Operation Manual

MunroSonic®

EGG100

Monitoring System

Contents

IMPORTANT NOTICE

ENSURE THE MAINS VOLTAGE SELECTOR SWITCH IS IN THE CORRECT POSITION BEFORE CONNECTING TO THE MAINS POWER SUPPLY.

YOUR EGG100 MONITORING SYSTEM CONTAINS:

1 x Input Amplifier
1 x Left Speaker
1 x Right Speaker
2 x EGG Nest
2 x 2m Speakon Speaker Cable

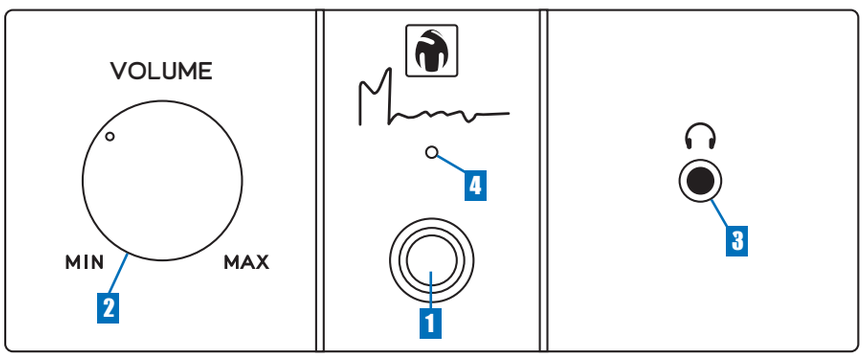
Thank you for purchasing your MunroSonic EGG100 Monitoring System, designed by Mr Andy Munro, one of the world's leading acousticians and monitor experts, and manufactured in the UK. Your system has been constructed using the finest quality components and extensively tested to ensure years of trouble free operation.

If something goes wrong, you won't get left without your speaker system.

If you register your product at ***www.MunroSonic.com/product-registration***, your standard 1 year free replacement warranty (excluding drivers) will be extended free of charge to 2 years. This is unique in the world of studio monitors, and means that if there is a technical fault caused by a manufacturing defect within the first 2 years from date of purchase, then we'll replace the entire system free of charge, immediately. We only ask for you to cover the cost of returning your system to us – the rest, we take care of for you. No other company goes this far. We're able to do this because this system is so well built.

INPUT AMPLIFIER

FRONT PANEL



1 MAIN SWITCH
An illuminated switch for the entire system allows safe power up and shut down without having to access the rear of each individual EGG monitor.

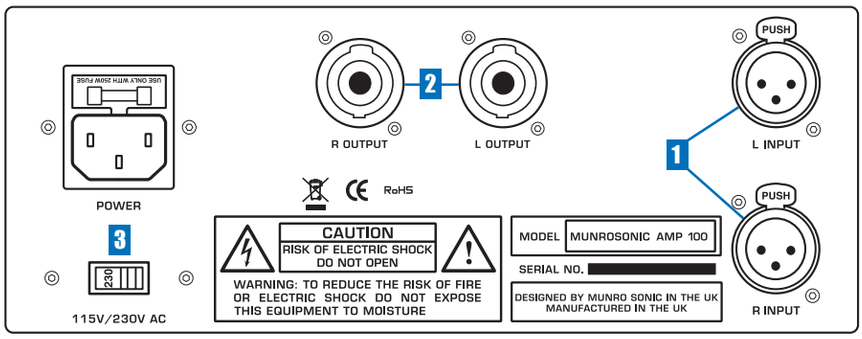
2 MAIN VOLUME
A precision potentiometer allows continuous listening level control of the main input channel without the need to access the individual speakers.

3 HEADPHONE SOCKET
An independent headphone amplifier is used. Inserting the headphone jack mutes the power amplifiers.

4 HEADROOM INDICATOR
An LED indicator designed to help protect your EGG system from overload. See Page 7 for more information.

INPUT AMPLIFIER

REAR PANEL



1 INPUTS

Industry standard balanced XLR connectors. Pin 2 is +ve.

2 OUTPUTS

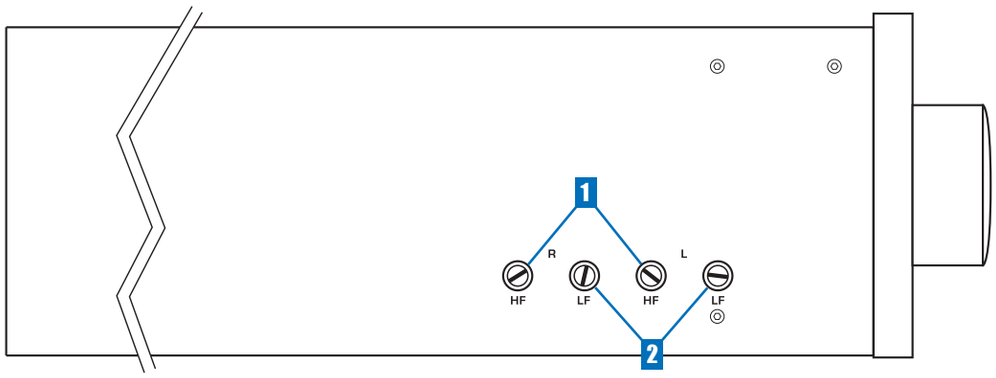
The speaker connectors are industry standard 4 way Speakons with unique (foolproof) polarity alignment.

3 VOLTAGE SELECTOR

The voltage must be set to the appropriate value and the fuse is designed to protect the EGG system from excessive current flow. Fuses should only ever be replaced with one of the correct value.

INPUT AMPLIFIER

SIDE PANEL



1 HF TRIM

The HF trim pots are designed to give absolute precision alignment of each channel and adjustment for personal taste. When set to maximum (fully clockwise) the tweeters are at maximum sensitivity. The graduation is approximately -1dB at 10kHz for each 45 degrees of anticlockwise rotation.

2 LF TRIM

The LF trim allows adjustment for speaker location and room acoustic effects. The reference (flat) setting is fully clockwise and up to 10dB of roll-off at 63Hz is available on each channel. See diagrams on page 8 for frequency range.

Setup and Operation

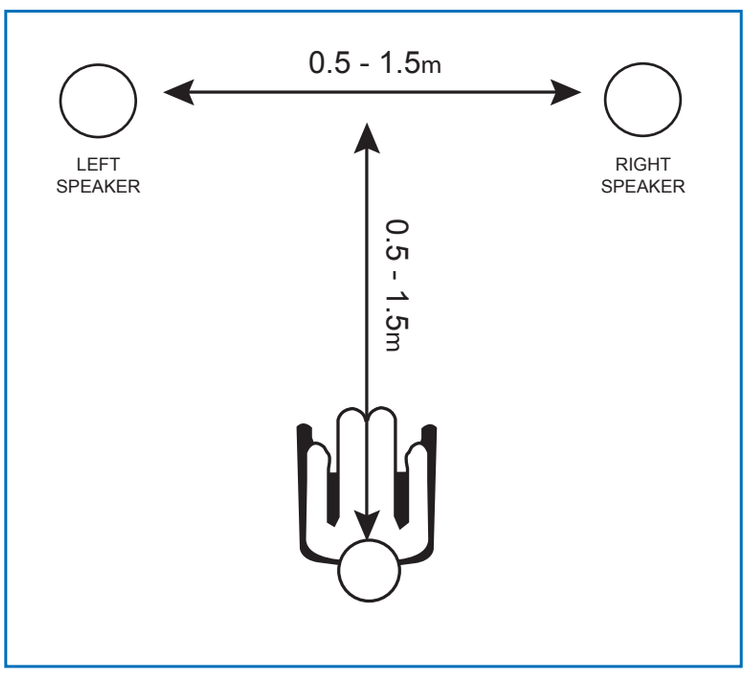
The EGG100 is designed for near-field, free standing or desktop operation. This means that adjacent equipment and surfaces will have some effect on the performance of the system and this should be taken into account when planning and installing the speakers. The openness of the sound balance will be at its best in a room that is acoustically treated in such a way as to be as neutral as is reasonably possible. Too much foam panelling on the walls and no bass absorption will create an uneven spectrum and some effort should be made to avoid this. A free guide to acoustics will be available from MunroSonic upon request.

Positioning

The ideal listening position is at between 0.5 & 1.5m from the speakers with a similar distance between them. The speakers are designed to work very well at close distances, for example, when setup either side of a computer monitor or TV screen.

The EGG100 system includes custom moulded, vibration damping nests for the EGGs to sit in. These serve several functions and are intended to facilitate the exact alignment of the speakers in any operational situation. The contoured surface allows axis tilting either forward or back without obstruction of the base port or cable entry. The material is natural rubber, as used in proprietary shock mounts and isolation pads, therefore care should be taken when adjusting the angle of the EGGs within the nests as excessive movement without first lifting the speakers may result in marking of the EGGs.

When everything is optimised the centre image will appear very solid and slightly forward of the main stereo balance. A mono mix should be absolutely solid with no impression of smearing to one side or the other. It should be noted that there are many factors that can affect stereo balance so the EGG will often show up phase and polarity issues with the rest of the system. That is what monitors are for!



Equalisation

The EGG100 is naturally neutral in its frequency response. This is mainly a result of the acoustically optimal enclosure and the choice of small drivers with almost perfectly controlled directivity. However, not all rooms are neutral and also the positioning of the speakers will affect the response. Placing a speaker very near a wall will increase bass and a corner will have even more effect. This is because energy is reflected from any surface and that energy will be in phase with the direct sound at low frequencies. This might sound like a good thing but without some degree of acoustic treatment the results can be unpredictable as at some frequencies the reverse will occur and the reflections will tend to cancel the direct energy. The EGG has precision trim potentiometers to equalise the bass and high frequency response for a given location. The HF trim can be used to compensate for acoustic imbalances or (more likely) personal preference. We all hear high frequencies in slightly different ways and also some allowance may be required for the intended reproduction of the recording although almost all media have a 'flat' response these days. As a general guide a quarter turn (90°) will give 2dB of attenuation of the highest octave and that is the preferred setting for most studio monitoring applications.

Control Unit

The EGG is unique in that all the electronics are housed in a separate unit that can be placed within reach of the operator and within the listening area. This has several important advantages.

- All balancing and adjustment can be done without having to move back and forth behind the speakers.
- The power amplifiers do not compromise the acoustic integrity of the EGG 'shell'.
- The unit acts as a volume controller in its own right.
- The 2m speaker cables allow the unit to be placed in a rack or free standing.
- Power can be switched without having to clamber behind the speakers.

Protection

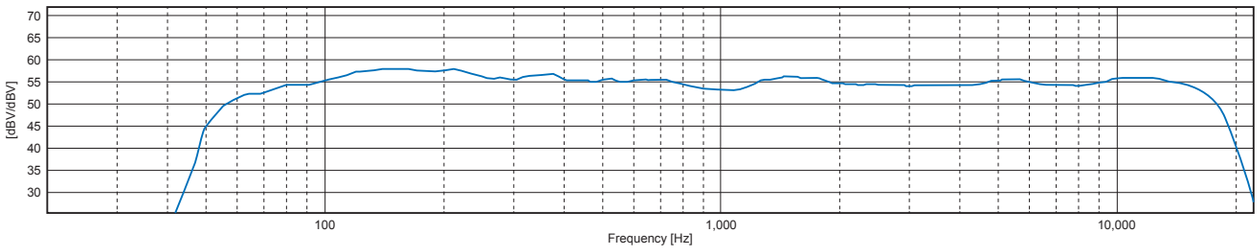
The EGG100 is well protected against electronic malfunction. An LED indicates when the system is approaching audio clip and this (when illuminated continuously or for more than a few seconds) should be regarded as a warning to reduce monitoring level. The high currents used in professional loudspeakers are capable of generating very high voice coil temperatures and prolonged loud listening can cause driver failure. Loud transients will pass through the system unhindered and the intermittent triggering of the overload LED is quite acceptable. Some manufacturers prevent this by limiting and signal processing but this can give a false impression of true dynamic range and can also impair sound quality.

The HF driver is fitted with a self resetting thermal fuse, therefore if the HF driver stops working, reduce the level and allow a few minutes for the fuse to reset. Then resume working but at a lower level to avoid a repeat.

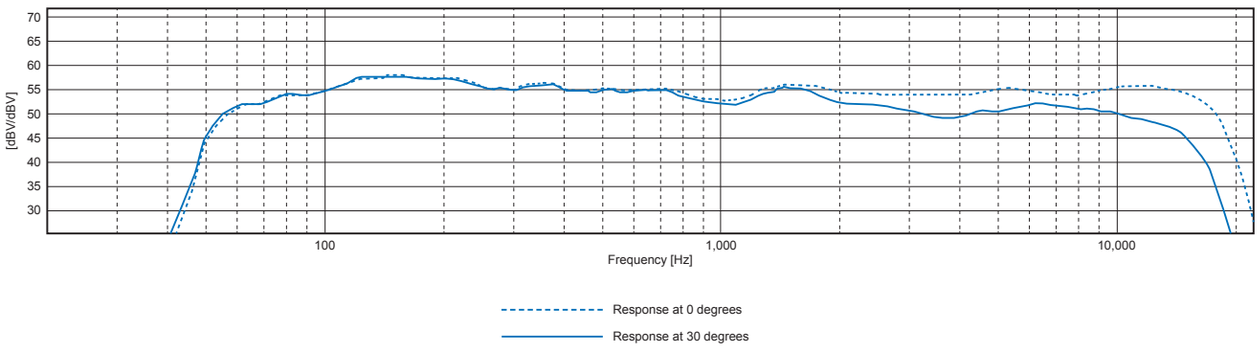
Running In

High quality drivers are used in the EGG100 Monitoring Systems. When new, they will reach their optimum working performance after approximately 24 hours of operation and, after that, should still be allowed to warm up before serious mixing is carried out.

Frequency Response



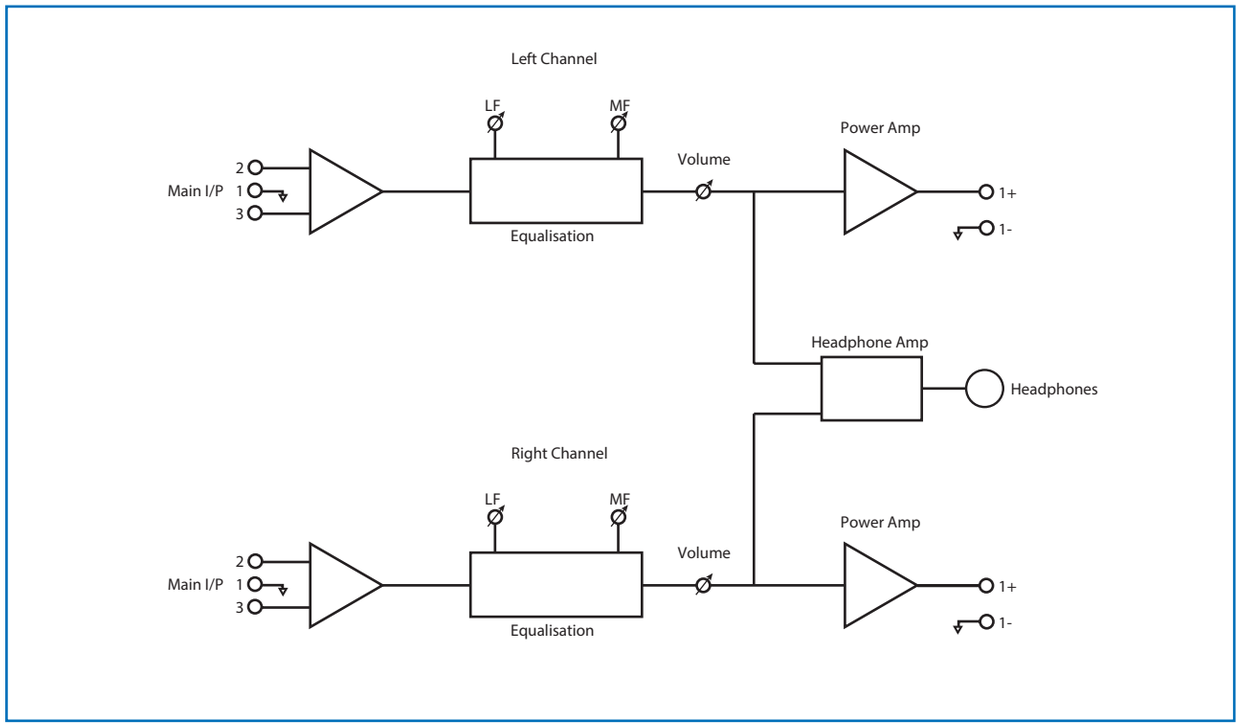
Frequency Response at 0 and 30 degrees Horizontal



Reference Data	
Frequency Response	60Hz to 20KHz (-3dB points)
Low Frequency Room Calibration	+0/-10dB at 63 Hz continuously variable
High Frequency Calibration	+1/-5dB at 10kHz continuously variable

Technical Specification

- Stereo active control unit with two 30W rms power amplifiers
- Balanced inputs
- Bass reflex speakers with 70Hz QB4 front port alignment
- Speaker effective internal volume: 14 Litres
- Two way passive crossover
- 25mm HF unit sensitivity 95dB SPL for 1 W at 1m
- 100mm LF unit sensitivity 86dB SPL for 1 W at 1m
- Thermal tweeter protection with automatic cut out and reset



EGG100 Monitoring System schematic

Safety Notice

BEFORE USING YOUR EGG100 MONITORING SYSTEM PLEASE READ THESE NOTES CAREFULLY

IMPORTANT SAFETY INFORMATION

This unit contains high voltages and hot components and must not be opened in any circumstances.

The EGG100 is a complete stereo system and the control unit, speakers and interconnecting cables are unique.
No substitutions of any sort should be used and no other speaker or amplifier can be used with the cables.

The IEC (or US Equivalent) three core mains cable must be used with appropriate regard for earthing and supply voltage.
Do not use any other type of cable.

There are no user serviceable components inside the control unit and it is hazardous to open or operate the system with the unit open.

Internal fuses exist to protect the EGG components and in the event of system failure or inoperation please report the fault to MunroSonic or their representative for further advice.

The control unit requires adequate ventilation and the top panel must not be covered or placed near a source of heat or moisture.

Do not disconnect the speaker cables when the system is switched on.

Set Volume controls to minimum before connecting/disconnecting inputs.

WARNING

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short circuiting, damages, fire or other hazards. These precautions include the following:

- The power supply (if included with this system) contains no user-serviceable parts. Do not attempt to disassemble or modify the internal components of the power supply in any way.
- Do not expose the system to rain, use it near water or in damp or wet conditions.
- If the power cord or plug becomes frayed, damaged, there is a sudden loss of sound during the use of the system or any unusual smells or smoke should appear to be caused by it, turn the power switch off immediately, disconnect the mains plug from the wall and have your system inspected by a qualified technician.
- Only use the voltage as specified as correct for the system supply.
- Always attach the three-pin attachment plug for the power supply to a properly grounded power source.
- Check the mains plug periodically and remove any dirt or dust that may have accumulated on it.
- Do not place the power cord near heat sources such as heaters or radiators and do not excessively bend or otherwise damage the power cord, place heavy objects on it or place it in a position where anyone could walk or trip over, or roll any thing over.
- When removing the power cable from either the power supply or the wall outlet, please do not jerk or pull on the power cord. Always remove the cord by holding the plug itself.
- Always connect the power supply to a direct outlet and not an extension cord. Doing so may result in an inadequate power supply for the unit to operate at specified levels.
- Always remove the plug from the outlet when the power supply is not in use for extended periods of time (longer than two weeks). Also remove the plug from the outlet during any electrical storm.
- Do not expose the system or power supply to any excessive dust or vibrations or extreme cold or heat.
  This includes but is not limited to: a car on a hot day, direct sunlight for long periods of time or near a heater or a radiator.
- Our power supplies are made for international use, so they all come with a voltage switch. This switch can be located on the back of the unit next to the on/off switch. You will have a selection between 115v or 230v. Please make absolutely sure that you have the correct voltage selected for your outlet as a mistake in selection could cause serious damage to the power supply and/or the system that is connected.

MUNROSONIC cannot be held responsible for any damage caused by improper use or modifications of the system or power supply.

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