

### Galileo® 408



***Keep these important operating instructions.  
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Galileo 408 User Guide, PN 05.203.005.01 A

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## DECLARATION OF CONFORMITY ACCORDING TO ISO/IEC GUIDE 22 AND EN 45014

**Manufacturer's Name:** Meyer Sound Laboratories Inc.

**Manufacturer's Address:** 2832 San Pablo Avenue  
Berkeley, CA 94702-2204, USA

Declares that the product:

**Product Names:** Galileo 408 : Loudspeaker Management

**Product Options:** All

Conforms to the following Product Specifications:

**Safety:** EN 60065:2002

**EMC:** EN55103-1: 1997 emission<sup>1</sup>  
EN55103-2: 1997 immunity<sup>2</sup>

This device also complies with EN 55103-1 & -2. Operation is subject to the following 2 conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation

**Supplementary Information:** The product herewith complies with the requirements of the Low Voltage Directive (LVD) 2006/95/EC and the EMC Directive 2004/108/EC.

Signature:



Ms. Margie Garza  
Director of Quality  
Meyer Sound Laboratories Inc.  
Berkeley, California 94702 USA  
Issued November 3, 2010

European Contact:  
Your local Meyer Sound dealer or  
Meyer Sound Germany, GmbH.

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## **FEDERAL COMMUNICATIONS COMMISSION (FCC) STATEMENT**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult a Meyer Sound dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from Meyer Sound authorized dealers. Meyer Sound is not responsible for any radio or television interference caused by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.





## **INDUSTRY CANADA COMPLIANCE STATEMENT**

This Class B digital apparatus complies with Canadian ICES-003.

## **AVIS DE CONFORMITÉ À LA RÉGLEMENTATION D'INDUSTRIE CANADA**

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

**SYMBOLS USED**

			
Dangerous voltages: risk of electric shock	Important operating instructions	Frame or chassis	Protective earth ground
Pour indiquer les ris- ques résultant de tensions dangereuses	Pour indiquer impor- tant instructions	Masse, châssis	Terre de protection
Warnung vor gefährli- cher elektrischer Spannung	Wichtige Betriebsan- weisung oder Gebrauchsanleitung	Rahmen oder Gehäuse	Masse Schutzleiter
Para indicar voltajes peligrosos	Instrucciones impor- tantes de funciona- miento y/o mantenimiento	Armadura o chassis	Tierra proteccionista

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## IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with Meyer Sound's installation instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9. Do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. The AC mains plug or appliance coupler shall remain readily accessible for operation.
11. Only use attachments/accessories specified by Meyer Sound.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug has been damaged; liquid has been spilled or objects have fallen into the apparatus; rain or moisture has entered the apparatus; the apparatus has been dropped; or when for undetermined reasons the apparatus does not operate normally.
15. If the apparatus is used in a manner not specified by the Meyer Sound, the protection provided by the apparatus may be impaired.



**CAUTION:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

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## SAFETY SUMMARY

### English

- To reduce the risk of electric shock, disconnect the apparatus from the AC mains before installing audio cable. Reconnect the power cord only after making all signal connections.
- Connect the apparatus to a two-pole, three-wire grounding mains receptacle. The receptacle must be connected to a fuse or circuit breaker. Connection to any other type of receptacle poses a shock hazard and may violate local electrical codes.
- Do not install the apparatus in wet or humid locations without using weather protection equipment from Meyer Sound.
- Do not allow water or any foreign object to get inside the apparatus. Do not put objects containing liquid on or near the unit.
- To reduce the risk of overheating the apparatus, avoid exposing it to direct sunlight. Do not install the unit near heat-emitting appliances, such as a room heater or stove.
- This apparatus contains potentially hazardous voltages. Do not attempt to disassemble the unit. The unit contains no user-serviceable parts. Repairs should be performed only by factory-trained service personnel.

### Français

- Pour réduire le risque d'électrocution, débrancher la prise principale de l'appareil, avant d'installer le câble d'interface allant à l'audio. Ne rebrancher le bloc d'alimentation qu'après avoir effectué toutes les autres connexions.
- Branchez l'appareil dans une prise de courant à 3 dérivations (deux pôles et la terre). Cette prise doit être munie d'une protection adéquate (fusible ou coupe-circuit). Le branchement dans tout autre genre de prise pourrait entraîner un risque d'électrocution et peut constituer une infraction à la réglementation locale concernant les installations électriques.
- Ne pas installer l'appareil dans un endroit où il y a de l'eau ou une humidité excessive.
- Ne pas laisser de l'eau ou tout objet pénétrer dans l'appareil. Ne pas placer de récipients contenant un liquide sur cet appareil, ni à proximité de celui-ci.
- Pour éviter une surchauffe de l'appareil, conserver-le à l'abri du soleil. Ne pas installer à proximité d'appareils dégageant de la chaleur tels que radiateurs ou appareils de chauffage.
- Cet appareil contient des circuits haute tension présentant un danger. Ne jamais essayer de le démonter. Il n'y a aucun composant qui puisse être réparé par l'utilisateur. Toutes les réparations doivent être effectuées par du personnel qualifié et agréé par le constructeur.

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## Deutsch

- Um die Gefahr eines elektrischen Schlages auf ein Minimum zu reduzieren, das Gerät vom Stromnetz trennen bevor ein Audio Schnittstellensignalkabel angeschlossen wird. Das Netzkabel erst nach Herstellung aller Signalverbindungen wieder einstecken.
- Der Gerät nur an eine geerdete Schuko Dose 230 V; "CEE 7/4 oder Type F" anschließen. Die Steckdose muß mit einem geeigneten Abzweigschutz (Sicherung oder Leitungsschuitzschalter) verbunden sein. Der Anschluß des Gerätes an einen anderen Steckdosentyp kann zu Stromschlägen führen und gegen die örtlichen Vorschriften verstoßen.
- Das Gerät nicht an einem Ort aufstellen, an dem es mit Wasser oder übermäßig hoher Luftfeuchtigkeit in Berührung kommen könnte.
- Darauf achten, daß weder Wasser noch Fremdkörper in das Innere den Gerät eindringen. Keine Objekte, die Flüssigkeit enthalten, auf oder neben die unterbrechungsfreie Stromversorgung stellen.
- Um ein Überhitzen des Geräts zu verhindern, das Gerät vor direkter Sonneneinstrahlung schützen und nicht in der Nähe von wärmeabstrahlenden Geräten (z.B. Heizgerät) aufstellen.
- Im Inneren dieses Geräts herrschen potentiell gefährliche Spannungen. Nicht versuchen, das Gerät zu öffnen. Es enthält keine vom Benutzer zu reparierende Teile. Reparaturen dürfen nur von ausgebildetem Kundendienstpersonal durchgeführt werden.

## Español

- Para reducir el riesgo de descarga eléctrica, desconecte de la red de voltaje el aparato antes de instalar el cable de señal de audio. Vuelva a conectar la alimentación de voltaje una vez efectuadas todas las interconexiones de señalización de audio.
- Conecte el aparato a un tomacorriente bipolar y trifilar con neutro de puesta a tierra. El tomacorriente debe estar conectado a la protección de derivación apropiada (ya sea un fusible o un disyuntor). La conexión a cualquier otro tipo de tomacorriente puede constituir peligro de descarga eléctrica y violar los códigos eléctricos locales.
- No instale el aparato en lugares donde haya agua o humedad excesiva.
- No deje que en el aparato entre agua ni ningún objeto extraño. No ponga objetos con líquidos encima de la unidad ni cerca de ella.
- Para reducir el riesgo de sobrecalentamiento, no exponga la unidad a los rayos directos del sol ni la instale cerca de artefactos que emiten calor, como estufas o calentadores.
- Este aparato contiene niveles de voltaje peligrosos en potencia. No intente desarmar la unidad, pues no contiene piezas que puedan ser reparadas por el usuario. Las reparaciones deben efectuarse únicamente por parte del personal de mantenimiento capacitado en la fábrica.



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## CHAPTER 1: INTRODUCTION

### HOW TO USE THIS MANUAL

Make sure to read these operating instructions in their entirety before using the Galileo® loud-speaker management system. In particular, pay close attention to material related to safety issues.

As you read these operating instructions, you will encounter the following icons for notes, tips, and cautions:



**NOTE:** A note identifies an important or useful piece of information relating to the topic under discussion.



**TIP:** A tip offers a helpful tip relevant to the topic at hand.



**CAUTION:** A caution gives notice that an action may have serious consequences and could cause harm to equipment or personnel, or could cause delays or other problems.

Information and specifications are subject to change. Updates and supplementary information are available at [www.meyersound.com](http://www.meyersound.com).

Meyer Sound Technical Support is available at:

- **Tel:** +1 510 486.1166
- **Tel:** +1 510 486.0657 (after hours support)
- **Web:** [www.meyersound.com/support](http://www.meyersound.com/support)
- **Email:** [techsupport@meyersound.com](mailto:techsupport@meyersound.com)

# GALILEO LOUDSPEAKER MANAGEMENT SYSTEM

The Galileo loudspeaker management system is a complete hardware and software solution with all the necessary tools for driving and aligning sound reinforcement systems with multiple zones. The system consists of:

- **Galileo 408:** A fully digital matrix processor with four inputs and eight outputs.

Designed as the perfect complement to Meyer Sound’s self-powered loudspeakers, Galileo includes array correction for M Series™ array products, presets for Meyer Sound systems of various sizes and types, and digital implementations of technologies used in Meyer Sound’s groundbreaking analog processors and line drivers. The system includes a wide selection of bandpass and parametric EQs, delay and gain adjustments, air absorption compensation, and other signal processing.

Galileo’s Composite EQ™ architecture offers the most extensive equalization of any current loudspeaker management system. By providing both CP-10 complementary phase parametric equalization and TruShaping® low-order shaping equalization, Composite EQ provides the right tools for addressing both acoustic anomalies and subjective sonic requirements. The Galileo 408 features full digital operation with fixed latency across all output channels regardless of the processing applied (see Table 1). All internal processing is performed at 96 kHz with a 32-bit floating point vector processor.

**Table 1: Internal Digital Audio Input Latency**

Sample Rate Input (kHz)	Measured Latency (ms)
32.0	4.15
44.1	3.52
48.0	3.37
96.0	2.60
192.0	2.43
Analog audio input latency: 1.53 ms	

*\*Test conditions were factory default settings: All input and output EQ and TruShaping filters enabled but set to flat response, no other filtering enabled.*

- **Compass® control software:** Provides comprehensive control of the Galileo 408 through a graphical user interface running on a remote computer.

The software enables easy access to all Galileo features and even provides control of multiple units. Compass includes a context-sensitive help system, full copy and paste of all settings and groups of settings, and multiple levels of undo. The tabbed interface can be scaled to any display resolution and the colors can be configured for either day or night. Windows and Mac OS X versions have the same user interface, so switching between platforms is completely transparent.

A sophisticated channel linking system allows multiple inputs and outputs, even across multiple Galileo 408s, to be linked so that parameter changes are applied to all linked channels. Relative gain mode allows gain changes to linked channels while retaining gain differences between linked channels.

The EQ Plotter window includes an overlay of the applied CP-10 and TruShaping equalization, for both amplitude and phase, in a single editable window. Equalization parameters can be edited directly by simply dragging EQ points in the display, or by entering values numerically for greater precision.



**TIP:** For information on using the Compass control software, refer to the *Compass User Guide* available at [www.meyersound.com](http://www.meyersound.com).

## **SIM® 3 Support**

The Galileo 408 can be directly connected to the SIM® 3 audio analyzer, providing complete audio measurement capabilities for complex audio systems.



## CHAPTER 2: GALILEO 408 FEATURES AND FUNCTIONS

### GALILEO PROJECTS

Galileo project files are saved by the Compass control software to the host computer. Galileo project files retain the full configuration of parameters, system settings, and snapshots stored in the Galileo 408. When a Galileo 408 is connected to the host computer, the Compass control software reads and displays the configuration currently residing in the Galileo 408.



**CAUTION:** Opening a project file in the Compass control software when a Galileo 408 is connected to the host computer overwrites the current Galileo 408 configuration (if the Overwrite option is selected when opening the project). To merge snapshots from a project file into the current configuration for the connected Galileo 408, use the Merge Project option on the Open Project dialog box (click More for this option to appear).



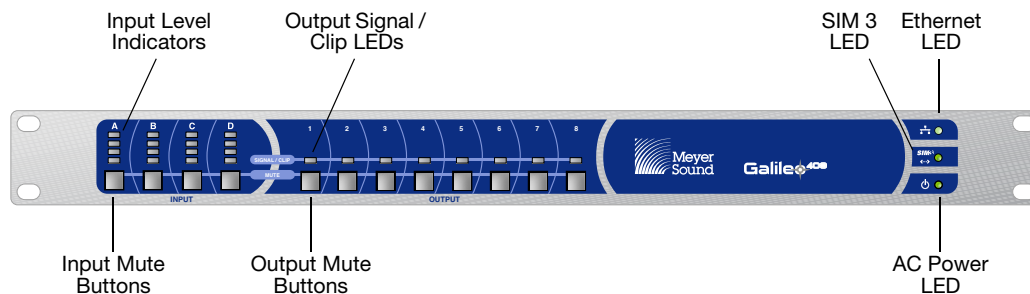
**TIP:** You can use the Compass control software to read and back up Galileo 408 configurations. The configurations are saved as project files on the host computer and can be later used to restore the configuration, via Compass, back into the Galileo 408.



**NOTE:** When using project files created on a Galileo 616, only the first four inputs and first eight outputs will be available on the Galileo 408. The unused inputs and outputs are preserved in the project file but unavailable to the Galileo 408.

## GALILEO 408 FRONT PANEL

The Galileo 408 front panel includes mute buttons for inputs and outputs, input level indicators, and output LEDs.



*Galileo 408 Front Panel*

- **Input Level Indicators:** Multi-segment LEDs for each input channel. The green LEDs indicate input levels from  $-80$  dB below clipping to a few dB below clipping. The yellow LED indicates a range from a few dB below clipping to just below the clipping level. The red LED indicates when the input signal reaches the clipping level. In the Compass control software on the Settings > Input and Output page, you can set the Input Voltage Range for each input to either  $+26$  dBu ( $15.5$  V rms) or  $+20$  dBu ( $7.75$  V rms), which determines the clipping levels.
- **Input Mute Buttons:** One for each input channel, allowing the channels to be muted and unmuted. Muting an input in the Compass control software also activates the button.
- **Output Signal / Clip LEDs:** Multi-color LEDs, one for each output channel. The LED turns green to indicate output levels from  $-85$  dB below clipping to approximately  $-5$  dB below clipping, with the LED glowing brighter as the signal increases. The LED turns amber to indicate levels from approximately  $-5$  dB to just below the clipping level. The LED turns red when the output signal reaches the clipping level. In the Compass control software on the Settings > Input and Output page, you can set the Output Voltage Range for each output to either  $+26$  dBu ( $15.5$  V rms) or  $+20$  dBu ( $7.75$  V rms), which determines the clipping levels.



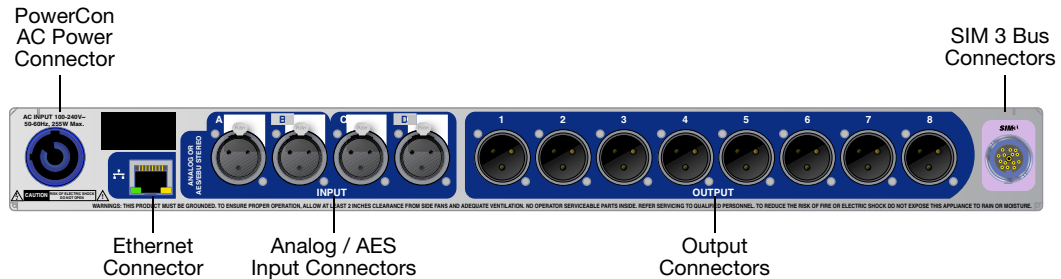
**NOTE:** The default and recommended Output Voltage Range is  $+26$  dBu.



- **Output Mute Buttons:** One for each output channel, allowing the channels to be muted and unmuted. Muting an output in the Compass control software also activates the button.
- **Ethernet LED:** Indicates Ethernet activity when the Galileo 408 is connected to a computer running the Compass control software.
- **SIM 3 LED:** Indicates when a SIM 3 audio analyzer is successfully connected to the SIM 3 bus.
- **AC Power LED:** Indicates when the Galileo 408 is receiving AC power.

## GALILEO 408 REAR PANEL

The Galileo 408 rear panel includes four audio inputs and eight outputs, a SIM 3 bus connector, and an Ethernet connector for communicating with a computer running the Compass control software.



*Galileo 408 Rear Panel*

- **PowerCon AC Power Connector:** This locking connector mates with the provided AC power cable.

**CAUTION:** Make sure the AC power cable has the appropriate power plug (on the other end) for the area in which you will operate the Galileo 408.

**NOTE:** The Galileo 408 incorporates Meyer Sound's Intelligent AC power supply, which automatically adjusts for any line voltage worldwide, and provides both soft turn-on and transient protection.

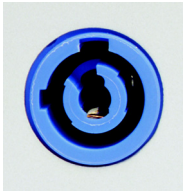
- **Ethernet Connector:** RJ-45 connector for connecting the Galileo 408 to an Ethernet network, so it can be controlled from a computer running the Compass control software. Use a shielded CAT-5e cable (recommended) or better Ethernet data cable.
- **Analog / AES Input Connectors (A and C):** XLR-3F input connectors that accept either a standard line-level analog signal or AES two-channel digital signal. In the Compass control software on the Settings > Input and Output page, you can set these inputs to either Analog or AES.
- **Analog Input Connectors (B and D):** XLR-3F input connectors that accept standard line-level audio only. These inputs are typically paired with the A and C inputs for receiving two-channel, left/right audio signals. The analog-only inputs are disabled when their partnered input is set to AES mode. For example, when input A is set to AES mode, input B is disabled; and when input C is set to AES mode, input D is disabled.
- **Output Connectors (1–8):** Eight XLR-3M connectors for connecting to Meyer Sound self-powered loudspeakers, or to power amplifier channels driving passive loudspeaker systems. Any signal routing and processing stored in the Galileo 408's project file is applied to these outputs.
- **SIM 3 Bus Connector:** Connects to the SIM 3 audio analyzer so the Galileo 408's inputs and outputs can be used as measurement points.

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## CHAPTER 3: CONNECTING THE GALILEO 408

### POWER CONNECTOR

The Galileo 408 uses a locking PowerCon® connector to provide AC voltage to the unit. Its internal switching power supply accepts voltages from 90 to 264 V AC, 50/60 Hz.

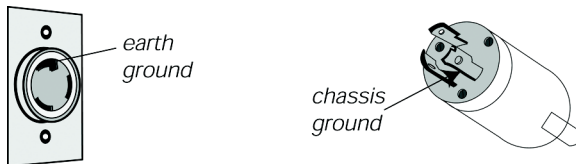


*Locking PowerCon connector for AC power*

### Electrical Safety Issues!

Pay close attention to these important electrical and safety issues:

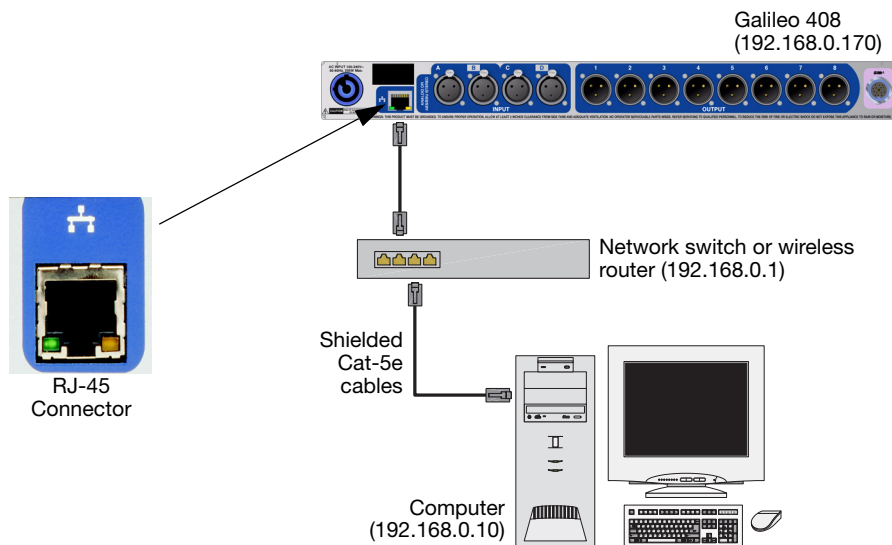
- Make sure the AC power cable has the appropriate power plug (on the other end) for the area in which you will operate the Galileo 408.
- Always use a grounded outlet and plug.



**CAUTION:** To comply with EMC standards, only operate this device with the supplied shielded power cord.

## REMOTE COMPUTER CONNECTION

The Galileo 408's RJ-45 port connects to a standard Ethernet port with a shielded Cat-5e cable. The Ethernet connection allows the unit to be controlled remotely from a Mac or Windows computer running the Compass control software.



*Galileo 408 Connected to Computer*

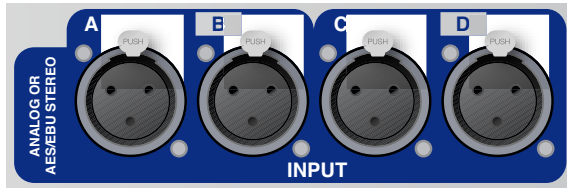


**NOTE:** When connecting the Galileo 408 to a computer through a router, make sure the router's IP address is appropriately configured (192.168.0.1).



**TIP:** For more information on connecting the Galileo 408 to a computer for remote control, refer to the *Galileo Quick Start Guide* (PN 05.141.002.09) available at [www.meyersound.com](http://www.meyersound.com).

## INPUT CONNECTORS (FROM CONSOLE)



*Galileo 408 Input Connectors*

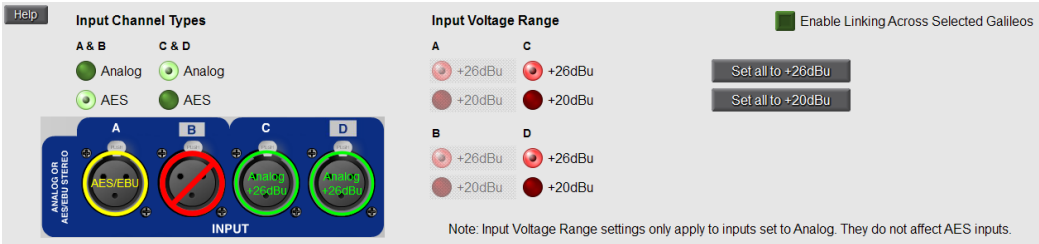
### Analog Inputs

Analog sources, including those from analog mixing consoles, are connected to the XLR-3F input connectors labeled A through D on the Galileo 408 rear panel. The four analog inputs are electronically balanced and feed state-of-the-art A/D converters operating at 24-bit resolution at a 96 kHz sample rate. In the Compass control software on the Settings > Input and Output page, the Input Voltage Range can be set to either +26 dBu (the default) or +20 dBu. In addition, inputs A and C can be configured as Analog or AES. The Galileo 408's input meters on the front panel indicate levels for both analog and digital signals.

# AES/EBU Inputs

AES/EBU digital signals are connected to the XLR-3F input connectors labeled A and C on the Galileo 408 rear panel. Standard stereo AES/EBU digital audio signals at sample rates up to 96 kHz are supported. The Galileo 408’s input meters on the front panel indicate levels for both analog and digital signals.

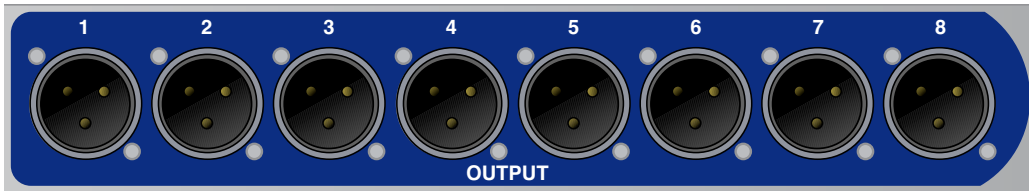
**NOTE:** In the Compass control software on the Settings > Input and Output page, the Input Channel Types can be set to Analog or AES. Because AES/EBU signals carry two channels of digital audio, when AES is selected, the second connector in the pair is disabled.



Compass System Settings, Input Channel Types


Both analog and digital input sources can be used simultaneously with the Galileo 408. For example, an AES/EBU signal can be connected to input A (with input B disabled), and analog signals can be connected to inputs C and D.

## OUTPUT CONNECTORS (TO LOUDSPEAKERS/ARRAYS)

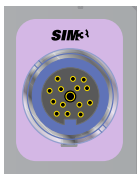


*Galileo 408 Output Connectors*

The Galileo 408 includes eight XLR-3M output connectors featuring high-resolution 96 kHz, 24-bit D/A converters. These outputs have the same line-driving capabilities found on Meyer Sound's analog line drivers, delivering signal levels up to +26 dBu. The Galileo 408 can easily drive Meyer Sound self-powered loudspeakers to full output at all frequencies, even over lengthy cable runs.

 **NOTE:** In the Compass control software on the Settings > Input and Output page, the Output Voltage Range can be set to either +26 dBu (the default) or +20 dBu. The +20 dBu setting lowers the overall noise floor by 6 dB but makes the output signal more susceptible to defects in the system's grounding; thus the actual performance at +20 dBu depends on the quality of grounding between components. At either setting, the unit's digital gain compensates for the output gain so that the overall system output level of the Galileo 408 will remain constant.

## Connecting the SIM 3 Audio Analyzer



*Galileo 408 SIM 3 Bus Connectors*

The Galileo 408 rear panel includes a bus for direct connection to the SIM 3 audio analyzer. Once connected, the Galileo 408 can act as a line switcher for the analyzer and be used to measure across any selection of inputs and outputs.

The default bus address for the Galileo 408 is 10 and the available range is 1–14. When the SIM 3 is connected to the Galileo 408 it is auto-detected and its presence is indicated on the front panel's SIM 3 LED. The SIM 3 also appears in the Compass control software on the Settings > SIM 3 page.

### System Settings for Galileo with SIM 3 Software 1.7.x

SIM 3 analyzers with version 1.7.0 software and later allow for two probe points when using the SIM 3 bus extension cable between Galileo and the SIM 3. In the Compass control software on the Settings > SIM 3 page, you can set the Output Probe Point to either of the following options:

- **Output Post Delay**, includes TruShaping EQ, Parametric EQ, SIM 3 Trim, Polarity, and Delay.
- **Output Post Gain**, includes TruShaping EQ, Parametric EQ, SIM 3 Trim, Polarity, Delay, Atmospheric Correction, Array Correction, and High/Low Pass and Gain.

Before you can measure Galileo inputs and outputs with the SIM 3, you must verify the switcher configuration in the SIM 3 software (choose Settings > Switchers to open the Switchers dialog box). Addresses 10–14 are reserved for Galileo. Next, connect the bus cable between the two devices using the Line Switcher port on the SIM 3 rear panel. Three branch combinations are available when measuring Galileo inputs and outputs.



**Combination 1**

- Console = Galileo Output Post Matrix (ex. Ad 10, Ch 1 Sw 10, Cons 1). This uses the output of the Galileo Summing Matrix as the signal that feeds the Console bus.
- Processor = Galileo Output Post Processing (ex. Ad 10, Ch 1 Sw 10 Proc 1). This uses the output of the Galileo Output Processing as the signal that feeds the Processor bus.



**NOTE:** Selecting Cons 1 on the Console channel will automatically select Proc 1 on the Processor channel. The transfer function shown will represent the output processing applied using Galileo.

**Combination 2**

- Console = Front Panel Signal Generator (ex. Ad FP Ch 0 Generator). The SIM signal generator is used as the signal that feeds the Console bus.
- Processor = Galileo Output Post Processing (ex. Ad 10, Ch 1 Sw 10 Proc 1). This uses the output of the Galileo Output Processing as the signal that feeds the Processor bus.



**NOTE:** The transfer function shown will include any input and output processing applied using Galileo and/or the mixing console.

**Combination 3**

- Console = Front Panel Line Input 1 (ex. Ad FP 1 Line In 1) This uses the signal received at Line Input 1 which can be in parallel to the console output feeding Galileo.
- Processor = Galileo Output Post Processing (ex. Ad 10, Ch 1 Sw 10 Proc 1). This uses the output of the Galileo Output Processing as the signal that feeds the Processor buss.



**NOTE:** The transfer function shown will include any input and output processing applied using Galileo and/or the mixing console.



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# APPENDIX A: SPECIFICATIONS

## GALILEO 408 SPECIFICATIONS

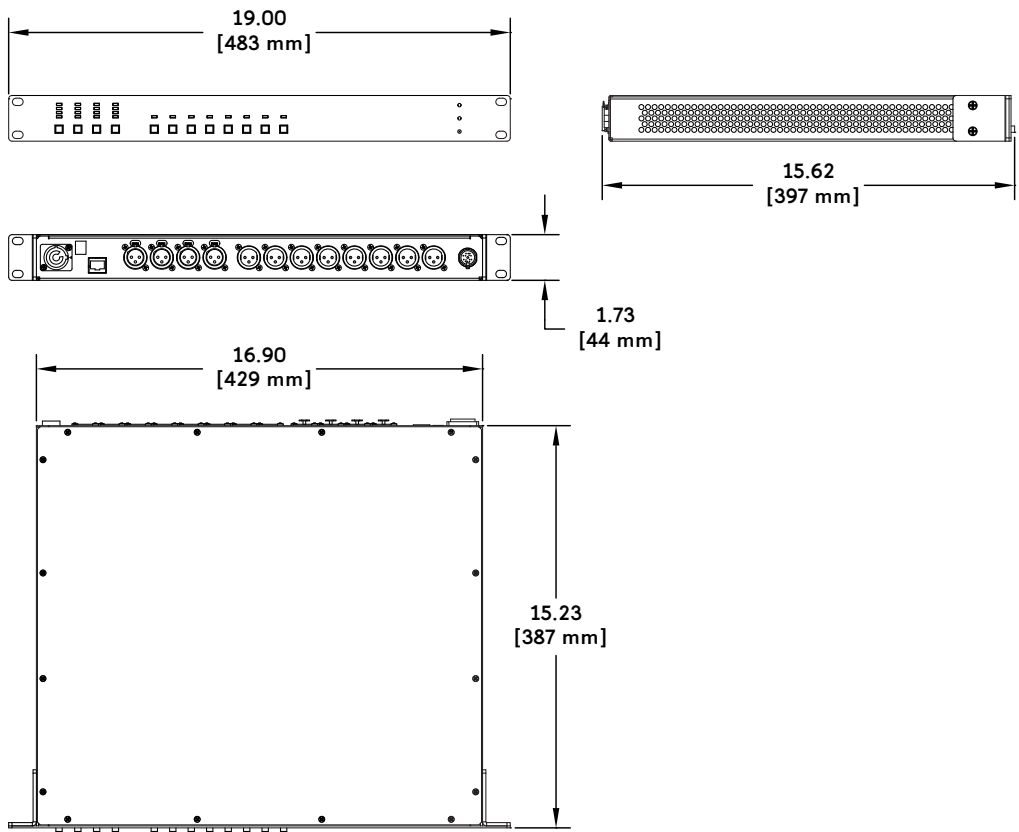
<b>INPUTS</b>	
Inputs Section	4 inputs, analog or digital (AES/EBU, selectable in pairs)
Connectors	Gold-plated female XLR
Maximum Peak SPL	+26 dBU (maximum range selected, 0 dB input gain)
Metering	4-segment LED ladder meters on each input
<b>OUTPUTS</b>	
Outputs Section	8 analog outputs
Connectors	Gold-plated male XLR
Maximum Output Level	+26 dBU into 600 $\Omega$ or greater (maximum range selected)
Metering	Variable intensity bi-color signal presence/clip LED on each output
<b>SUMMING</b>	
Summing Matrix	Full 4 x 8 summing matrix; any input summed with any input and routed to any output
<b>PROCESSING</b>	
Digital Conversion	24-bit resolution, 96 kHz sampling rate
Internal Processing	32-bit vector floating point, 96 kHz
Processor	Monolithic, 1 GHz vector DSP
<b>CONTROL</b>	
Network	Ethernet port for network connection and control from a Windows or Mac computer
Control	Full bidirectional communication with Meyer Sound's Compass control software within a client-server architecture
<b>AC POWER</b>	
Connector	PowerCon
Operating Voltage Range	90–250 V AC, 50/60 Hz
Power Consumption	0.56 A (110 V AC); 0.28 A (220 V AC), 50/60 Hz

PHYSICAL	
Dimensions	1 rack space 19.00" w x 1.75" h x 15.30" d (482 mm x 88 mm x 388 mm)
Weight	16.50 lbs (7.48 kg)
ENVIRONMENTAL	
Operating Temperature	0° C to +45° C
Non Operating Temperature	<-40° C or >+75° C
Humidity	to 95% at 35° C
Operating Altitude	to 4600 m (15,000 ft)
Non operating Altitude	to 95% at 35° C
Shock	30 g 11 msec half-sine on each of 6 sides
Vibration	10 Hz – 55 Hz (0.010 m peak-to-peak excursion)

GALILEO 408 COMPLIANCE



GALILEO 408 SPECIFICATIONS



Galileo 408 Dimensions



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Galileo 408 User Guide

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