

SYMPHONY

DANTE NETWORK AUDIO MUSICIAN'S TWIN HEADPHONE & MICROPHONE AMPLIFIER SYSTEM

PRODUCT DETAILS

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Glensound Electronics Ltd

Thank you for choosing a new Glensound product.

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Information contained in this manual is subject to change without notice, if in doubt please contact us for the latest product information.

If you need any help with the product then we can be contacted at:

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PRODUCT WARRANTY:

All equipment is fully tested before dispatch and carefully designed to provide you with trouble free use for many years.

We have a policy of supporting products for as long as possible and guarantee to be able to support your product for a minimum of 10 years.

For a period of one year after the goods have been despatched the Company will guarantee the goods against any defect developing after proper use providing such defects arise solely from faulty materials or workmanship and that the Customer shall return the goods to the Company's works or their local dealer.

All non-wear parts are guaranteed for 2 years after despatch and any defect developing after proper use from faulty materials or workmanship will be repaired under this warranty providing the Customer returns the goods to the Company's works or their local dealer.

CE

This equipment manufactured by Glensound Electronics Ltd of Brooks Place Maidstone Kent ME14 1HE is $\mathbf{C}\mathbf{\epsilon}$ marked and conforms to:

Low Voltage Directive: EN60065

Emissions: EN55103.1

Immunity: EN55103.2

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT REGULATIONS 2006 (WEEE)

Glensound Electronics Ltd is registered for business to business sales of WEEE in the UK our registration number is:

WEE/JJ0074UR

RoHS DIRECTIVE

EC directive 2002/95/EC restricts the use of the hazardous substances listed below in electrical and electronic equipment.

This product conforms to the above directive and for this purposes, the maximum concentration values of the restricted substances by weight in homogenous materials are:

Lead	0.1%
Mercury	0.1%
Hexavalent Chromium	0.1%
Polybrominated Biphenyls	0.1%
Polybrominated Diphenyl Ethers	0.1%
Cadmium	0.01%

GLENSOUND SYMPHONY Handbook Contents

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Description

Page No.

Contents

PRODUCT WARRANTY:	3
OVERVIEW	6
BLOCK DIAGRAM	7
PANEL LAYOUT & FUNCTIONS	8
CONNECTING THE INFERNO TO A DANTE NETWORK	13
Getting Dante Controller	13
Connecting Symphonys To The Network	13
Audio Over IP Network	13
Running Dante Controller	14
Dante Controller TIP	14
UPDATING FIRMWARE	15
WIRING INFORMATION	16

OVERVIEW

The Glensound Symphony is a twin user musician's microphone amplifier & headphone monitoring box with talkback facilities originally designed to meet the requirements of orchestras and designed to connect to a Dante audio network.

The audio inputs and outputs of the Symphony are Dante network audio circuits. Dante network audio is a common protocol for distributing high quality linear audio over standard IP networks and it is widely used by many audio equipment manufacturers. The Glensound Symphony's Dante audio interface will be compatible with any other manufacturers Dante audio interface. Further details of Dante network audio can be found at <u>www.audinate.com</u>

The Symphony is designed to be mounted on a microphone stand and when done will present the musician operator with easy access to the headphone mixer/ monitoring controls and also the talkback circuit. The set up controls for setting the microphone amplifiers gain, phantom power & compressor settings are all located on the base of the unit, so during normal use (when mounted on a microphone stand) will be concealed and out of the way.

Powering of the device is by means of PoE. There are 2 copper network ports and both can accept PoE, although only one is actually needed.

The microphone amplifiers on the Symphony are broadcast quality and offer very low noise & distortion circuits.



PANEL LAYOUT & FUNCTIONS



1. Phantom Power (48V) Select

This switch turns the phantom power on/off. The LCD screen indicates the current state. To operate the switch the 'FUNCTION' button must first be pressed.

2. Input Gain Up

The up push buttons increase the microphone amplifier's gain. Each time the button is pressed the gain increases by 1dB. The LCD screen shows the current amount of gain being applied. To operate the switch the 'FUNCTION' button must first be pressed.

3. Input Gain Down

The down push buttons decrease the microphone amplifier's gain. Each time the button is pressed the gain decreases by 1dB. The LCD screen shows the current amount of gain being applied. To operate the switch the 'FUNCTION' button must first be pressed.

4. LCD Display

The LCD screen is split in half, with the left half showing details of the left side microphone amplifier's settings and the right side showing details of the right side microphone amplifier's settings.

The screen has a backlight which only turns on when a button is pressed and automatically turns off again after 10 seconds of inactivity.

When no settings are being altered the display continuously scrolls between 3 screens to provide system information.

- A) Current gain settings & phantom power status are shown
- B) Available power sources are displayed
- C) The state of the internal compressors (on or off) are indicated

5. Microphone Stand Connection Point

The standard 3/8BSW (British Standard Whitworth) is a standard thread size used by many microphone stands. The threaded hole in the Symphony is mounted in a steel bar and is designed for supporting the unit while mounted onto a microphone stand. The maximum length of screw thread that the Symphony can accept is 25mm.

6. <u>Microphone Input</u>

The standard 3 pin XLR socket is the microphone input.

7. Secondary CAT5 Network Port

This standard network port provides the redundant Dante[™] network audio signal. It also accepts a PoE source for powering the unit.

8. Primary CAT5 Network Port

This standard network port provides the redundant Dante[™] network audio signal. It also accepts a PoE source for powering the unit.

9. 12V DC Power Inlet

This is a 2 pin barrel type DC input connector. The centre pin is 2.5mm. It is wired centre pin + Volts. It is designed to accept a + volt DC input between 9 and 15 volts. The Symphony consumes less than 1A @ 12Volts

10. Function Button

This button must be pressed before the gain or phantom power settings of the microphone amplifiers can be changed, a time out will occur after 10 seconds of inactivity.

Pressing & holding this button for a few seconds will allow access to the compressor settings. Once in the compressor menu, then the 'UP' and 'DOWN' buttons turn the compressor on and off.

11.USB Socket

This is used for connecting a PC to the inferno for updating its firmware.

12. Reset Switch

Only use if advised to by support.



13. Talkback Microphone

This is the microphone used for the musician's talkback. When the 'Talkback' switch (20) is operated then the output of the talkback microphone is routed to the Dante network.

14. Power On LED

The green power on LED indicates that the Symphony is receiving power and that it is turned on and running.

15. Mix Level Controls

These 3 potentiometers (marked MIX 1, MIX 2 and MIX 3) adjust the headphone mix level (volume) of the associated input circuit being received across the Dante network. Each 'MIX' has an associated stereo input being received from the Dante network.

When turned fully anti-clockwise the associated audio input circuit is effectively off.

16. Instrument Level

This audio level control adjusts the level of the associated mono input circuit from the Dante network. This will normally be the output of the musicians own microphone.

17. Instrument Pan

The pan control adjusts the left/ right position of the instrument level audio in the musician's headphones. Turning this potentiometer fully anticlockwise will route the instrument audio source only to the musician's left ear, while turning this potentiometer fully clockwise will route the instrument audio source only to the musician's right ear

18. <u>Headphone Volume</u>

This control adjusts the overall audio volume of the associated musician's headphone output.

19. <u>Headphone Socket</u>

A standard 3.5mm stereo headphone jack socket is provided to connect the musician's headphones to. It is wired as standard such that tip is left ear, ring is right ear and sleeve is common. It is designed to work ideally with headphones with impedances between 32 and 1000 Ohms and features our unique circuit that automatically reduces the output level into lower impedance headphones to allow the volume pot to provide the correct range over both low and high impedance headphones.

20. Talkback Switch

Pressing this switch turns the talkback microphone on and allows its output to be routed onto the Dante network.

CONNECTING THE INFERNO TO A DANTE NETWORK

The Symphony is a network audio device utilizing the reliable and versatile Dante audio over IP protocol. Dante is a proprietary system (although very widely used) the originators of which are Audinate.

The information below is only meant as a very basic guide. Full details of the power of Dante network audio and instructions for using it can be found at www.audinate.com

Getting Dante Controller

If you are connecting the inferno to a new Dante network the first thing you will need to do is to get the free Dante controller software from Audinate. This can be downloaded by visiting Audinate's web site at <u>www.audinate.com</u>

Connecting Symphonys To The Network

Symphonys can be connected to the network that you are going to use for your audio distribution simply by plugging in either or both of the network connections on the rear. Once connected to the network it will be possible to see the Symphony from within the Dante controller and route its' audio circuits.

Audio Over IP Network

We strongly recommend that you consider your network topology carefully and would not recommend sharing broadcast audio and general data on the same network.

For more details of audio over IP network structure please visit www.audinate.com

Running Dante Controller

At the time of writing this manual the Dante Controller looks as per the screenshot below:



The Symphonys will have been named at the factory during test to allow them to be identified by the Dante controller.

The format used for the factory name is:

'Symphony-serial-141-of63e2'

Where 'Symphony-serial-141' refers to the Glensound product i.e. Symphony and its serial no (in this case 103) and 'of63e2' refers to the units Dante Brooklyn II module and its MAC address.

Dante Controller TIP

If you have never run Dante controller before then make sure that on the bottom left of the Dante controllers' screen 'P' or 'S' is next to a green square as this indicates that it is connected to a network. By clicking 'P' or 'S' a pop up box opens to allow you to set what network interface the controller is using.

UPDATING FIRMWARE

1. <u>General</u>

The Symphony is a complex digital audio system comprising of a DSP and several Micro Controllers. All these items run software and may need to be occasionally updated.

2. Single File

One single update file contains all the updated software for the internal devices.

3. Connect To A PC

Using the rear panel USB connector connect your windows PC to the Inferno. Use Windows Explorer to locate the new software file provided by support and follow supports instructions for loading the new software.

WIRING INFORMATION



XLR SOCKET (FEMALE)

STANDARD XLR AUDIO PINOUTS:

- 1: Ground/ Earth
- 2: INPHASE/ POSITIVE/ MIC +
- 3: MATE/ NEGATIVE/ MIC -



STANDARD HEADPHONE WIRING:

TIP: A/ LEFT Ear

RING: B/ RIGHT Ear

SLEEVE: Common/ Earth

Symphony External DC power input: 2.5mm Barrel, Centre +Ve, 9 to 15 Volts, 1 Amp