

### DIGITAL MIXER 6 ZONE LTS.PM62

# **Operation manual**



Please follow the instructions in this manual to obtain the optimum results from this unit. We also recommend that you keep this manual handy for future reference.





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#### 1. SAFETY PRECAUTIONS

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

#### Safety symbol and message conventions

Safety symbols and messages 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 safety.



**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 safety ground (earth) terminal to avoid electric shock. Never ground 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 down, 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 dealer.
   Make no further attempt to operate the unit in this conditions 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 or remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest 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.

#### 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 the direct sunlight, near the 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

- 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 dealer.
   Make no further attempt to operate the unit in this conditions this may cause fire or electric shock, ...
- 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 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.
- 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.
- Make sure that the volume control is set to 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 an extended period 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
- Contact your dealer as to the 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.

**Note**: 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.

#### 2. GENERAL DESCRIPTION

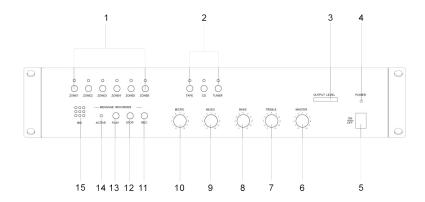
The PM62 is a digital 6 zone mixer can provide an ideal public address solution from small to big places such us mosques, schools, hotels and factories to train stadium and air stations.

#### 3. FEATURES

- 6 zones sources selection and control function.
- Build-in 3 record storage, can setting freely to play.
- Build-in chime generator.
- 3 CH sources input: 1 CH MIC input, build-in optional control, build-in optional control+48V phantom power.
- 3 CH preamp output: MUSIC, MUSIC PAGE, PAGE pre-output.
- 3 Classes priority.
  - Build-in record message (1 and 2) Priority: TUNER, CD, MP3.
  - Build-in chime priority: Record message (1 and 2): TUNER, CD, MP3.
  - Select paging MIC override all audio sources.
- · Build-in voltage output indicator.
- 485 COM port.

#### 4. NOMENCLATURE AND FUNCTIONS

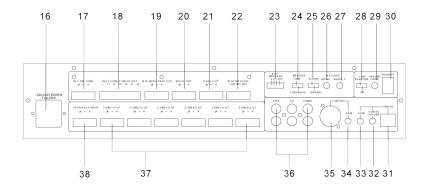
#### a. Front panel



- 1. **ZONE (1~6)**: Buttons for music selection in the 6 different zones.
- 2. AUDIO: 3 key switches for input channel selection: Tape, CD, tuner.
- 3. OUTPUT LEVEL: Signal level indicator.
- 4. POWER INDICATOR
- 5. POWER SWITCH
- 6. MASTER LEVEL CONTROL
- 7. **TREBLE**: Rotate clockwise to increase treble output and anti-clockwise to reduce it.
- 8. BASS: Rotate clockwise to increase bass output and anti-clockwise to reduce it.
- 9. MUSIC VOLUME CONTROL
- 10. MIC VOLUME CONTROL
- 11. **REC**: 3 messages of 60 seconds each could be recorded.
- 12. **STOP**: Key switch stop message.

- 13. **PLAY**: Key switch play message for manual activation.
- 14. ACTIVE: Indicator play message.
- 15. MIC: Internal microphone for message recording.

#### a. Front panel



- 16. **AC INLET**: Connect to the supplied power cord.
- 17. IN COMMON RELE MUSIC ZONE
- 18. OUT POWER CONTROL RELE
- 19. OUT MIX MUSIC PAGE VOICE
- 20. OUT SIGNAL MUSIC
- 21. OUT SIGNAL PAGE
- 22. **CONTACT PLAY MESSAGE 1 OR 2**: The third message is activated by microphone base directly.
- 23. SWITCH REC MESSAGE FROM OFF, 1, 2 TO 3. : Select the message to record.
- 24. SWITCH MESSAGE
  - 1 time: The recorded message plays only once.
- Continuous: The recorded message plays continuously till the message contact is kept closed.
- 25. **MICROPHONE ALARM / NORMAL SWITCH**: The mixer could work without microphone console; a simple microphone base with priority contact be connected to XLR microphone input.
  - Alarm : The voice is simultaneously distributed in all the 6 zones.
  - Normal: The voice is distributed only in the zone selected with front panel buttons.
- 26. VOLUME REC MESSAGE
- 27. VOLUME PLAY MESSAGE
- 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 bases in parallel.
- 32. VOLUME INPUT CONSOLE
- 33. CONSOLE GAIN CONTROL
- 34. MICROPHONE GAIN CONTROL
- 35. MICROPHONE INPUT XLR BALANCED
- 36. AUDIO SOURCE INTERFACE
- 37. **OUT ZONE (1~6)**
- 38. INPUT CONTACT OPEN RELE ZONE



#### 5. OPERATION

#### Operation attention

- 1. Dial REC message switch in rear panel to 1, 2, 3, which means 1, 2, 3 storage. Press REC, the indicator will be active, input signal to MIC port, start record. Press stop, it will stop record (it should be recorded mAX audio 1 minute for every storage. It can use the recorded alarm message in N°3 storage)
- 2. Start play storage 1 or 2. Separately short circuit COM-NO1 / COM-NO2 of PLAY message, simultaneously press PLAY, the indicator will be active, then start play, press STOP, then it stops.
- 3. Press STOP, it can stop record / play. Choose MESSAGE 1 TIME / CONTINUOUS, which means play record once / play continuously. Move switch REC message to off, then it can not record.

#### **Guidance of excluding errors**

Phenomena	Cause	
All the wires are connected well but no voice output	1. No power or wrong plug connection.	
	2. Fuse is burned.	
	3. Volume is town off.	
	4. No input signal.	
Power on but alarming signal	Overloading or short circuit.	
	2. Voltage is not stable, too high or low.	
	1. Machine is in protection condition in	
No voice output in	case of high temperature.	
	2. Wrong wire connection.	

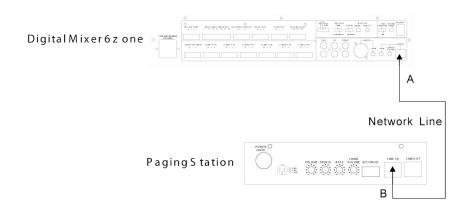
#### **Mute function**

Test 3 levels priority function:

- 1. Built in REC MSG (NO.1 and NO.2) priority: TUNER, CD, MP3.
- 2. Built in chime: REC MSG (NO.1 and NO.2): TUNER, CD, MP3.
- 3. Paging MIC first priority than all other music sources.

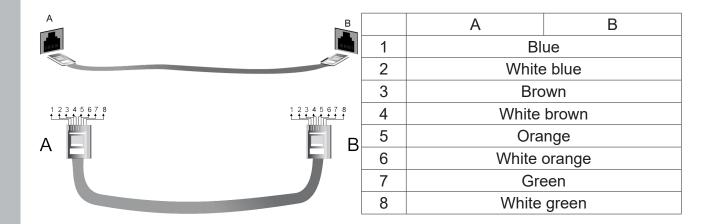
## 6. CONNECTIONS

#### **Network connection line**



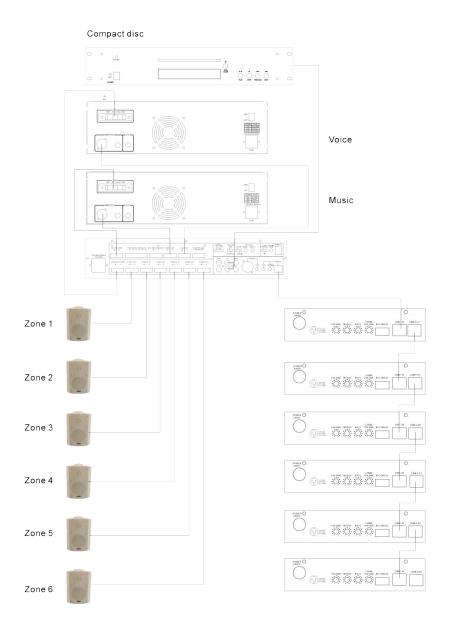


#### Net production line method



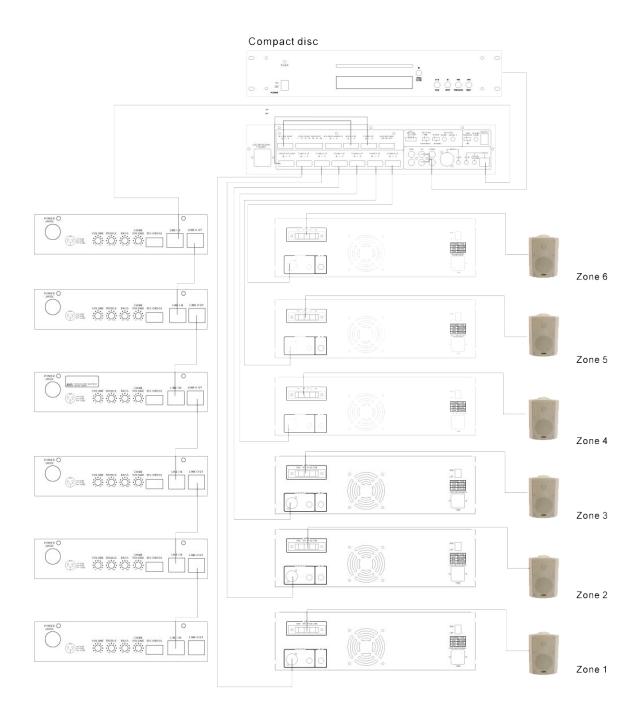
# 7. APPLICATIONS

1 amplifier for music, 1 amplifier for voice for 6 zone.





6 amplifiers one for each zone.





# 8. ADDRESS SET

ID console address set.

ADDRESS	DEFINITION	ADDRESS	DEFINITION
1	1 2 3 4 5 6 ON	17	1 2 3 4 5 6 ON
2	1 2 3 4 5 6 ON	18	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
3	1 2 3 4 5 6 ON	19	1 2 3 4 5 6 ON
4	1 2 3 4 5 6 ON	20	1 2 3 4 5 6 ON
5	1 2 3 4 5 6 ON	21	1 2 3 4 5 6 ON
6	1 2 3 4 5 6 ON	22	1 2 3 4 5 6 ON
7	1 2 3 4 5 6 ON	23	1 2 3 4 5 6 ON
8	↓1 2 3 4 5 6 ON	24	1 2 3 4 5 6 ON
9	1 2 3 4 5 6 ON	25	1 2 3 4 5 6 ON
10	1 2 3 4 5 6 ON	26	1 2 3 4 5 6 ON
11	1 2 3 4 5 6 ON	27	1 2 3 4 5 6 ON
12	1 2 3 4 5 6 ON	28	1 2 3 4 5 6 ON
13	1 2 3 4 5 6 ON	29	1 2 3 4 5 6 ON
14	↓1 2 3 4 5 6 ON	30	1 2 3 4 5 6 ON
15	1 2 3 4 5 6 ON	31	1 2 3 4 5 6 ON
16	1 2 3 4 5 6 ON	32	1 2 3 4 5 6 ON

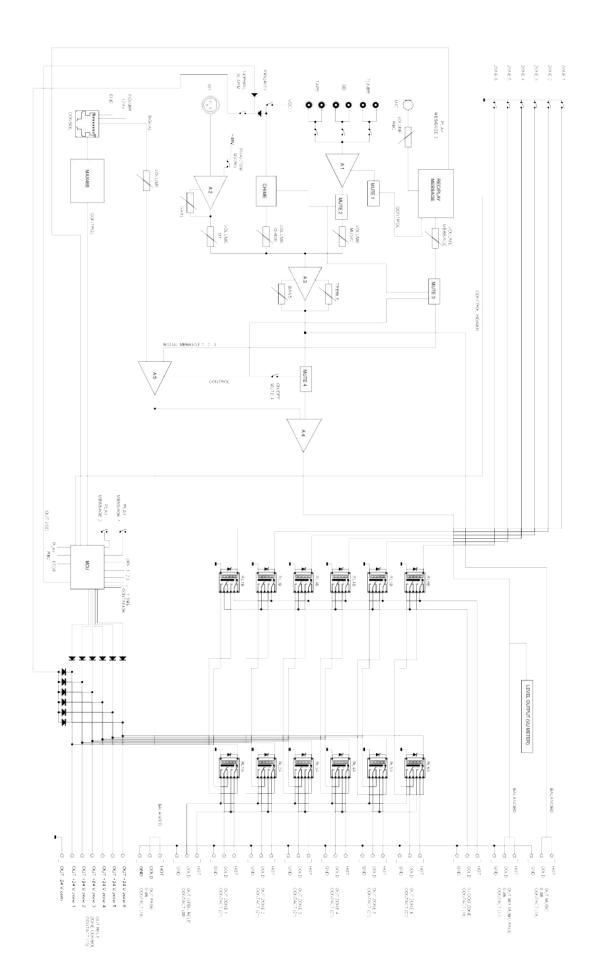


#### ID console address set.

ADDRESS	DEFINITION	ADDRESS	DEFINITION
33	1 2 3 4 5 6	49	1 2 3 4 5 6 ON
34	1 2 3 4 5 6	50	1 2 3 4 5 6 ON
35	1 2 3 4 5 6	51	1 2 3 4 5 6 ON
36	1 2 3 4 5 6	52	1 2 3 4 5 6 ON
37	1 2 3 4 5 6	53	1 2 3 4 5 6 ON
38	1 2 3 4 5 6	54	1 2 3 4 5 6
39	1 2 3 4 5 6	55	1 2 3 4 5 6 ON
40	1 2 3 4 5 6	56	1 2 3 4 5 6 ON
41	1 2 3 4 5 6	57	↓1 2 3 4 5 6 ON
42	↓1 2 3 4 5 6	58	1 2 3 4 5 6 ON
43	1 2 3 4 5 6	59	1 2 3 4 5 6 ON
44	1 2 3 4 5 6	60	1 2 3 4 5 6
45	1 2 3 4 5 6	61	1 2 3 4 5 6 ON
46	↓1 2 3 4 5 6 ON	62	1 2 3 4 5 6
47	1 2 3 4 5 6	63	1 2 3 4 5 6
48	1 2 3 4 5 6	64	1 2 3 4 5 6



# 9. BLOCK DIAGRAM

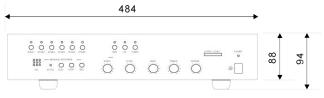




# 10. SPECIFICATIONS

Sensitivity	-50 / -2 dB 2, 5 / 500 mV			
S/N ratio	>68 dB			
Frequency response	100 / 17.000 Hz (-3 dB)			
1 microphone input				
Phantom power	48V			
Tuner and tape input sensitivity / impedance	200 mV / 47 Kohm			
CD input sensitivity / impedance	500 mV / 47 Kohm			
S/N ratio	>90 dB			
Frequency response	40 / 20.000 Hz (-3 dB)			
Bass	±12 dB			
Treble	±12 dB			
	2 tone active for contact free in priority and			
Chime	BGM			
Normal distortion	>0.1%			
Main power supply	220 - 240V 50 - 60 Hz			
Dimension	484 x 322 x 88 mm			
Weight	6.58 kg			
Max. number of microphone bases	6			

# 11. DIMENSIONAL DIAGRAM



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

