VITA PLUS DANTE NETWORK AUDIO SINGLE USER COMMENTARY BOX

PRODUCT DETAILS

Glensound Electronics Ltd

Thank you for choosing a new Glensound product.

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:

Glensound Electronics Ltd
1 – 6 Brooks Place
Maidstone
Kent
ME14 1HE
United Kingdom

Telephone: +44 (0) 1622 753662

Fax: +44 (0) 1622 762330

EMAIL ADDRESSES

General enquires: office@glensound.co.uk

Technical enquires: techinfo@glensound.co.uk

Sales enquires: sales@glensound.co.uk

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 CE 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 VITA PLUS
Handbook Contents

Issue 2

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OVERVIEW

The Glensound Vita Plus is a single user commentary box designed to connect to a Dante audio network. The Vita Plus provides a single user headphone and microphone interface with a single talkback circuit, in a compact desktop format. A very high quality microphone amplifier and compressor/limiter circuit are used in the Vita Plus, designed specifically for the specialist requirements of commentators' equipment.
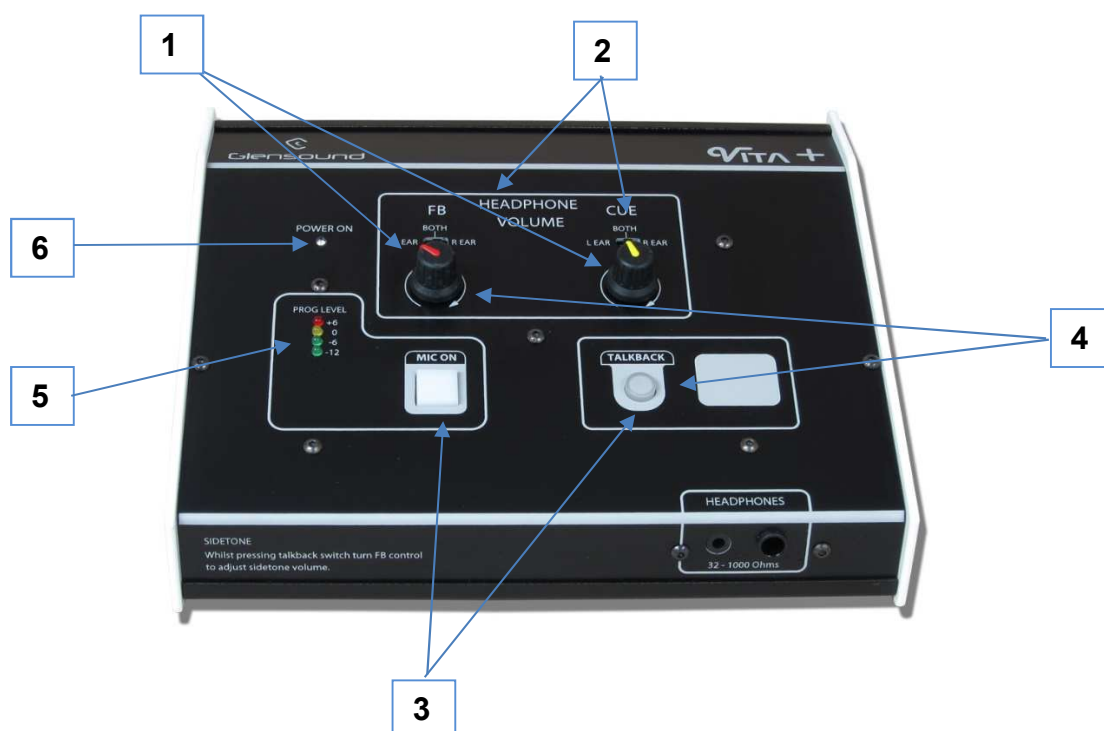
The audio inputs and outputs of the Vita Plus are Dante network audio circuits. Dante network audio is a common protocol for distributing high quality linear audio over standard IP networks and it is widely used by many audio equipment manufacturers. The Glensound Vita Plus' Dante audio interface will be compatible with any other manufacturers' Dante audio interface.

Network audio routing is managed by the Dante Controller software. Further details of Dante network audio, and the Dante Controller software can be found at www.audinate.com

Being designed for live on-air broadcast applications, the Glensound Vita Plus has been designed with backup power capabilities. It can be powered via the CAT5 connection with PoE or via a local external DC connection.

PANEL LAYOUT & FUNCTIONS

PLEASE NOTE AS THE UNIT IS CONFIGURABLE IT IS POSIBLE TO CHANGE THE OPERATION OF SOME OF THE CONTROLS SHOWN HERE. THEREFORE THE FOLLOWING IS MEANT AS A GUIDE ONLY.

1. ### Source Level Controls

These two potentiometers adjust the headphone volume of the two input circuits being received from the Dante network.

2. ### Input Routing Controls

Left-Both-Right headphone routing. This control routes the associated headphone source to either the left only, right only or both (centre) of the commentator's headphones.

3. ### Program/Talkback Switches

The 2 illuminated switches route the commentator's mic to the output of the Vita Plus i.e. channels 1 or 2 of the Dante network.

The operation of these talkback switches (momentary, latching, intelligent, etc) can be set using Vita Controller software (see page 11).

4. Sidetone Level Control

The feedback pot and talkback switch are also used to adjust the audio level of the commentators' microphone in their own headphones. It has no effect on the outgoing audio level and is used just for confidence monitoring.
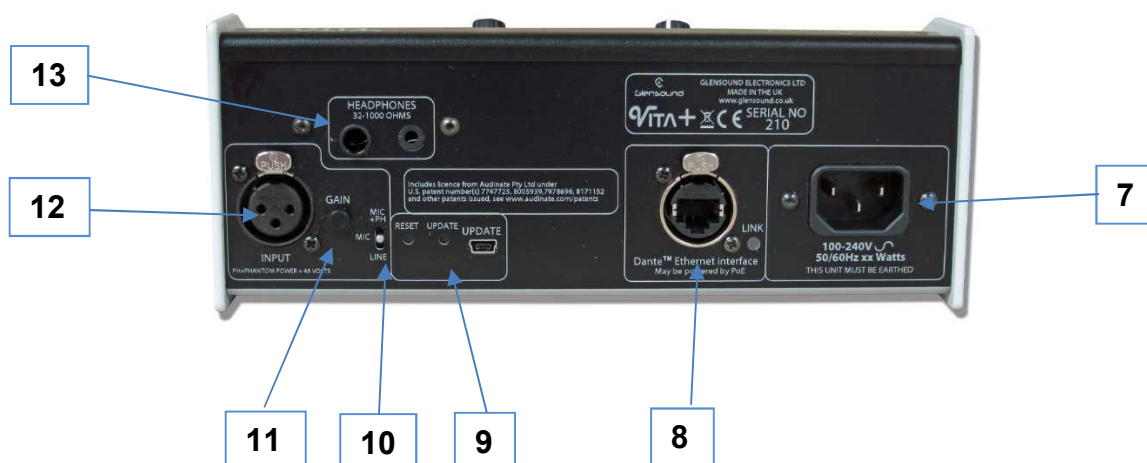
To adjust the sidetone level, hold down the talkback button, whilst adjusting the feedback pot to the desired level.

5. Peak Programme Meter (PPM)

A 4 LED PPM indicating the output level of the main program circuit. The -12 to +6 scale shows the output level in dBs. Each LED covers a 6dB range.

6. Power LED

A single blue LED indicates that the Vita Plus is receiving power. Either from an external mains source or from a PoE source.

7. Mains Input

A standard IEC plug is provided for connecting external power to the Vita Plus. It accepts a wide voltage range input of 100 to 240 VAC (+/-10%) and also frequency range of between 50 and 60 Hz. There is an internal fuse.

The Vita Plus may also be powered by PoE on the network interface connector.

8. CAT5 Network Port

An EtherCON RJ45 socket allows the audio connection to the Dante network. The Vita Plus has 2 audio inputs and 2 audio outputs on this connection. If the device the VITA Plus is connected to provides PoE, it will also power the Vita on this connection. A LED indicates the network connection status.

9. Mini USB Socket & Update/Reset Buttons

A mini USB socket and the recessed push buttons allow PC connections for future firmware upgrades. Visit www.glensound.co.uk/product-details/vita-plus/ for the latest information.

10. Input Selector Switch

A 3 position switch selects the gain of the input amp, depending on the type of input connected. With the input gain control in the centre position the following gains are applied:

INPUT SELECTED	GAIN OF MIC AMP	OUTPUT LEVEL
MIC	58dB	0dB
MIC + PH PWR	40dB	0dB
LINE	0dB	0dB

11. Input Gain Control

A small pot adjusts the gain of the input amplifier

12. Input Connector

A 3 pin Neutrik XLRF is for connecting the mic or line input to the Vita.

13. Headphone Sockets

6.35mm & 3.5mm jack sockets in parallel are available for a headphone connection, with a recommended impedance range of 32-1000 ohms.

Stereo & mono headphones can be used, or single earpieces.

A sophisticated headphone amplifier design maintains the same output level, regardless of the impedance of the earpiece or headphones used.

VITA CONTROLLER WINDOWS 10 APPLICATION

Vita Controller enables remote control of key functions, and configuration of a single or multiple Vita's connected to the network. It is PC software that runs on Window 10 machines.

Downloading

The Vita controller application must be downloaded. It is a zipped file, which contains 32 & 64 bit Windows versions of the app, a security certificate for Windows and installation instructions. To download the file please use the following address:

www.glensound.co.uk/Software/Dante/Vitacontroller.zip

1) Check whether you have a 32 bit or 64 bit installation of Windows.
2) Run File Explorer.
3) Select 'This PC' from the left hand column.
4) Right click and select 'properties.
5) 'System type' will show a 32 bit or 64 bit system installed.
6) Download the Vita Controller software for your operating system onto your local machine.

Installation

Make sure the correct Vita Controller download files are in a folder on your local machine.

Installation of Vita Controller is a two stage process as all Windows 10 applications must have a digital certificate. If this is the first time you have installed Glensound applications, then you must first load the Glensound App Certificate. This will allow you to install Vita Controller and any further Glensound Windows 10 applications. If you already have the Glensound digital certificate you can go straight to Stage 2.

Stage 1 – Installing the Glensound App Certificate

1) Make sure that you have adminstrator rights on your system. If not, please contact your system administrator.

2) Windows 10 must allow 'sideloading' applications.

   To do this, open the Settings app and select the 'Update & security icon'. Then go to the 'For developers' tab. Select 'Sideload apps'. NB Sideload apps will also work if 'Developer mode' is selected but this is not recommended.

3) From the files downloaded from the Glensound website, double-click on 'GlensoundApp.cer'.

    a. Click Install Certificate.
    b. Select 'Local Machine' and click 'Next'.
    c. Select the option "Place all certificates in the following store" and then click Browse.
    d. Select the "Trusted Root Certification Authorities" store and click OK then Next.
    e. Click 'Finish'.
    f. You will get a Security Warning asking if you want to install the certificate. Click 'Yes'.
    g. Click 'OK'.

The Glensound App Certificate will now be installed. Certificates for the current user can be managed by starting 'certlm.msc'.

Stage 2 – Installing The Vita Controller Application

1) From the files downloaded from the Glensound web site, unzip the files to a local folder.
2) Select the 32 bit or 64 bit folder that is appropriate for your operating system.
3) Right-click on the 'Vita Controller Setup.ps1' file and select 'Run with PowerShell'.
    a. If you do not have permissions to run scripts on your machine, you may get an error at this point, even though this file is digitally signed. If so, please contact your System Administrator to change the Execution Policy to a less restrictive one to allow Vita Controller to be installed. This can be changed back after installation.
4) If you get an 'Execution Policy Change' warning, press 'Y' and then 'enter' to accept. This should only happen on the first application installation after installing the Glensound App Certificate.
5) The installation folder can now be deleted.
6) To run Vita Controller, click the Windows icon in the bottom left corner of the screen, and find it in the 'All apps' list and double click.
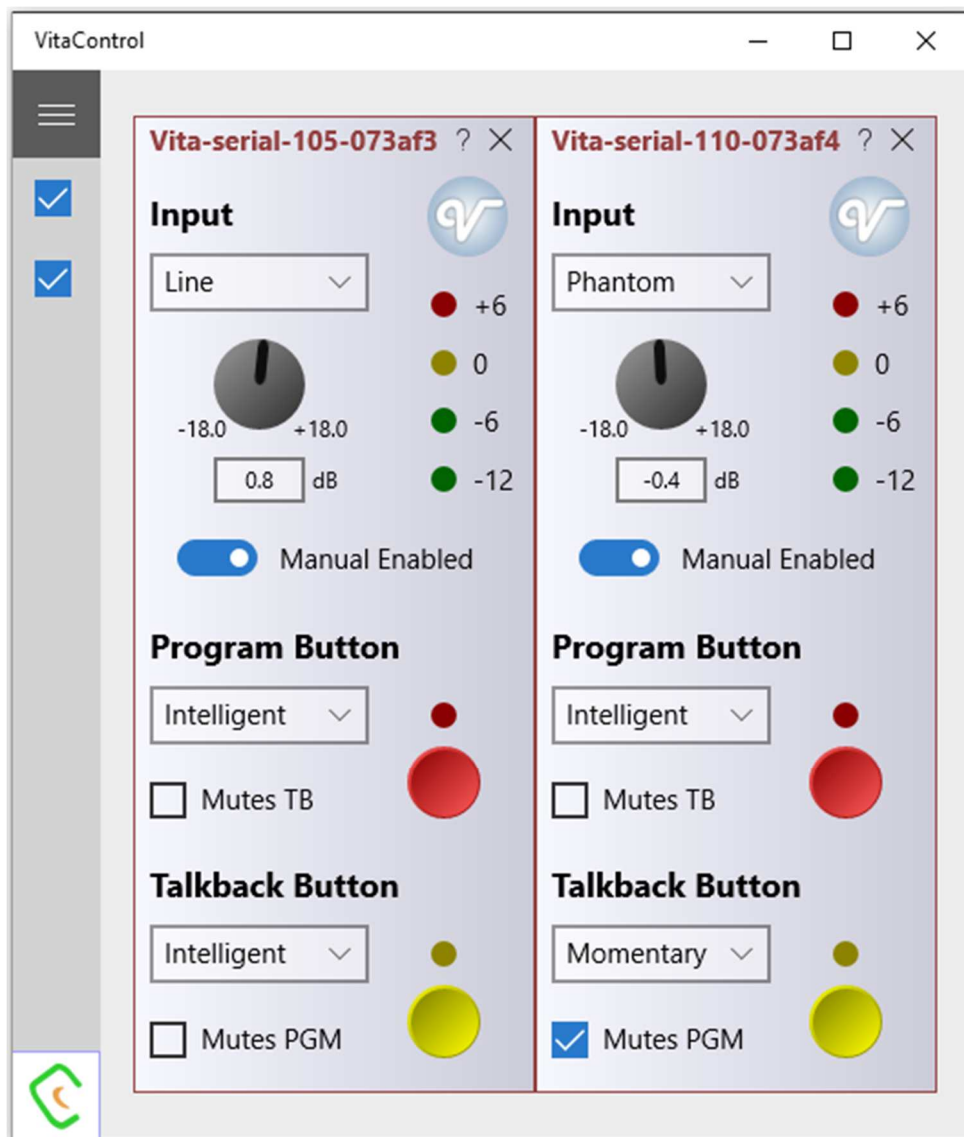
Uninstalling Vita Controller
Find the app in the 'All apps' list then right-click and select 'Uninstall'.

VITA CONTROLLER OPERATION OVERVIEW

When Vita Controller is run, it will scan the network looking for any connected Vita's. These will show up on the left hand side and each can be selected by clicking down the tabs.

Names of each device can be changed for something appropriate within Audinates Dante controller software – the operators name, for example.

The operation of Vita Controller is real time and any changes made will be instantly applied. Simply click on the graphic to make real time changes to the function selected.

Key Vita Controller Features

- Change input type to mic/mic+48v/phantom
- Adjust mic input gain
- Turn the mic or talkback on/off
  - Pressing the red or yellow buttons on Vita Controller has exactly the same effect as pressing the buttons on the unit does.
- Set the mode of the Program and Talkback buttons
  - Latching
  - Momentary push to talk
  - Intelligent
    - Quick push is a latch, a longer push is momentary
  - Always on and mutes when pressed (cough button)
  - Pressing one of the buttons mutes the other
    - This is when you use the talkback circuit and want your on air mic muted when you press the talkback button
- Lock all the local controls on the Vita so Vita Controller has exclusive control.
- PPM meter

CONNECTING THE VITA TO A DANTE NETWORK

The Vita 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 www.audinate.com

Connecting Vita's To A Network

Vitas can be connected to the network that you are going to use for your audio distribution simply by plugging in the network connection on the rear. Once connected to the network it will be possible to see the Vita from within the Dante controller and route the audio circuits.
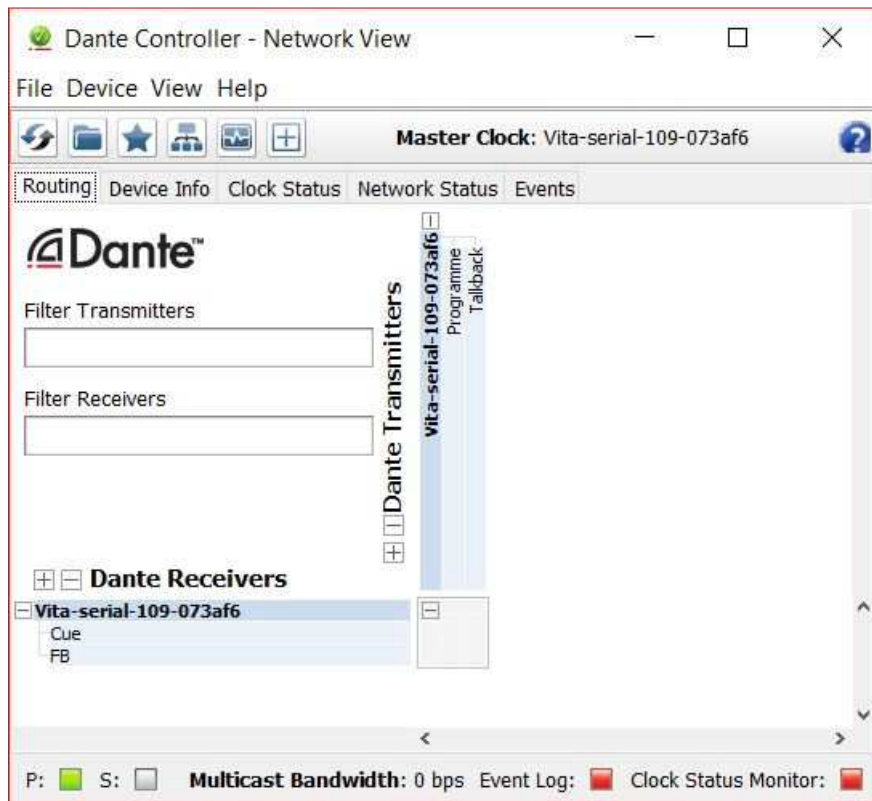
Audio Over IP Network

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, Dante Controller looks as per the screenshot below:

The Vita 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:

'Vita-serial-XXX-YYY'. 'XXX' will be the units 3 digit serial number, and 'YYY' will be the Vita's 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. General

The Vita 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.
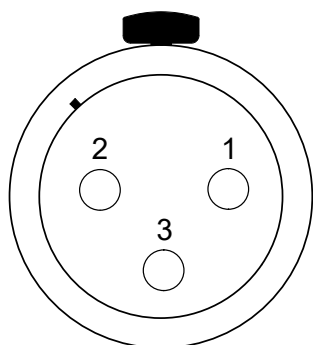
2. Single File

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 Vita. Use Windows File Explorer to locate the new software file provided by support and follow supports instructions for loading the new software.
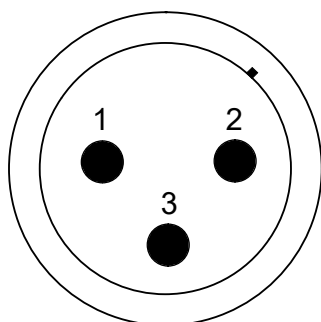
WIRING INFORMATION

XLR SOCKET (FEMALE)

XLR PLUG (MALE)

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

RING

TIP

SLEEVE