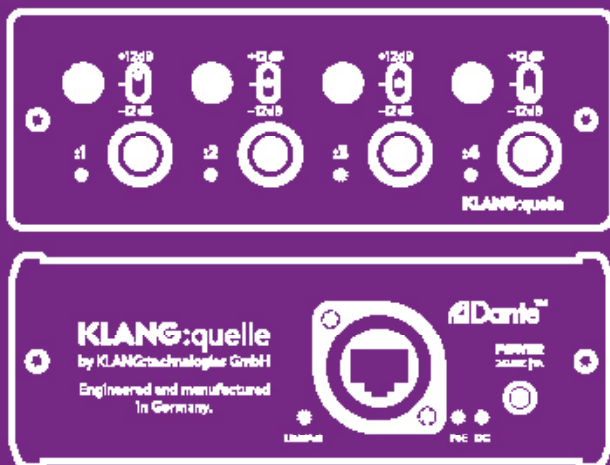




USER MANUAL | ENGLISH

1 WELCOME TO THE KLANG:FAMILY !

We would like to thank you for choosing KLANG:quelle. We are convinced that you will have the same positive sound experience we have by using the KLANG:quelle in your professional daily work – live on stage, in the studio, in the rehearsal room. Our products have been tested to comply with the highest standards.

! PLEASE READ THIS MANUAL CAREFULLY AND ENTIRELY. IMPROPER USE MIGHT RESULT IN SERIOUS RISKS, DAMAGES OR PROBLEMS IN COMBINATION WITH ADDITIONAL EQUIPMENT.

This manual guide is designed to assist you in setting up your KLANG:quelle as a professional headphone monitoring system for four users. If you experience any problems in setting up the system please contact us support@KLANG.com

! PLEASE MAKE SURE THAT YOU HAVE THE FOLLOWING EQUIPMENT AVAILABLE:

- **KLANG:quelle.**
- **Other Dante enabled products** e.g. mixing console, stage box, sound card or Computer – PC or Mac with **Dante Virtual Soundcard** – DVS
- **Pair of headphones.**

FIELDS OF APPLICATION

KLANG:quelle is a 4 output Dante headphone amp and integrates 2 devices in 1 – the combination of a valuable Dante enabled digital-analog converter and the professional 4-channel headphone amp. Through the choice of premium converters suitable for low-resistance in-ear headphones, a crystal clear sound without distortion or coloration, is enabled.

KLANG:quelle is delivered with either a stabilizing plug adapter or a network cable, which is enabled over Powerover Ethernet (PoE). This is exactly the correct solution for your high standards, being in a complex studio, at band rehearsals or in the hectic daily stage routine. Everywhere at these places, an extremely reliable, latency free and momentum faithful headphone sound is essential. This is where KLANG:quelle comes into play.

2 TECH SPECS

DIGITAL TO ANALOG CONVERSION

- 8 channel high-end digital to analog converters (24 bit, up to 192 kHz). Upper roll-off frequency depending on sampling rate. (16Hz-20kHz ± 0.1 dB).

HEADPHONE OUTPUT

- 4 times stereo TRS stereo headphone jack connector (6.3mm).
- 4 times volume control
- 4 times adjustable gain switch (-12 / 0 / 12 dB)
- Output impedance < 1 Ω .
- Maximum output level: +20 dBu (~22 Volt peak to peak), max. 150 mA
- Inter-channel crosstalk < -82dB

DANTE MODULE

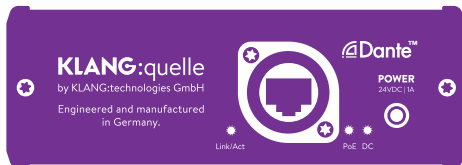
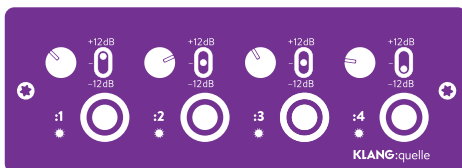
- 8 input channels Dante interface.

EXTERNAL POWER SUPPLY

- 24-48V DC, 1 Ampere max.
- 18-32V AC, 1 Ampere max.

DIMENSIONS AND WEIGHT

- Weight: 0.9 kg.
- Size (W/H/D): 8.3 x 4.3 x 12.0 cm



3 DANTE NETWORK SETUP

- Audinate® Dante™ is a sophisticated audio network protocol for the professional transmission of audio with a multitude of channels, high sampling rates and it can also provide redundancy.

! PLEASE NOTE: AVOID TRANSMITTING UNNECESSARY DATA ON THE DANTE NETWORK, E.G. SHARING BIG CHUNKS OF DATA BETWEEN COMPUTERS TO ENSURE HIGHEST STABILITY FOR THE AUDIO NETWORK.

- Connect the KLANG:quelle to another Dante enabled product or to a Gigabit network e.g. directly to a **router network switch**.

! PLEASE NOTE: SOME WIFI ROUTERS CAN ONLY OPERATE WITH 100MBIT/S AND NOT GIGABIT AS RECOMMENDED FOR DANTE BY AUDINATE!

! USE HIGH CLASS NETWORK CABLES WITH CAT6 COMPATIBILITY AND PREFER NEUTRIK ETHERCON CONNECTORS TO AVOID UNWANTED DISCONNECTS.

DANTE VIRTUAL SOUND CARD

- License available under: <https://www.audinate.com/products/software/dante-virtual-soundcard>
- Make sure the network connector is green and shows **1G indicating a Gigabit** connection. It does not work properly with 100 MBit/s. In case you have 100 Mbit, modify the network cable connection to connect you computer directly to KLANG:quelle.

DANTE CONTROLLER AND ROUTING

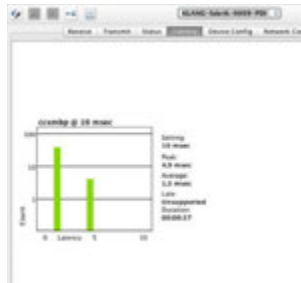
- Available under: <https://www.audinate.com/products/software/dante-controller>
- Start the **Dante Controller** on your compatible operating system and proceed with the following settings.
- Connect the audio output of your computer's **Dante Virtual Soundcard (DVS)** to KLANG:quelle.

! PLEASE NOTE: HIGHLIGHTED DEVICE NAMES IN RED INDICATE PROBLEMS WITH THE DANTE SETTINGS.

- Please disable distracting multiple connections to the same network, e.g. by **disabling WiFi** on your Mac or PC while using a network cable for Dante streaming.

DANTE LATENCY AND SETTINGS

- Although Dante is built for low latency it is important to monitor the settings and the behavior after setup. In case the Dante latency exceeds the specified latency e.g. of the DVS for streaming playback data from e.g. Logic, Reaper or ProTools to KLANG:quelle audible drop outs are likely to appear.



4 ANNOUNCEMENTS

WARNINGS AND PRECAUTIONS

- TO REDUCE THE DANGER OF ELECTRICAL SHOCK DO NOT REMOVE COVERS. NO USER SERVICE-ABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.
- Do not expose this product to rain or other types of moisture. To avoid the hazard of electrical shock, do not handle the power cord with wet hands.
- Operating Temperature: 0 °C to 50 °C (32 °F to 122 °F). Avoid exposition this device to sources of heat.
- Apparatus shall not be exposed to dripping or splashing. No Objects filled with liquids, such as vases, shall be placed on the apparatus.
- Using any audio system at high volume levels can cause permanent damage to your hearing. Set your system volume as low as possible. Avoid prolonged exposure to excessive sound pressure levels.

COMPLIANCE

The KLANG:quelle has been tested and complies with:

- EN55103-1:2009 EN 55103-2: 2009.
- EN 55022:2006 / CISPR 22:1997 CAN/CSA-CEI/IEC CISPR 22:02 FCC 47 CFR, Part 15.

SAFETY

- UL 60065, 7th Edition, Rev.: 09/21/2012; CAN/CSAC22.2 No. 60065:03 (R2012).
- RoHS Compliant and Pb-Free.

WEEE – RECYCLING

According to RL2002/96/EG (WEEE – Directive on Waste Electrical and Electronic Equipment) electronic equipment has to be recycled and does not belong in the standard waste. If you are unsure how to recycle this product please contact us and we will recycle the device for you.

AUDINATE PATENT AND RIGHTS

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