QX-300
USER MANUAL

PRODUCT OVERVIEW

The QX-300 Amplifier is a compact, 2-channel, one third RU, high fidelity solution for both high (70/100V) and low impedance (4 -16Ohm) distributed audio systems. The amplifier has automatic load sensing for low impedance and 70V line operation and can output 100V in bridged mono mode.

The QX-300 can be used as a stand-alone amplifier, or with the available mounting accessories for additional installation flexibility. Three units can be mounted in 1RU or 10 units can be mounted in 3RU. For ease of operation the front panel features recessed volume controls and status indicator lights. A removable magnetic cover doubling as an air intake filter hides Automatic Standby, Bridged Mono, 80Hz High Pass Filter and Limiting selection switches. The Auto Standby function will mute the amplifier after 10 minutes of no audio signal presence and after 30 minutes the amp will enter a sleep mode, which allows it to draw less than 0.5W (QX-300A) or 2.5W (QX-300D). Typical power-on from mute is <1ms and from sleep mode is 660ms.

SAFETY PRECAUTIONS

- Please read the instructions in this section carefully before use.
- Ensure all instructions in this manual are observed as all information contained within is very important.
- It is also highly recommended that this manual is retained for future reference.

SAFETY SYMBOL & MESSAGE CONVENTIONS

The safety symbols described are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating this product, please read this manual first, in full so you that you are thoroughly aware of any risks.

⚠ **WARNING** **Indicates a potentially hazardous situation which, if mishandled, could result in serious personal injury or death.**

⚠ GENERAL CAUTION

- Do not expose the unit to any moisture whether rain, water, or other liquids. Exposure to moisture could result in damage to internal components or electrocution\circuit failure.

- Do not cut, kink, or otherwise damage or modify speaker cable. Ensure a speaker cable with a core diameter of at least 0.75mm2 is used for specified performance.

- Do not install or place speaker cables or this device near heaters, high traffic areas or any area where the cables or device can be damaged.

- Avoid installing or mounting speaker boxes, amplifiers, electronics or cabling in unstable locations.

- In the event of storms and/or lightning, ensure all devices are disconnected from mains power in order to prevent damage to any of the units in the system.

- When cleaning the unit, ensure it has been disconnected from any power source and that only a dry cloth is used. Do not use any aerosol or liquid-based cleaners.

- Ensure all electronics are electronically grounded (earthed) to a safety ground terminal in order to avoid electric shock. Do not ground any device to a gas pipe as this may result in fire.

- Servicing of all electronics should only be carried out by a certified Quest technician. Please consult your original place of purchase to find the location of your nearest Quest service centre.

- When installing amplifiers and/or other electronics only use the hardware specifically designed for this product.

FRONT PANEL CONTROLS
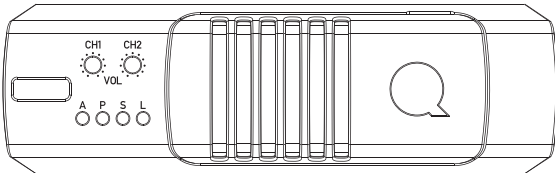
CH1	Rotary gain control
CH2	Rotary gain control
A	Blue: Amplifier active
	Orange: Amplifier in standby mode
P	Orange: Amplifier is in protect mode
S	Green: Signal is detected
L	Orange: Amplifier is limiting signal
	Red: Amplifier is clipping

UNDER PANEL CONTROLS
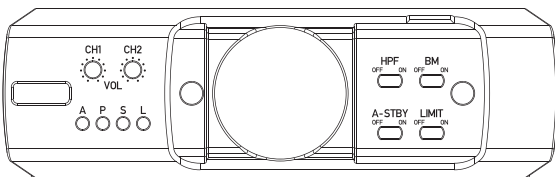
	High Pass Filter Off /On
HPF	Off: Amplifier passing full range signal
	On: 80HZ High Pass Filter Active
	Bridge Mono Off/On
BM	Off: Amplifier operating as 2 individual channels
	On: Amplifier operating in bridged mono mode
	Standby Off/On
A-STBY	Off - Amplifier will not enter power saving mode
	On - Amplifier will enter sleep mode after 30 minutes of no signal
	Off/On
Limit	Off - Amplifier will not limit
	On - Amplifier will limit to prevent clipping

REAR PANEL CONTROLS QX-300A
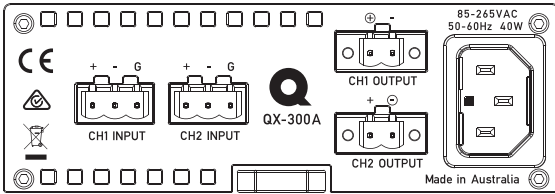
Channel 1 Input	Phoenix/Euroblock
Channel 2 Input	Phoenix/Euroblock
Channel 1 Output	Phoenix/Euroblock
Channel 2 Output	Phoenix/Euroblock
Mains Connection	IEC

REAR PANEL CONTROLS QX-300D
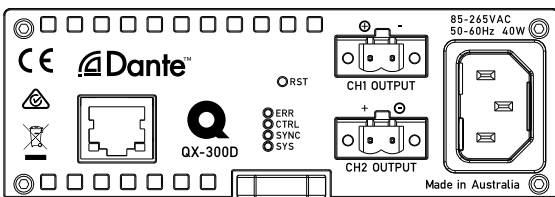
Primary	RJ-45 Dante Input
Secondary	RJ-45 Dante Input
Channel 1 Output	Phoenix/Euroblock
Channel 2 Output	Phoenix/Euroblock
Mains Connection	IEC
RST	Dante Reset
ERR/CTRL/SYS/SYNC	Dante System LEDs

DANTE SYSTEM LEDS

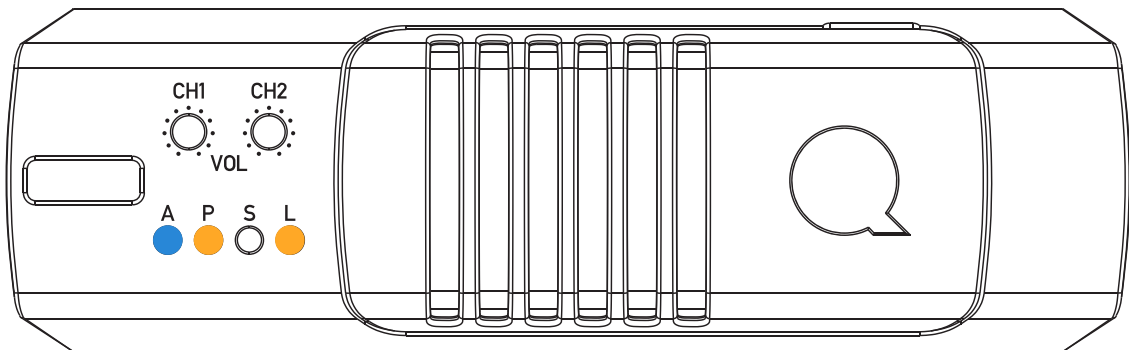|			
SYS red	SYS	🔴	System booting
SYS green	SYS	🟢	System ready
SYNC amber	SYNC	🟠	PTP currently syncing
SYNC red	SYNC	🔴	PTP error / no PTP sync / PTP disabled
SYNC green	SYNC	🟢	PTP slave, with PTP sync
SYNC green flashing	SYNC	🟢	PTP master
ERR amber	ERR	🟠	Capability is corrupted
ERR amber	ERR	🔴	Memory stack overflow
All flashing green	SYS SYNC CTRL ERR	🟢	Identify
All amber	SYS SYNC CTRL ERR	🟠	Factory / manufacturing mode
All flashing amber	SYS SYNC CTRL ERR	🟠	Upgrade mode
All flashing red	SYS SYNC CTRL ERR	🔴	Failsafe - corrupt or missing application image
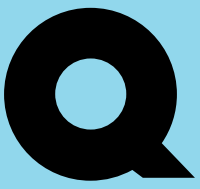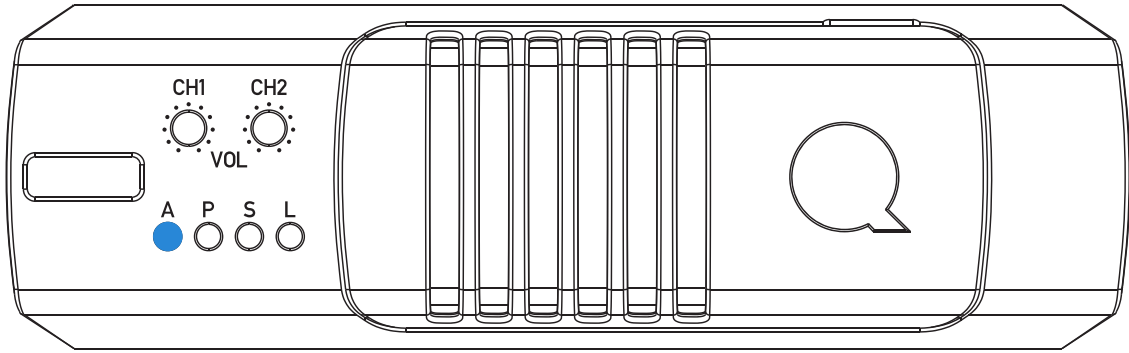
OPERATION MODES

ACTIVE
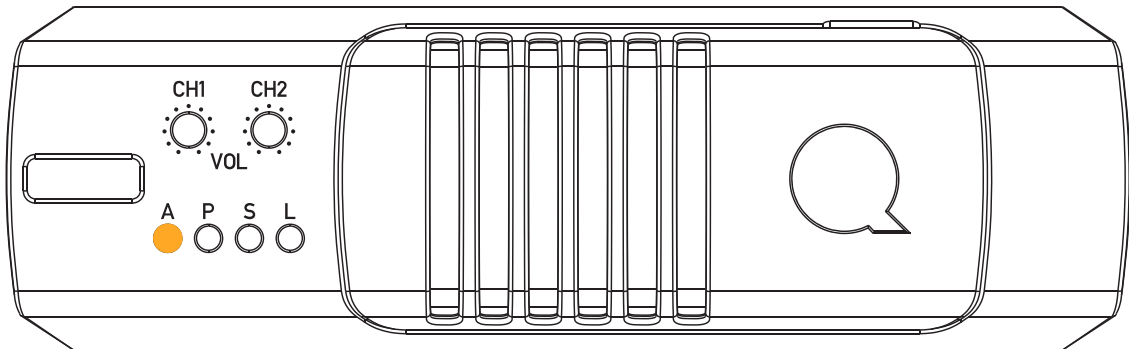
STAND-BY

MUTED

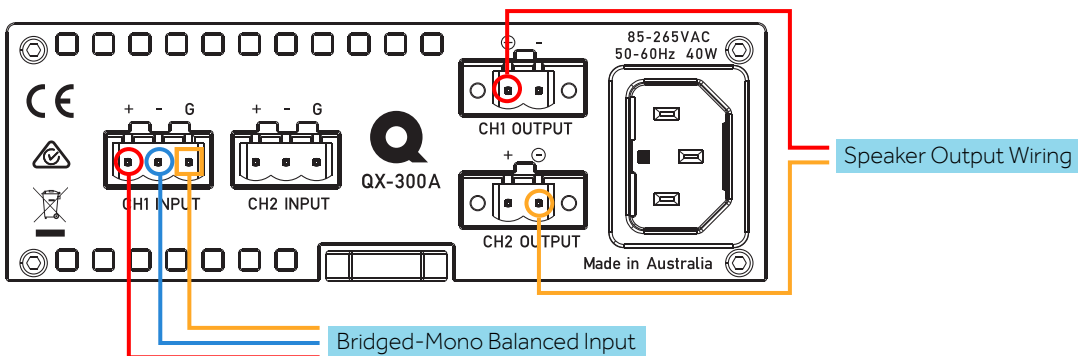## INPUT WIRING

Balanced Input Wiring

Unbalanced Input Wiring

STEREO MODE

Speaker Output Wiring

BRIDGED-MONO MODE

Speaker Output Wiring

Bridged-Mono Balanced Input
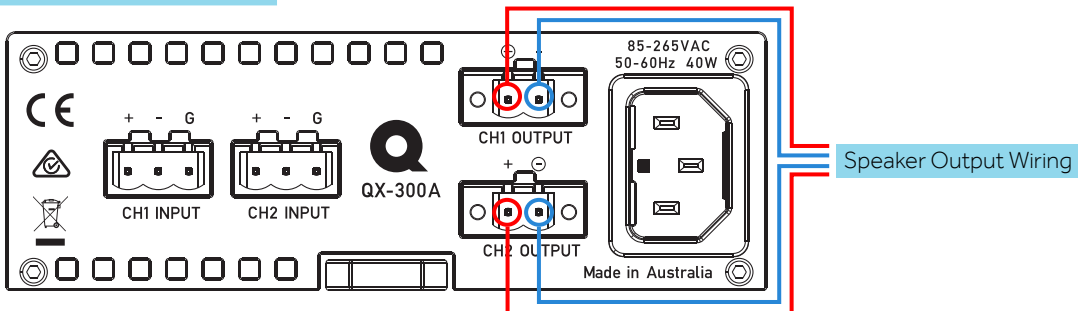
SPECIFICATIONS

OPERATION MODES	STEREO MODE		BRIDGED-MONO MODE			
LOAD	8Ohm	4Ohm	8Ohm	4Ohm	70v	100V
Maximum Continuous Power (@1khz, 1% Thd)	2 x 140W	2 x 140W	1 x 280W	1 x 260W	250W	240W
Maximum Dynamic Power (@1khz, 1% Thd)	2 x 200W	2 x 275W	1 x 550W	1 x 550W	550W	550W

Frequency Response	20-20kHz (+/-0.3dB)
Peak Output Current	25A
Dynamic Range	104dB (A-weighted)
Noise Level	-67dBu (A-weighted)
Distortion (1kHz@1W/8Ohm)	0.006%
Distortion (1kHz@50W/8Ohm)	0.006%
Crosstalk (1kHz@1W/8Ohm)	-80dB
Gain	32dB
Maximum Input Level	+24dBu
Input Type	Analogue Balanced 3-pin Phoenix (5.08mm pitch)
Input Sensitivity	+4dBu
Input Impedance	10kOhm
Output Resistance	43.6mOhm
Front Controls	Volume Adjust, 80Hz HPF Enable, 100Hz LPF Enable, Limiter Enable, Auto-Standby Enable)
Indicators (LEDs)	Blue/Orange — Active/Standby
	Orange — Protection
	Green — Signal Detection
	Orange/Red — Limiter/Clip
Cooling	Fan cooled, temperature dependent

|	
Features	Wake On Music, Auto-Mute (1ms wake-up), Limiting on High Temperature
Amplifier Protection Systems	Thermal protection, Over-Current Protection, DC Protection, HF Protection
Mains Input Voltage Range	85VAC - 265VAC
Standby Power Consumption	4.8W
Muted Power Consumption	16W
Idle Power Consumption	28W
Standard Power Consumption (Pink Noise@ 1/8th Rated Power, 8Ohm)	150W
Mains Connector	Standard IEC C14
Output Connector	2-pin Phoenix (5.08mm pitch) with a screw lock
Dimensions (H x W x D)	44 x 482 x 344 mm (1.75 x 19 x 13.5")
Weight	5.9kg (13 lbs)
Accessories	Mains Cable, Feet, User Manual, vPhoenix Plugs

* All specifications were measured at 240VAC

** Quest Engineering reserves the right to make changes in specifications, or products without prior notice.
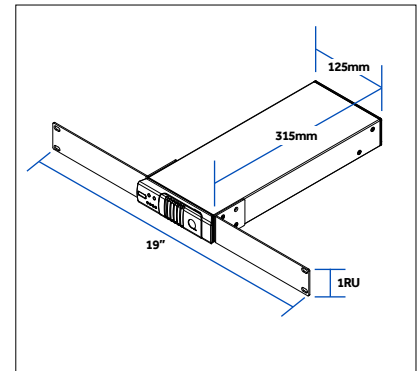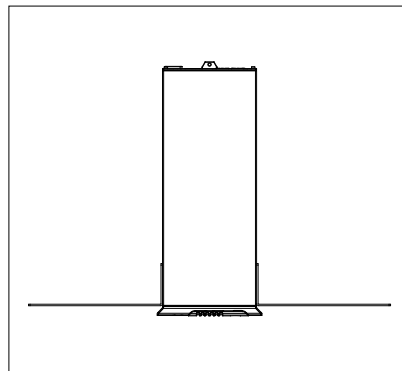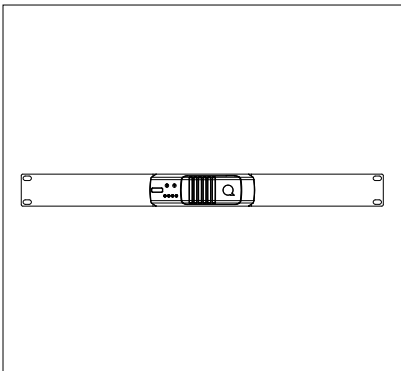
*** The figures shown above are 'real world', usable specifications and are conservative as a result. Quest Engineering does not believe in portraying misleading or exaggerated specifications.
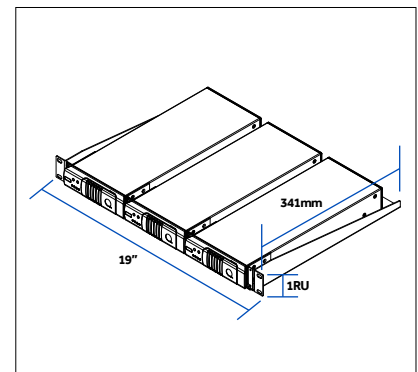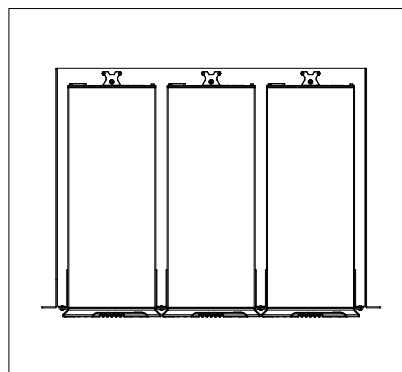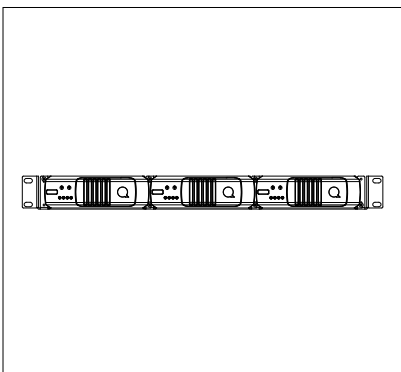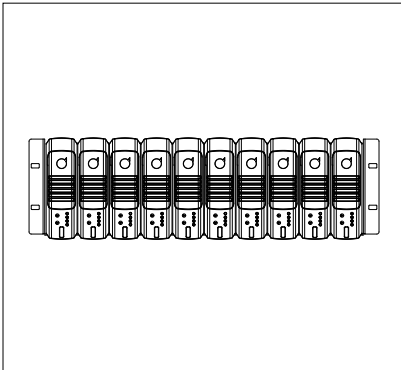
TECHNICAL DRAWINGS
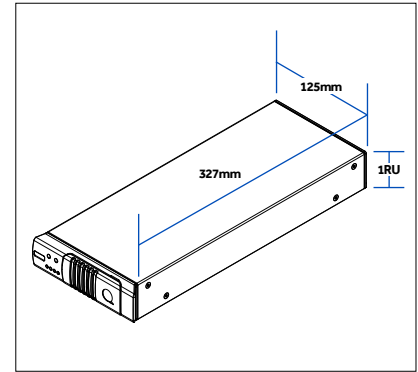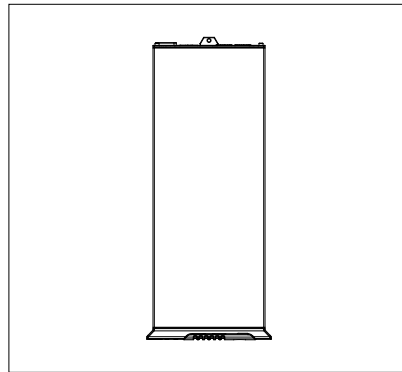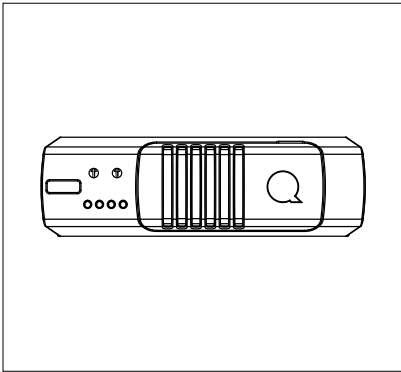
ACCESSORIES

1RU Brackets (Included)
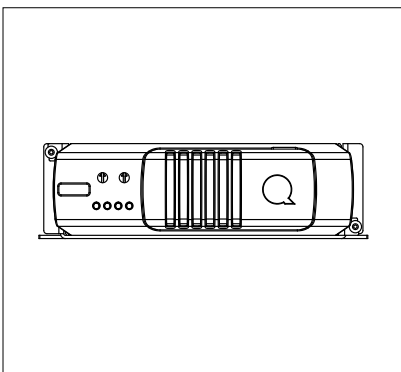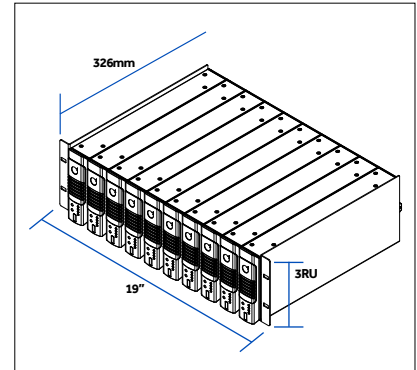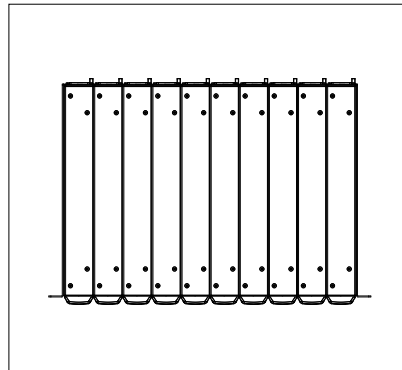

uRAK2 (optional)

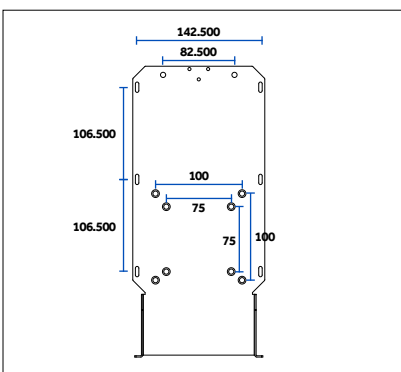## ACCESSORIES

uRAK3 (optional)

WBQX300 (optional)

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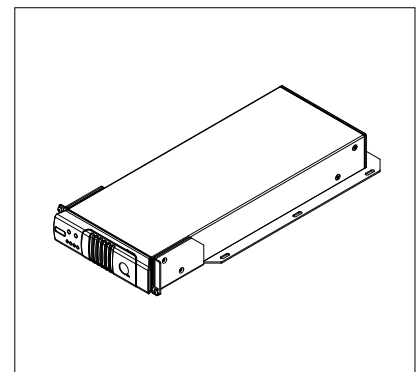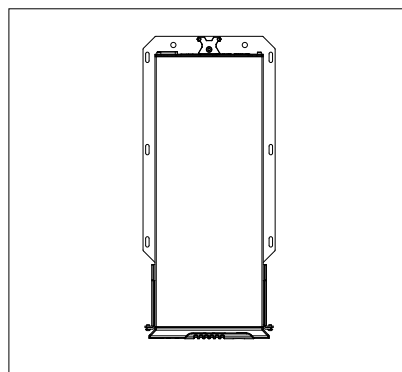
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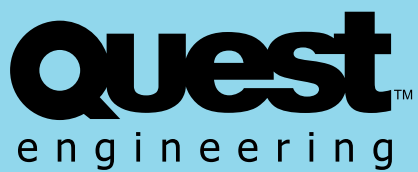
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• Register your product

• Protect your new product

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