

A23 - A41 - A42 manual

Amplifier Operating Instructions



Index:

3	Index
4	Welcome
5	Legend
6	Unpacking, use, accessories
7	Water & moisture, cooling
8	Front panel
9	Back panel
10	Default mode
11	Bridge mode
12	Specifications
13	Power consumption
14	EC Declaration of Conformity, WEEE
15	Warranty
16	Copyright

Thank you for purchasing a Quint Audio A-series power amplifier

This manual contains essential information on installing and operating the product correctly and safely. It is necessary to read this manual carefully in order to become familiar with these procedures.

Keep the manual for future use. This manual forms an integral part of the product. Reselling of the product is only possible if the user manual is available. Any changes made to the product have to be documented in writing and passed on to the buyer in the event of resale.

As part of a continuous evolution of techniques and standards, Quint Audio BV reserves the right to change the specifications of the product and the content of this manual without prior notice. Please check the Quint Audio BV web site at www.quintaudio.com on a regular basis for latest updates.

Should the product requires repair or if information about the warranty is needed, please contact an approved Quint Audio BV distributor. The address of the nearest distributor is available on the Quint Audio BV web site.

Best regards,

The Quint Audio people

A23 / A41 / A42 Power Amplifier Series

- Class D power amplifier
- Switching mode power supply
- Active power factor correction
- High efficiency design
- Low working temperature
- Energy saving
- Compact, light weight, road proof
- Wide range power supply; 100~240VAC / 50~60Hz
- Temperature controlled variable fan cooling
- Ergonomic layout
- Low Total Cost of Ownership

Safety notes in this manual

The '**WARNING**' sign refers to potentially dangerous situations and/or dangerous voltages that may lead to personal injury.



The '**CAUTION**' sign refers to a potentially dangerous situation which may lead to damage to the equipment.



The '**IMPORTANT**' sign refers to a situation that may cause malfunction of the equipment.



Unpacking

Carefully open the shipping carton and check the product for any noticeable damage. Each Quint Audio BV product is tested and inspected before leaving the factory and should arrive in perfect condition. If found to be damaged, notify the shipping company or the distributor immediately.

Only the consignee may initiate a claim with the carrier for damage incurred during shipping. Be sure to save the carton and packing materials for the carrier's inspection. Attachment of the equipment (such as machine foot, manual bag, silicagel, etc.) please put them in the place where children can not get them.

All system components must be inspected before use, in order to detect any possible defects.



Use

The system should only be installed or fitted in accordance with the manufacturers recommendations. The audio amplifier may not be used for other purposes than it is meant for.



Accessories

Proper operation of Quint Audio equipment is only guaranteed if original Quint Audio accessories and mounting materials are being applied. Quint Audio is not responsible for any equipment and accessories provided by third party manufacturers nor for the consequences of the use of these parts.



Water and moisture

The amplifier should never be used in the immediate vicinity of water; prevent the possibility of entering water and moisture or any other fluids and substances.

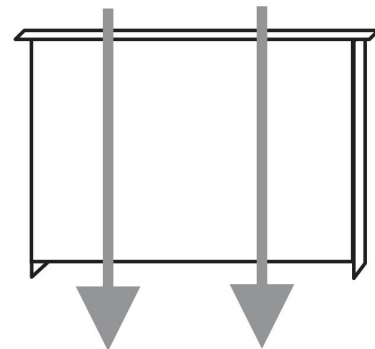


Cooling

The direction of the airflow cooling the equipment is from front to back.

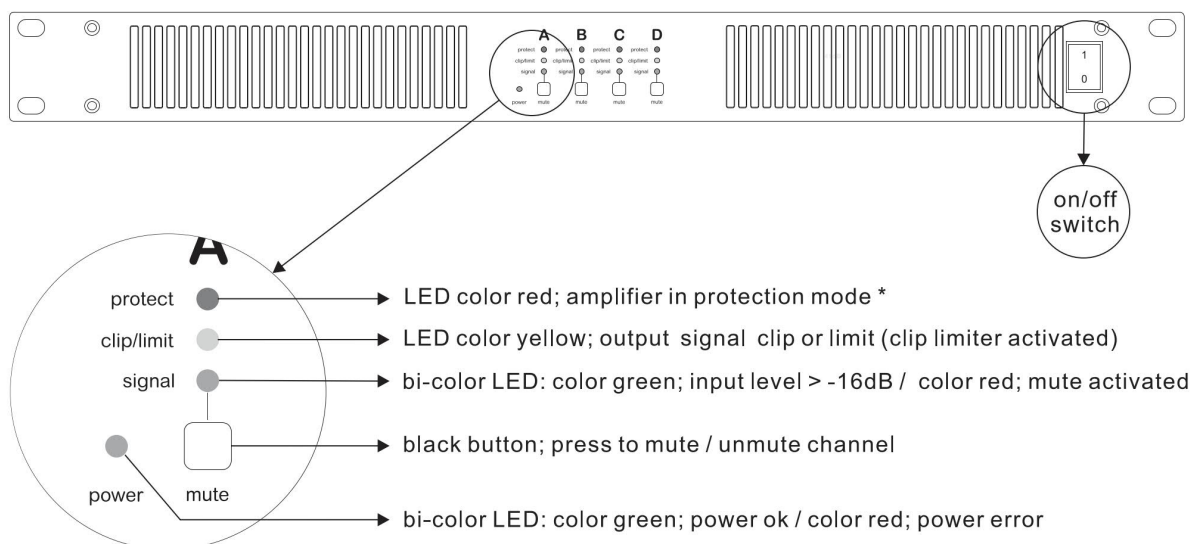
Do not block the ventilation holes. Please keep enough space around the equipment.

To prevent heat from building up in an amplifier rack, make sure cooling air can leave the rack freely.



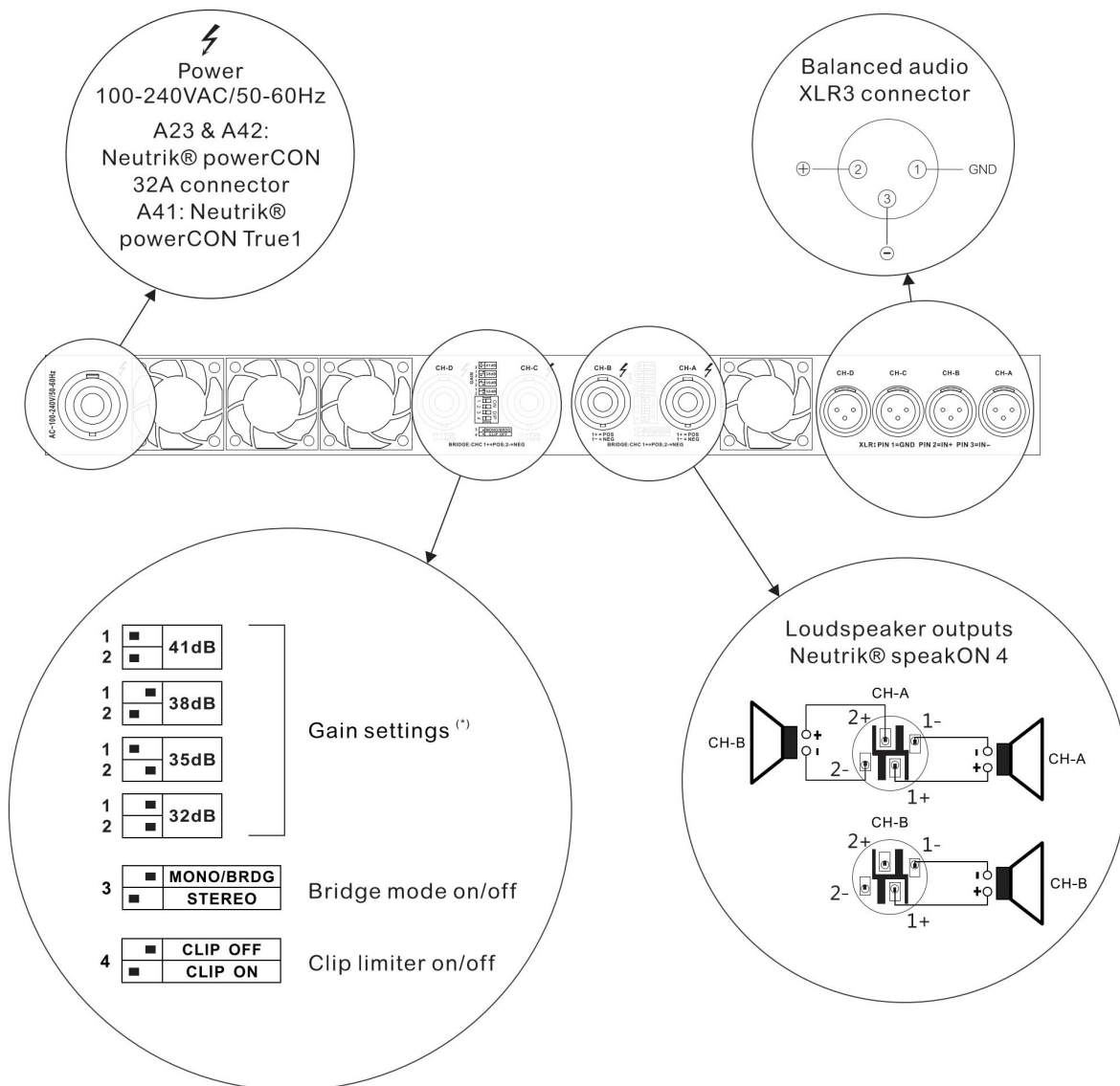
airflow: front to back

Front panel controls & indicators



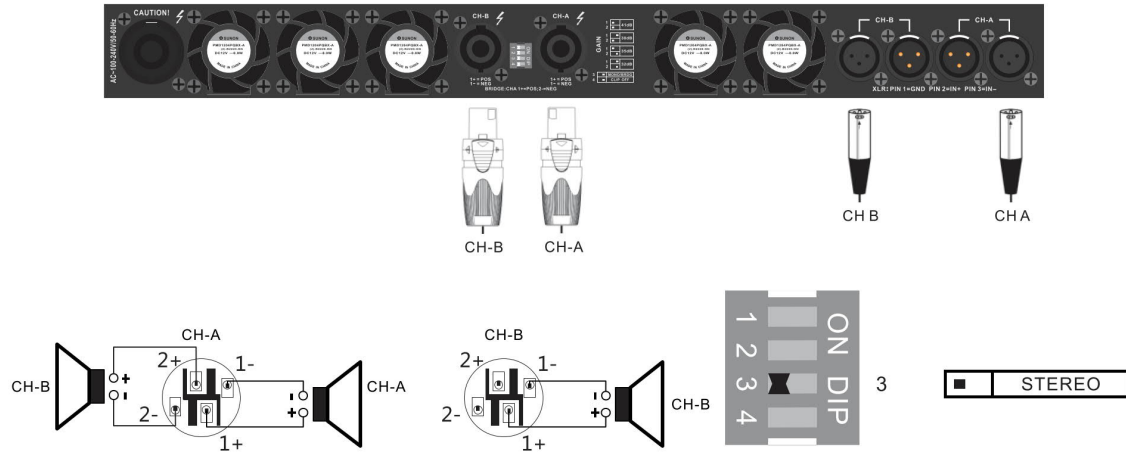
* Under voltage, DC, Overload limiter, Short circuit protection Over temperature (If the temperature of the internal electronics exceeds 85 degrees Celsius, output will be reduced. If the temperature reaches 90 degrees Celsius, the power amplifier will shut down. As soon as the temperature has dropped to a safe value (<85 degrees Celsius), the amplifier will restart automatically.)

Back panel controls & connectors

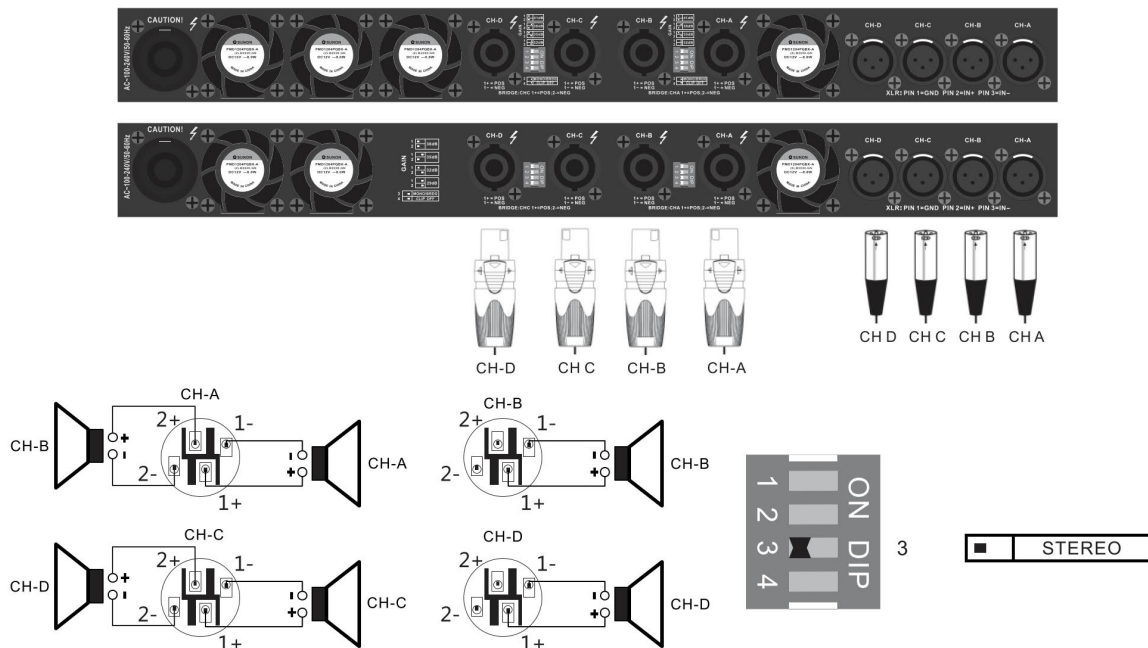


(*) A41 selectable 29dB, 32dB, 35dB, 38dB

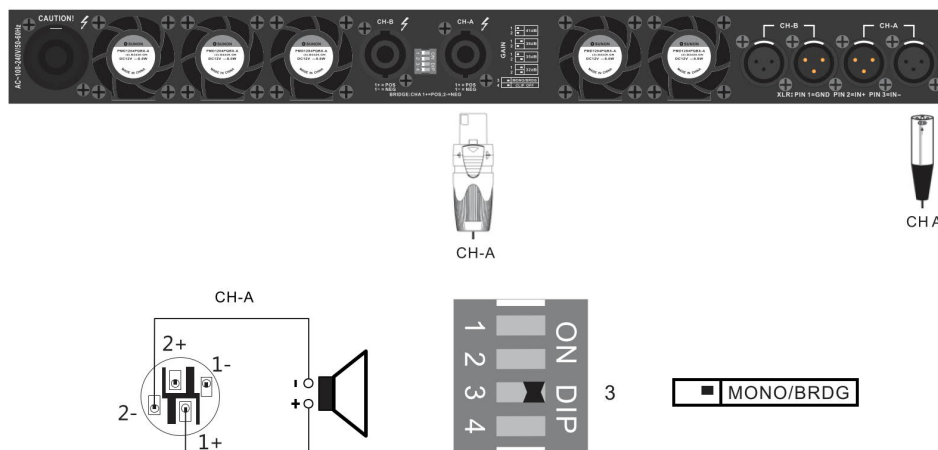
A23: 2 channel mode



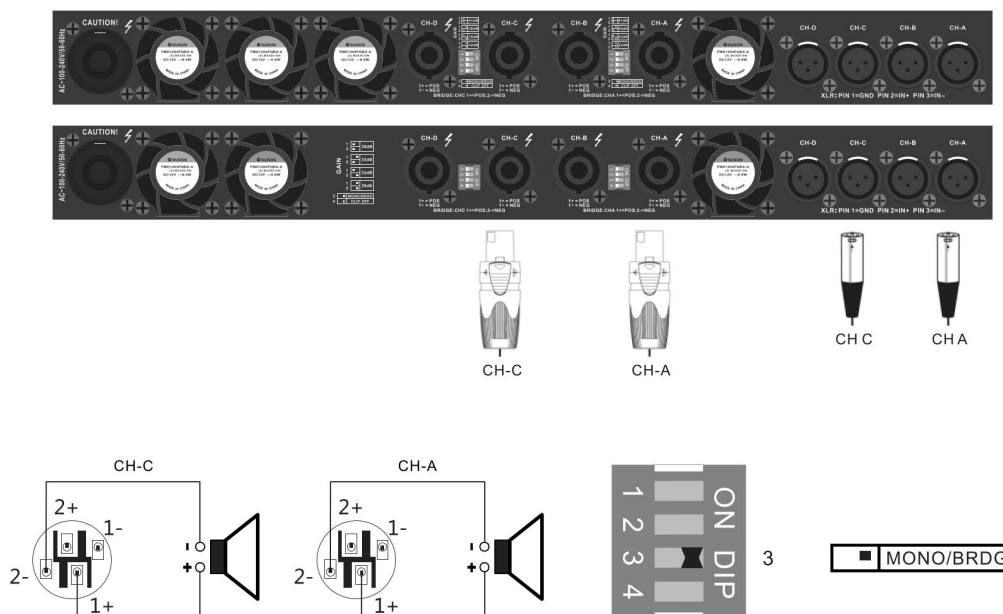
A41 & A42: 4 channel mode



A23: 1 channel bridge mode



A41 & A42: 2 channel bridge mode

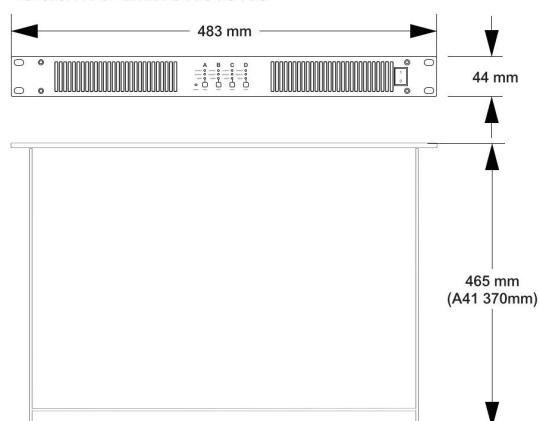


Specifications

Model		A23	A42	A41
Rated Output Power (THD+N=1%, 1kHz continue sine wave, all channels driven)	8 Ohms	2x3000W	4x2000W	4x1000W
	4 Ohms	2x5100W	4x3400W	4x1700W
	2 Ohms *	2x7140W	4x4760W	4x2890W
	16 Ohms / Bridge	1x6000W	2x4000W	2x2000W
	8 Ohms / Bridge	1x10200W	2x6800W	2x3400W
	4 Ohms / Bridge*	1x14280W	2x9520W	2x5780W
Output RMS voltage (THD+N=1%, 1kHz)		154.9V	126.5V	89.4V
Slew rate		50V/us		
Gain		selectable 41dB 38dB 35dB 32dB		selectable 38dB 35dB 32dB 29dB
THD+N(10% Rated Power, typical)		0.01%		
IMD-SMPTE (10% Rated Power, typical)		0.01%		
DIM30(10% Rated Power, typical)		0.01%		
Cross-talk(20Hz-1kHz)		≥90dB		
Frequency response (20Hz-20kHz, 8Ohms)		+/- 0.2dB		
Input impedance		20k Ω (Balanced) , 10k Ω (Unbalanced)		
Damping factor (<200Hz 8 Ohms)		≥5000		
SNR(A weighted 20Hz-22kHz)		≥115dB	≥112dB	≥109dB
Main power		100-240VAC +/- 10%, 50-60Hz		
Protection		Under voltage, DC, Over temperature, Overload limiter, Short Circuit protection.		
Size(W×H×D)		483x44x465mm		483x44x370mm
Net weight		12kg		9kg

* Test conditions: 20ms, 1kHz, THD+N=1%.

Outline dimensions



Input sensitivity

GAIN(dB)	A23	A42	A41
29	—	—	3.17V
32	3.89V	3.18V	2.25V
35	2.75V	2.25V	1.59V
38	1.95V	1.59V	1.13V
41	1.38V	1.13V	—

Power consumption and dissipation

Test signal: Pink Noise, bandwidth limited from 22Hz to 22kHz. 1/8 power is typical for program material with occasional clipping. Refer to these figures for most applications.

1/3 power represents program material with extremely heavy clipping.

2x3000W (A23)		Line Current(A)		Power(W)			Thermal Dissipation	
	LOAD	220V	110V	IN	OUT	Dissipated	Btu/h	kcal/h
idle		0.6	1.2	130.0	0.0	130.0	443.7	111.8
1/8 power	8 Ohms/Ch.	4.7	9.5	1041.7	750.0	291.7	995.4	250.8
	4 Ohms/Ch.	7.8	15.7	1723.0	1275.0	448.0	1528.8	385.3
1/3 power	8 Ohms/Ch.	11.2	22.4	2469.1	2000.0	469.1	1601.0	403.5
	4 Ohms/Ch.	18.8	37.7	4146.3	3400.0	746.3	2547.0	641.9

4x1000W (A41)		Line Current(A)		Power(W)			Thermal Dissipation	
	LOAD	220V	110V	IN	OUT	Dissipated	Btu/h	kcal/h
idle		0.7	1.5	160.0	0.0	160.0	546.0	137.6
1/8 power	8 Ohms/Ch.	3.2	6.3	694.4	500.0	194.4	663.6	167.2
	4 Ohms/Ch.	5.2	10.4	1148.6	850.0	298.6	1019.2	256.8
1/3 power	8 Ohms/Ch.	7.5	15.0	1646.1	1333.3	312.8	1067.3	269.0
	4 Ohms/Ch.	12.6	25.1	2764.2	2266.7	497.6	1698.0	427.9

4x2000W (A42)		Line Current(A)		Power(W)			Thermal Dissipation	
	LOAD	220V	110V	IN	OUT	Dissipated	Btu/h	kcal/h
idle		0.8	1.6	180.0	0.0	180.0	614.3	154.8
1/8 power	8 Ohms/Ch.	6.3	12.6	1388.9	1000.0	388.9	1327.2	334.4
	4 Ohms/Ch.	10.4	20.9	2297.3	1700.0	597.3	2038.4	513.7
1/3 power	8 Ohms/Ch.	15.0	29.9	3292.2	2666.7	625.5	2134.7	537.9
	4 Ohms/Ch.	25.1	50.3	5528.5	4533.3	995.1	3396.1	855.8

EC declaration of conformity

We, Quint Audio BV, Netherlands declare, that the following products;

Quint Audio A23, 2x 3000W@8Ohm power amplifier
Quint Audio A41, 4x 1000W@8Ohm power amplifier
Quint Audio A42, 4x 2000W@8Ohm power amplifier

To which this declaration relates, is in conformity with :

- (1) The requirements of the Electromagnetic Compatibility Directive (EMC) 2014/30/EU
- (2) The requirements of the Low Voltage Directive (LVD) 2014/35/EU
- (3) The requirements of the Restrictions of Hazardous Substances Directive (RoHS2) 2011/65/EU
- (4) The requirements of Registration, Evaluation and Authorization of Chemicals (REACH) regulation 1907/2006

in accordance with the standards listed below:

- (1) EN 55032:2015
EN 55032:2017
EN 62368-1:2014
EN 62368-A11:2017

According to the provisions of the EMC Directive 89/336/EEC, amended by the directive 91/263/EEG, 92/31/EEG EN 93/68/EEG EN 60065

Established at Amsterdam, Date May 1st, 2019

WEEE Declaration (Disposal)

Electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime.

Please dispose of this product according to the respective national regulations or contractual agreements.

If there are any further questions concerning the disposal of this product please contact Quint Audio BV.

Warranty

Quint Audio BV warrants the original purchaser and any subsequent owner of each new Quint Audio BV product, for a period of 3 years limited from the date of the original purchase by the original purchaser that the new Quint Audio BV product is free of defects in materials and workmanship.

Quint Audio BV warrants the new product regardless of the reason for failure, except as excluded in this warranty. In order to obtain warranty, you must keep the original sales receipt to establish the exact date of purchase.

Warranty does not cover any product which has been damaged because of any misuse, accident, or negligence. Warranty also does not extend to a new Quint Audio BV product if the serial number has been defaced, altered or removed.

Quint Audio BV will replace defective parts and repair malfunctioning products, regardless of the reason for failure (except as excluded).

Warranty work can only be performed at our authorized service centres.

Disclaimer

Quint Audio BV is not liable for any damage to loudspeakers, amplifiers, or any other equipment that is caused by negligence, misuse or improper installation.

Quint Audio BV is not liable for any incidental damages resulting from any defect in the new Quint Audio BV product. This includes any damage to another product or products resulting from such a defect.

The information contained in this manual has been carefully checked for accuracy, at the time of going to press, however no guarantee is given with respect to the correctness.

Quint Audio BV bv accepts no responsibility for any errors or inaccuracies that may appear in this manual or the products and software described in it.

All specifications in this manual are subject to change without prior notice.

Technical specifications, dimensions, weights and properties do not represent guaranteed qualities.

Copyright © 2019
Quint Audio. All rights reserved.

Except as permitted by applicable copyright law, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording or otherwise, without prior written permission from Quint Audio BV.

A23, A41 and A41 are alpha numeric designations for Quint Audio BV products and accessories are trademarks of Quint Audio BV.

All third-party trademarks mentioned herein are the property of their respective trademark holders.