

# Allen & Heath ZED-428 Specs

Total # Of Inputs	28
Mic/Line Inputs	24 x 3-Pin XLR Female Mic Inputs (Balanced) 24 x 1/4" TRS Line Inputs (Balanced/Unbalanced)
Stereo Line Inputs	4 x 1/4" TRS Line Inputs (Two Stereo Pairs, Balanced/Unbalanced)
In-Line Inputs>Returns	No
Aux Sends	6 x 1/4" TRS Mono (Balanced)
Aux Returns	4 x RCA Coaxial Line Inputs (Two Stereo Pairs, Unbalanced)
Inserts	24 x 1/4" TRS on Mono Channels (Unbalanced) 4 x 1/4" TRS on Group Buses (Unbalanced) 2 x 1/4" TRS on Stereo Main Bus (Unbalanced) 1 x 1/4" TRS on Mono Main Bus (Unbalanced)
Channel Direct Out	24 x 1/4" TRS (Balanced)
BUS (Group) Outputs	4 x 1/4" TRS Group Outputs (Balanced)

2 x 1/4" TRS Matrix Outputs  
(Balanced)

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Main Outputs 3 x 3-Pin XLR Male (One Stereo Pair  
and One Mono, Balanced)

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Monitor Outputs 1 x 1/4" TRS Stereo Headphone  
Output (Unbalanced)  
1 x 1/8" / 3.5 mm TRS Stereo  
Headphone Output (Unbalanced)

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2-Track I/O 2 x RCA Coaxial 2-Track Input (One  
Stereo Pair, Unbalanced)  
2 x RCA Coaxial 2-Track Output (One  
Stereo Pair, Unbalanced)

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ALT I/O 1 x USB Type-B (2-Channel  
Send/Return)

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Talkback Mic Input 1 x 3-Pin XLR Female (Balanced)

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EQ Section High (All Channels):  $\pm 15$  dB Shelving  
Filter at 12 kHz  
High-Mid (Mono Channels):  $\pm 15$  dB  
Peaking Filter at Selectable Frequency  
(500 Hz to 15 kHz, Sweepable)  
High-Mid (Stereo Channels):  $\pm 15$  dB  
Peaking Filter at 2.5 kHz  
Low-Mid (Mono Channels):  $\pm 15$  dB  
Peaking Filter at Selectable Frequency  
(35 Hz to 1 kHz, Sweepable)  
Low-Mid (Stereo Channels):  $\pm 15$  dB  
Peaking Filter at 250 Hz  
Low (All Channels):  $\pm 15$  dB Shelving  
Filter at 80 Hz

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High-Pass Filter 12 dB/Octave at 100 Hz, Switchable

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Solo/Mute	Mute and PFL Solo
Channel Level Control	100mm Fader
Trim/Gain Control	Rotary Control
Gain Range	Mic Inputs: -6 to +63 dB Line Inputs: -10 to +26 dB Stereo Inputs: $-\infty$ to +10 dB Faders: $-\infty$ to +10 dB Returns: $-\infty$ to +10 dB Aux Masters: $-\infty$ to +10 dB Matrix Levels: $-\infty$ to +6 dB
Phantom Power	+48 VDC, Selectable per Channel
Metering	Dual 12-Segment LEDs 4-Segment LED per Group Output 4-Segment LED per Main Output Signal LED per Channel Peak LED per Channel
USB Specification	USB 1.1 Compliant
Bit Depth	USB: 16-Bit
Sample Rates	USB: 32 kHz, 44.1 kHz, or 48 kHz
Nominal Input Level	Mic Input: -63 to +6 dBu Mono Line Input: -26 to +10 dBu Stereo Line Input: 0 dBu (+10 dB with Control Off) Insert Point: 0 dBu
Maximum Input Level	Mic Input: +17 dBu

Mono Line Input: +30 dBu  
Insert Point: +21 dBu

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Nominal Output Level

XLR Main Outputs: +4 dBu  
Group Outputs: +4 dBu  
Aux Outputs: -2 dBu  
Matrix Outputs: -2 dBu  
Inserts: -2 dBu  
2-Track Output: 0 dBu  
Direct Output: 0 dBu

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Maximum Output Level

XLR Main Outputs: +27 dBu  
Group Outputs: +27 dBu  
Aux Outputs: +21 dBu  
Matrix Outputs: +21 dBu  
Inserts: +21 dBu  
2-Track Output: +21 dBu  
Direct Output: +21 dBu

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Frequency Response

Mic In to Main Out (30 dB Gain): 20 Hz to 20 kHz (+0.5 dB, -1 dB)  
Line In to Main Out (0 dB Gain): 10 Hz to 30 kHz (+0.5 dB, -1 dB)  
Stereo In to Main Out: 10 Hz to 30 kHz (+0.5 dB, -1 dB)

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Mic In to Main Out (0 dB Gain, 1 kHz, +10 dBu Out): 0.004%  
Mic In to Main Out (30 dB Gain, 1 kHz): 0.014%  
Line In to Main Out (0 dB Gain, 1 kHz, 0 dBu): 0.005%  
Stereo In to Main Out (0 dB Gain, 1 kHz, +10 dBu): 0.003%

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Headroom

Analog Headroom from Nominal (0 VU): 21 dB  
USB In and Out Headroom from Nominal (0 VU): 14 dB

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Noise	Mic Pre EIN: -127 dBu (Maximum Gain, 150-Ohm Input, 22 Hz to 22 kHz) Mix Noise: -89 dB (-85 dBu) (L/R Out, 24 Channels Routed, Ref +4 dBu, 22 Hz to 22 kHz)
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Power Consumption	60 W Maximum
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Power Requirements	100 to 240 VAC, 47 to 63 Hz
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Dimensions (W x H x D)	36.6 x 5.1 x 22.1" / 93.0 x 12.9 x 56.0 cm
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Weight	40 lb / 18.1 kg
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## Packaging Info

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Package Weight	62 lb
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Box Dimensions (LxWxH)	42 x 22 x 10.8"
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