



# User Manual

MODEL: QM3/QM4







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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 the conventions of safety symbols and messages are very important.
- 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 be a result of mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of any risks.



The QM3 and QM4 are not designed for flying applications. For wall mounting with the 36mm top hat fitting, it is essential to follow the local approved safety standards and installation by qualified personnel.



Do not attempt to clean the painted enclosure with solvents or petrochemical based cleaners. Touching up scratches can be done with polyester paint.



Installation that allows direct precipitation is not advised and the installation method must prevent liquids from entering the cabinet.



Do not stack the speaker cabinet in a manner that could cause injury should a cabinet become dislodged.



Do not place sources of heat on the speaker cabinet such as lighting equipment or smoke machines, and where possible keep out of direct sunlight.



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



Before connecting or disconnecting any signals (including mains power), be sure to set the master level control counter-clockwise to the off position. This will prevent unexpected and possibly damaging noises from the system.







# **WARNING**

### 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 all signal cabling (including mains power).
   Moving the unit with cabling connected may cause damage to the unit, resulting in fire or electric shock.
- Do not block the free flow of air around the unit. Doing so may cause heat to build up inside the unit and result in fire or damage to components.
- Avoid installing the unit into areas of: humid, dusty, direct sunlight, steam, smoke, or near heating systems. Doing so may result in fire or electric shock.

### When the Unit is in Use

- Do not place objects on the unit as they can dislodge and cause personal injury and/or property damage.
- Make sure the volume control is set to minimum position before power is switched on. Loud noises produced when power is switched on can impair hearing.
- Do not operate the unit for an extended period of time with the sound distorting.
   This is an indication of a malfunction or incorrect gain structure. Turn down the sound source and check for the source of distortion. Ignoring this can cause damage to the speaker system and under some circumstances can cause excessive heat to generate and result in a fire.
- Contact your dealer for cleaning procedure. If dust is allowed to accumulate inside the unit over a long period of time, a fire or damage to the unit may result.
- 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 many days.



# **General Description**

The QM3/QM4 powered speakers are a two way active bass reflex design suitable for mobile and installation use.



### **Hybridtec Amplifier Technology**

The amplifier power is supplied by Quest Engineering's new "Hybridtec" digital class D and analogue class A/B amplifier system. The Hybridtec amplifier is controlled by an internal analogue system. Simplified controls on the rear of the QM3/QM4 make operation easy. The QM3/QM4 features an XLR input, XLR link output, gain control, bass/treble cut and boost, and input mic/line sensitivity.

Individually colored LED indicators show mic/ line settings and signal/peak presence.

The QM3/QM4 is a multi-purpose loudspeaker that can be used as a front of house system or as a powered foldback monitor. The cut and boost rotary EQ controls can be adjusted to make basic alterations to the sound. Though maximum boost should be avoided at high power levels.

The Hybridtec design saves weight, lowers potential heat generation and also improves sonic performance. A limiter monitors RMS power for excessive input level.

Limiters and compressors are not a substitute for sensible operation. The system will sound its best when mixers and other signal processors are not driven into distortion. The design characteristics make the QM3 and QM4 suitable for both full range use or as the Mid-High component of a multi way system with bass enhancement. Coupled with a Quest Engineering compact subwoofer, the QM3 and QM4 can act as part of a point source multi way system for full range sound at medium to high sound pressure level.

### Installation

Temporary installation is possible with the addition of a 35-36 mm speaker stand.

### **Accessories**

An optional transit carry bag is available for the QM3/QM4. Made from rugged black canvas to protect your investment.

### Solid Build Construction

The QM3/QM4 is well suited to all professional applications. The high grade lightweight birch cabinet is specially engineered to withstand demanding use and the heavy gauge power-coated steel grill ensures the driver and horn are always protected.





## **Connection Panel**

- 1 Input Volume Control
- 2 LED Peak Indicator
- 3 Bass Cut / Boost
- 4 Treble Cut / Boost
- 5 Input Selector LED Indicators
- 6 Input Sensitivity Mic / Line Switch
- 7 Input XLR / Phono Female
- 8 XLR Male Line Out / Thru
- 9 100V-240V Power Input
- 10 Power On / Off Switch.

### **EQ Settings**

It is advised not to boost Bass or Treble controls to maximum at more than medium power levels. Bass boost will cause the limiter to activate at a lower input level to prevent overloading the bass amplifier or woofer.

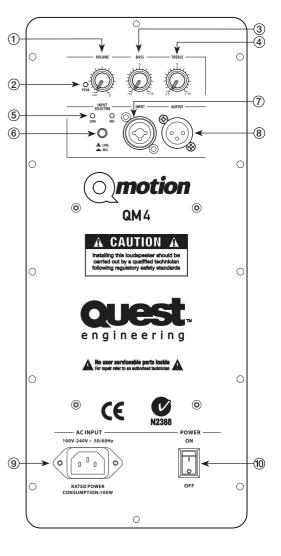
### **System Limiter**

When driven to full power the system limiter will engage to prevent overload and amplifier clipping. Continuing to drive the input to higher levels will cause more excessive limiting and loss of high frequency performance and clarity.

This effect is noticeable and lowering the input level will restore clarity and allow the system to achieve its maximum potential sound pressure level.

# **A** CAUTION

Use only same fuse for replacement. Please consult your Quest Engineering service agent.



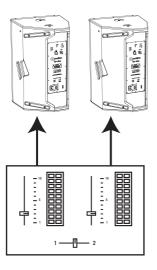


# **System Connections**

### As a stand-alone system

It is good audio practice to set the input volume of your powered speakers to a high level and control the overall sound level from your mixer.

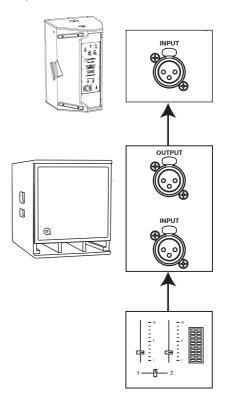
Be careful to make sure your input switch is set to Line and not MIC.



# As part of a multi way powered system

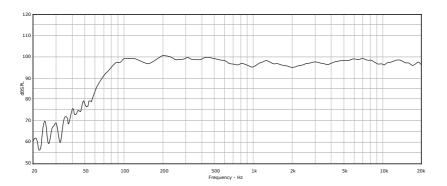
(If your powered subwoofer has an electronic crossover output).

Connecting the QM3/QM4 through the output of the subwoofer crossover allows for the low bass to be directed to the subwoofer and the upper bass/hi frequencies to be reproduced by the QM3/QM4. This approach takes the low frequency load off the QM3/QM4 and makes more power available for mid/high output.





# **QM3 Specifications**

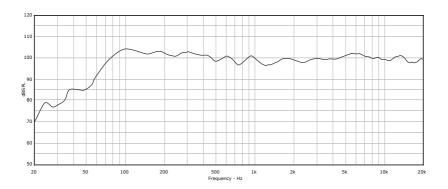




Technical Parameters									
Max SPL *calculated			125 dBSPL						
Sensitivity *5-band average			98 dBSPL						
Frequency Response			60Hz - 20kHz						
Amplifier Power	RMS	380W	Peak	470W					
Transducers	HF	34mm Compression Driver	LF	12" High Power Woofer					
Directivity *H x V			85° x 75°						
Connections			XLR+1/4" In, XLR Out						
Dimensions *H x W x D			620 x 380 x 347 mm						
Net Weight			16.5 kg						
Shipping Weight			20 kg						

<sup>\*</sup> Quest Engineering reserves the right to make changes in specifications, or products without prior notice.

# **QM4 Specifications**



Technical Parameters									
Max SPL *calculated			127 dBSPL						
Sensitivity *5-band average			99 dBSPL						
Frequency Response			60Hz - 20kHz						
Amplifier Power	RMS	380W	Peak	470W					
Transducers	HF	34mm Compression Driver	LF	15" High Power Woofer					
Directivity *H x V			85° x 75°						
Connections			XLR+¼" In, XLR Out						
Dimensions *H x W x D			705 x 462 x 440 mm						
Net Weight			21.5 kg						
Shipping Weight			26 kg						



<sup>\*</sup> Quest Engineering reserves the right to make changes in specifications, or products without prior notice.

# **NOTES**



# **Register Your Product**

Thank you for choosing Quest. Please take the time to complete your product registration card which is included with the packaging.

Registering your Quest Engineering product will:

- CONFIRM YOUR WARRANTY
- REGISTER YOUR PRODUCT
- PROTECT YOUR NEW PRODUCT

### **REGISTER ONLINE:**

www.questaudio.net/registration

For spare parts and service, contact your local authorised Quest Dealer.



www.questaudio.net