

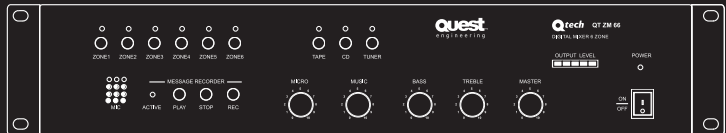
# Q-Tech

## Commercial Series

### QT ZM66

## Digital Mixer 6 Zone

User Manual



# Contents

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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 splashed by 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 nor 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 after connection completion. Because high voltage is applied to the speaker terminals, never touch these terminals to avoid electric shock.
- Be sure to ground to the earth terminal to avoid electric shock.

### 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.
  - If you detect smoke or a strange 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 nor 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 nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.

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## CAUTION

### When Installing the Unit

- Never plug in nor 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 it to fall or break which may result in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and/or damage.
- Contact your Quest dealer as to cleaning. 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. Clean it periodically. In addition, insert the plug in the wall outlet securely.
- 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.

## General Description

The QT ZM66 is a digital 6 zone paging mixer which is capable of being used with one separate power amplifier for each audio zone, or, by way of using two power amps. The individual power amplifier per zone option switches line level, with the two power amp option allowing for the switching of the 100v outputs to make paging announcements into individual zones, or all call.

## Features

- 6 zones sources selection and control function
- Up to 6 QT ZM66M paging consoles may be used
- 10 inputs and 10 outputs
- In built 3 message capacity, with 2 messages operated via dry contact closure, with the 3rd message operated from the paging console
- Built in chime generator.
- 3 inputs for BGM sources, with a mic input including 48v phantom power
- 3 levels of priority
  - 1. In built message recording and BGM**
  - 2. Recorded messages**
  - 3. Paging and selection of paging zones overrides all other sources**
- Build-in voltage output indicator
- RS 485 COM port
- MAX load is 2000W

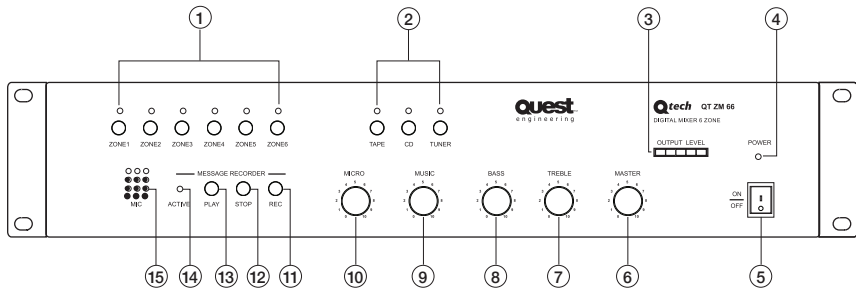


## Specifications

Console Input	
Sensitivity	-50 / -2 dB 2, 5 / 500 mV
S/N ratio	>68dB
Frequency response	100/17.000Hz(-3dB)
1 Microphone input	
Sensitivity	-50 / -2 dB 2, 5 / 500 mV
S/N ratio	>68dB
Frequency response	100/17.000Hz(-3dB)
Phantom power	48V
3 Auxiliary inputs	
Tuner & Tape input sensitivity/ impedance	200 mV / 47 Kohm
CD input sensitivity / impedance	500 mV / 47 Kohm
S/N ratio	>90 dB
Frequency response	40/20.000Hz(-3dB)
Control	
Bass	±12dB
Treble	±12dB
Chime	2 tone active for contact free in priority and BGM
Normal distortion	>0.1%
Operating conditions	
Main power supply	230 V/ 50 Hz
Dimension (mm)	484X322X88
Net Weight	6.58KG
Weight	6.58KG
Max number of microphone bases	6



## Front Panel Layout



### 1. ZONE(1-6)

6 buttons for selection of BGM into whichever zones required

### 2. Audio

Input switches for source choice of input source selection (Tape CD Tuner)

### 3. Output Level

Signal level indicator

### 4. Power

Power indicator

### 5. Power Switch

ON/OFF

### 6. Master

Master level control

### 7. Treble

Treble response. Rotate clockwise to increase treble output and anti-clockwise to reduce it.

### 8. Bass

Bass response. Rotate clockwise to increase bass output and anti-clockwise to reduce it.

### 9. Music

Music volume control

### 10. Micro

Microphone Volume Control

### 11. REC

Message record switch. Three messages of 60 seconds each may be recorded; for message selection see switch(13) on rear Panel

### 12. Stop

End message recording switch

### 13. Play

Manual message replay switch

### 14. Active

Message playing indicator

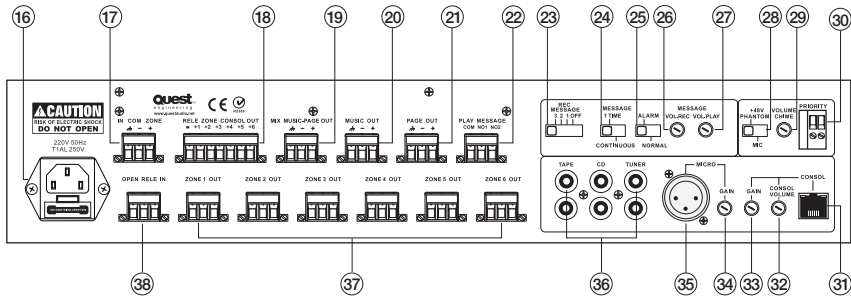
### 15. MIC

Internal microphone for message recording

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## Rear Panel Layout



### 16. AC Inlet

Connect to the supplied power cord

### 17. IN Common relay music zone

### 18. Output Power Control Relay

### 19. Mixed output, music and paging

### 20. Music Signal Output

### 21. Paging Signal Output

### 22. Contact for playback of messages 1 & 2

The third message is activated by Microphone base directly

### 23. Message Selection Switch: OFF,1,2,3

This is used to select the message to record

### 24. Message 1 selection mode switch 1 Time:

The recorded message plays only once.

#### Continuous:

The recorded message plays continuously till the message contact is remotely closed

### 25. Alarm Selector switch

The mixer will operate without the QT ZM66M paging console and announcements may be made via a remote microphone in emergency situations

#### Alarm:

The announcement is simultaneously distributed in all the 6 zones

#### Normal:

The announcement is distributed only in the zone selected with front panel buttons

### 26. Message record level

### 27. Message playback level

### 28. Phantom power select switch

### 29. Chime volume control

### 30. Priority control port for BGM and internal chime

### 31. Input RJ45 console

Max 6 microphone consoles in parallel

### 32. QT ZM66M input level control

### 33. QT ZM66 gain control

### 34. Microphone gain control

### 35. Microphone Input XLR Balanced

### 36. Audio Source Interface

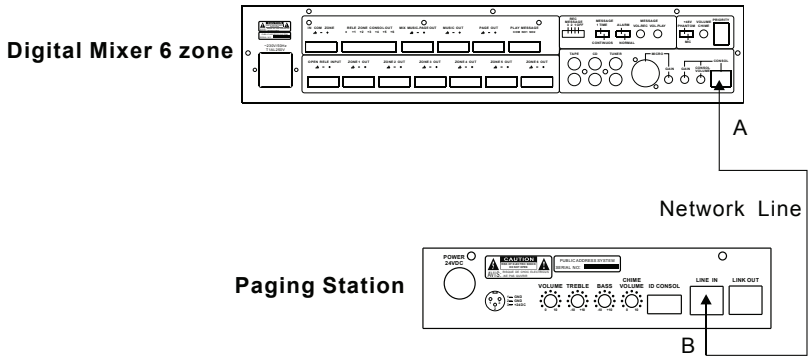
### 37. OUT zone (1-6)

### 38. Output relay zone contacts



## Connections

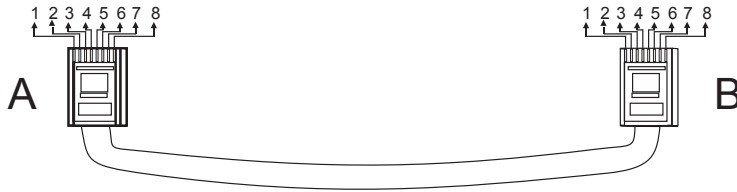
### Network Connection Line



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### Net Production Line Method



1. Blue
2. White Blue
3. Brown
4. White Brown
5. Orange
6. White Orange
7. Green
8. White Green

1. Blue
2. White Blue
3. Brown
4. White Brown
5. Orange
6. White Orange
7. Green
8. White Green

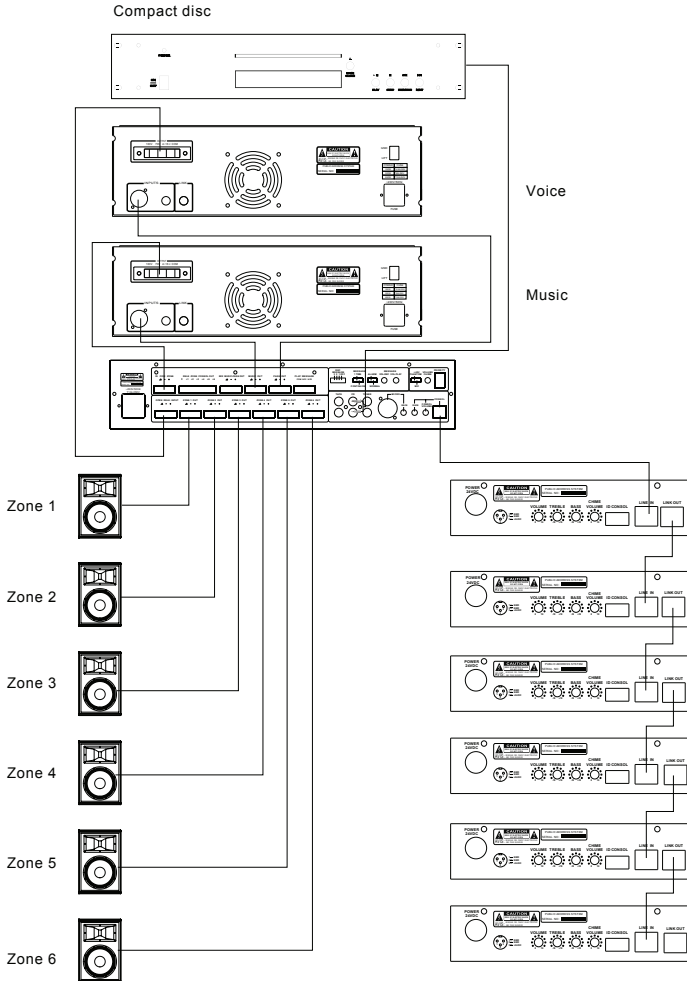


**Note:** Network lines must adopt the five categories of twisted-pair with double-layer shielding, RJ45 connectors must be used with shielded connector

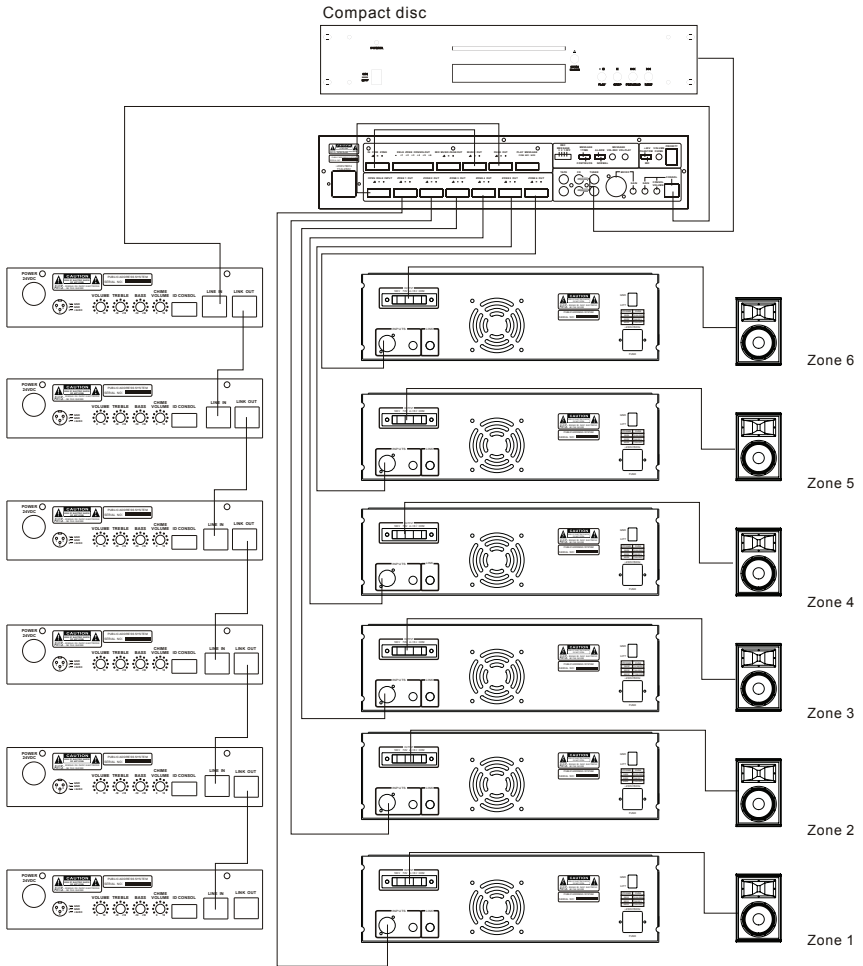
# Applications

1 amplifier for music 1 amplifier for voice for 6 zone

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**6 amplifier one for each zone**



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## Address Set

### ID Console Address Set

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ADDRESS	DEFINITION
1	
2	
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4	
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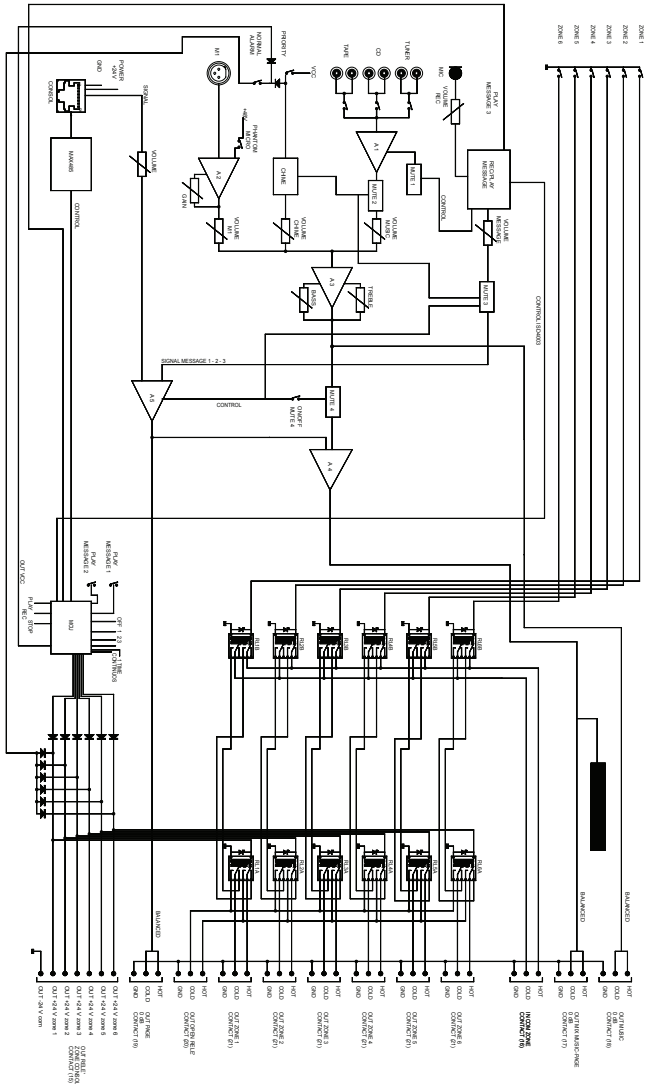
ADDRESS	DEFINITION
17	
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31	
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ADDRESS	DEFINITION
33	
34	
35	
36	
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41	
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48	

ADDRESS	DEFINITION
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13

## Block Diagram

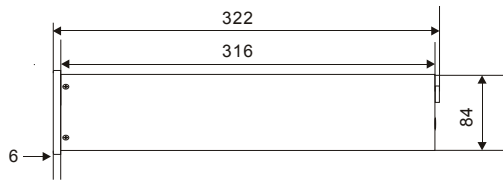
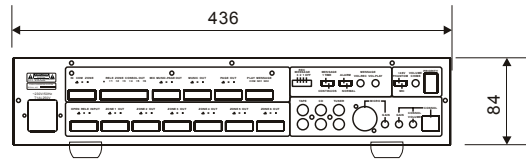
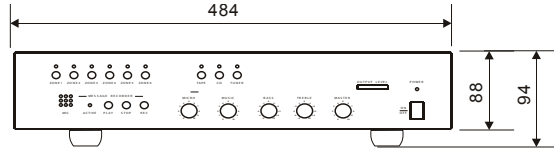


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## Dimensional Diagram

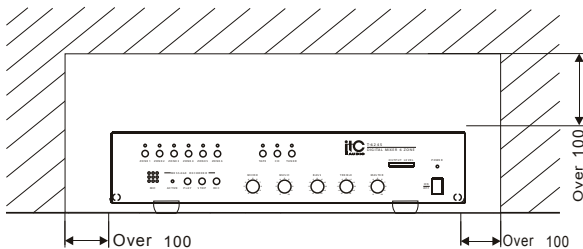
UNIT: mm



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Keep all the unit's sides over 10cm away from objects that may obstruct air flow to prevent the unit's internal temperature rising.

UNIT: mm









[www.questaudio.net](http://www.questaudio.net)

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