# 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