

GLD Specification

Inputs

XLR Mic/Line Inputs	Balanced, (All XLR on GLD-80 and AudioRacks)
Mic/Line Preamp	Fully recallable
Input Sensitivity	-60 to +15dBu
Analogue Gain	+5 to +60dB, 1dB steps
Pad	-20dB
Maximum Input Level	+32dBu
Input Impedance	>4k Ω (Pad out), >10k Ω (Pad in)
Mic/Line Channel noise	20-20kHz, Direct Out @ unbalanced out
Mic EIN	-127dB with 150 Ω source
Unity gain (Pad in)	-90dBu
Low gain (5dB, Pad out)	-93dBu
Mid gain (30dB, Pad out)	-89dBu
Mic/Line Channel THD+N	20-20kHz, Direct Out @ unbalanced out
Unity gain (Pad in)	0.005% -86dBu @ 1kHz, 0dBu output
Low gain (5dB, Pad out)	0.003% -89dBu @ 1kHz, 0dBu output
Mid gain (30dB, Pad out)	0.004% -88dBu @ 1kHz, 0dBu output
RCA Line Inputs	Unbalanced (GLD-80)
Input Sensitivity	-24 to +24dBu, nominal 0dBu
Trim	+/-24dB, recallable
Maximum Input Level	+18dBu
Input Impedance	>10k Ω
RCA channel Noise	-92dBu 20-20kHz
RCA channel THD+N	0.0035% -90dBu @ 1kHz, 0dBu output

Outputs

XLR Outputs	Balanced, Relay protected
Output Impedance	<75 Ω
Nominal Output	+4dBu = 0dB meter reading
Maximum Output Level	+22dBu
Residual Output Noise	-91dBu (muted, 20-20kHz)
RCA Line Outputs	Balanced, Relay protected
Output Impedance	<75 Ω
Nominal Output	0dBu = 0dB meter reading
Maximum Output Level	+18dBu
Residual Output Noise	-94dBu (muted, 20-20kHz)
Digital Outputs	48kHz sampling rate
SPDIF	RCA, 600mV, coax terminated input 75 Ω
AES3 2 ch XLR output	XLR, 2.5Vpp balanced terminated 110 Ω

System

Measured balanced XLR in to XLR out, 20-20kHz, minimum Gain, Pad out	
Dynamic Range	112dB
System Signal to Noise	-90dB
Frequency Response	0/-0.25dB @ 20Hz, 0/-0.5dB @ 20kHz
System peak level THD+N	0.0055% -68dBu @ +17dBu output, 1kHz
System Line level THD+ N	0.0022%, -84dBu @ +9dBu output, 1kHz
Headroom	+18dB
Internal operating Level	0dBu
dBFS Alignment	+18dBu = 0dBFS (+22dBu at XLR output)
Meter Calibration	0dB meter = -18dBFS (+4dBu at XLR out)
Meter Peak indication	-3dBFS (+19dBu at XLR out)
Meter Type	Fast (peak) response
Sampling Rate	48kHz +/-100PPM
ADC	24-bit Delta-Sigma
DAC	24-bit Delta-Sigma
Latency	1.49ms (GLD-80 local XLR in to XLR out) 0.68ms (GLD-80 local XLR in to digital out)
USB Playback	2 channel, WAV, MP3, M4A, FLAC 44.1/48kHz
USB Record	2 channel, 48kHz / 16bit - WAV
I/O Port	64 channel bi-directional
Card Options	A&H ACE, MADI, Dante, ES, Waves, MMO
Operating Temperature Range	0 deg C to 35 deg C (32 deg F to 95 deg F)

Mains Power

GLD-80	100-240V AC, 50/60Hz, 95W max
GLD-AR2412	100-240V AC, 50/60Hz, 70W max
GLD-AR84	100-240V AC, 50/60Hz, 20W max

Dimensions and Weights

GLD-80 Mixer	Width x Depth x Height
Unpacked	730 x 577 x 159mm (28.7" x 22.7" x 6.2")
Packed in shipping box	930 x 730 x 290mm (36.6" x 28.6" x 11.4")
Unpacked weight	16kg (35lbs)
Packed weight	21kg (46lbs)
GLD-AR2412 AudioRack	Width x Depth x Height
Unpacked	483 x 220 x 137mm (19" x 8.6" x 5.4") 3U rack
Packed in shipping box	600 x 350 x 250mm (23.6" x 13.7" x 9.8")
Unpacked weight	5kg (11lbs)
Packed weight	6.4kg (14lbs)
GLD-AR2412 AudioRack	Width x Depth x Height
Unpacked	483 x 220 x 48mm (19" x 8.6" x 1.9") 1U rack
Packed in shipping box	600 x 330 x 143mm (23.6" x 12.9" x 5.6")
Unpacked weight	3kg (6.6lbs)
Packed weight	4.4kg (9.7lbs)

Control

Faders	100mm motorised
Fader Banks	2 Independent banks - 12, 8 faders
Touch Screen	8.4" TFT, 800x600 resolution
Control Strips	4 Layers per Bank = 80x strips
Strip Display	LCD per strip, assignable backlight colours
SoftKeys	10 assignable
MIDI	MIDI In and Out
Network	TCP/IP Ethernet (for future application)

Input Processing

48 Input Processing Channels	Mono = 1-44, Stereo = 45/46, 47/48
Trim	+/-24dB digital trim
Polarity	Normal/Reverse
High Pass Filter	12dB/octave 20Hz – 2kHz
Insert	Assign to any sockets, In/Out, +4dBu/-10dBV level
Delay	Up to 85ms Input global setting - ms, feet, meters, samples
Gate	Self key, In/Out, Sel 'listen'
Sidechain	12dB/octave, Freq 20Hz – 5kHz
Sidechain Lo-Cut Filter	12dB/octave, Freq 120Hz – 20kHz
Sidechain Hi-Cut Filter	-72dBu to +12dBu
Threshold	0 to 60 dB
Depth	50us to 300ms
Attack	10ms to 5s
Hold	10ms to 1s
Release	
PEQ	
Type	4-Band fully parametric, +/-15dB
Frequency Range	Global setting for Inputs = 20-20kHz or 'Analogue'
Analogue Ranges	20-200Hz, 35-1kHz, 500-15kHz, 2k-20kHz
Band 1	Selectable LF Shelving, Bell, Hi-Pass
Band 2	Bell
Band 3	Bell
Band 4	Selectable HF Shelving, Bell, Lo-Pass
Bell Width	Non-constant Q, variable, 1.5 to 1/9th octave
Shelving Type	Classic Baxandall
Hi-Pass, Lo-Pass Filter	12dB/octave
Compressor	
Sidechain	Self key, In/Out, Sel 'listen'
Sidechain Lo-Cut Filter	12dB/octave, Freq 20Hz – 5kHz
Sidechain Hi-Cut Filter	12dB/octave, Freq 120Hz – 20kHz
Threshold	-46dBu to 18dBu
Ratio	1:1 to infinity
Attack	300us – 300ms

Release	100ms – 2s
Knee	Soft/Hard
Manual Types	Peak Manual, RMS Manual
Auto Types	VocalAuto, OptoAuto, PunchBag
Channel Direct Out	Individual Trim (per channel)
Options	Source, follow Fader, follow Mute (global for all)

Mix Processing

20 Mix Processing Channels	Configure as mono/stereo Groups, Aux, Main, Matrix Mains = None, LR, LCR. LR+M(bus), LR+M(sum)
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External Input	Assignable source
Trim	+/-24dB digital trim
Polarity	Normal/Reverse

Insert	Assign to any sockets, In/Out, +4dBu/-10dBV level
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Delay	Up to 170ms Mix global setting - ms, feet, meters, samples
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GEQ	
Type	Constant 1/3 octave, 28 bands 31Hz -16kHz
Gain	+/-12dB
GEQ Fader Flip Mode	2 overlapping frequency banks on strip faders layer 1 - 31-1kHz + Mix master fader layer 2 - 500-16kHz + Mix master fader SEL key resets frequency band to 0dB RTA following PAFL is displayed on strip meters

PEQ	
Type	4-Band fully parametric, +/-15dB
Frequency Range	Global setting for Mixes = 20-20kHz or 'Analogue'
Analogue Ranges	20-200Hz, 35-1kHz, 500-15kHz, 2k-20kHz
Band 1	Selectable LF Shelving, Bell, Hi-Pass
Band 2	Bell
Band 3	Bell
Band 4	Selectable HF Shelving, Bell, Lo-Pass
Bell Width	Non-constant Q, variable, 1.5 to 1/9th octave
Shelving Type	Classic Baxandall
Hi-Pass, Lo-Pass Filter	12dB/octave

Compressor	
Sidechain	Self key, In/Out, Sel 'listen'
Sidechain Lo-Cut Filter	12dB/octave, Freq 20Hz – 5kHz
Sidechain Hi-Cut Filter	12dB/octave, Freq 120Hz – 20kHz
Threshold	-46dBu to 18dBu
Ratio	1:1 to infinity
Attack	300us – 300ms
Release	100ms – 2s
Knee	Soft/Hard
Manual Types	Peak Manual, RMS Manual
Auto Types	VocalAuto, OptoAuto, PunchBag filter in/out with sel 'listen'

FX Processing

Internal FX	8x RackFX engine
Types	Reverbs, Delays, Modulators, Sub-harmonics
Mode	Send>Return, Inserted, Daisy Chain FX

FX 'Short' Return Channels	
8 Stereo dedicated returns	Adds to inputs for up to 56 sources to the mix
Controls	Fader, Pan, Mute, Routing to Grp, Aux, FX, Main
FX Return PEQ	Same as Input Channel PEQ

Talkback	Assignable source
High Pass Filter	12dB/octave, 20Hz-2kHz
Routing	To Groups, Aux, Main, Matrix

Signal Generator	Sine, White Noise, Pink Noise, Bandpass Noise
Sine, Bandpass sweep	20-20kHz
Controls	Level, Mute
Routing	To Groups, Aux, Main, Matrix

RTA	31-Bands 1/3 octave 20-20kHz
Source	Follows selected PAFL source
Peak Band Indication	Option to display dominant frequency