



## ME Personal Mixing System

ME PERSONAL MIXING SYSTEM

GLD is fully compatible with the ME Personal Mixing System. ME puts the musician in control of their own monitor mix. Each performer's ME-1 personal mixer can be set up to work perfectly for them, whether they crave maximum control over the fine details of their mix or just want the minimum of keys to press. ME-1 is easy to use, with straightforward controls, a clear display and custom naming for instant familiarity. Learn more at [www.allen-heath.com/me](http://www.allen-heath.com/me)



- Fully customisable
- Intuitive operation
- Compact, smart design
- 40 sources from GLD
- Daisy chain or use PoE Ethernet hubs

## Accessories



**AH8721 120m drum of Cat5 cable**  
120m (393ft) drum of Cat5 with locking connectors made by Klotz. This is the most flexible Cat5 cable for mobile use on the market.



**AH7000 80m Cat5 Etherflex Drum**  
80m (264ft) drum of Neutrik Etherflex cable with EtherCon locking connectors.



**LEDLamp**  
LEDLamp is a variable brightness 18" gooseneck lamp.

### Dustcover

Black water repellent 4oz polyester dustcover with purple piping and sewn on GLD logo



DIGITAL MIXING SYSTEM



**ALLEN & HEATH**  
WWW.ALLEN-HEATH.COM



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## ACCESSIBLE, FLEXIBLE, DIGITAL

GLD inherits the key benefits of our iLive pro touring system and makes them affordable for the kinds of hardworking rental companies, houses of worship and live venues that have used and loved our GL series analogue mixers for many years.

GLD is a complete digital mixing system. Our dSNAKE Cat5 digital multicore together with our plug 'n' play audio racks and expanders make it simple and affordable to build the system as your needs grow. Networking cards let you link GLD systems, make multi-track recordings or connect with other equipment. A Monitor port allows connection to the ME Personal Mixing System.

Analogue veterans, digital converts and novices alike will feel at home with GLD, thanks to a balance of WYSIWYG analogue-style controls and intuitive touchscreen interface. The layout and appearance of the GLD-80 and GLD-112 mixers can be customised quickly and easily, providing an interface that logically mirrors your application and puts the operator at their ease.

As you would expect from Allen & Heath, GLD delivers outstanding audio performance, with a new high-end mic preamp, low latency and the DSP muscle to provide full processing without compromise. GLD's FX engines are taken directly from the iLive system and feature beautifully crafted emulations of industry classics.

Finally, a professional system that delivers all the benefits of digital mixing at the price of an analogue mixer—and that's before you think about all the outboard gear it replaces.

# THE GLD FAMILY

- Compact digital mixer with scalable, remote I/O
- Systems from 4 to 44 mics
- Easy to use, quick to access, analogue style interface
- dSNAKE Cat5 digital snake—up to 120m cable length
- 8.4 inch colour touchscreen for graphical view and setup
- 48 input channels into 30 assignable buses (Aux, Group, Matrix, Main, FX Send) into 20 mix outputs
- 8 stereo RackFX engines with dedicated 'short' returns with 4-band PEQ
- Full processing on all inputs including trim, polarity, HPF, insert, gate, 4-band PEQ, compressor and delay
- Full processing on all outputs including insert, PEQ, GEQ, compressor and delay
- LR, None (monitors), LR+M (sum), LR+M (bus), LCR main mix modes
- USB stereo recording and playback
- 16 DCAs / mute groups
- Built-in Talkback, RTA and Signal Generator
- I/O module options for FOH/Monitor split, multitrack recording, link to iLive and more
- MIDI In/Out and Ethernet Network port
- Monitor port on main AudioRack for connection to ME Personal Mixing System. Also Aviom™ compliant
- High end 1dB step recallable mic/line preamps
- User definable channel names and colours
- Engineer's mono Wedge and stereo IEM strips
- Input, output and insert soft patchbays
- Quick copy, paste and reset of mixes and parameters
- Libraries, Scenes and Show memories with USB transfer
- Get started quickly with Template Shows
- Password protectable user profiles



## AR2412

24 input / 12 output  
Main AudioRack

## AR84

8 input / 4 output  
Expander AudioRack



## GLD-80

Compact digital mixer with 80 channel strips and 10 SoftKeys.



## GLD Remote

iPad App



## GLD-112

Digital mixer with 112 channel strips and 14 SoftKeys.

GLD-112 shown with iPad (not included)

## GLD Editor

Offline configuration / Live control software



## ME Personal Mixing System



# ULTIMATE USER EXPERIENCE

## Analogue style processing strip

GLD mixers put essential controls like Preamp, HPF, Gate, Parametric EQ and Compressor right at your fingertips. Hit the Select key on a channel strip and the processing strip becomes the controls for that input or mix, with clear visual displays of current settings and dedicated, analogue style controls.

## Customizable surface layout

GLD-112 provides 28 faders arranged in 4 layers for access to 112 independent channel strips. The compact GLD-80 has 20 faders in 4 layers for a total of 80 strips. Not only can you design your own mixer by arranging strips across the surface, but each one comes with a write-on display where custom names and colours for easy identification are coupled with information relevant to the current mix mode.

Manage your mix with 2 buttons. Access all the processing for each strip with Sel and Mix parameters/contributions.

## Touchscreen

GLD-80 and GLD-112 feature a colour touchscreen with on-screen keyboard and dedicated data encoder for instant and intuitive access to all key functions and parameters. The user friendly interface has been designed from scratch with simplicity in mind.



# THE HEART OF THE SYSTEM

Quickly access preamp gain and Pad, HPF frequency, gate threshold, frequency, gain and bandwidth for each PEQ band, compressor threshold, ratio and gain

Each strip contains coloured display, assignable rotary encoder, 5 LED bar meter, Mute, Select, Mix and PAFL switches, and 100mm motorised fader

GLD-80 has 20 faders in 2 banks. Each bank has 4 layers for access to lots of channels in a compact space. GLD-112 has a further bank of 8 faders

Copy, Paste or Reset any section of channel processing, a whole channel or mix



USB 2 track playback, recording, data transfer, archiving and firmware update

Dedicated, assignable Talkback button

10 user-assignable SoftKeys for scene recall, DCA mutes, quick Sel or Mix access, tap tempo and much more. GLD-112 has 4 additional SoftKeys.

'Scene Safe' protects a channel from being overwritten when recalling a scene

'Freeze in Layers' keeps a channel in place regardless of layer selection

GEQ Fader Flip toggles access to the Graphic EQ on faders

# GLD Remote App

GLD Remote is an iPad app providing wireless mobile control for GLD. It gives you the freedom to walk the room or stage and control the sound right where it is needed. GLD Remote and a GLD-80 or GLD-112 mixer can work together to provide simultaneous control of independent functions, for example one engineer using the console to mix front-of-house sound, and another using the iPad to mix monitors on stage. Several iPads can be connected, each providing independent control.



# GLD Editor

GLD Editor gives you the ability to configure the system offline before the show, check and edit show files from guest engineers, and control the mix live using a PC or Mac. GLD Editor software is available free of charge and gives complete wired or wireless control of the GLD system using standard TCP/IP Ethernet. Online mode has the ability to carry out different tasks at the same time. For example, monitors can be tweaked on stage using a wireless laptop while another engineer runs the FOH sound check from the mixer. The similarities with the GLD mixer and touchscreen GUI make GLD Editor an invaluable learning and training resource too.



# FX Emulations

Great sounding reverbs, delays and modulators with an instantly familiar interface

GLD-112 and GLD-80 each boast 8 stereo RackExtra FX engines with the additional, dedicated channels to handle them all without compromise. These feature top quality emulations and developments of popular industry classics. Modelled by our engineers right into the heart of the DSP mix engine, they provide very low latency and instant access to all 8 effects at all times. No need for licences or complex configuration. Any combination of up to 8 FX devices can be loaded. A back panel allows patching as mix send/returns or as insert into specific channels. A front panel view presents a familiar classic knob layout where the user can adjust the many parameters, select from numerous presets and create new ones, and transfer them between systems using a USB key. FX can be returned via input channels or dedicated short returns with 4-band PEQ.



**2Tap Delay**  
Generate separate left and right delay from a mono source, each with its own tempo. These can be linked for mono output. Tap the screen, dial the value or assign tap tempo to soft keys for delay from 5ms to 1.36s. Controls let you adjust delay, feedback, filters and width to create a wide range of effects.

**ADT**  
Create classic automate double tracking effects, voice thickening, vintage slap back tape delay loop emulation and more. Generate double or quad tracked voices from a mono source with stereo width enhancement and auto panning control.

**Chorus**  
Re-create the classic analogue chorus effects from the 80's using 3 stereo field emulations which can be combined to create even more variation. Features a built-in sine or rectified LFO modulator and auto panner.

**Flange**  
3 emulations - subtle airy 'Ambient', classic silky tape based 'Vintage', and an untameable 'Wild' effect. Classic pedal flangers were researched and their many LFO modulation, regeneration and stereo splitting effects implemented here. For classic deep flange set stereo split and stereo spread off, pick triangular mod, vintage and tweak depth and regenerate.

**Gated Verb**  
The traditional gated reverb effect with 'panned' and 'powerbox' presets and the addition of many controls to shape the envelope, adjust diffusion and width, and filter the sound. It brings the 80's effect right up to date with a visual representation of the gate time domain envelope.

**Hypabass**  
A sub-harmonic synthesizer classically used in the live environment to generate infra (lower than 35Hz) and sub bass (35-70Hz) from weaker bass programme. It features very low distortion and separate control of these two frequency spectrums.

**Symphonic**  
A faithful emulation of this simple to use, frequently requested classic 80's chorus. Using just two controls it produces a rich and lively chorus sound with suggestion of mild phasing. Two presets satisfy the popular live sound application - SymphonicVox and SymphonicStrings.

**Spatial Modelling Reverberation**  
Based around 4 complex spatial modes - Classic, Hall, Room, EMT. Each of these models employ different reflection and decay algorithms to provide natural sound spaces. Important parameters are always visible. 'Expert' pages add many more parameters as found on top end pro touring units.

**12 Stage Phaser**  
Classic 12 stage circuitry creating rich textured phasing with control of feedforward, feedback stages and 'zero' depth manual mode. The characteristic sound is produced by careful emulation of the phase chain and operating frequency range around the offset control.

**DeEsser**  
A dual-channel DeEsser featuring automatic threshold detection, adjustable lower frequency, response and reduction, and a listen button to allow monitoring of the sibilant region.

**PitchDoubler**  
A fully stereo, wide-range pitch shifting doubler effect with minimal phasing / flutter artefacts, adjustable delay and modulation, and stereo width control. The doubling effect is achieved by provision of time delay and modulated pitch shift with adjustable rate and depth.

**VocalShift VS1**  
A fully stereo, low latency vocal pitch shifter. By allowing large shifts of up to +/- 1 octave, with a further switchable octave downshift, it is ideal for theatrical and extreme musical effects.

**Rotator**  
The Rotator is an extensive emulation of a rotary speaker unit, reproducing this characteristic sound by modelling the separate treble/woofer speakers along with their crossover. The effective microphone positions can be adjusted and a simulation of the tube drive stage reproduces the warmth and distortion found in a classic rotary speaker.



# PLUG & PLAY SYSTEM BUILDING

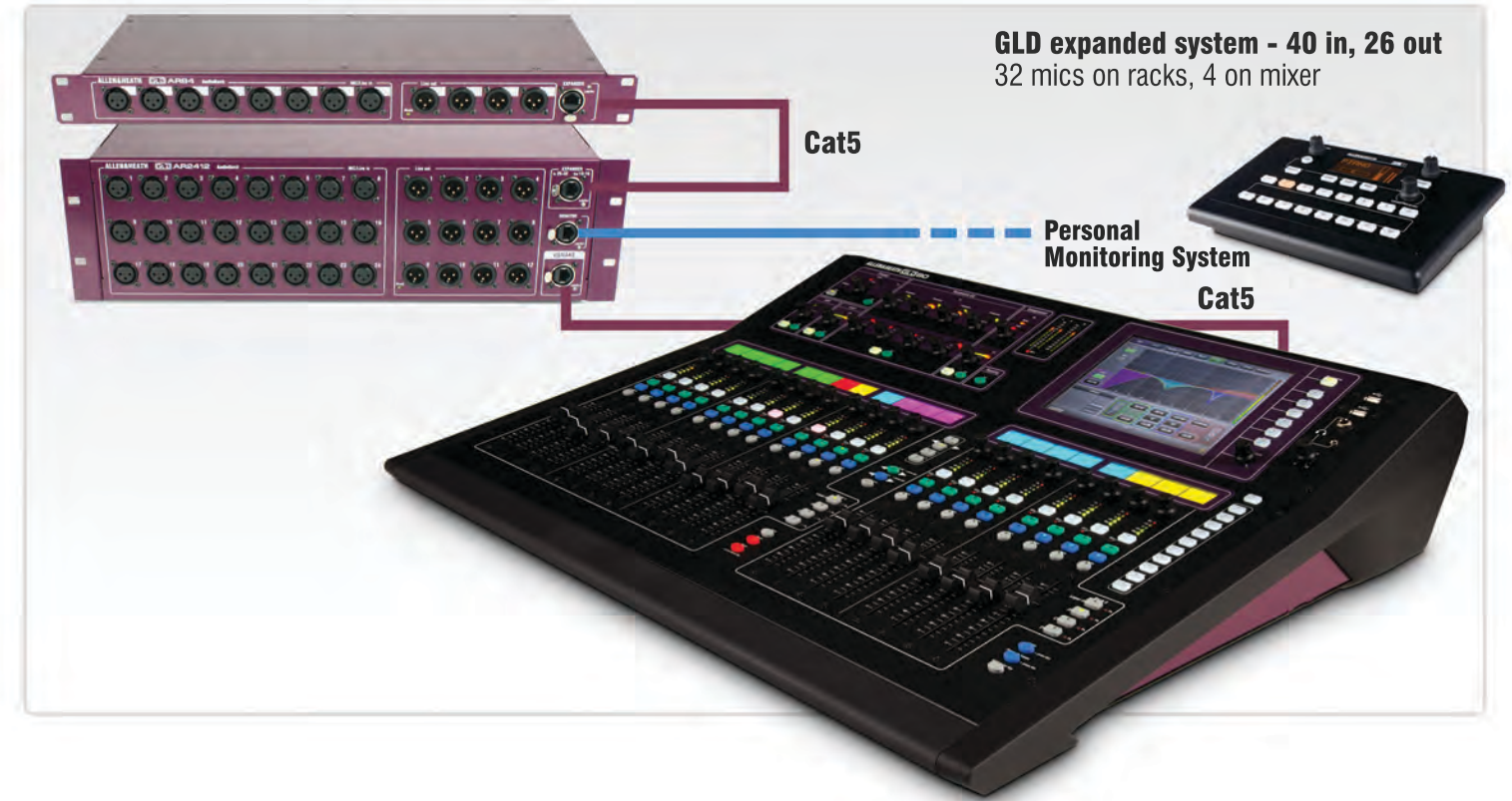
True plug 'n' play

GLD gives you the freedom to put your I/O where you need it and the flexibility to expand and adapt your system as your needs change. Although GLD-112 and GLD-80 are capable of standalone operation, they come into their own when connected to the main GLD-AR2412 AudioRack and up to two GLD-AR84 expanders. All components in a GLD system are connected over up to 120 metres (over 390ft) of Cat5 cable, so no more bulky, costly copper multicores.

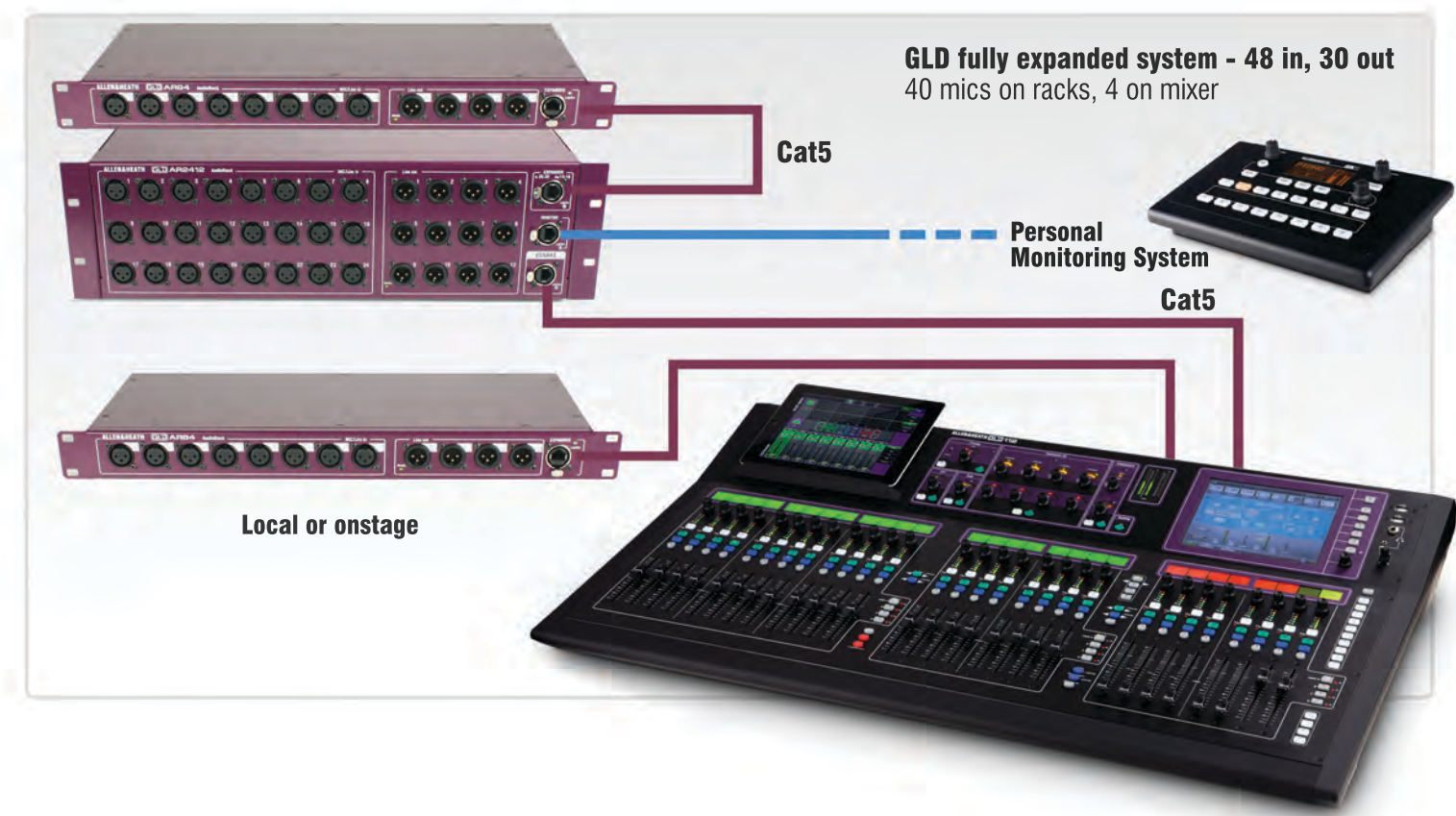
**GLD standard system - 32 in, 22 out**  
24 mics on rack, 4 on mixer



**GLD compact system - 16 in, 14 out**  
8 mics on rack, 4 on mixer



**GLD expanded system - 40 in, 26 out**  
32 mics on racks, 4 on mixer



**GLD fully expanded system - 48 in, 30 out**  
40 mics on racks, 4 on mixer

Local or onstage



# EXPANDABLE SYSTEM WITH FLEXIBLE I/O

GLD-80 Mixer (GLD-112 has the same connectors)



Ethernet Network port for TCP/IP remote control, connection of GLD Editor running on a computer, or connection of a wi-fi router / access point to use with GLD Remote iPad app.

Cat5 dSNAKE port to connect to GLD-AR2412 AudioRack

Expander port to connect an additional GLD-AR84 AudioRack

64 ch. 2 way remote audio port, supports a range of A&H option cards

8 inputs—4 Mic/Line XLR, 2 stereo RCA line inputs

10 outputs—4 XLR, stereo RCA, 1 S/PDIF, 1 AES3

## GLD-AR2412 AudioRack



24 XLR Mic/Line inputs  
12 XLR Line outputs

Cat5 dSNAKE port to connect to GLD-80 / GLD-112 Mixer

Monitor port for connection to ME Personal Mixing System. Also Aviom™ compliant.

Expander port to connect a GLD-AR84 AudioRack

## GLD-AR84 AudioRack



8 XLR Mic/Line inputs  
4 XLR Line outputs



Connects to a GLD-AR2412 on stage or directly to the mixer

# RECORD, PLAY, TRANSFER & ARCHIVE

## Easy to Capture

Nowadays everybody wants a recording of the show. No problem. Capturing a high quality stereo recording with GLD could not be simpler - plug in your USB stick, patch your source and press record.



2 track WAV recording from any source or Mix master  
Multi format playback support—patch to any Input channel: WAV, FLAC



## Easy to Backup

Use your USB stick to perform firmware updates, archive & transfer Libraries and Shows.

One of the major advantages of going digital is the ability to take a complete snapshot of the mixer with the press of a button. GLD can store all parameters and settings into Scenes and recall them all at will. All the scenes can be wrapped up into a Show so that at the end of the night settings can be saved or archived to USB.

Personalised settings for each processing block, channel or FX can be saved as Library presets, which can be transferred to USB key for backup or use on another GLD system.

# EXPAND, CONNECT, INTEGRATE

## Option Cards

A range of option cards allows GLD systems to be connected using Dante, MADI, EtherSound and more. Multichannel recording and digital split can easily be configured using GLD's extensive soft patching.

### ACE

ACE (Audio & Control over Ethernet) is Allen & Heath's own, cost-effective multichannel protocol. With up to 64 channels to and from another GLD or iLive system, it's ideal for a FOH/Monitor digital split and affordable audio distribution.



### DANTE

Connect to any Dante-enabled device with Audinate's AVB-ready, TCP/IP friendly Dante protocol, and record / playback up to 64 tracks with a Cat5 cable and the Dante Virtual Soundcard (ASIO / Core Audio compatible) - no need for third party interfaces.



### MADI

Industry standard MADI is a frequent choice of equipment interconnection in live, studio and broadcast applications. Connect up to two, 64 channel bidirectional MADI streams with up to 150m of coaxial cable, and set the Aux BNC connector to daisy-chain or split signals to multiple devices.



### WAVES

Hook up a Waves Server for high-precision, ultra low latency plug-in processing, multitrack recording and playback, benefitting from Waves audio-over-Ethernet SoundGrid technology—specifically designed for real-time audio applications.



### EtherSound

A popular low latency industry networking standard supporting 64 channels of bidirectional audio over Cat5 cable, EtherSound can link to a significant number of third party devices available for audio distribution, recording and more.



### MMO

MiniMultiOut gives you a variety of formats for multichannel digital output including 3x ADAT ports (24 channels), Aviom™ (16 channels) and links to Allen & Heath's iDR series or the Hear Back personal monitoring system.



## Inputs

### XLR Mic/Line Inputs

Mic/Line Preamp  
Input Sensitivity  
Analogue Gain  
Pad  
Maximum Input Level  
Input Impedance

### Mic/Line Channel noise

Mic EIN  
Unity gain (Pad in)  
Low gain (5dB, Pad out)  
Mid gain (30dB, Pad out)

### Mic/Line Channel THD+N

Unity gain (Pad in)  
Low gain (5dB, Pad out)  
Mid gain (30dB, Pad out)

### RCA Line Inputs

Input Sensitivity  
Trim  
Maximum Input Level  
Input Impedance  
RCA channel Noise  
RCA channel THD+N

## System

Measured balanced XLR in to XLR out, 20-20kHz, minimum Gain, Pad out

Dynamic Range  
System Signal to Noise  
Frequency Response  
System peak level THD+N  
System Line level THD+N

Headroom  
Internal operating Level  
dBFS Alignment  
Meter Calibration  
Meter Peak Indication  
Meter Type

### Sampling Rate

ADC  
24-bit Delta-Sigma  
24-bit Delta-Sigma  
DAC  
Latency

### USB Playback

USB Record

### I/O Port

Card Options

Operating Temperature Range

## Outputs

### XLR Outputs

Output Impedance  
Nominal Output  
Maximum Output Level  
Residual Output Noise

### RCA Line Outputs

Output Impedance  
Nominal Output  
Maximum Output Level  
Residual Output Noise

### Digital Outputs

SPDIF  
AES3 2 ch XLR output

## Mains Power

GLD-80  
GLD-112  
GLD-AR2412  
GLD-AR84

## Dimensions and Weights

### GLD-80 Mixer

Unpacked  
Packed in shipping box  
Unpacked weight  
Packed weight

### GLD-112 Mixer

Unpacked  
Packed in shipping box  
Unpacked weight  
Packed weight

### GLD-AR2412 AudioRack

Unpacked  
Packed in shipping box  
Unpacked weight  
Packed weight

### GLD-AR84 AudioRack

Unpacked  
Packed in shipping box  
Unpacked weight  
Packed weight

# GLD SPECIFICATIONS

## Control

### Faders

Fader Banks  
Touch Screen  
Control Strips

100mm motorised  
GLD-80 - 2 Independent banks - 12, 8 faders  
GLD-112 - 3 Independent banks - 12, 8, 8 faders  
8.4" TFT, 800x600 resolution

4 Layers per Bank  
GLD-80=80x strips  
GLD-112=112x strips  
LCD per strip, assignable backlight colours  
GLD-80 = 10 assignable, GLD-112 = 14 assignable  
MIDI In and Out  
TCP/IP Ethernet (for future application)

Mono = 1-44, Stereo = 45/46, 47/48

## Mix Processing

20 Mix Processing Channels

### External Input

Trim  
Polarity

### Insert

Assign to any sockets, In/Out, +4dBu/-10dBV level  
Up to 170ms  
Mix global setting - ms, feet, meters, samples

### Delay

Constant 1/3 octave, 28 bands 31Hz - 16kHz  
+/-12dB

### GEQ

Type  
Gain  
GEQ Fader Flip Mode

### PEQ

Type  
Frequency Range  
Analogue Ranges

### Band 1

Band 2  
Band 3  
Band 4

### Bell Width

Shelving Type  
Hi-Pass, Lo-Pass Filter

### Compressor

Sidechain  
Sidechain Lo-Cut Filter  
Sidechain Hi-Cut Filter

### Threshold

Ratio  
Attack  
Release

### Knee

Manual Types  
Auto Types

## Input Processing

### Trim

Polarity  
High Pass Filter

### Insert

Assign to any sockets, In/Out, +4dBu/-10dBV level  
Up to 85ms  
Input global setting - ms, feet, meters, samples

### Delay

Constant 1/3 octave, 28 bands 31Hz - 16kHz  
+/-12dB

### Gate

Self key, In/Out, Sel 'listen'  
12dB/octave, Freq 20Hz - 5kHz  
12dB/octave, Freq 120Hz - 20kHz  
-72dBu to +120dBu

### Depth

0 to 60 dB  
50us to 300ms  
10ms to 5s  
10ms to 1s

### Hold

Release

### PEQ

4-Band fully parametric, +/-15dB  
Global setting for Mixes = 20-20kHz or 'Analogue'  
20-200Hz, 35-1kHz, 500-15kHz, 2k-20kHz

### Band 1

Band 2  
Band 3  
Band 4

### Bell Width

Shelving Type  
Hi-Pass, Lo-Pass Filter

### Compressor

Sidechain  
Sidechain Lo-Cut Filter  
Sidechain Hi-Cut Filter

### Threshold

Ratio  
Attack  
Release

### Knee

Manual Types  
Auto Types

### Channel Direct Out

Options

## FX Processing

### Internal FX

Types  
Mode

### FX 'Short' Return Channels

8 Stereo dedicated returns  
Controls  
FX Return PEQ

### Talkback

High Pass Filter  
Routing

### Signal Generator

Sine, Bandpass sweep  
Controls  
Routing

### RTA

Source  
Peak Band Indication

8x RackFX engine  
Reverbs, Delays, Modulators, Sub-harmonics etc.  
Send>Return, Inserted, Daisy Chain FX

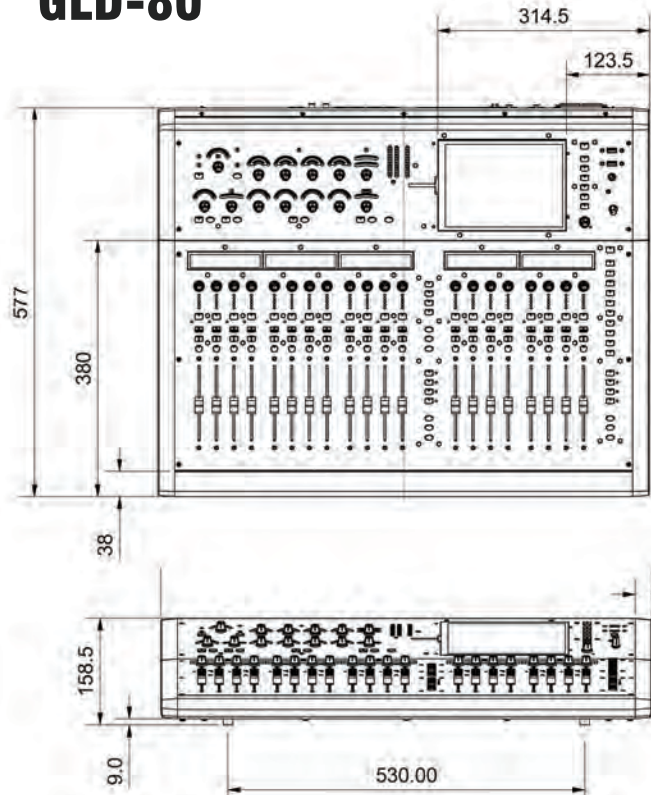
Adds to inputs for up to 56 sources to the mix  
Fader, Pan, Mute, Routing to Grp, Aux, FX, Main  
Same as Input Channel PEQ

Assignable source  
12dB/octave, 20Hz-2kHz  
To Groups, Aux, Main, Matrix

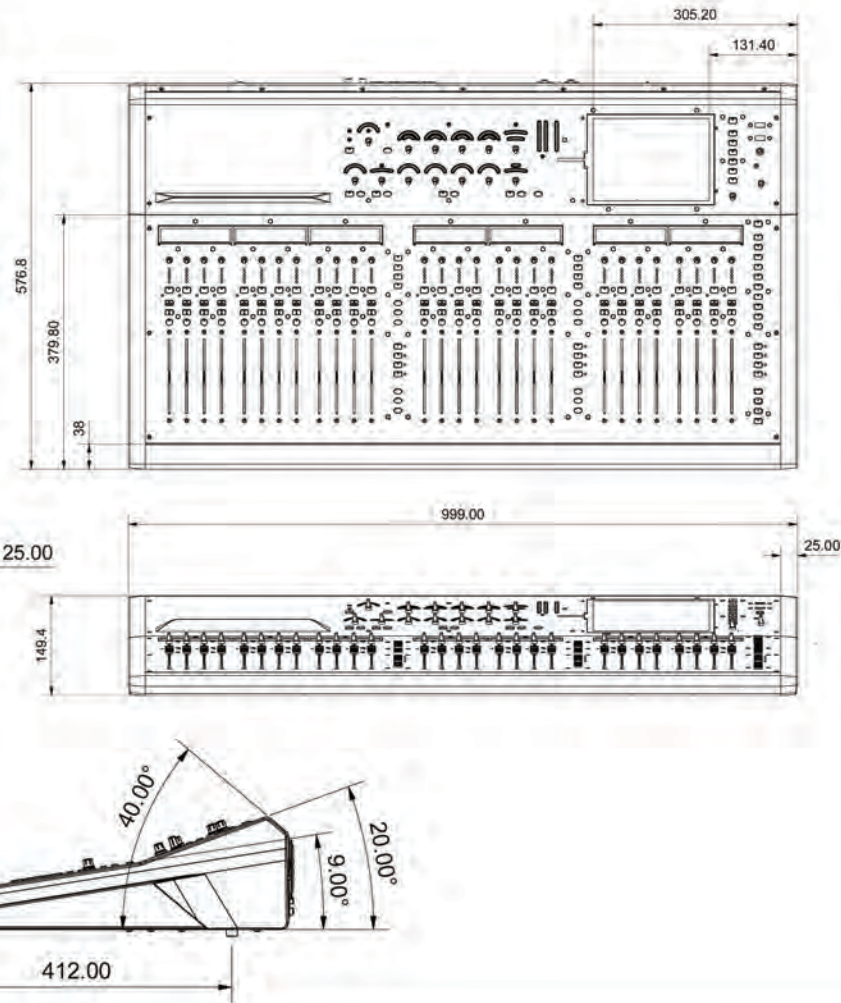
Sine, White Noise, Pink Noise, Bandpass Noise  
20-20kHz  
Level, Mute  
To Groups, Aux, Main, Matrix

31-Bands 1/3 octave 20-20kHz  
Follows selected PAFL source  
Option to display dominant frequency

# GLD-80

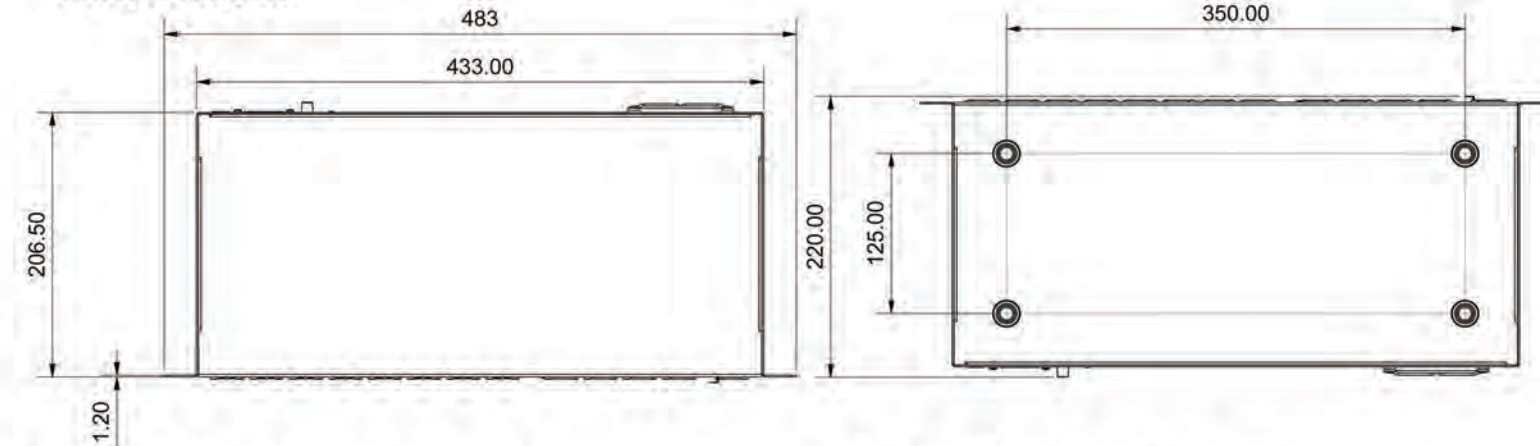


# GLD-112

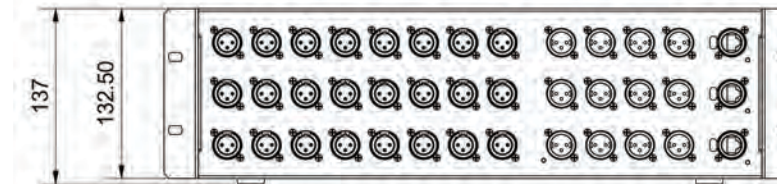


# DIMENSIONS AND SYSTEM BLOCK DIAGRAM

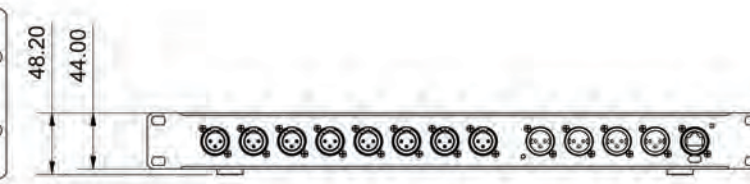
## AudioRacks



## GLD-AR2412 AudioRack



## GLD-AR84 AudioRack



# System Block Diagram

