

GLD Specification

For V1.2 and higher firmware

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, 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	0 deg C to 35 deg C (32 deg F to 95 deg F)
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Mains Power

GLD-80	100-240V AC, 50/60Hz, 95W max
GLD-112	100-240V AC, 50/60Hz, 110W 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	16.5kg (36lbs)
Packed weight	21.2kg (46.6lbs)
GLD-112 Mixer	Width x Depth x Height
Unpacked	1000 x 577 x 159mm (39.4" x 22.7" x 6.2")
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

Touch Screen	8.4" TFT, 800x600 resolution
Faders	100mm motorised
GLD-80 Fader Strips	2 Banks (12,8), 4 Layers = 80x strips
GLD-112 Fader Strips	3 Banks (12,8,8), 4 Layers = 112x strips
Strip Display	LCD per strip, assignable backlight colours
SoftKeys	10 assignable
MIDI	MIDI In and Out
Network	TCP/IP Ethernet

Input Processing

48 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, Bypass switch
Input global setting - ms, feet, meters, samples

Gate	
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	-72dBu to +12dBu
Depth	0 to 60 dB
Attack	50us to 300ms
Hold	10ms to 5s
Release	10ms to 1s

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 Options	Individual Trim (per channel) Source, follow Fader, follow Mute (global for all)
Mix Processing	
20 Mix Channels	Configure as mono/stereo Groups, Aux, Main, Matrix Mains = None, LR, LCR. LR+M(bus), LR+M(sum)
External Input Trim Polarity	Assignable source +/-24dB digital trim Normal/Reverse
Insert	Assign to any sockets, In/Out, +4dBu/-10dBV level
Delay	Up to 170ms, Bypass switch Mix global setting - ms, feet, meters, samples
GEQ	
Type	Constant 1/3 octave, 28 bands 31Hz -16kHz
Gain	+/-12dB
GEQ Fader Flip Mode	2 overlapping frequency banks on strip faders 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, Pitch Shift, Rotary Speaker, De-Esser
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	
Mode	Assignable source Latched/Momentary, PAFL Dim option
High Pass Filter	12dB/octave, 20Hz-2kHz
Routing	To Groups, Aux, Main, Matrix
Level Trim	+/-24dB
Signal Generator	
Sine, Bandpass sweep	Sine, White Noise, Pink Noise, Bandpass Noise 20-20kHz
Controls	Level, Mute
Routing	To Groups, Aux, Main, Matrix
RTA	
Source	31-Bands 1/3 octave 20-20kHz Follows selected PAFL source
Peak Band Indication	Option to display dominant frequency