu maximum
L, R & M insert (TRS Jack socket) +4dBu nominal, +27dBu maximum
Group Outputs (Jack sockets) +9dBu nominal, +27dBu maximum
Group Inputs (TRS Jack socket) 0dBu nominal, +27dBu maximum
Aux Outputs (Jack sockets) -2dBu nominal, -27dBu maximum (The Option = -2)
Matrix Outputs (TRS Jack socket) -2dBu nominal, -27dBu maximum (Bal Option = +4)
2 Track Outputs (phones sockets) 0dBu nominal +27dBu maximum
Direct Out (TRS Jack socket) 0dBu nominal +27dBu maximum

Frequency Response
Mic in to Mic LR out (XLR) gain +0.5/-1dB 20Hz to 20kHz
Line in to Mic LR out (XLR) gain +0.5/-1dB 10Hz to 30kHz
Line in to Mic LR out (TRS) gain +0.5/-1dB 10Hz to 30kHz

THD+n
Mic in to LR out (XLR) gain 10dBu +0.004%
Mic in to LR out (TRS) gain 10dBu +0.014%
Line in to LR out (XLR) gain 10dBu +0.005%
Line in to LR out (TRS) gain 10dBu +0.003%

Headroom
Analog to Headroom from nominal (XLR) +25dB
USB in & out headroom from nominal (XLR) +4dB
USB Audio CODEC (Decoder/Encoder)
USB Audio in/out USB 1.1 compatible 16bit.
Sample Rate: 32, 44.1, or 48kHz

Rubs
Mic Noise, LR out, 18 channels routed: Ref = -4dBu, 22-23kHz -48dB (-86dBu)
Mic Noise, LR out, 24 channels routed: Ref = -4dBu, 22-23kHz -48dB (-86dBu)
Mic Noise, LR out, 32 channels routed: Ref = -4dBu, 22-23kHz -48dB (-86dBu)
Mic Noise, LR out, 40 channels routed: Ref = -4dBu, 22-23kHz -48dB (-86dBu)

USB Audio CODEC (Decoder/Encoder)
USB Audio In/Out USB 1.1 compatible 16bit.
Sample Rate: 32, 44.1, or 48kHz

DUO PRE

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 mixers, utilizing 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 in and from your PC or Mac. Switches and connection through jack socket termina provide different send/return configurations.

ZED-14 / ZED-18 / ZED-24
Send options:
1) Main Mic Left + Right (Pre-Fade)
2) Main Mic Left + Right (Post-Fade)
3) Auxes 1-2
4) Auxes 3-4
5) Return options:
1) To Stereo 3 channel
2) To Main 1-2
3) To 1-2 Auxes
4) To 3-4 Auxes
5) To Return 1-2
6) To Return 3-4
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
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 pin
Illuminated PFL & peak warning indicator
ALPS 100mm faders
6 auxiliary sends (3 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 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 alternative 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 minimal 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 maximise 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 talkback feeds and FX sends, and the main XLR outputs feed the PA system. Recording the live gig is straightforward; the return 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 connections 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 MGR 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-R16 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 = Off to +10dB)
- Stereo Input (phone sockets): 0dBu nominal (control = Off to +10dB)
- 2 Track Input (phone sockets): 0dBu nominal +21dBu maximum

**Outputs**

- Min (2 Track) L-R (2LR) +4dBu nominal, +27dBu maximum.
- L-R Insert (TRS Jack socket): 0dBu nominal +21dBu maximum
- 2 Track 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: +10dBu 1kHz to 140kHz.
- Line in to Mix L/R out 0dB gain: +10dBu 1kHz to 20kHz.
- Stereo in to Mix L/R out: +10dBu 1kHz to 40kHz

**THD + n**

- Mic in to Mix L/R Out, 6dB gain 1kHz: +10dBu 0.0025%
- Line in to Mix L/R out 0dB gain: +10dBu 1kHz: 0.003%
- Stereo in to Mix L/R out: +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 -12dBu, 22-22kHz: -86dB (-84dBu)
- Mix Noise, Aux 1-4 out, sends minimum, masters at unity 22-22kHz: -86dBu
- Mic Pre EIN @ 60dB gain 150R input 22-22kHz: -128.5dBu

**MIDI**

- Fader and Rotary values: 0-127
- MIDI switches: Note on/off, off
- Transport control: MIDI machine control
- MIDI channel: Default: 16, User settable
- Power consumption: 48W