TECHNICAL NOTE

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Digico(UK) Ltd. unit 10 Silverglade Business Park Chessington Surrey KT9 2QL England
Tel: +44 1372 845600 Fax: +44 1372 845656 email: support@digiconsoles.com

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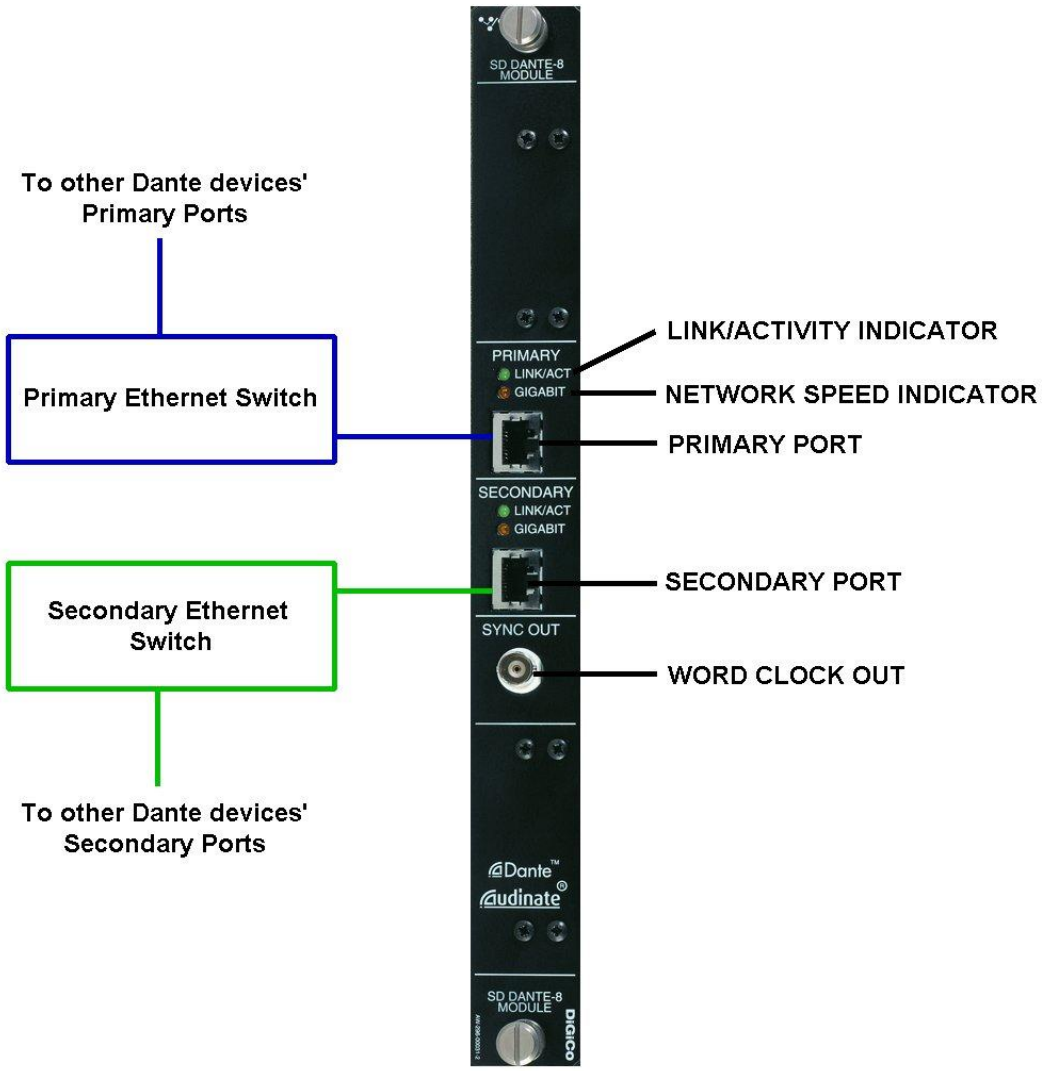
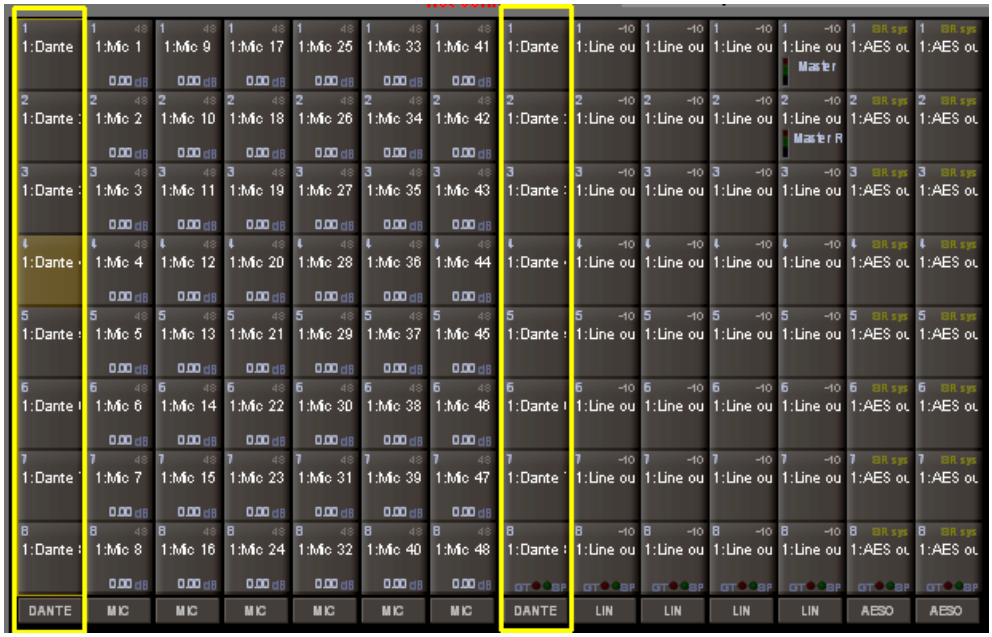
SD Rack Dante Card Operation

The SD Rack Dante card is a bi-directional 8 input / 8 output module which can be installed in any SD Rack slot from 1-7. It should not be installed in slots 8-14.
On an SD MiNi or SD Nano Rack the card can be installed in any slot of your choice.
The card can run in DiGiCo systems at 48KHz or 96Khz and has both Primary and Secondary Ports for main and redundant connections.

All Dante devices are connected to each other via CAT5 connections using a Gigabit Ethernet switch but the Primary and Secondary Ports must be connected to 2 separate Ethernet switches.
All Primary connections on one switch and all Secondary connections on another.



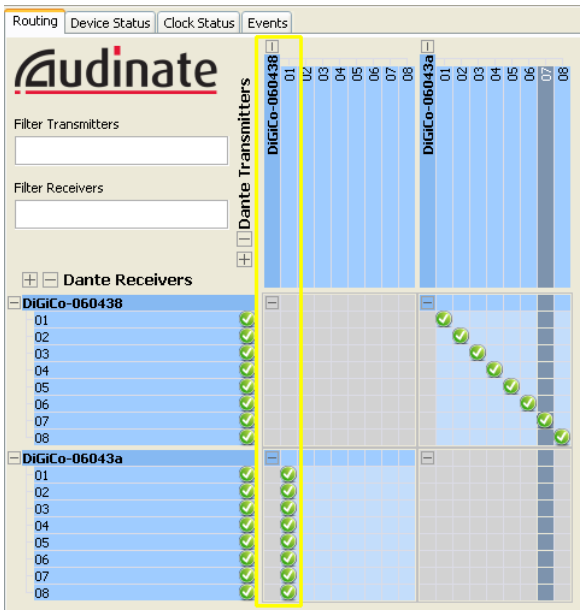
When the card is installed and the rack switched on and connected to an SD Series console the card will appear in the relevant port's rack picture in the Audio I/O panel (see below).
The rack should be conformed in the normal way.



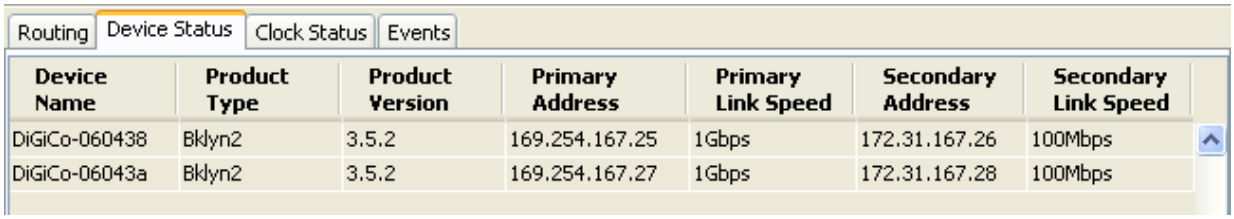
The Dante card's sockets will appear in the console's input and output routing panels and therefore routing to and from the console to the Dante card is achieved in the same way as with any other DiGiCo Input/Output card.

Once a console route is in place the routing of the signal within the Dante network ie From one Dante device to another, must be set up using Audinate's Dante Controller running on a standalone computer (PC or Mac).
This controller application and detailed instructions for its use can be downloaded from
http://www.audinate.com/

DiGiCo Dante cards will appear in the Dante Controller routing panel as follows:
This picture shows the Routing tab from the Dante Controller with 2 Dante cards.
The green ticks represent routing from outputs across the top row to inputs in the left hand column.
For example, Output 1 from DiGiCo-060438 is routed in the Dante network to all of the inputs on DiGiCo-06043a.



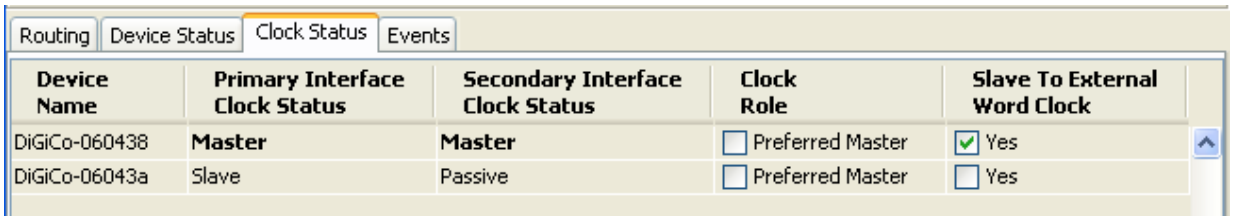
The Device Status tab shows details of the 2 cards including the automatically assigned IP addresses for both Primary and Secondary ports and the link speeds.



Device Name	Product Type	Product Version	Primary Address	Primary Link Speed	Secondary Address	Secondary Link Speed
DiGiCo-060438	Bklyn2	3.5.2	169.254.167.25	1Gbps	172.31.167.26	100Mbps
DiGiCo-06043a	Bklyn2	3.5.2	169.254.167.27	1Gbps	172.31.167.28	100Mbps

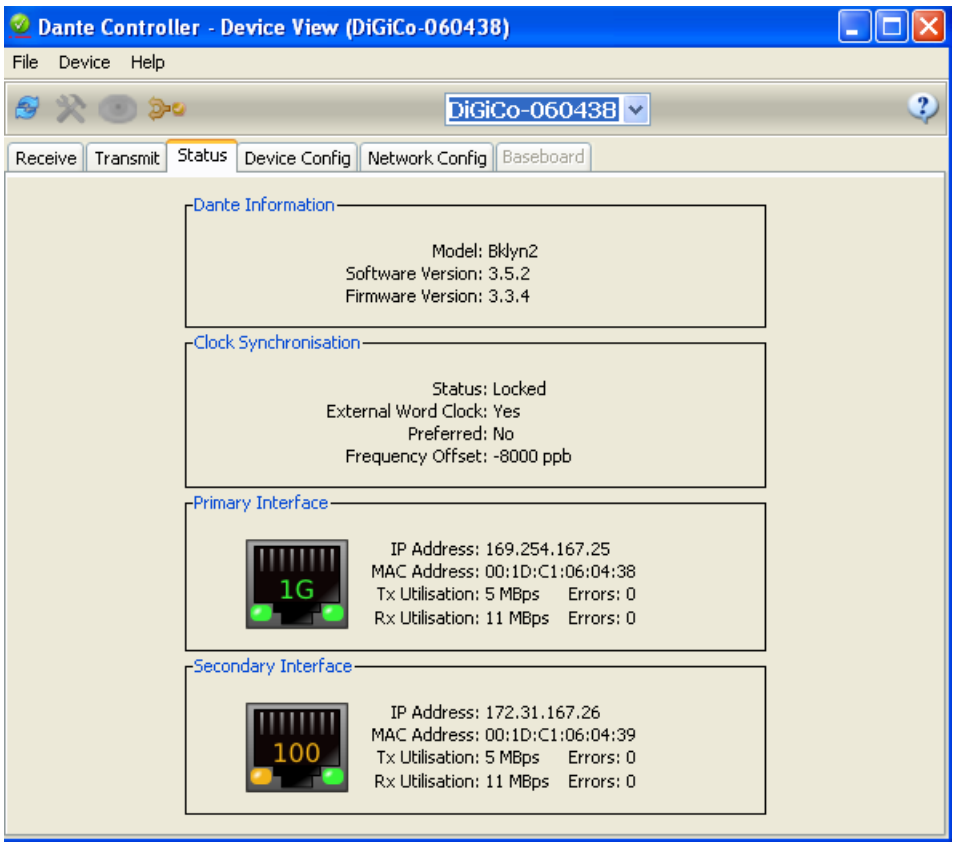
The Clock Status tab shows shows which Dante Card is currently Clock Master and allows the user to select a Preferred Master and/or whether the cards are Slaved to external Word Clock.

NOTE: The External Word Clock is provided by the Host device which, in this case, is the DiGiCo rack so one card should be set to External Word Clcok to ensure that the Dante network is synced to the rack. The rack is normally synced from the attached DiGiCo console so all devices will then have a common sync source.

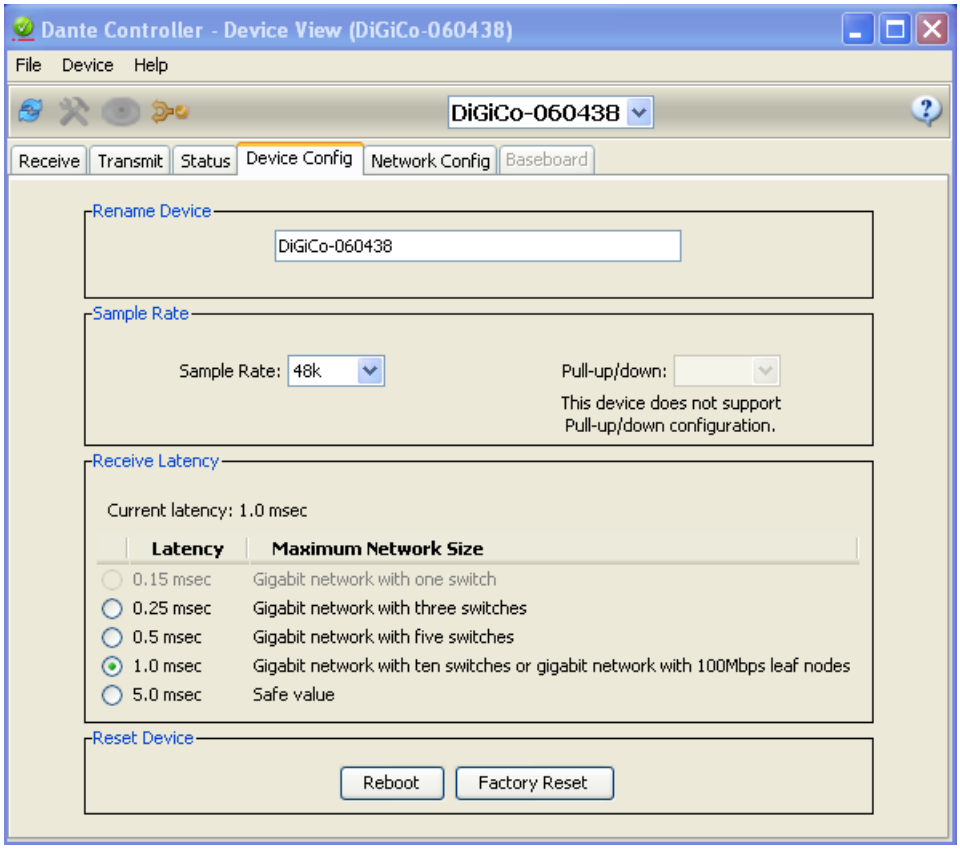


Device Name	Primary Interface Clock Status	Secondary Interface Clock Status	Clock Role	Slave To External Word Clock
DiGiCo-060438	**Master**	**Master**	☐ Preferred Master	☑ Yes
DiGiCo-06043a	Slave	Passive	☐ Preferred Master	☐ Yes

Double clicking on any card name will open another window with further information about the system in Device view. Cards can be selected from the drop down box and their information is then displayed. In the picture below there is detail about the Status of DiGiCo-06043B.



The Device Config tab allows the user to adjust the sample rate of the Dante device and in the picture below it is set to 48KHz.
Dante cards can run at a different sample rate to the Host system but you can only route to or from devices that are set to the same sample rate.



The Network Config tab allows the user to set the mode of the card.
DiGiCo Dante cards are designed to run in REDUNDANT mode allowing use of the Secondary port. If the Primary port is disconnected the audio will continue to pass via the Secondary port if it is connected.