Release Note

Genelec Loudspeaker Manager
GLM™ 2.0 Software

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the sonic reference

Release Note

GLM 2.0 Version 2.2.0 for Mac and PC

This update is highly recommended for all GLM 2.0 users.

PC requirements:
OS: Windows 10, Windows 8 or 8.1 (32- or 64 bit), Windows 7 SP1 or newer (32- or 64 bit)

Processor: Intel Pentium or compatible, 1.6 GHz minimum.
GPU*: DirectX 11.0 class or better.
RAM: 2 GB minimum
Disk space: 1 GB minimum
Display: 1024 x 768 or higher-resolution monitor.
Internet connection for downloading software**.

Mac requirements:
OS: MacOS 10.12 Sierra, OS X 10.11 El Capitan, OS X 10.10 Yosemite, OS X 10.9 Mavericks

Processor and GPU*: Mac has a qualified Processor and GPU if Mac is running either of the operating systems above.
RAM: 2 GB minimum
Disk space: 1 GB minimum
Display: 1024 x 768 or higher-resolution monitor.
Internet connection for downloading software**.

*GPU - Graphics Processing Unit
** Link www.genelec.com/glm

This version includes support for 9301, firmware updates, bug fixes, improved performance and user experience.

GLM 2.0 software calibrates and controls Genelec SAM monitors and subwoofers using Genelec Network Adapter model 8300-416 (see image).

Genelec older Network Interface models 8200-416 and 8200-416B *are not supported* with GLM 2.0 software.

Compatibility with Genelec SAM Systems

GLM 2.0 software supports the following products:

SAM Monitors:
8240A, 8250A, 8260A
8320A, 8330A, 8340A, 8350A, 8351A
1237A, 1238A, 1238AC, 1238CF, 1238DF, 1234A, 1234AC, 1236A
8130A when used with SE7261A subwoofer (SE System)

SAM Subwoofers:
SE7261A
7260A, 7270A, 7271A,
7350A, 7360A, 7370A

Other SAM devices:
9301, 8300-416 Network Adapter

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New Features

Support for New SAM devices

GLM 2.0 version 2.2.0 will now support 9301A that is used with 7300 –series subwoofers. Note that the 7300 subwoofers require a firmware update to handle 9301A signal properly. 7200 –series subwoofers are not compatible with 9301A. See an example of 5.1 multichannel configuration at the end of this document.

Firmware updates for SAM monitors, SAM subwoofers and GLM Adapter

Firmware updates must be done to make sure that SAM system has all possible features enabled and working. The update can be done through the GLM acoustic editors. The steps to follow are:

For users that have a setup ready:

- Double click on the monitor, subwoofer or Network Adapter icon in the GLM software main page to open the acoustic editor page
- Press "Update Firmware" –button.
- Wait until the device is back online.
- Repeat the process for all monitors on the GLM Network

For new users that are proceeding with first time installation of monitor systems:

- Connect the GLM adapter to computer and connect monitors and subwoofers to the GLM adapter.
- Launch GLM and create a system layout.
- Define a group.
- Skip Autocal and Autophase and save the setup (the main window will open).
- Double click on the monitor, subwoofer or Network Adapter icon in the GLM software main page to open the acoustic editor page
- Press "Update Firmware" – button.
- Wait until the device is back online.
- Repeat the process for all monitors on the GLM Network

To check quickly if the firmware update is available select "Check Update available" from Setup : View Info menu. That will show information below the monitor and subwoofer icons.
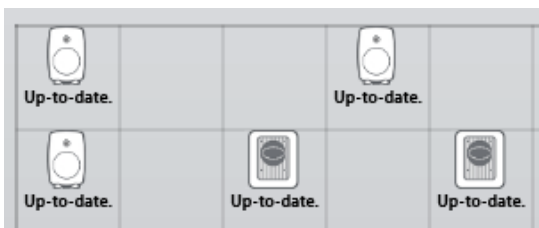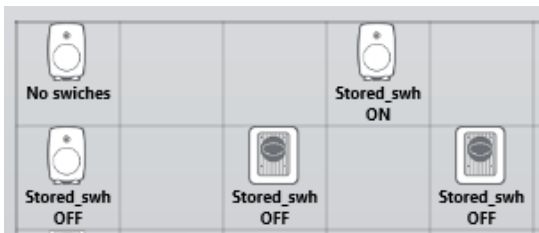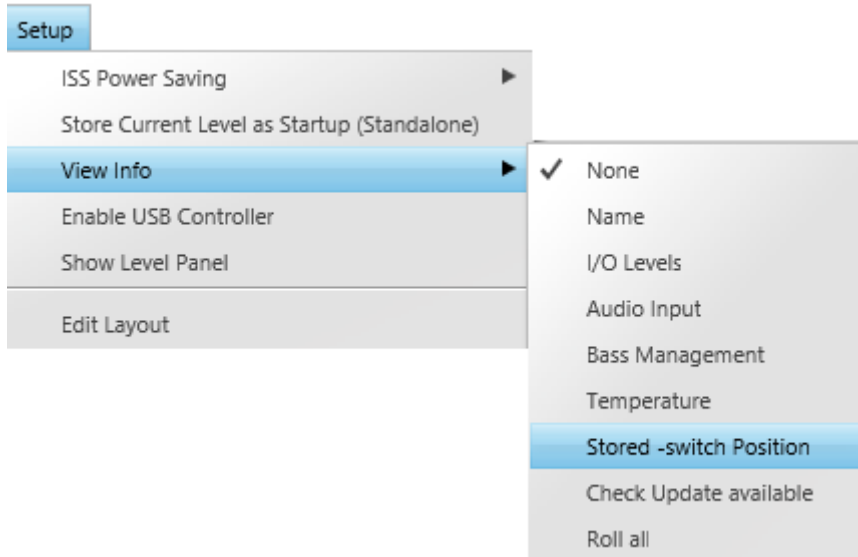
Updates available for following models:
- GLM Adapter
- 1237A / 1238A / 1238AC / 1238CF / 1238DF / 1234A / 1236A
- 7350A / 7360A / 7370A
- 8240A / 8250A / 8260A
- 8320A / 8330A / 8340A / 8350A / 8351A

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New View Info -menu items

To improve usability and problem solving there are new View Info data shown under the Setup tab. Shown data below the icons in the main page can be selected from Setup : View Info –menu. Stored –switch Position will show the Stored –switch position (ON/OFF) if the monitor has that control. This helps to identify devices that have a switch in OFF state.

Check Update available shows information if there is a firmware update available for device.
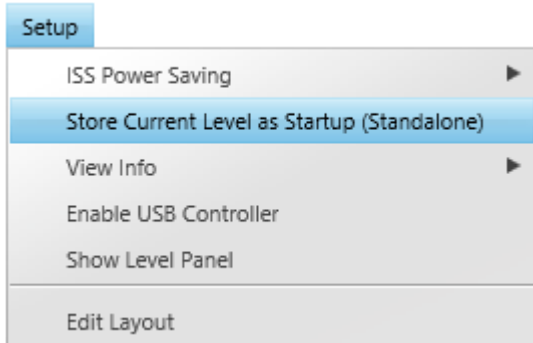

Startup Level

As default SAM monitor will start up at full level, it's now possible to set this level. Older SAM models (like 8240A, 8250A etc) need a firmware update before the Startup level can be stored. Startup Level will be overridden by GLM and when using the adapter as VC.

Setting Startup level (sets to all online devices):
1. Adjust the master level to the wanted level.
2. Store the Startup level by clicking "Store Current Level as Startup (Standalone)" from Setup menu.

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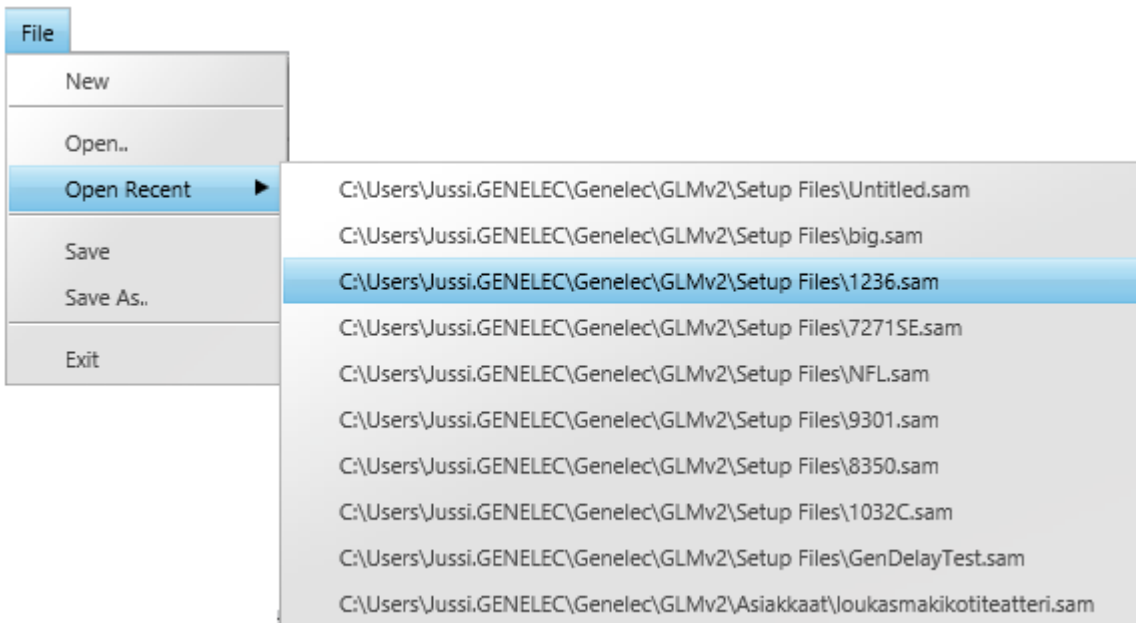Clearing Startup level (sets to all online devices):
1. Adjust the master level to the full level (0dB).
2. Store the Startup level by clicking "Store Current Level as Startup (Standalone)" from Setup menu.
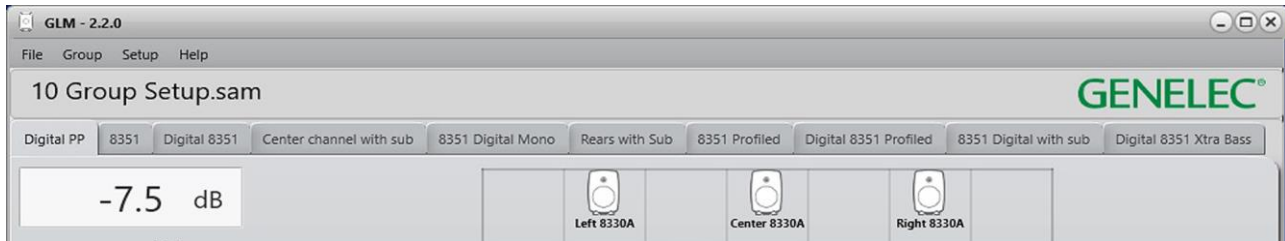

NOTE: When using 'Store Current Group Settings at Current Level to SAM Monitors' in Group menu, sets Level to Level Sensitivity and will limit maximum output of SAM monitors and subwoofers.

Longer Recently Used Setups Menu

Recently opened setup files log and menu items will include 10 last used GLM setups. This enables quick access to the last used setups.

Number of Groups Increased from 5 to 10

Users can create as many as 10 Groups in a Setup initiated from the Group tab and selecting either Add Group (creates a non-calibrated Group) or Duplicate Group. Attributes of the Groups can be modified via Group tab>Edit Group.

ID Tones are consistent between all SAM models

All ID tones are now band limited pink noise when dragging virtual monitors off the Stack during the Layout phase of building a Setup.

Firmware changes

Changes from previous production firmware version.

8320A / 8330A / 8340A / 8350A / 8430A

- Improved ISS operation.
- Improved protection functions.
- Fixed bug in the generator.

8240A / 8250A

- Distributed Bass Management (DBM) high pass filter support added
- Standalone volume control support added
- Startup volume support added
- Digital input clip indication improved, similar as 8260A
- Fixed occasional noise/room correction filter corruption on Standalone use with volume control (Stored settings, no DIP settings).

8260A / 1238CF

- Distributed Bass Management (DBM) high pass filter support added
- Standalone volume control support added
- Startup volume support added
- Fixed occasional noise/room correction filter corruption on Standalone use with volume control (Stored settings, no DIP settings).

8351A

- Startup volume support added
- Added wireless remote on/off support with GLM adapter 1.0.10 firmware
- Improved digital audio receiver initialization on startup.
- Fixed occasional noise/room correction filter corruption on Standalone use with volume control (Stored settings, no DIP settings).

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1237A / 1238A / 1238AC / 1238DF / 1234A / 1236A

- Startup volume support added
- Added wireless remote on/off support with GLM adapter 1.0.10 firmware
- No Digital audio error indication during test signal
- Model renamed. 1238CF w RAM L model name changed to 1238DF
- Fixed occasional noise/room correction filter corruption on Standalone use with volume control (Stored settings, no DIP settings).
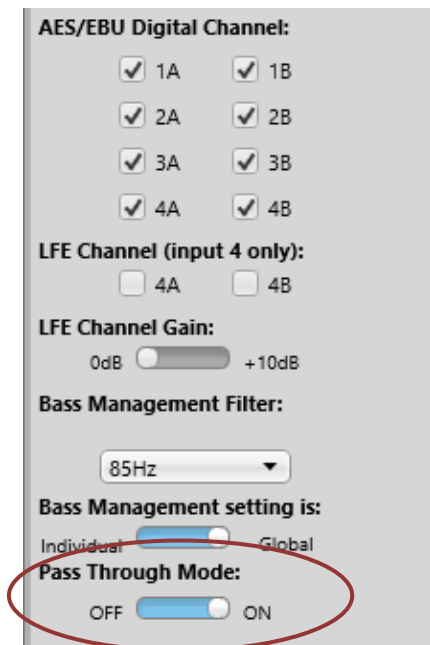
7350A / 7360A / 7370A

- Improved ISS operation.
- Improved protection functions.
- Fixed bug in the generator.

7260A / SE7261A / 7270A / 7271A

- No updates. (*see note below)

*Digital Audio 7260, 7270, 7271 Series Subwoofers (not 7261).

If you have updated your 8240, 8250, 8260, or 1238CF monitors with this release, their default is to have their **Distributed Bass Manager filter** turned **ON** when building File > New > Setups. This means your 7200 no longer needs to do the **High Pass** filtering on its outputs. You need to edit the subwoofer to Pass Thru. From Group > Edit, single click the subwoofer and in the selection area set Pass Thru Mode to ON, then confirm the Group.
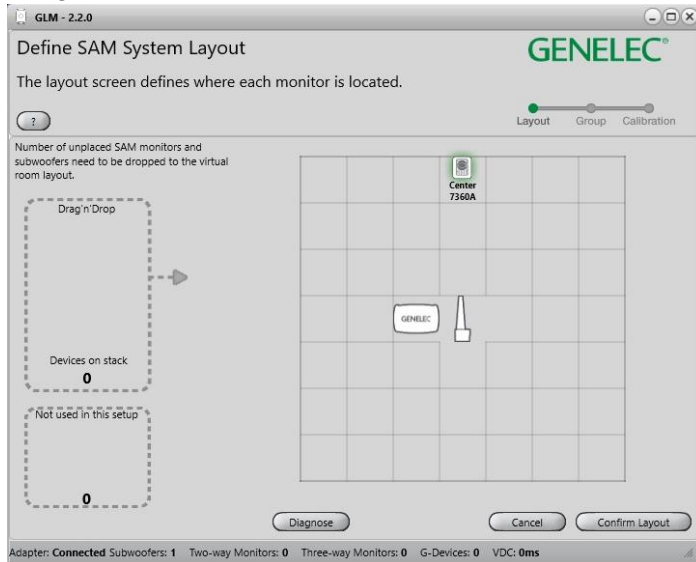
Using the 7360 and 7370 with non-SAM monitors (Hybrid mode).

With GLM V2.2, the 7360 and 7370 subwoofers can be used under the control and calibration available with GLM and AutoCal with non-SAM monitors.
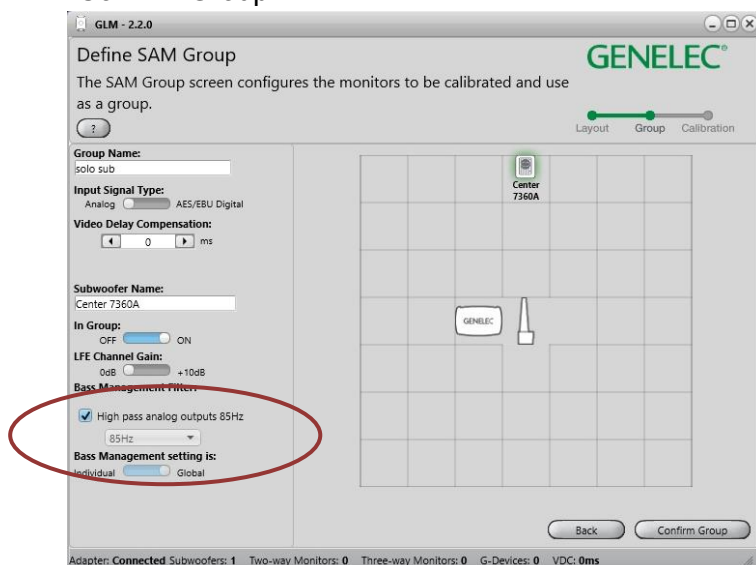
Since the 7360 and 7370 have the built-in 85Hz analog HP filters that are regularly available in Manual mode using the panel dip switches, a new feature in GLM v2.2 enables the 85Hz High Pass outputs and AutoCal filters as well as phase control available for optimization.

Making New Setup with 2.2

1. Launch GLM 2.2 and make File>New
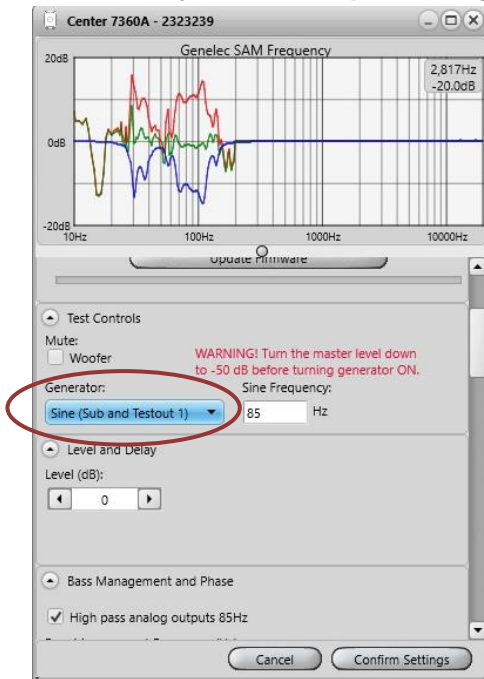2. Drag the 7360 or 7370 off the Stack and place in on the Grid. Press "Confirm Layout"

3. Then on the Group Define page check the box marked "High Pass analog outputs 85Hz". "Confirm Group"
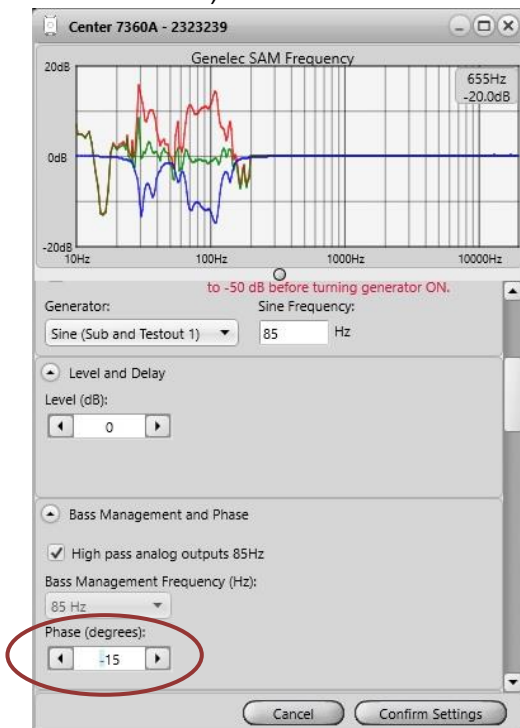

4. On the Calibration Page make all the checks for mic placement and serial number entry. Double click the mic icon and do the AutoCal calibration for the subwoofer. Confirm Calibration and
5. Skip **AutoPhase**
6. Save the Setup and return to Main Screen

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Setting Manual Phase In Hybrid Mode From the Main Page

1. Increase GLM Master Fader to -0dB (Full up)
2. Double click the sub icon. The Acoustic Settings page will appear. Move it to the left or right of the GLM Main Page.
3. Scroll down to Generator and select **Sine Wave Test out 1 or 2 depending on which L or R monitor you want to phase align to**.
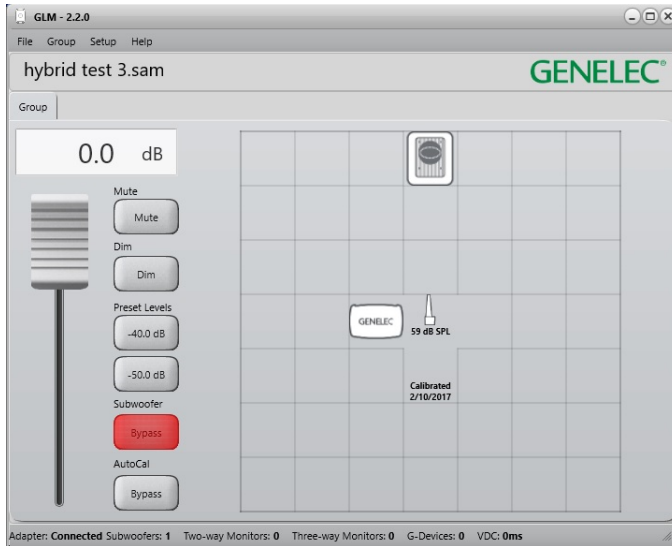

4. Using the mic SPL reading slowly change **Phase setting** using the < or > keys. We suggest you start at -180 then click > stopping at -135, -90, -45, 00, +45, +90, +135, +180 and then noting which setting is the loudest SPL on the mic. Do this slowly (about 4 seconds secs) as the mic uses a slow update rate. Then Choose Confirm Settings.

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Adjusting level with Mains

It is possible, with significant subwoofer eq bass reduction in AutoCal (see acoustic traces above), that the Main speakers may need attenuation in order to level match the compensated sub. This may require a bit of experimentation and can be confirmed by Bypassing the Bass Manager 85Hz filter as well as adjusting the sensitivity on the main monitor inputs.

1. Press the Subwoofer Bypass button On, then Off to make this comparison.

Digital Audio 5.1 with a 7300 Series Subwoofer and 9301 Example

Before cabling, turn off the power in all monitors and subwoofers. 7300 series subwoofers have only one (stereo) input for AES/EBU digital audio, 9301 Multichannel AES/EBU Interface is needed for multichannel digital installations. An example of the audio cabling for AES/EBU digital audio is shown in figure **Error! Reference source not found.**
Connect the following XLR digital audio cables:

Left/Right channel pair
- from the AES/EBU output of the audio source to the 9301's AES IN 1 connector
- from the 9301's AES OUT 1 to the right monitor DIGITAL IN
- from the right monitor DIGITAL OUT to left monitor DIGITAL IN

Surround Left/Right channel pair
- from the AES/EBU output of the audio source to the 9301's AES IN 2 connector
- from the 9301's AES OUT 2 to the surround right monitor DIGITAL IN
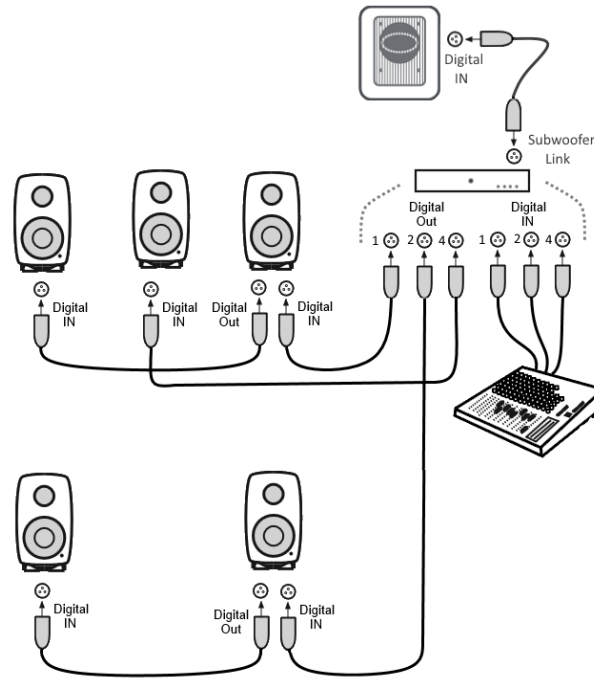- from the surround right monitor DIGITAL OUT to surround left monitor DIGITAL IN

Center/LFE channel pair
- from the AES/EBU output of the audio source to the 9301's AES IN 4 connector
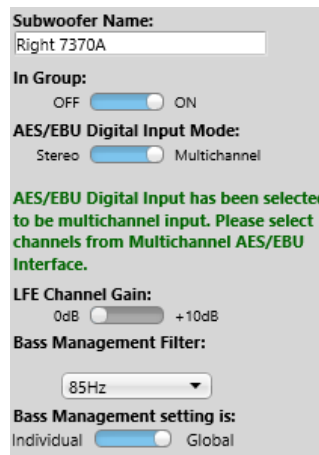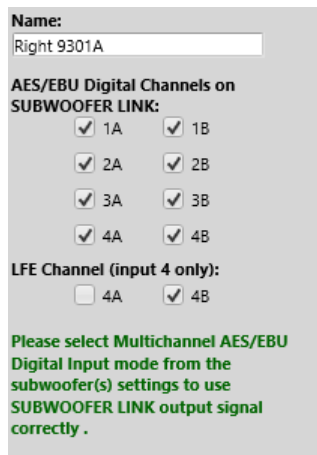- from the 9301's AES OUT 4 to the center monitor DIGITAL IN

Sum signal
- from the 9301's SUBWOOFER LINK output to the 7300 series subwoofer DIGITAL IN connector

NOTE: AES/EBU Digital input mode of 73xx subwoofer needs to be in Multichannel mode. See below for more details.

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When 9301 is activated to be part of the group, it will be automatically sum all channels together to be passed through SUBWOOFER LINK (left figure) and all 7300–series subwoofers will automatically turn its AES/EBU Digital Input Mode to Multichannel (right figure). This is required to reproduce the sum signal properly.
If using the LFE channel for Dolby Digital or DTS playback, be sure to set the +10dB Channel Gain as well.

For more information on the GLM 2.0 software, please follow the following website link GLM 2.0.

On that page you will also find the link to download the latest GLM 2.0 software version and its installation package.

If you have any questions, please do not hesitate to contact us!

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