



**ALLEN & HEATH**



# Features

- Compact digital mixer with scalable, remote I/O
- Systems from 4 to 48 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
- Deep processing embedded plugins including GEQ and compressor models
- Automatic Mic Mixer with up to 44 microphone sources
- 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
- Compatible with ME Personal Mixing System
- 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
- Scene Filters, crossfades and automated recalls
- Get started quickly with Template Shows
- Password protectable user profiles

# Welcome

GLD is a comprehensive digital mixing ecosystem that marries our passion for audio quality with a beautifully elegant workflow. GLD has earned its stripes on international rock tours, at iconic venues, in houses of worship and at flagship sporting events across the globe, securing its reputation as a truly professional mixing solution.

GLD-80 and GLD-112 mixers are supported by an array of remote AudioRacks, Editor software, control and personal monitor apps, option cards for all the main audio networking and recording protocols, plus connection to our ME personal mixing system, making it easy to create the GLD system that fits your exact needs.

Seasoned professionals with countless tours under their belts and first time volunteer engineers have praised GLD for its ease of use. Everything is clear, logical and intuitive, and there is huge scope to create custom layouts and visual cues, helping to keep the focus on the mix, not on the mixer.

As you would expect from Allen & Heath, GLD delivers outstanding audio performance. Our Deep processing suite provides the quality and craftsmanship of boutique plug-ins without the hassle and expense, while our DSP engine has the muscle to provide full processing without compromise.

With new advanced automatic mic mixer (AMM) features, GLD is perfect for mixing conferences, panel talks and TV shows. The AMM can be configured to work across all 44 microphone sources, allowing the user to select which inputs should be auto-mixed without the usual restrictions of a 16 channel insert based system. The AMM can be set to work in two modes – 'D-Classic' dynamic gain sharing for a simple quick set-up, and 'Number of Open Microphones' (NOM) logic gate technology for a more flexible and sophisticated auto mix.

Now available in a range of styling options and boasting our best ever array of FX and processing, GLD is the premium solution for live mixing.



# The GLD Family

GLD-80



20 fader strips in 4 layers  
48 input processing channels  
8 stereo FX returns

30 configurable buses  
20 mix processing channels  
10 assignable SoftKeys

GLD-112



28 fader strips in 4 layers  
48 input processing channels  
8 stereo FX returns

30 configurable buses  
20 mix processing channels  
14 assignable SoftKeys

## Styling options

GLD systems can be ordered in a choice of styling options to fit different environments (and personal tastes!). GLD-80 and GLD-112 are available in Chrome Edition or Purple livery and AR2412 and AR84 AudioRacks are offered in either Black or Purple. All hardware is fully compatible and interchangeable, so feel free to mix and match styles.

AR84 AudioRacks



8 mic / line inputs  
4 XLR outputs

AR2412 AudioRacks



24 mic / line inputs  
12 XLR outputs  
Expander port  
Dedicated Monitor port

AB168 AudioRack



Portable stagebox format  
16 mic / line inputs  
8 XLR outputs  
Expander port

## ME Personal Mixing System

GLD mixers are fully compatible with our ME Personal Mixing System. Any number of ME-1 personal mixers can be chained from the mixer or AR2412 / AB168 AudioRacks. Each ME-1 mixer can mix up to 40 channels and pick up channel names automatically from the Cat5. Performers can be given tailored control over their own mix, leaving the engineer free to focus on the audience experience.

Find out more at [www.allen-heath.com/ME](http://www.allen-heath.com/ME)



## GLD Remote iPad 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 Offline configuration / Live control software

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. It 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.



## OneMix Personal Monitoring iPad App

OneMix is a cut down version of the GLD Remote app that locks control to a single Aux (monitor) mix. Multiple iPads may be set up by the 'Admin' user to give each musician customised personal monitor control via Wi-Fi

connection to GLD without the risk of affecting the other monitors or FOH main mix.



# Do everything intuitively better

## **Analogue Style channel strip**

All essential controls like Preamp, HPF, Gate, Parametric EQ and Compressor are right at your fingertips, with clear visual displays of your current settings and dedicated in/out keys. Select keys are available on all processing blocks to bring up the corresponding view on the touchscreen, quickly copy and paste parameters, or listen to that exact point in the signal path via the PFL bus.



## **Touchscreen**

GLD mixers feature an 8.4" colour touchscreen with on-screen keyboard and dedicated data encoder for instant and intuitive access to all functions and settings. Designed from scratch with simplicity in mind, the interface is acclaimed by many as the best in its class.



## **Ease of use**

GLD is the perfect mixer for novices and new converts to digital, thanks to a familiar interface and streamlined workflow. Manage your mix with 2 buttons: access all the processing for a channel with Sel, and all sends and bus assignments with Mix.

## **Advanced workflow**

Experts will appreciate a number of smart, advanced options including special fader modes such as MIDI strips for DAW control and IEM / Wedge strips for the engineer's personal monitors. Theatre users will take advantage of recallable custom Cue Lists, plus Embedded Scene Recalls and Scene Crossfades for complete automation.





## Premium sound springs from premium design

Building on our design experiences during the development of iLive, the team's goal for GLD was to deliver the same outstanding audio quality, low latency and proven reliability in a compact and affordable mixing system. The DSP engine uses a similar architecture to iLive, but with next generation, smaller dual core processors that pack the same punch. This allowed us to provide the same configurable mix bus, the same bespoke Rack FX engine and FX libraries and high quality audio channel processing algorithms.

The audio processing algorithms resident in the DSP engine use various bit widths to optimise every stage of the signal path - be it 56 bit mix bus summing, 48 bit sensitive data paths in equalisers or extended coefficient bit depths for smooth real-time parameter morphing.

The mic preamp technology, converter and output stages deployed in GLD are also similar to iLive. Throughout the design process we meticulously sourced and selected components through listening tests, rather than purely relying on paper specs. Careful consideration was also given to power supply design to minimize transient and intermodulation distortions. All this was key to achieving the transparent sound, low distortion and noise performance that GLD is now known and recognised for.

**Rob Clark**  
R&D Director

# Create your perfect mixer

## Customizable surface layout

GLD mixers provide up to 28 faders over 4 layers for a total of up to 112 independent fader strips. Users can design their own mixers in a matter of seconds by arranging strips across the surface thanks to our unique drag 'n drop approach, be it an input, mix, DCA or more. Each strip comes with a write-on display where custom names and colours for immediate identification are coupled with information relevant to the channel and current mix mode.

## True Plug n' Play System Building

With GLD you can put your I/O where it's needed, with the flexibility and peace of mind to expand and adapt your system as your needs change. Build systems from 4 to 48 XLR inputs, with up to 40 inputs on stage over a single Cat5 cable up to 120m long! Up to three of our dSNAKE AudioRacks can be used at the same time, with 10+ different combinations to fit the application and channel count.

## Flexible bus architecture

GLD gives complete freedom over the bus configuration, so the number of mono/stereo Auxes, Groups, Matrix and Main outputs can be tweaked to fit the requirement and deployed in the blink of an eye.

## User Permissions

Up to 8 different User Profiles can be set up with a tailored set of permissions each. Inexperienced users can be given an unthreatening layout with only the inputs and outputs they really need, while advanced functions and critical settings are password-protected from 'finger trouble'.



# DEEP Processing

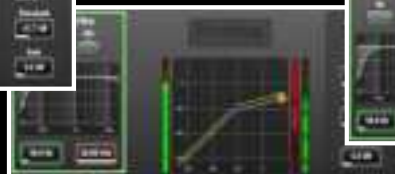
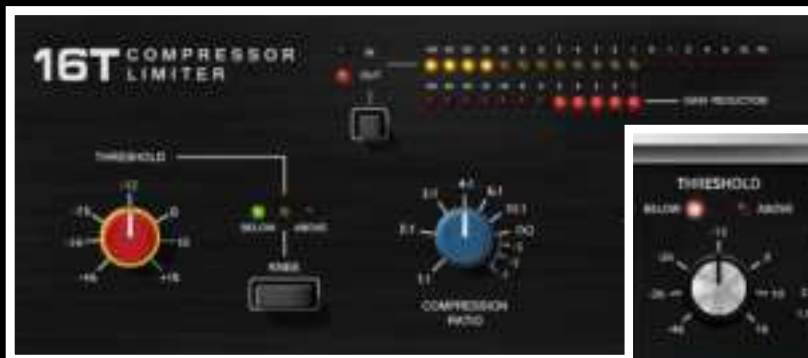
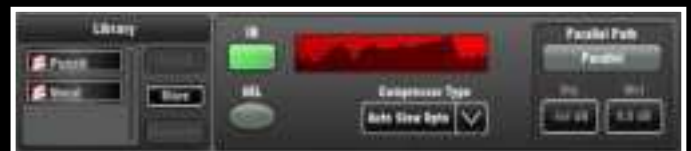
Deep processing is the culmination of years of research and development in crafting the very best processing algorithms in the live sound industry. Founded on the acclaimed processing developed for the iLive system, Deep takes this a step further to create an array of powerful embedded plugins, faithfully emulating, adding to, and reinventing popular industry classics.

Until now, use of dynamic or EQ modelling across multiple channels required external, dedicated plugin systems and interfaces. GLD is the first mixer to embed quality emulations into every input and mix processing channel. Modelled by our engineers right into the heart of the DSP mix engine, they provide very low latency and instant access. Users can pick their favourite model on any channel on the fly, without burning FX slots, and without the hassle and license cost associated with external plugins.

## Compressor Models

All 6 compressor models are freely available on all input and mix channels. The models capture the audio nuances and non-linear ballistics of industry classics, ranging from slow-opto release, RMS detection, fierce Punchbag, through to super fast peak compression/limiting.

All models also encompass additional essential features, parallel path mode for convenient wet/dry compression balancing, comprehensive sidechain filter and gain reduction histogram.



# RackExtra FX

GLD offers 8 stereo RackExtra FX engines with the additional buses and channels to handle them all without compromise, including 8 dedicated short returns with 4-band PEQ.

Each FX engine has access to a Library containing no less than 19 different units and hundreds of editable factory presets. The full spectrum of FX units is included, such as reverbs, phasers, pitch shifters, sub harmonic synthesizers, transient processors and rotary speaker emulators. All units have been recreated with familiar knob layouts, and back panels for patching as send/returns or as channel inserts. Whether it's for taming vocals and instruments, polishing mixes, or being creative, a full menu of dynamic tools is also on offer, including de-essers, Multiband Compressors and Dynamic EQ.



Bucket Brigade

De-Esser

Transient Controller



An emulation of vintage delay units which relied on bucket brigade chip technology. The signal degradation expected from such device and nonlinearities in the feedback path can be minimized or accentuated with the Distortion switch. Unlike its analogue equivalent however, this digital model benefits from long delay lines of up to 2.7s. There are controls for both input and feedback filters, with the latter having individual slope settings.

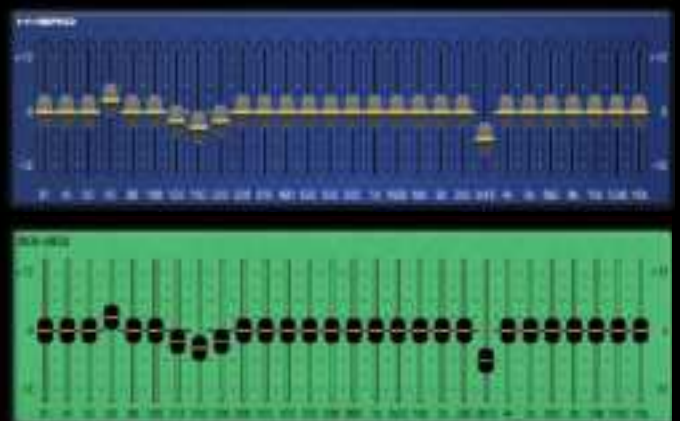
Based on the iLive De-Esser, it emulates the classic Auto-Threshold circuit commonly found on high end hardware units. This produces a constant sibilance reduction regardless of signal level, resulting in a more natural De-Essing process. In comparison, threshold based De-Essing produces inconsistent reduction activity which can result in unnatural vocals.

Transient Controller is an accurate model of the industry standard Transient Signal Processor. Transient Signal Processors provide cut and boost of the attack and sustain envelopes of the input signal, giving the sound engineer greater control over the transient behaviour of programme material. The processor is auto-threshold, and boosts or cuts specific parts of a signal envelope with auto attack and release times, making control incredibly simple.



## EQ models

4 different Graphic Equalizers are available on all Mix Outputs. 1/3-octave 'Constant-Q' and 'Proportional-Q' are based on the American and British industry standards, while asymmetrical 'Hybrid' offers the best of both worlds and 'Digi-Q' ensures minimal band interaction.



# Live

Packing big console features into a compact footprint, GLD has made many friends in PA and AV hire, in music venues, and with bands looking to invest in their own pro touring systems. Building on the success of our iLive series, GLD's outstanding audio quality and acclaimed Deep processing give it the gravitas that other compact mixers lack. With built-in dSNAKE ports for stage I/O over Cat5, GLD makes carrying bulky and expensive multicore copper cables a thing of the past, and the

choice of plug 'n' play AudioRacks makes it easy to put the I/O where it's needed most. The GLD Remote app frees the live engineer from the mix position, and GLD Editor is ideal for configuring the system on the plane or tour bus. Thanks to the wide range of audio networking cards, GLD can handle digital splits, multitrack recording and plugin processing using any of the leading protocols.



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# Installation

From stadiums to schools, GLD is specified and used in countless fixed installations in every continent. Our plug 'n' play approach to system building makes creating tailored solutions simple, with inputs and outputs connected over up to 120m of Cat5 and deployed throughout the facility. GLD's intuitive interface, custom layouts and user permissions help users to master the system and reduce callbacks due to finger trouble.

MIDI and TCP/IP protocols are available for remote control from third party devices such as Crestron and AMX, and a comprehensive range of networking cards allows integration via industry standard protocols. Advanced automatic mic mixer (AMM) features also make GLD ideal for mixing conferences, panel talks and TV shows.



# Houses of Worship

Like its analogue predecessors in the GL series, GLD is a natural choice for houses of worship. Custom strip layouts can be set up by a senior operator or installer to present less experienced volunteers with a comfortable, unthreatening interface, and password-protected user permissions prevent them from straying into advanced functions and critical settings. GLD offers a shallow learning curve, with the familiarity of a touchscreen interface and a one-knob-per-function channel

strip. The choice of personal monitoring options, including ME-1 personal mixers, the GLD OneMix app and compatibility with Aviom® A-16ii personal mixers, gives musicians control over their own mixes and takes pressure off the AV team.



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# System Examples

## GLD + AR2412 + AB168 + AR84

Maximum I/O expansion with 48 remote mic inputs



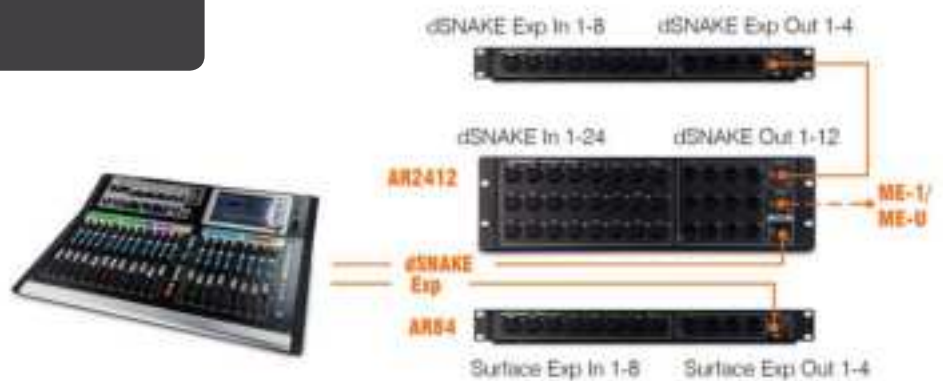
## GLD + 2x AB168

Two digital stage boxes for 32 inputs on stage  
40 in, 26 out.



## GLD + AR2412 + 2x AR84

Fully expanded AR system, 48 in, 30 out.  
40 remote mic inputs



# 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

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**GLD**



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 or OneMix iPad apps.

Cat5 dSNAKE port to connect to an AR2412 or AB168 AudioRack.

Expander port to connect an additional AR84 AudioRack.

64ch, 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

## EXPAND, CONNECT, INTEGRATE



### 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 of 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.

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