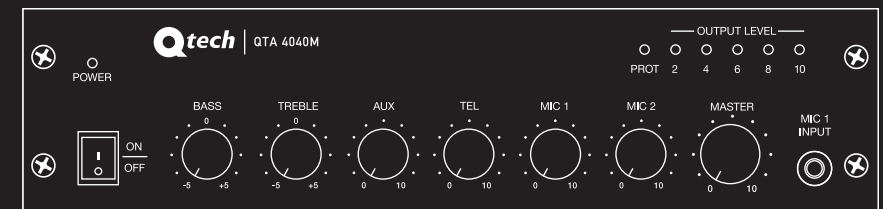




Q-Tech

Q-Tech Commercial Series
QTA 4040M
Mixer Amplifier

User Manual



www.questaudio.net

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Safety Precautions

- Be sure to read the instructions in this section carefully before use.
- Make sure you observe the instructions in this manual as to the conventions of safety symbols.
- We also recommend you keep this instruction manual handy for future reference.

Safety Symbol and Message Conventions

Safety symbols described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential risks.



WARNING

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



CAUTION

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

WARNING

When Installing the Unit

- Do not expose the unit to rain or an environment where it may be exposed to water or other liquids as doing so may result in fire or electric shock.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Do not cut, kink, otherwise damage or modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord as doing so may result in fire or electric shock.
- Be sure to replace the unit's terminal cover once the unit has been configured. Because high voltage is applied to the speaker terminals, never touch these terminals to avoid electric shock.
- Be sure to ground the unit to the safety ground (earth) terminal to avoid electric shock. Never ground the unit to a gas pipe as a catastrophic disaster may result.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling, causing personal injury and/or property damage.

When the Unit is in Use

- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest Quest dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock. Conditions where use should immediately cease include the following:
 - If you detect smoke or a strong smell coming from the unit
 - If water or any metallic object gets into the unit
 - If the unit falls, or the unit case breaks
 - If the power supply cord is damaged (exposure of the core, disconnection, etc.)
 - If it is malfunctioning (no tone sounds.)
- To prevent a fire or electric shock, never open or remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest Quest dealer.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not insert/drop metallic objects or flammable materials into the ventilation slots of the unit's cover as this may result in fire or electric shock.

CAUTION

When Installing the Unit

- Never plug in or remove the power supply plug with wet hands, as doing so may cause electric shock.
- When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.
- When moving the unit, be sure to remove its power supply cord from the wall outlet. Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.
- Do not block the ventilation slots in the unit's cover. Doing so may cause heat to build up inside the unit and result in fire.
- Avoid installing the unit in humid or dusty locations, in locations exposed to direct sunlight, near heaters, or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.

When the Unit is in Use

- Do not place heavy objects on the unit as this may cause a fall or break the unit and/or additional objects which may result in personal injury and/or property damage.
- Make sure that the volume control is set to the minimum position before power is switched on. Loud noise produced at high volume when power is switched on can impair hearing.
- Do not operate the unit for extended periods of time with the sound distorting. This is an indication of a malfunction, which in turn can cause heat to generate and result in a fire.
- Contact your dealer in regards to how to correctly clean the unit. If dust is allowed to accumulate in the unit over a long period of time, a fire or damage to the unit may result.
- If dust accumulates on the power supply plug or in the wall AC outlet, a fire may result. The power supply plug cleaned periodically with a dry cloth. Also ensure that the power supply plug is always securely inserted into the wall.
- Switch off the power, and unplug the power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more. Doing otherwise may cause a fire or electric shock.

An all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated in the electrical installation of the building.

Description

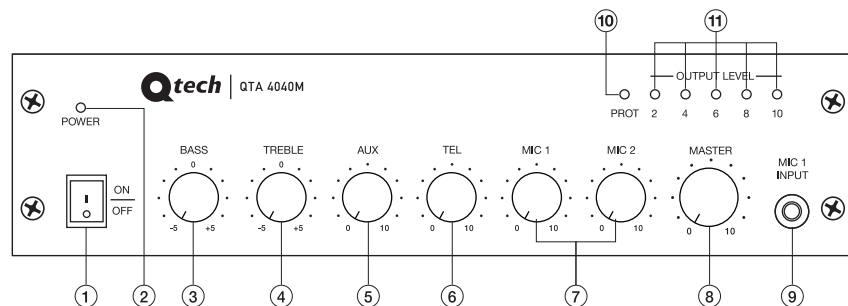
- Rated Power:40W
- 100V,70V constant voltage outputs and 4-16Ohms constant resistance output.
- 1 channel MIC2 one-port input (5mv 1Kohms) and 1 channel (300mv 10Kohms) AUX input
- 1 channel MIC1 balanced/unbalanced input (2.5/5mv 1/2Kohms)
- 1 channel TEL input (sensitivity 1V 2Kohms)
- Built-in treble bass adjusting bass 10dB at 100Hz treble 10dB at 10KHz

Built-in Priority Functions

- **TEL priority:**
TEL override Aux and MIC(1-2)
- **MIC1 is second priority, override AUX and MIC2 signal except TEL signal**

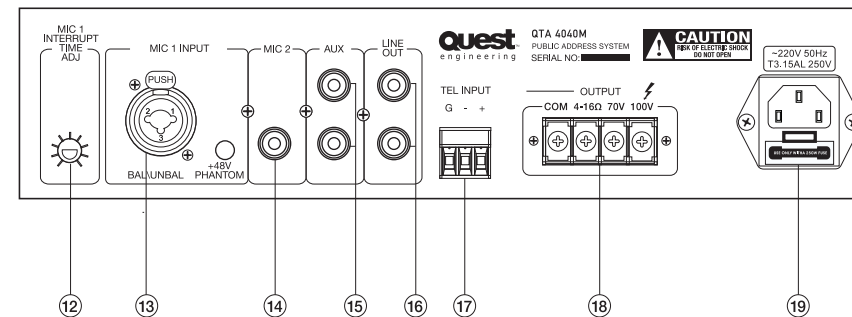
Front Panel Layout

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- 1. Power Switch**
On top of the opening Power. Press the end, power shut down.
- 2. Power Indicator**
- 3. Bass**
Adjust bass response. Rotate clockwise to increase bass output and anti-clockwise to reduce it.
- 4. Treble**
Adjust treble response. Rotate clockwise to increase treble output and anti-clockwise to reduce it
- 5. AUX Volume Control**
- 6. TEL Volume Control**
- 7. MIC Volume Control (MIC1/MIC2)**
- 8. Master Volume Control**
- 9. MIC1 Input 6.3 Microphone Jack**
- 10. Level Indicators**
Level meters 6 output level indicators
- 11. Protection Indicator**

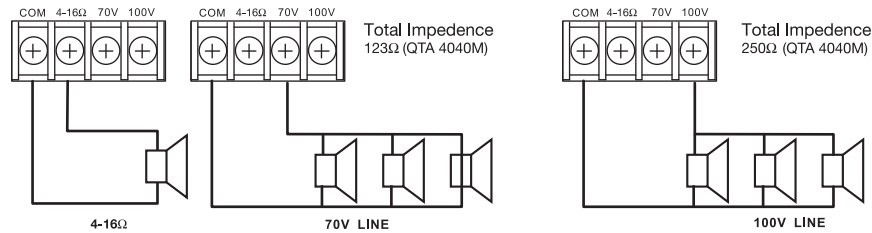
Rear Panel Layout



- 12. Mute adjustor**
Adjust the mute degree from 0-20dB when MIC1 input override all the other inputs.
- 13. MIC Input With Phantom Power**
MIC1 input compatible of XLR and 6.3 MIC
- 14. MIC 2 MIC Input**
MIC2 input of 6.3 MIC.
- 15. AUX Input**
AUX for extra equipment input
- 16. Line Output**
Connect to other audio processing equipment
- 17. TEL Input**
- 18. Speaker Terminals**
Connectors for 4-16 ohms or 70V and 100V speaker
- 19. AC POWER INPUT**
~ 220V-240V 50/60Hz

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Speaker Connections



Notes

- Both the 4-16Ω and 70V/100V terminals cannot be used at the same time
- Impedances indicated in the figures represent the total speaker system (load) Impedances

WARNING

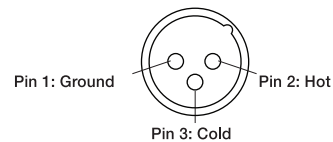
- Be sure to attach the supplied terminal cover after connection is complete
- Never touch these terminals.
High voltage applied to speaker terminals will cause an electric shock

XLR Connections

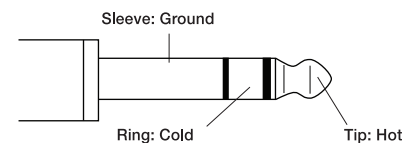
Combined XLR (female)/phone jack connectors

Usable Connections and Plugs

XLR Type Male Connector



Phone Plug



Operation

The four output connectors allow for operating the amplifier either in 100v, 70v or 4-16 Ohm. It is always best to allow for a minimum of 15% headroom to allow for cable losses.

Trouble Shooting

If all wires are connected correctly but there is no output please check the following

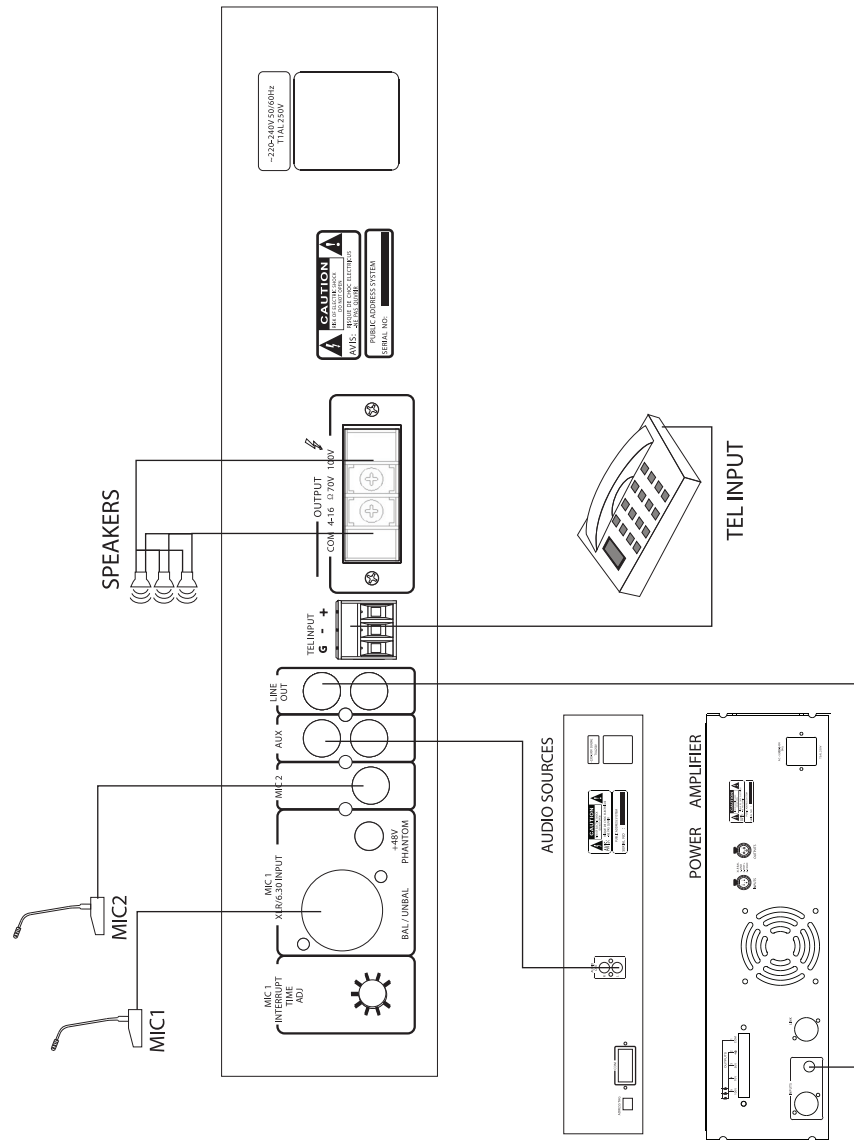
- Power is connected and the unit is turned on
- The Fuse has not be shorted
- Volume is turned all the way down
- There is no input signal
- The machine is hot and has entered a non-conditioning state due to high temperature
- If the unit Powers on but an alarm signal can be heard:
- Check that the unit is not overloading or short circuiting
- Check that the voltage is stable and at the correct rate

Mute

- TEL has priority over all inputs
- Mic 1 has secondary priority. You can also adjust the audio level of any background music during a paging announcement when using this input by adjustment of the control knob (12) on the rear panel.

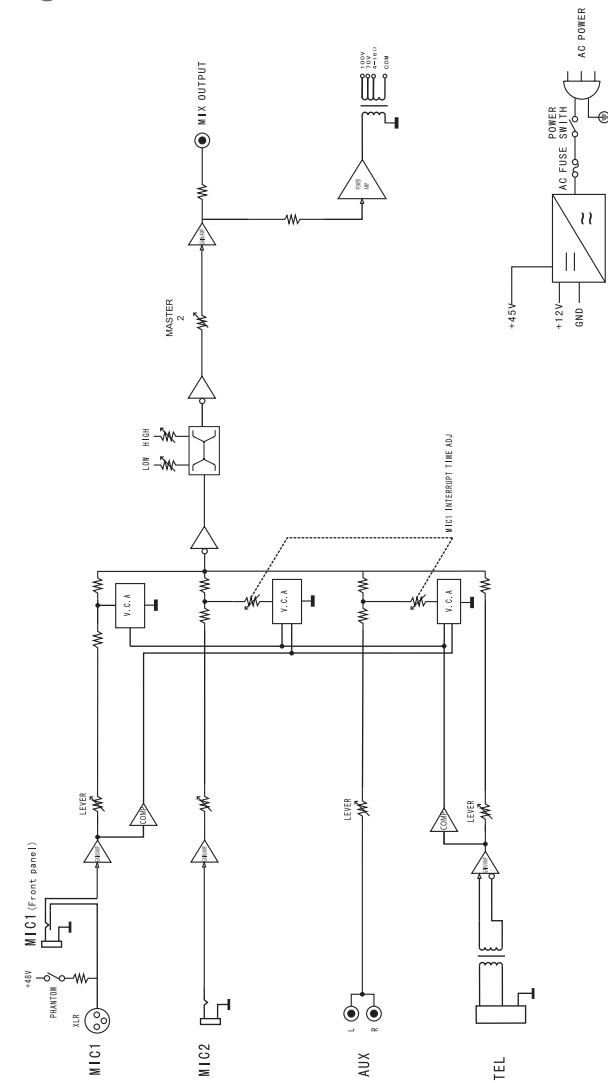
Applications

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Block Diagram

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Specifications

| | |
|-----------------------------|----------------------|
| Input sensitivity/impedance | 1V/500ohms |
| Power source | ~220V-240V 50/60Hz |
| Power consumption | 60W |
| Net weight | 4,0Kg |
| Gross weight | 4,5Kg |
| Dimensions | 320mm x 273mm x 66mm |

Amplifier Section (amp In @ 1khz,8ohm Load Output)

| | |
|--------------------|----------------|
| Speaker Line Input | 4~16 ,70V,100V |
|--------------------|----------------|

Amplifier Section (amp In @ 1khz,8ohm Load Output)

| | |
|--|-----------------------|
| Rated maximum output power (THD 1%) | 40W |
| Input sensitivity/impedance | 1V/20Kohms |
| Frequency response (At 1KHz Half power output) | 80Hz~16KHz(+1dB/-3dB) |

MIC1~2 input section (MIC in@1KHz, preamp out)

| | |
|-----------------------------|--|
| Input sensitivity/impedance | 5mV/500ohms,unbalance 2.5mV/500ohms,balance |
|-----------------------------|--|

AUX input section (AUX in@1KHz, preamp out)

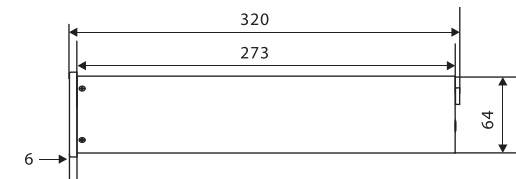
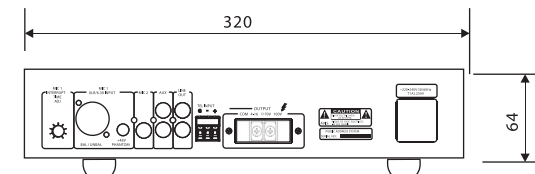
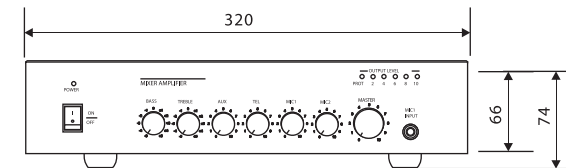
| | |
|-----------------------------|---------------|
| Input sensitivity/impedance | 300mV/500ohms |
|-----------------------------|---------------|

TEL input section (AUX in@1KHz, preamp out)

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Dimensional Diagram

UNIT :mm



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To prevent the unit from overheating, keep all sides of the unit over 10cm away from objects that may obstruct air flow.

UNIT :mm

