



# COIN SILVER 4016

**COMMENTARY BOX WITH INBUILT RTS  
INTERCOM**

**PRODUCT DETAILS**





# 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.



**SAFETY WARNING**



This product can produce high sound levels via the headphone output.

Please take caution when operating this product as listening to excessively high peak or sustained levels of volume may permanently damage human hearing.




## **EU DECLARATION OF CONFORMITY FOR:**

### **COIN SILVER 4016**

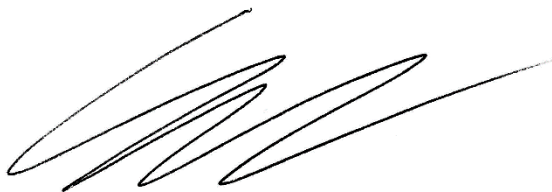
*Combined Commentary & RTS Intercom Panel*

This declaration of conformity is issued under the sole responsibility of the manufacturer.

This equipment is manufactured by Glensound Electronics Ltd of Brooks Place Maidstone Kent ME14 1HE is  marked and conforms to the following Union harmonisation legislation:

Low Voltage Directive:	EN60065 and EN62368-1:2014
Emissions:	BS EN55032:2015
Immunity:	BS EN55035:2017

Signed for and on behalf of Glensound Electronics Ltd.



Gavin Davis, Managing Director  
Maidstone, Kent, England

Date: 17/02/2019



## 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%

# **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**

# GLENSOUND COIN SILVER 4016

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## **OVERVIEW**

The COIN SILVER 4016 is an RTS desktop keypanel type DKP 4016 built into a custom housing designed for use by two commentators and features Glensound high quality commentary microphone pre amplifiers and Glensound Referee compressor limiter system.

The design of the Coin Silver 4016 has been undertaken by Glensound with the full knowledge of RTS and the DKP 4016 keypanel components fitted are sourced by Glensound directly from RTS.

The original DKP 4016 intercom connections have been retained and the COIN SILVER 4016 can connect to both RTS digital and Omneo matrixes. The high quality commentary audio is available on its own Dante enabled Ethernet interface as well as traditional balanced line level analogue outputs.

The two commentary microphone amplifiers feature low noise high quality circuits followed by Glensound's much loved Referee compressor limiter circuit keeping the outgoing audio controlled and coherent even with the most excitable of commentators. The outputs from the commentators microphone amplifiers are routed directly to Dante and analogue outputs for broadcast and are also fed internally into the DKP 4016 keypanel via what would be the left and right handside headset interface connectors on a standard DKP 4016 for off air intercom talkback.

Two separate stereo headphone amplifiers are provided, one for each commenatator. These can produce very high output levels and as such care should be taken to prevent long term exposure to high headphone levels from damaging your commentators' hearing and also any Country specific noise at work regulations should be adhered to by the use of external limiting devices.

The two headphone amplifiers each have three audio inputs, the commentator's own voice (often referred to as sidetone), the other commentators voice and also the output of the DKP 4016 intercom. Different intercom outputs are provided for each commentator, and are sourced from what would be the left and right handside headset interface connectors on a standard DKP 4016.

Although the original RTS 4016 keypanel will operate from PoE the commentary side of the COIN SILVER 4016 is powered by the ineternal mains power supply and as such the unit needs to be connected to a mains power supply to correctly operate.

## **GENERAL INFO SUPPLIED BY RTS**

The following was kindly written by Geoff Rogers of RTS.

The COIN is based on the RTS DKP4016 and uses some of its enhanced audio and configuration settings to achieve the split of the commentary positions.

You may need IPedit and to use AZedit in order to programme the unit fully

It was imagined that the COIN will use the benefits of the Network connectivity and it uses 2 ports from the matrix to provide the audio for the Commentators

We will look at this in 2 elements, the key assignments and the audio routing.

Fortunately the panels are supplied with Audio and Control packages so the routing is simplified.

Configure the COIN in IPedit between the Matrix OMI card or Odin channel as you would any regular keypanel. The ports we use from the matrix do not need to be consecutive but for the purpose of simplicity we will assume they are. The next channel is an audio only route from the OMI / ODIN to the second audio channel of the COIN unit

### **Assigning keys**

The ports will be named in the normal manner in this exercise "COM1" "COM2" will suffice. And we will assume these to be ports 14 & 15

The Left headset is configured for the "COM1" position and the right headset is configured for the "COM2" user.

From a Technical perspective there is only 1 physical keypanel, and all of the programming is made through this nominated port.

"COM1" uses the main panel settings and is configured in the AZedit configuration pages for the PORT 14 (our first elected port) you apply the required Talk and Listen destinations in the keys numbered # 9,10,11, 25,26,27 you do not need to populate all of these, but they are the keys that "COM1" would normally have access to.

For the purposes let's just assume there is just Key #9 with a "DIR" (director destination) and to continue the example the "DIR" panel port is port 1. So when the "COM1" Makes the "DIR" key active the crosspoint 14 "COM1" Is made to "DIR" port 1 (14:1)

The "COM2" position has access to keys # 14,15,16 30,31,32 in the AZedit template, these keys need to be populated from the same template as "COM1" but were these to be added to the positions directly then the routing of a "DIR" key will still activate the crosspoint 14 "COM1" to "DIR" port 1.

We need our audio Channel 15 to make the crosspoint.

There is a feature in the configuration software that allows the use of an arbitrary crosspoint.

You will find this in the UR or UPL Resource function ( Control + F8 ) but we are getting a little ahead of ourselves, so in the Other Alphas ( Control + shift + F8) create UR alphas these will be near copies of the key assignments on the "COM1" side of the panel, so we need a new "DIR" key .

If I just use "DIR" AZedit will throw out a warning about using a duplicated Alpha, this isn't specifically either a big deal or a problem since the regular port Alpha will be a different colour to the UR alpha if we assign it. It would also be the case that were any other users to assign the "DIR" key then a pop up would ask you to confirm which of the duplicates you want to assign.

Should this seem to be an issue then create the UR Alpha with a different label "DIR\*" as an example. I will use this alpha in the following passages.

Repeat for the other keys and alphas as you need for your own purposes.

Now we have UR alphas we can create those Arbitrary Crosspoints  
So from the UR screen (Control + F8) you have a list of these new alphas when you double right click the mouse there is an edit box which allows for the arbitrary crosspoint to be made.

My input is for my "COM2" port 15 the output will be to the "DIR" port 1  
I will also include the scroll enable so I can route it from the COIN itself, if needed. There is a check box for the reciprocal, or return pathway for audio to be made.  
There is either this option. Or to create more UR's with the specific routes we may need to listen to.

Now with the UR alphas created and the arbitrary crosspoints configured you can apply these to the "COM2" section of the COIN. Now when "COM2" uses a UR assignment on the key "DIR\*" the crosspoint from my port 15 is made to the "DIR" port 1

For the audio routing the left hand portion of the COIN is associated to Headset left and uses the matrix audio in the DSP mix the right hand side is associated to the headset right and uses the audio on the Omneo channel 2

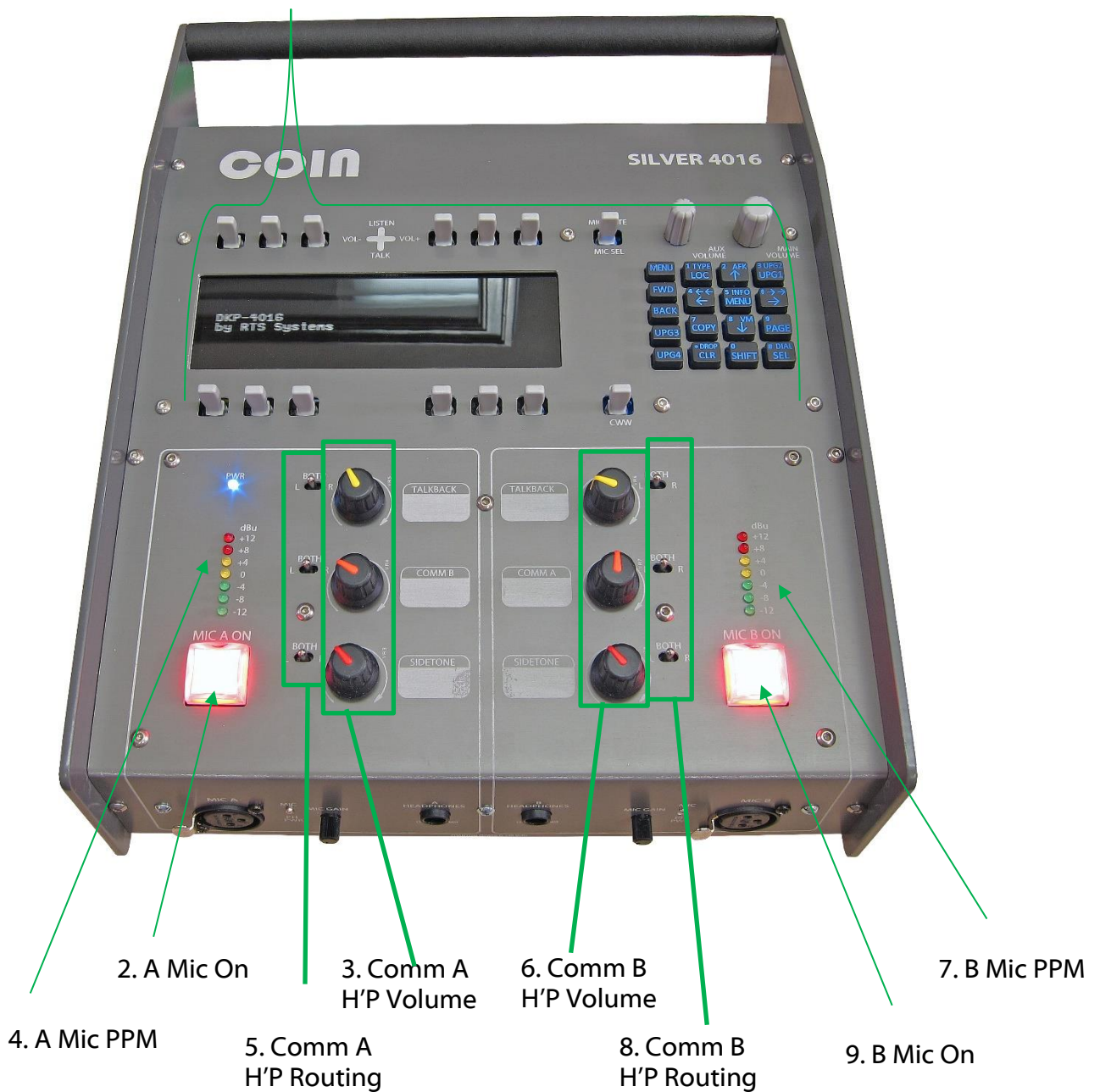
The Mix is always active.

Other Aux Inputs are available to you as needed

Firmware for the RTS element of the COIN 4016 is managed as a regular KPseries panel.

# COIN SILVER 4016 FRONT PANEL LAYOUT

## 1. Keypanel from RTS DKP 4016



## 1. Keypanel from RTS DKP 4016

This section of the COIN SILVER 4016 is the original keypanel from the RTS DKP 4016 desktop intercom. It has had 4 talkback keys removed, this is to provide a less cluttered workspace for the commentators, whereby 6 talkback keys for each commentator is usually more than sufficient.

The interaction between the talkback keys and mic on switches and the routing of the incoming and outgoing audio circuits will all need setting up before the unit can operate with your system.

## 2. **A Mic On**

This large switch turns the A microphone on/ off. When on (illuminated red) the A commentators microphone audio will be passing to the Dante and analogue commentary outputs.

It can be set to operate as on/ off switch or as a cough switch (see Mic switch configuration).

Its logic is connected internally to the normally open/ common connection of the RTS keypanel's relay 1 output. This will allow it to be set to automatically turn off whenever a talkback key is operated. This operation will need to be set during first installation, see RTS keypanel setup for further details.

## 3. **Comm A Headphone Volume**

These three volume controls adjust the level of three audio sources in commentator's A headphone output.

The three sources are:

- 1) TALKBACK**...this is the return audio from the RTS keypanel that would be routed to the left side RTS headset interface on the original DKP 4016. This will need to be set during first installation, see RTS keypanel setup for further details.
- 2) COMM B**...this is the on air microphone output from the other commentator.
- 3) SIDETONE**...this is the A commentator's own voice. A signal will only be present here when commentators A mic is turned on.

## 4. **A Mic PPM**

This seven segment LED peak programme meter provides an indication of the commentator's A microphone output level. The meter audio level is taken after the A mic on switch.

## 5. **Comm A H'P Routing**

These three switches route their associated source to the left/ right or both (left and right) output channels of the commentator's headphone amplifier.

## 6. **Comm B Headphone Volume**

These three volume controls adjust the level of three audio sources in commentator's B headphone output.

The three sources are:

- 1) TALKBACK**...this is the return audio from the RTS keypanel that would be routed to the right side RTS headset interface on the original DKP 4016. This will need to be set during first installation, see RTS keypanel setup for further details.
- 2) COMM A**...this is the on air microphone output from the other commentator.

**3) SIDETONE**....this is the B commentator's own voice. A signal will only be present here when commentators B mic is turned on.

7. **B Mic PPM**

This seven segment LED peak programme meter provides an indication of the commentator's B microphone output level. The meter audio level is taken after the B mic on switch.

8. **Comm B H/P Routing**

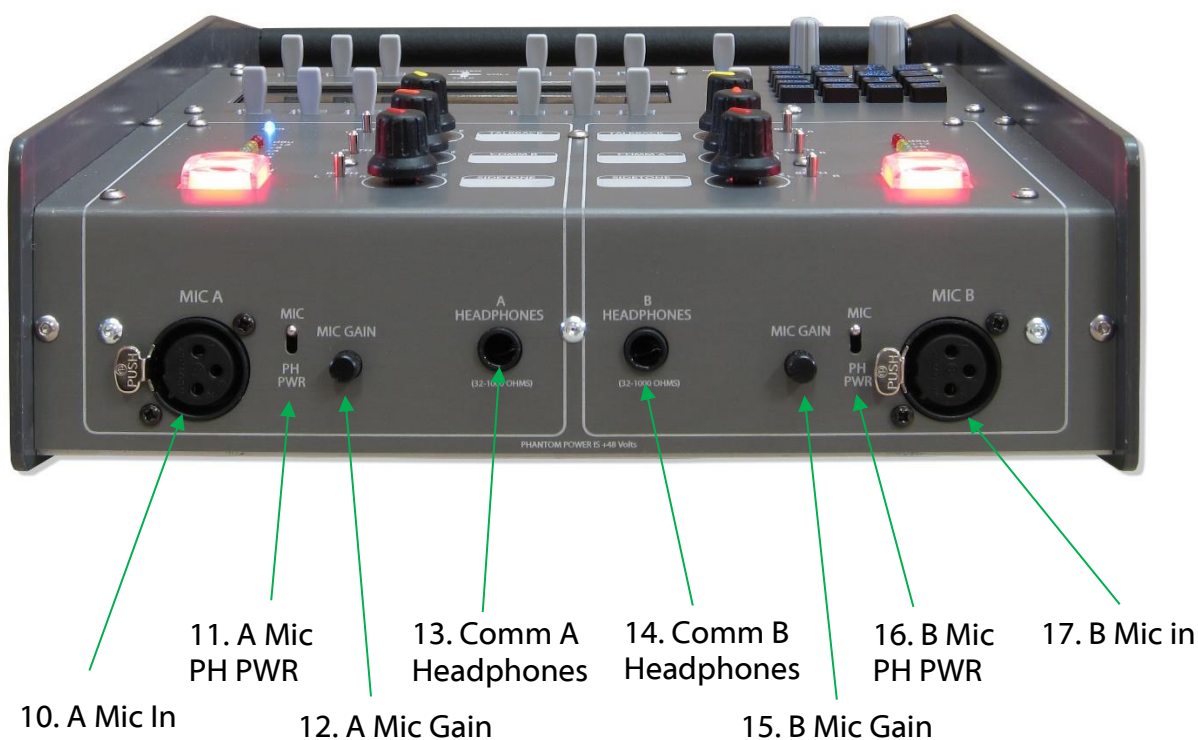
These three switches route their associated source to the left/ right or both (left and right) output channels of the commentator's headphone amplifier.

9. **B Mic On**

This large switch turns the B microphone on/ off. When on (illuminated red) the B commentator's microphone audio will be passing to the Dante and analogue commentary outputs.

It can be set to operate as on/ off switch or as a cough switch (see Mic switch configuration).

Its logic is connected internally to the normally open/ common connection of the RTS keypanel's relay 2 output. This will allow it to be set to automatically turn off whenever a talkback key is operated. This operation will need to be set during first installation, see RTS keypanel setup for further details.



10. **A Mic In**

This is a balanced microphone audio input for commentator's A microphone.

11. **A Mic PH PWR**

PH PWR...Phantom Power.

If this switch is in the down position then 48V phantom power will be applied to commentator's A microphone input.

12. **A Mic Gain**

This is rotary gain control adjust the input gain being applied to commentator's A microphone input.

13. **Comm A Headphones**

This standard 6.35mm TRS jack socket provides the monitoring audio output for the A commentator.

It is suitable for use for headphones with impedances of between 32 and 1000 Ohms.

14. **Comm B Headphones**

This standard 6.35mm TRS jack socket provides the monitoring audio output for the B commentator.

It is suitable for use for headphones with impedances of between 32 and 1000 Ohms.

15. **B Mic Gain**

This is rotary gain control adjust the input gain being applied to commentator's B microphone input.

16. **B Mic PH PWR**

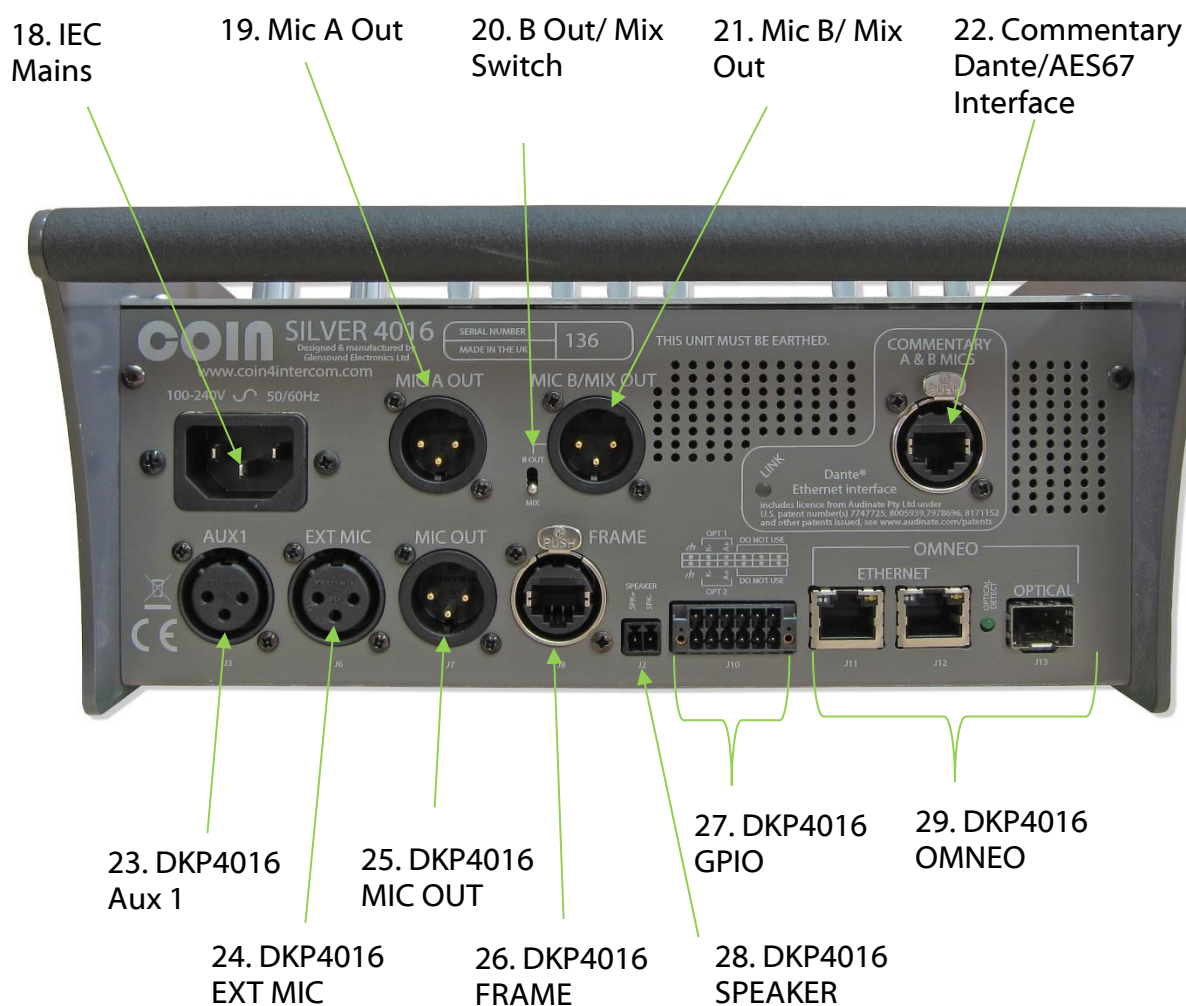
PH PWR...Phantom Power.

If this switch is in the down position then 48V phantom power will be applied to commentator's B microphone input.

17. **B Mic In**

This is a balanced microphone audio input for commentator's B microphone.

## COIN SILVER 4016 REAR PANEL LAYOUT



### 18. IEC Mains

The standard IEC mains plug accepts external AC voltages of 100 -240 VAC +/- 10%. There is an internal fuse.

Please note that although the RTS keypanel within the unit will work from PoE, the Glensound commentary part of the unit requires external mains power to operate.

### 19. Mic A Out

This is a balanced line level analogue output circuit of commentators A microphone input after the front panel Mic On switch.

### 20. B Out/ Mix Switch

This switch selects what source is routed to the Mic B/ Mix Out XLR. When set to Mix the output is an equal mix of both A and B commentary mic inputs.



## 21. Mic B/ Mix Out

This is a balanced line level analogue output circuit of either commentators B microphone input after the front panel Mic On switch, or a mix of both commentators mic inputs.

The switch to the left of the XLR sets which of the two possible outputs is routed to the XLR.

## 22. Commentary Dante/ AES67 Output

This is a copper Ethernet network output. It provides a Dante (AES67 compliant) network audio output of the commentators' microphones.

The network audio output is driven from an Ultimo chipset from Audinate and as such requires just a 100 BASE T circuit.

The commentary output has been provided on its own separate network circuit to allow customers to build a system that keeps commentary on air audio and intercom audio separate. However if you're using Omneo and prefer to have just one single network connection and cable carrying both your commentary and intercom signals then just connect the short RJ45 network cable supplied into one of the Omneo network ports and make sure that the DKP4016 keypanel network ports are set to switch mode.

## 23.-29. DKP4016 Connections

These connectors are the standard rear panel connections found on a DKP4016 keypanel. Please see the RTS DKP4016 handbook for more information.

### **\*\*\*\*EXCEPTION TO ABOVE\*\*\*\* no 27 GPIO Connector**

Relay 1 and Relay 2 normally open/ common outputs are connected internally to the microcontroller looking after the commentators mic on switches.

The logic needs to be set up within the RTS to make these relays operate when the associated talkback keypanel switch is operated.

## **MIC SWITCH CONFIGURATION**

It is possible to alter the operation of the Mic On Air buttons to work in a way that meets your commentators requirements.

### **Options**

There are currently 2 possible operational options for each mic on switch:

- 1) LATCHING MODE: A brief press of the speak key toggles the circuit on/ off.
- 2) COUGH: The channel output is always active unless the speak key is pressed.

NOTE: Factory default is Latching Mode.

### **Configuration**

To access the Speak Key Configuration menu then please follow these instructions:

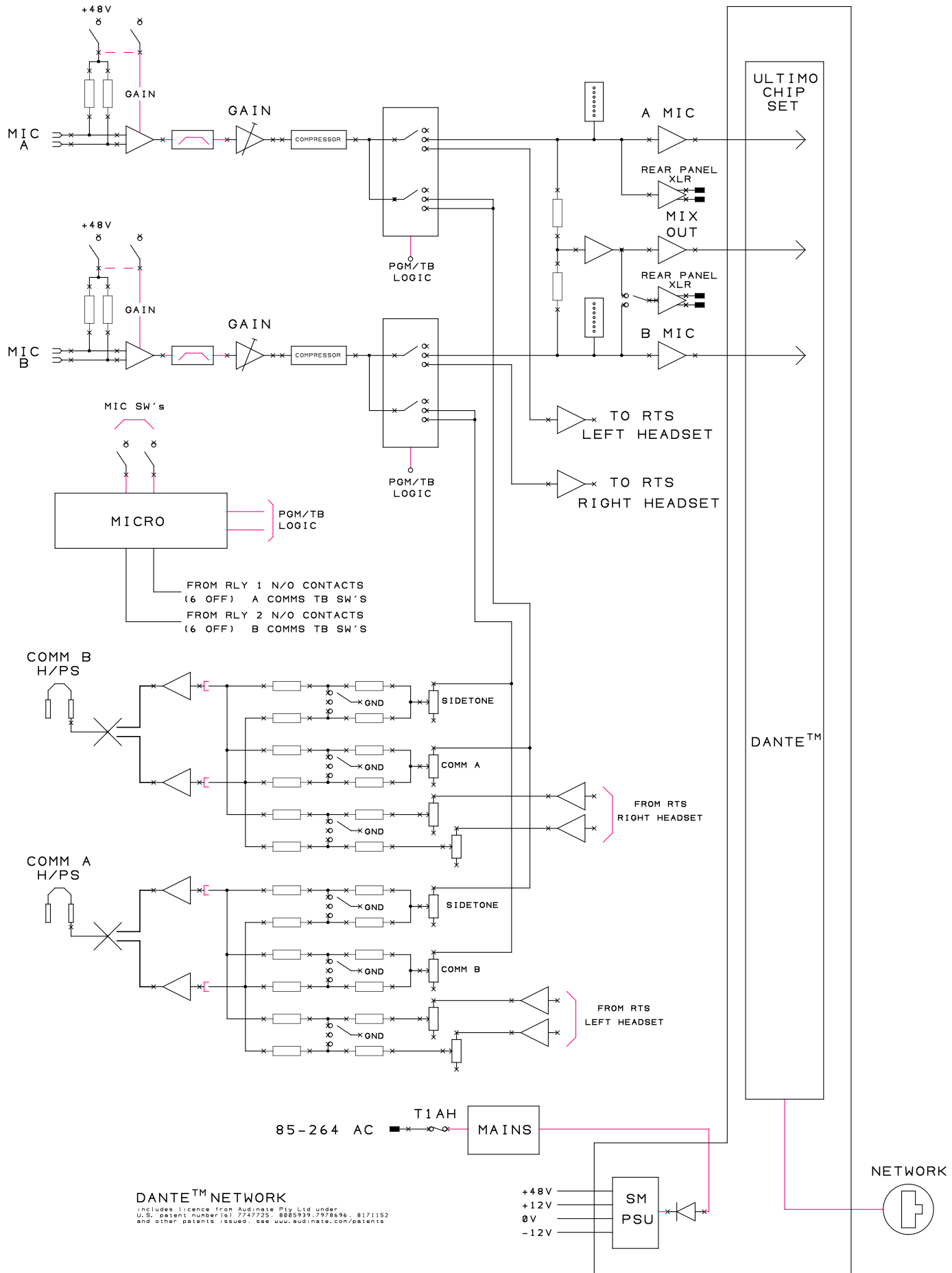
- 1) Start with the unit turned off (i.e. no power source connected)
- 2) Hold down both Mic A and B On buttons
- 3) While holding down the Mic A and B buttons apply power and turn the unit on
- 4) The buttons can now be released and they will flash to indicate that you are in Mic switch configuration mode
- 5) The PPM above each speak key will indicate the current selected operation of that button:

<b>PPM Number</b>	<b>Mic Switch Mode</b>
+12	Not used
+8	Not used
+4	Not used
0	Not used
-4	Not used
-8	Latching On/ Off
-12	Cough

- 6) Pressing the Mic On button will toggle to the next available mode.
- 6) Once you've set the modes required, remove the power and restart the Coin. The mode that you selected will be saved in non-volatile memory and the Coin will automatically start in that mode each time it is turned on.

NOTE: The talkback keys are interlocked to the mic on switches...if a mic on switch will not turn on this maybe because one of its related talkback keys is on.

# AUDIO BLOCK DIAGRAM



## **RTS KEYPANEL SETUP**

A number of settings need to be made within the RTS DKP4016 keypanel to correctly integrate with the GlenSound commentary hardware, before the Coin Silver 4016 can be used. We're told by our friends at RTS that these settings cannot be preconfigured by us as their functionality is determined by the complete RTS Intercom system that the Coin unit is connected to.

Therefore to make the Coin work correctly on your RTS Intercom system the following items need configuring:

### **1. Allocating Talkback Keys to Headset Circuits**

The talkback keys from original DKP4016 keypanel need to be divided into two halves, one for each of the two commentators.

Commentators A microphone/ headphone has been wired internally in hardware to connect to the left hand side headset connector of the original DKP 4016



Commentators A Intercom  
Microphone input &  
headphone output

These 6 talkback switches need their audio inputs & outputs to be associated with left side headset connector of the original DKP4016



Commentators B microphone/ headphone has been wired internally in hardware to connect to the right hand side headset connector of the original DKP 4016



Commentators B intercom  
Microphone input &  
headphone output

These 6 talkback switches need their audio inputs & outputs to be associated with right side headset connector of the original DKP4016



## **2. Allocating Talkback Keys to Relays (J10)**

The normal operation of any commentary box is for the main on air microphone circuits to be muted when an off air talkback key is in use.

To enable this to happen within the Coin Silver 4016 we have internally connected the original DKP4016 keypanel relay outputs to our microprocessor that looks after the on air microphone switches.

**A)** The original DKP4016 Relay one (RLY 1) normally open (NO) and common (C) are internally interfaced to commentator's A microphone on/off switch. The original RTS Relay circuit needs to be set such that Relay 1 closes when any of the 6 talkback switches associated with commentator A are operated.

**B)** The original DKP4016 Relay two (RLY 2) normally open (NO) and common (C) are internally interfaced to commentator's B microphone on/off switch. The original RTS Relay circuit needs to be set such that Relay 2 closes when any of the 6 talkback switches associated with commentator B are operated.

## **3. Checking Microphone Gain of Headset Inputs**

Both the new commentators microphone inputs on the Coin Silver 4016 are fed through their own high quality microphone preamplifiers and their own compressor limiter circuits and then onwards to the mic on/ off switches and the broadcast outputs.

Prior to the mic on/ off switches each microphone input is internally split with one circuit continuing to the broadcast chain and the 2<sup>nd</sup> circuit being attenuated back to microphone level and fed into the side headset interfaces of the original DKP4016.

When the new Coin Silver 4016 microphone inputs are set for line up then the level fed back into the two headset connectors of the original keypanel is -50dB.

We're informed by our colleagues at RTS that -50dB is the default input level of the two headset interfaces but we recommend checking these to confirm that when a commentator switches from on air to talkback the outgoing level is correct for your overall system.

## **CONNECTING THE COIN UNIT TO A DANTE NETWORK**

The Coin Units are network audio devices 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](http://www.audinate.com)

### **Getting Dante Controller**

If you are connecting the Beatrice 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](http://www.audinate.com)

### **Connecting Coin To The Network**

Coin units can be connected to the network that you are going to use for your audio distribution simply by connecting the commentary A & B mics network connection on the rear to your Dante network. Once connected to the network it will be possible to see the Coin from within the Dante controller and route its' audio circuits.

Alternatively the commentary A & B mics network connection on the rear of the Coin can be connected by a short patch cable to one of the Omneo Ethernet ports located below it. If this is done then the Omneo Ethernet circuits must be set to operate as a network switch. Then one of the other Omneo Ethernet ports can be connected to your network and this will carry both your Dante broadcast audio and Omneo intercom circuits.

### **Audio Over IP Network**

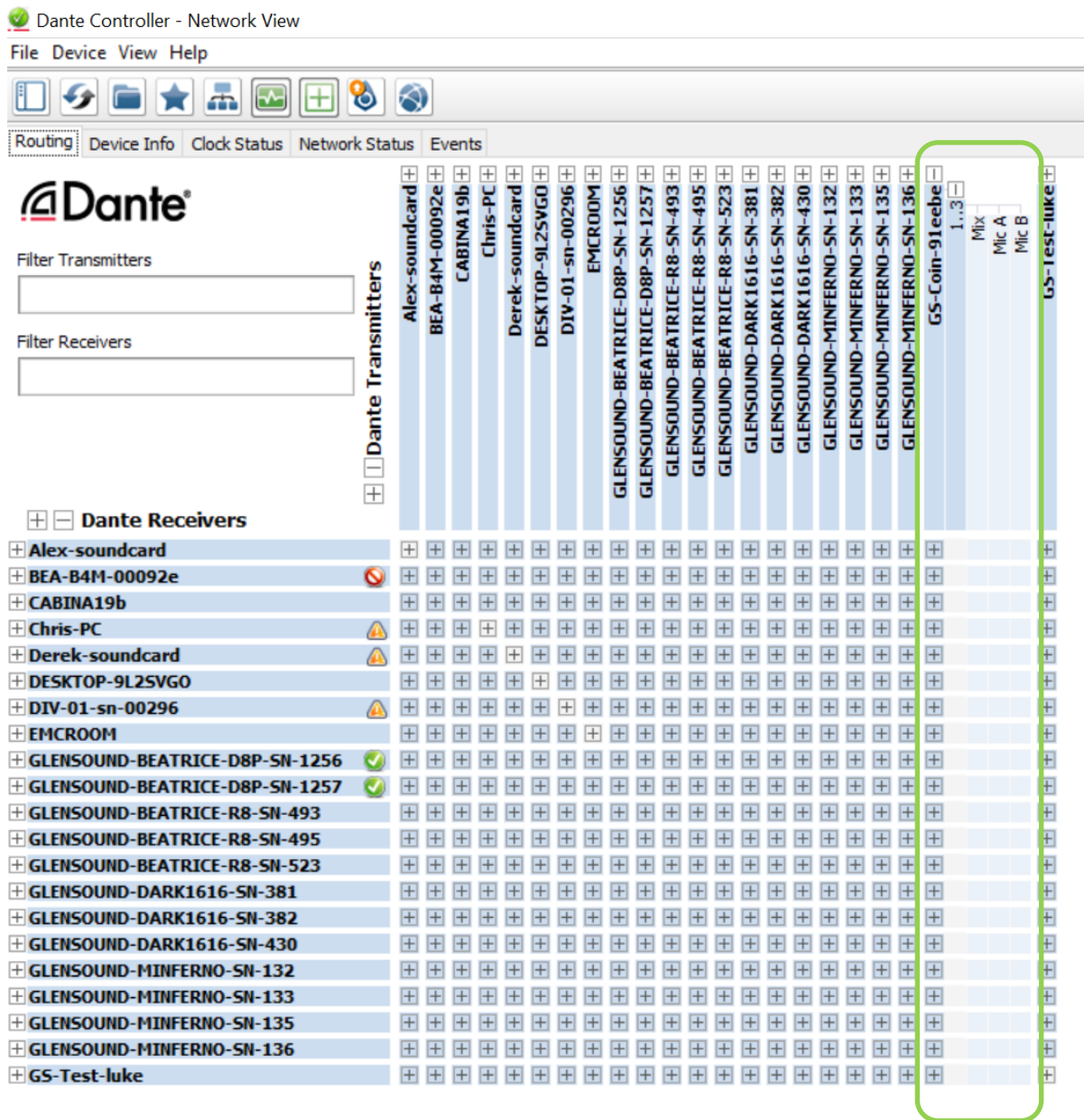
We strongly recommend that you consider your network topology carefully and would not recommend sharing broadcast audio and general data on the same network.

For more details of audio over IP network structure please visit [www.audinate.com](http://www.audinate.com)



## Running Dante Controller

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



The Coin 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:

‘GLENSOUND-COIN-SN-xxx

The ‘-snXXX’ refers to the serial number of the Coin which can be found printed on the rear or side of the unit.

Note if you upload a new DNT file or clear the devices config then the name will change to Coin-xxXxXx whereby the ‘X’s refer to the devices MAC address.

## Device Not Showing Up In Dante Controller

### Overview

Dante devices that have been 'misplaced' are those that have been configured with a static IP address which falls outside the subnet that the Dante Controller computer is on (or more specifically, the subnet configured on the network interface which is selected in Dante Controller as the primary network interface).

### Locating Misplaced Devices

Because Dante devices use MDNS multicast advertising, misplaced devices will always be visible in Dante Controller, if the computer is connected to the same physical network as the misplaced device.

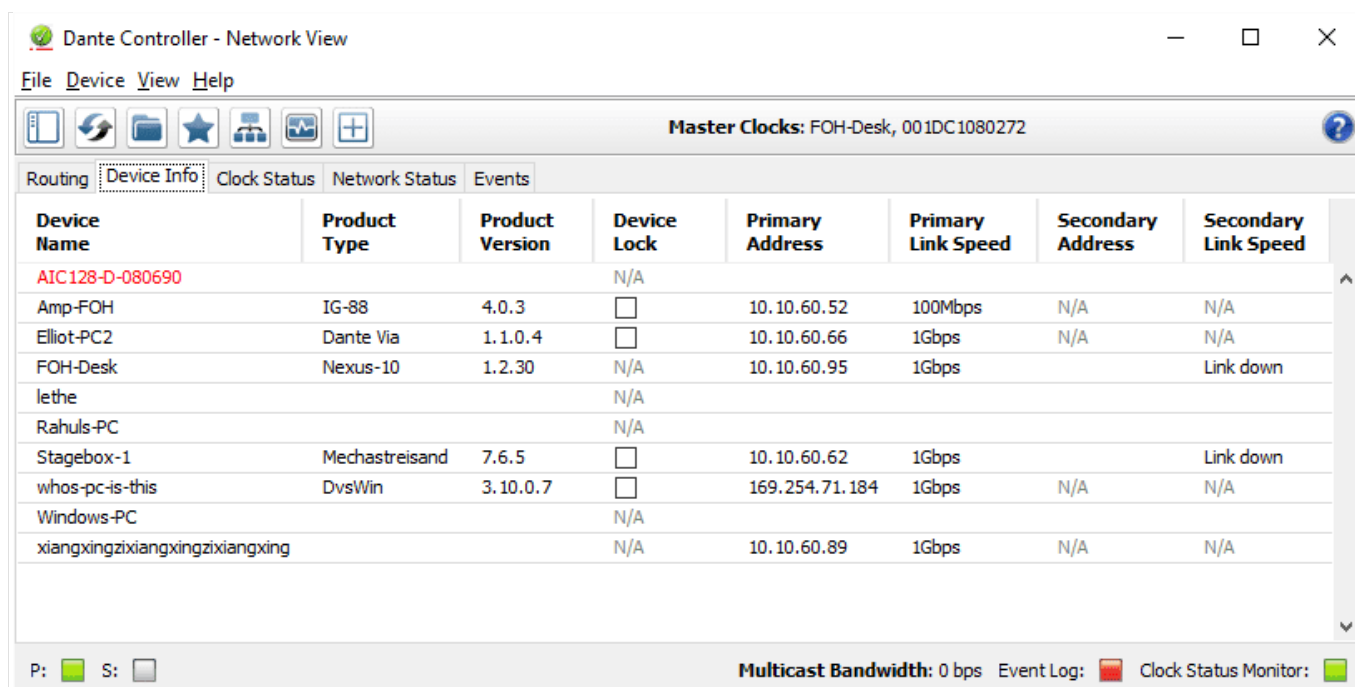
However, the misplaced device *and* the computer must be either:

Both using IP addresses inside the Link-Local address range (169.254.1.0 to 169.254.254.255 inclusive), or

Both using IP addresses outside the Link-Local address range

First, assign a static IP address to your computer which is inside the Link-Local address range. If the device does not appear (as described below), assign an address which is outside the Link-Local address range and try again.

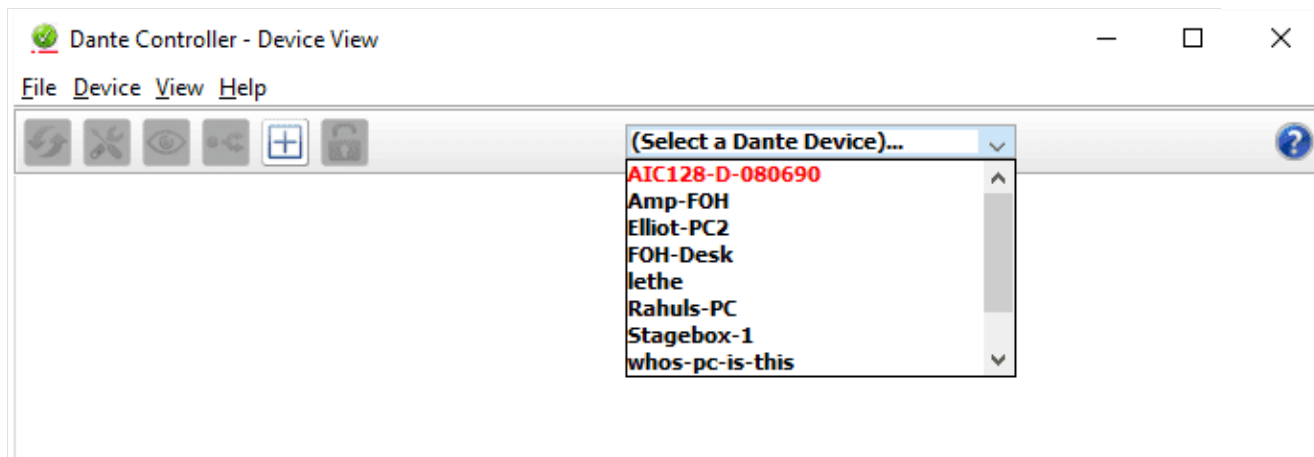
They will not appear in the Routing tab of the Network View, but they will appear (highlighted in red) in the Device Info, Clock Status and Network Status tabs of the Network View:



The screenshot shows the Dante Controller Network View interface. The 'Device Info' tab is selected, displaying a table of devices. The device 'AIC128-D-080690' is highlighted in red. The table has the following columns: Device Name, Product Type, Product Version, Device Lock, Primary Address, Primary Link Speed, Secondary Address, and Secondary Link Speed.

Device Name	Product Type	Product Version	Device Lock	Primary Address	Primary Link Speed	Secondary Address	Secondary Link Speed
AIC128-D-080690			N/A				
Amp-FOH	IG-88	4.0.3	<input type="checkbox"/>	10.10.60.52	100Mbps	N/A	N/A
Elliot-PC2	Dante Via	1.1.0.4	<input type="checkbox"/>	10.10.60.66	1Gbps	N/A	N/A
FOH-Desk	Nexus-10	1.2.30	N/A	10.10.60.95	1Gbps		Link down
lethe			N/A				
Rahuls-PC			N/A				
Stagebox-1	Mechastreisand	7.6.5	<input type="checkbox"/>	10.10.60.62	1Gbps		Link down
whos-pc-is-this	DvsWin	3.10.0.7	<input type="checkbox"/>	169.254.71.184	1Gbps	N/A	N/A
Windows-PC			N/A				
xiangxingzixiangxingzixiangxing			N/A	10.10.60.89	1Gbps	N/A	N/A

They will also appear (highlighted in red) in the device drop-down list in Device View (Ctrl + D):

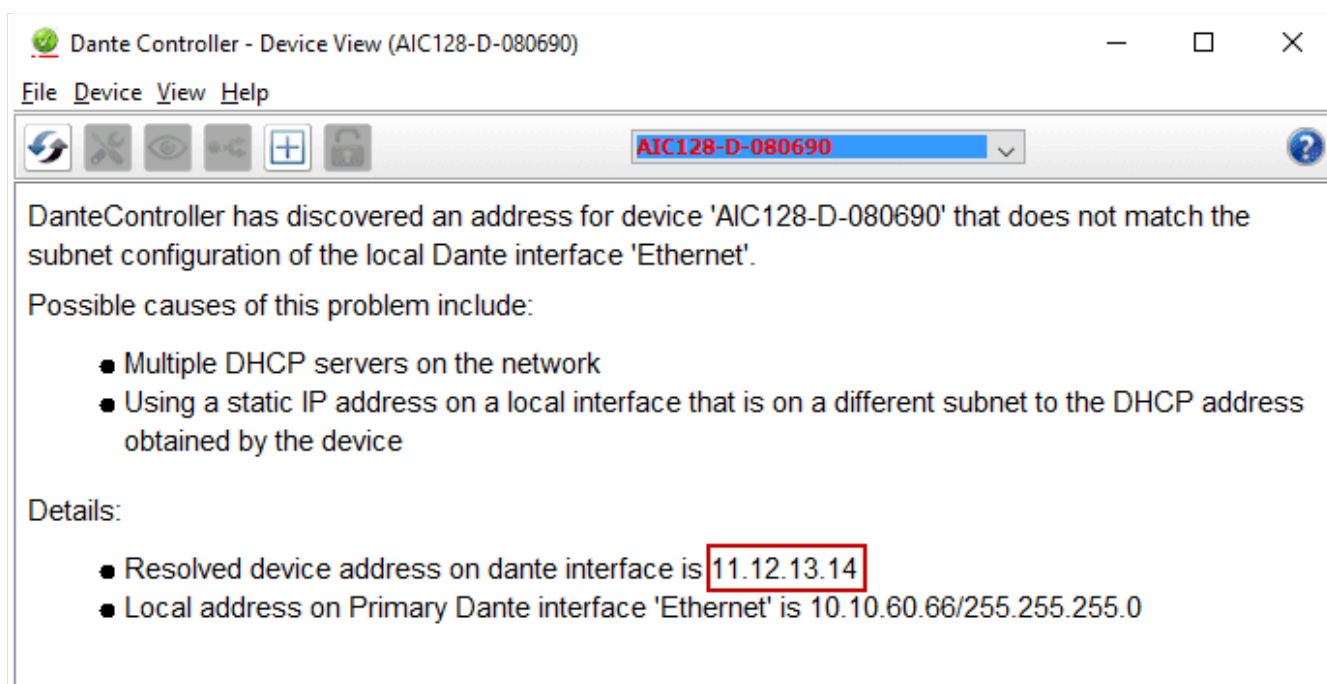


## Recovering Misplaced Devices

Note: 'Recovering' in this context is not the same as failsafe recovery.

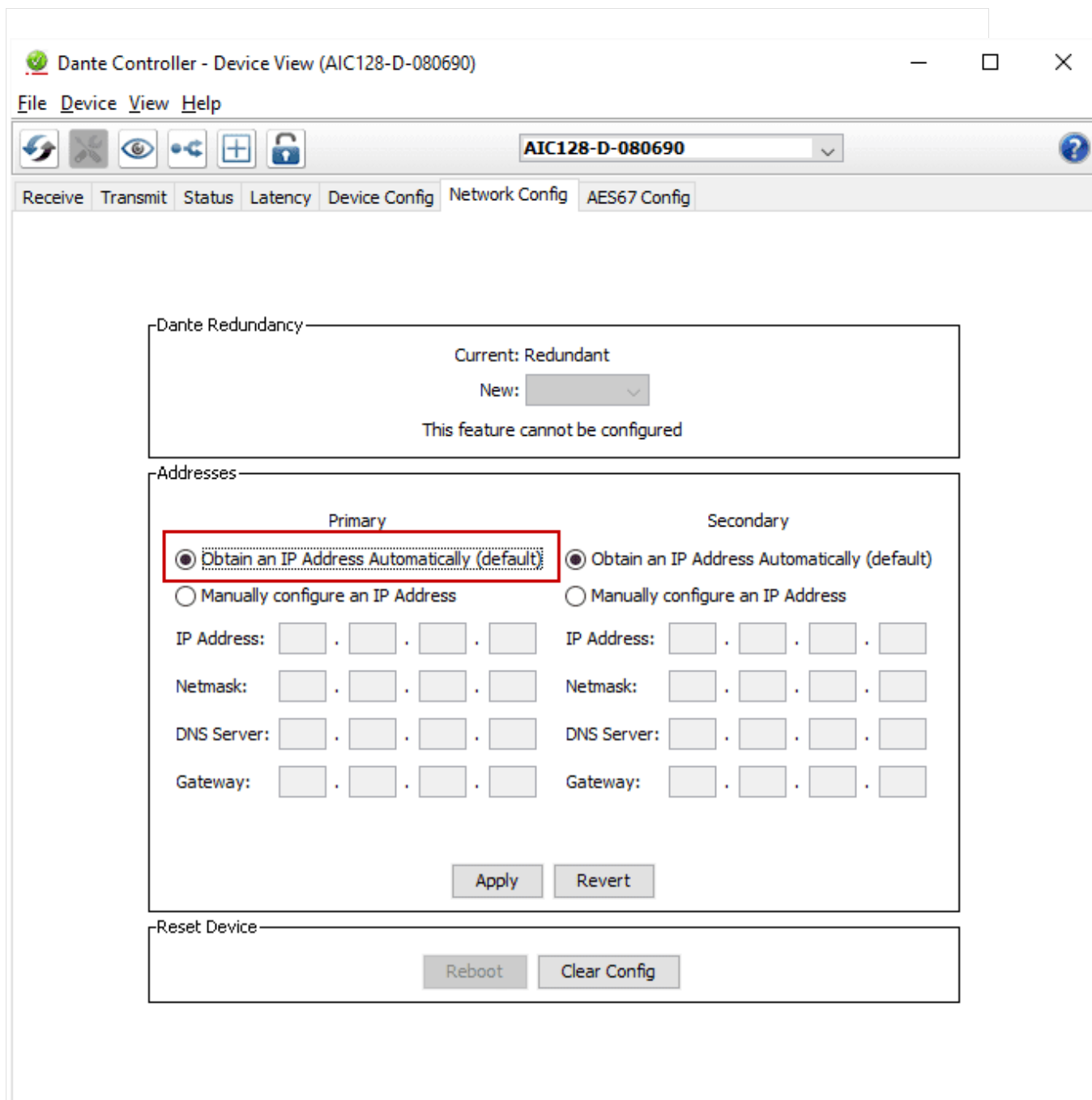
To recover a misplaced device:

1. Ensure the computer running Dante Controller has an IP address outside the Link-Local address range (either set a static address, or use DHCP).
2. Open the device view for the device (either double-click the device in the Device Info, Clock Status or Network Status tabs, or open Device View and select the device from the drop-down list).



3. Record the IP address listed in the first line of the Details section (after 'Resolved device address on Dante interface is')
4. Configure your computer's network interface with a static IP address in the same range as the IP address for the device. It is recommended that you use the same values for the first three octets – in this example, that would be 11.12.13 – and then choose a different number for the last octet (e.g. 15). The operating system will provide a suitable subnet mask (the last octet must be zero, however). In Windows, you can tab to the 'Subnet mask' field to auto-populate the field.

5. Apply the changes to the computer's IP address, and return to Dante Controller. The device should now appear in the Routing tab of the Network View, and can be configured with a different address (or set to 'Obtain an IP Address Automatically') using the Network Config tab of the Device View.



6. Set the computer's network interface to obtain an IP address automatically (or restore it to its previous address).

The misplaced device will now appear in the main Dante network.

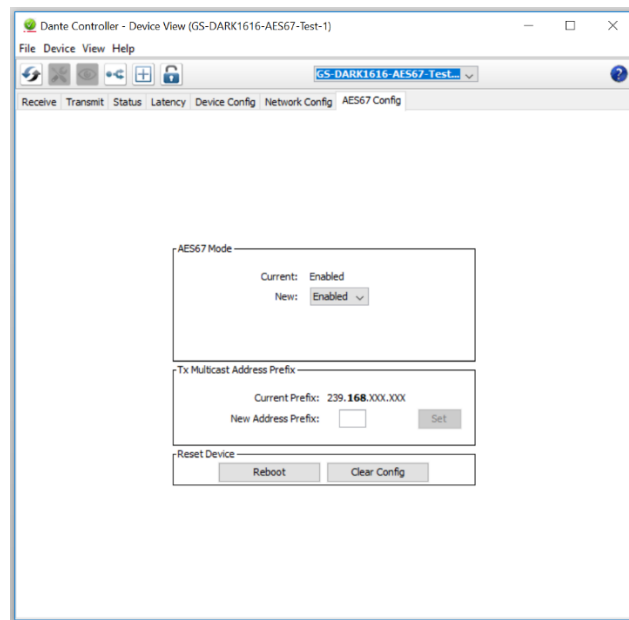
## AES67 MODE

The Coin uses a chipset from Audinate called Ultimo for its network audio interface. Audinate are the company behind Dante™ and as such the chip's primary network audio protocol is Dante, however Audinate have enabled their module to comply with AES67 and therefore the Beatrice can be set to AES67 mode for interaction with other AES67 devices.

Please note however that Glensound are relying on Audinate's AES67 interface and are unfortunately not able to provide full AES67 support for the unit. AES67 support should be sought directly from Audinate.

### **1. Turning On AES67 Mode**

If you want to use your Coin on an AES67 network and it has not been set to AES67 mode then this can be set in Dante controller by double clicking the Coin to open the Device View window where you will find an AES67 tab to enable AES67 support.

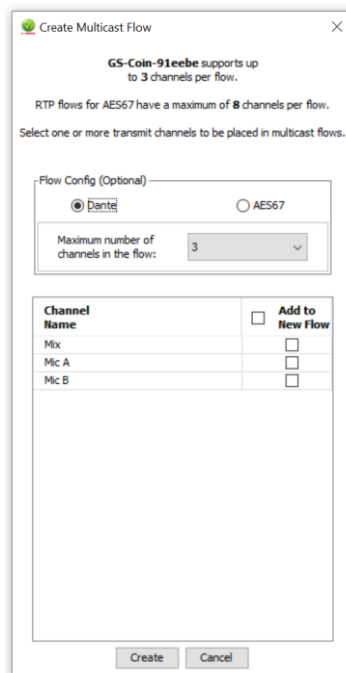


Once the AES67 drop down box has been enabled you'll have to reboot the Coin for the change to take effect. After the reboot go back to the AES67 tab and set the multicast prefix address to one that is suitable for your network.

## 2. Sending AES67 Audio

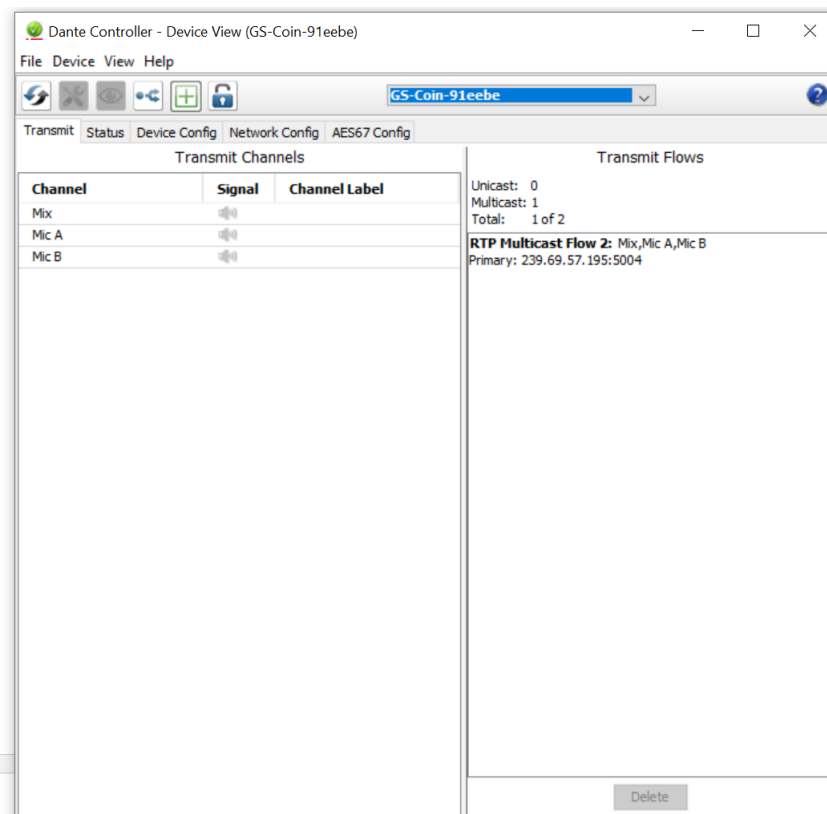
To transmit AES67 audio to the network a multicast flow must first be setup.

This is done by selecting the 'Create New Multicast Flow' Icon  in the Device View.



Tick the AES67 Flow check box, then select up to 3 channels to be included in the flow then click 'Create'

Once set the flows can be seen in the transmit tab of the device view.



### **3. Receiving AES67 Audio**

Once a compatible AES67 stream is detected on the network by Dante Controller the AES67 flows will appear in the Dante Transmitters section in the Routing tab.

### **4. AES67 Restrictions**

AES67 flows can only be generated with the following constraints:

- Multicast Only
- Non-redundant
- Destination address in range 239.nnn.0.0 to 239.nnn.255.255 (239.nnn/16), port 5004
- 48kHz sampling rate
- 24 bit linear (L24) encoding
- 1 msec packet time
- Up to 8 channels per stream

## **UPDATING THE ULTIMO CHIPSET**

The Ultimo Chipset is a device supplied by Audinate that does most of the processing for the actual Dante/ AES67 network audio streams. There is one Ultimo Chipset in each Coin Silver 4016. We supply special code (a .dnt file) that sets up/ initiates the Ultimo Chipset and makes it work in particular way that is compatible to the Coin.

### **1. Finding Out Current Installed Version**

Using Dante® controller double click on the Coin device name in the routing tab to open the Device View box.

On the Device View box open the Status Tab.

The 'Product Version:' shows the currently installed version of Ultimo Chipset dnt code.

### **2. Finding Out What The Latest Available Version Is**

Go the Coin's webpage and open the 'Firmware Latest Version' Tab.

This will give both the latest version numbers/ file names and also the location to download the file from.

### **3. Updating the Ultimo Chipset**

The firmware that runs in the Ultimo Chipset is updated using Audinate's Firmware updating tool. The updating tool and a user guide can be downloaded from Audinate's website:

<https://www.audinate.com/products/firmware-update-manager>

#### **NOTE:**

Please note we strongly advise that when you do the update that only your PC and the Coin that you want to update are on the network to save accidentally updating the wrong Dante device.

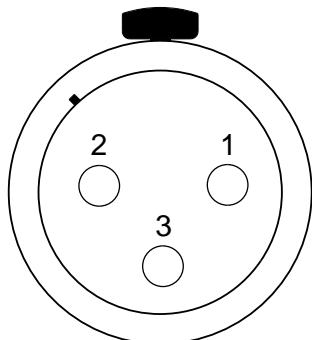
#### **NOTE**

Once updated the devices name will change to CoinSilver-xxXxXx whereby the 'X's refer to the MAC address. We recommend changing the name to something more convenient.



# WIRING INFORMATION

## XLR & JACK Wiring



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**

