

PowerSoft

QTU1400

User Manual

COD: MAN-QTU-USER_MAN_ - ____10-EN-10
Sept 2002

Caution QTU1400



CAUTION: To reduce the risk of electric shock, do not remove the cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture.

SAFEGUARDS: Electrical energy can perform many useful functions. This unit has been engineered and manufactured to assure your personal safety. Improper use can result in potential electrical shock or fire hazards. In order not to defeat the safeguards, observe the following instructions for its installation, use and servicing.

NOTES: This equipment has been tested and found to comply by Competent Body (Directive 89/336/EEC-EMC) pursuant to the product family standard for audio professional use: EN 55103-1 and EN 55103-2 standard (with the limits for E1 and E2 electromagnetic environment); EN61000-3-2, EN 61000-3-3

This is a Class A product. In a domestic environment this product may cause radio interferences in which case the user may be required to take adequate measures.

This equipment has been tested and found to comply by Notified Body (Directive 73/23/EEC L.V) pursuant to the audio apparatus safety requirements: Standard EN 60065.

Warning Notices

Location

Install the amplifier where it will not be directly exposed to high temperature or humidity. Do not install the amplifier in a location that is exposed to direct rays of the sun, or near to hot appliances or radiators. Excessive heat can adversely affect the operation and internal components. Installation of the product in a damp or dusty environment may result in malfunction or accident.

Precautions regarding installation

Placing and using the amplifier for long periods on heat-generation sources will affect performances. Avoid placing the amplifier on heat-generating sources. Install this amplifier as far as possible from tuners and TV sets. An amplifier installed in close proximity to such equipment may cause noise or degradation of the picture.

Safety rules

QTU1400



This device must be powered exclusively by earth connected mains sockets in electrical networks compliant to the IEC 364 or similar rules.

Is absolutely necessary to verify this fundamental requirement of safety and, in case of doubt, require an accurate check by a qualified personal.

The constructor cannot be considered responsible for eventual damages caused to persons, things or data for the missing of accurate earth link.

Before powering this device verify that the correct voltage rating.

Verify that your mains connection is capable to satisfy the power ratings of the device.

Be sure that connection socket or circuit breaker is accessible to the operator for servicing

Be sure that sufficient air cooling in provided inside the rack mounting unit

Do not spill water or other liquids into or on the unit.

Do not use this unit if the electrical power cord is frayed or broken.

Do not remove the cover. Removing the cover will expose you to potentially dangerous voltage.

No naked flame sources such like lighted candles should be placed on the product.

Contact the authorized center for ordinary and extraordinary maintenance.

Input mains and output power connection wirings must not to be accessible to the user.

Specifications

QTU1400

GENERAL

Type 4 channels digital amplifier for PA professional applications with insulated output

POWER REQUIREMENTS

All models..... AC 95V + 265V, 50/60 Hz / 450V A
Weight 29 Kg
External dimensions485mm(W),480mm(D),88.4mm(H)
Environmental temperature..... 40°C
Overall efficiency.....better than 75%

AUDIO SECTION

Slew Rate (100V output / 28.5 Ω Load) 30V/ μ S
S/N ratio >105 dB/A
Distortion <0.1% (THD, DIM, SMPTE)
Inputs Balanced to ground, three poles in line
Impedance 10 K
Gain 34, 37, 40 dB (50, 70, 100Voutput)
Output Floating insulated
Bandwidth (100V output / 28.5 Ω Load) 50 Hz - 20 KHz / 0 – 3dB

POWER SPECIFICATIONS

Power continuous all channels driven (1KHz, 0.5% THD)

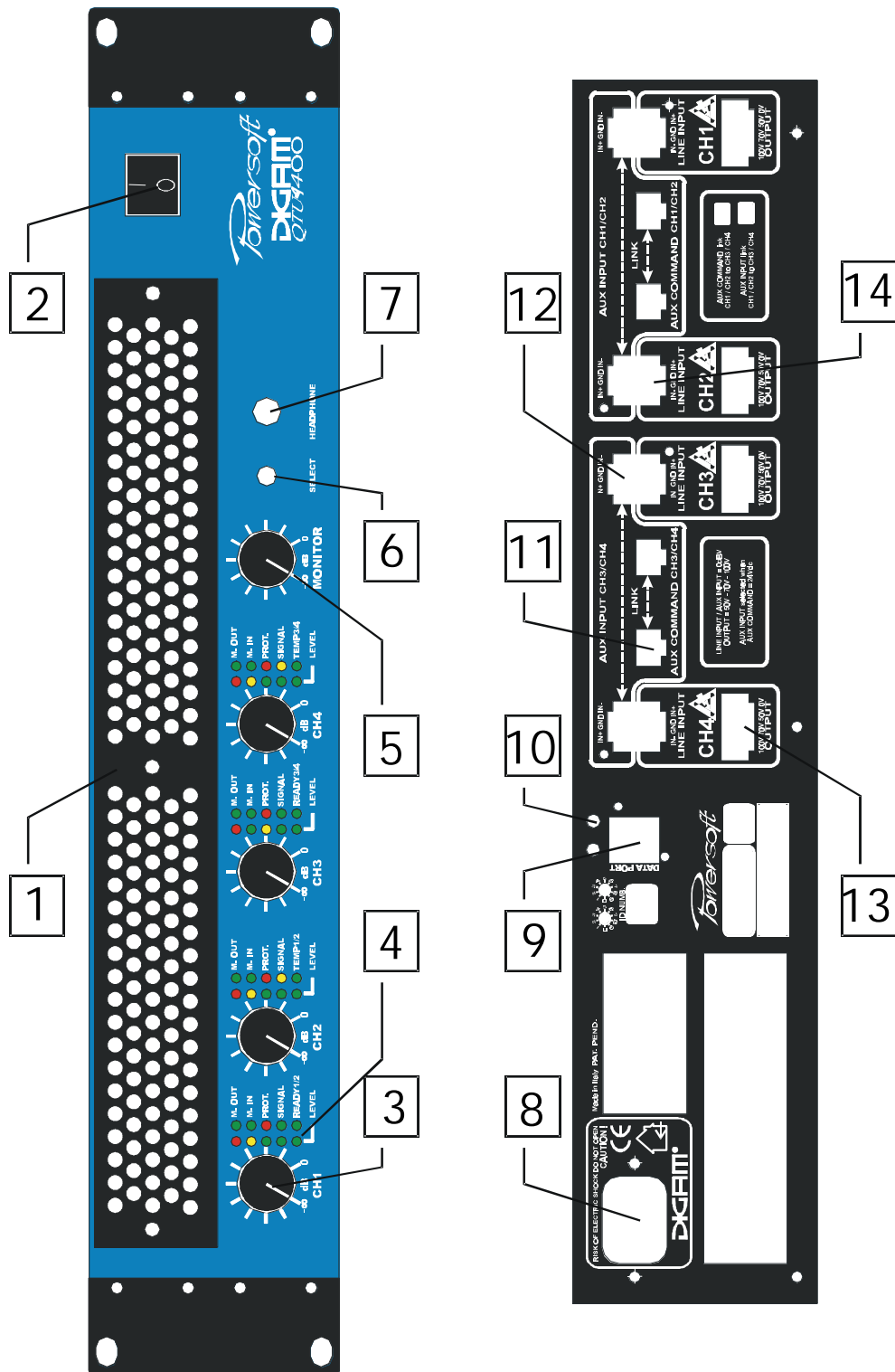
100V out / 28.5 Ω Load = 350 W	minimum load range > 28.5 Ω
70V out / 14.0 Ω Load = 350 W	minimum load range > 14.0 Ω
50V out / 7.14 Ω Load = 350 W	minimum load range > 7.14 Ω

FUNCTIONS

- Thermal protection (over-temperature power limiting, thermal shutdown)
- Auto reset short-circuit / overload output protection
- Soft Clip limiter and High frequency gain control
- Temperature controlled fan
- Input output monitoring by inner loudspeaker or external headphones
- Switchable auxiliary inputs by 24 Vdc external command
- Remote controlling and diagnosis option board

Connection description

QTU1400



Front/Rear panel description

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FRONT PANEL:

- 1) Removable dust cover
- 2) Mains switch
- 3) Channel gain control knob
- 4) Channel output level indicator,
Ready status channel 1 / 2 (3 / 4)
Temperature status channel 1 / 2 (3 / 4)
Input signal presence
Output stage protection indicator
Input signal monitor selection indicator
Output signal monitor selection indicator
- 5) Monitor gain control knob
- 6) Monitor selection pushbutton
- 7) Exclusive headphone 6.3mm jack

BACK PANEL:

- 8) Mains IEC socket
- 9) Data port connector (optional)
- 10) ID selection encoders (optional)
- 11) Auxiliary input selection command (24Vdc coil relays) conn1
- 12) Auxiliary balanced input (In+, Gnd , In-) conn2
- 13) Output power connector (100V, 70V, 50V, 0) conn3
- 14) Line balanced input (In-, Gnd , In+) conn2



**CHECK PROPER EARTH CONNECTION BEFORE OPERATE
THIS DEVICE IS DESIGNED TO WORK WITH EARTH CONNECTION**

Mating connectors

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- Conn1 (2POLES 5.08mm): Phoenix Contact MSTB 2,5/2-ST-5,08 (Cod. Ph.C. 1757019)
(Cod.Powersoft CN000149)
- Conn2 (3POLES 5.08mm): Phoenix Contact MSTB 2,5/3-ST-5,08 (Cod. Ph.C. 1757022)
(Cod.Powersoft N000150)
- Conn3 (4POLES 5.08mm): Phoenix Contact MSTB 2,5/4-ST-5,08 (Cod. Ph.C. 1757035)
(Cod.Powersoft CN000151)

Servicing

QTU1400



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



This device must be correctly cooled for correct and reliable operation:

Clean front panel dust filter every 2000 Hours of operation.
Remove the N°3 exegonal screws on front grille and clean the filter with compressed air.

Dimensions

QTU1400

