



## PUBLIC ADDRESS SYSTEM

# OPERATION MANUAL

**T-216**

**MICROPHONE WITH ZONE CONTROL**



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 **ITC** 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 **ITC** 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

- 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 fire.
- Contact your **ITC** 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.

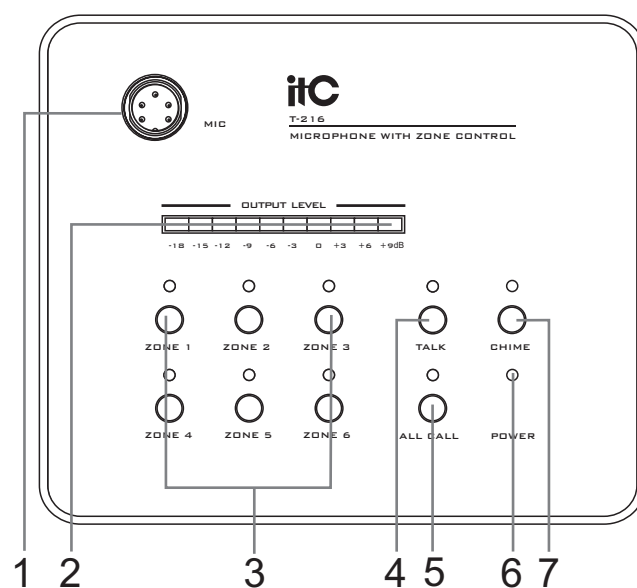
An all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated in the electrical installation of the building.

## 2. FEATURES

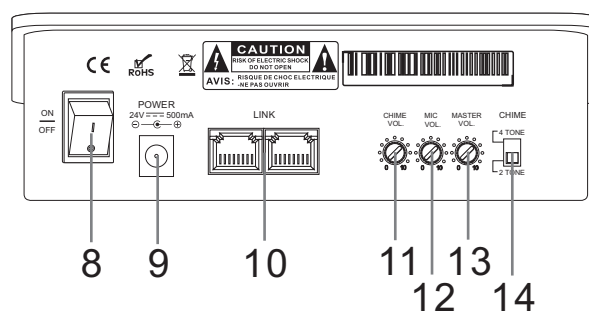
1. You can select any calling from zone 1 to zone 6 or for all zones manually..
2. It is available online and with priority queue function. There are two RS485 online interfaces.
3. Independent power switch with LED indicator on the panel.
4. Chime function: both choices of 2 tones and 4 tones.
5. MIC/Chime/Main Volume Control.
6. Panel with 10-segment volume level display.
7. 24V DC power input.

### 3. NOMENCLATURE AND FUNCTIONS

#### 3.1 FRONT PANEL



#### 3.2 REAR PANEL



- |                                    |                                      |
|------------------------------------|--------------------------------------|
| 1. Mic interface                   | 8. Power switch                      |
| 2. 10-segment volume level display | 9. DC 24V input interface            |
| 3. Zone selection button           | 10. RS-485 online interface          |
| 4. Conversation confirmed button   | 11. Chime volume control adjustment  |
| 5. All zone selection button       | 12. MIC volume control adjustment    |
| 6. Power indicator                 | 13. Master volume control adjustment |
| 7. Chime button                    | 14. Chime times selection switch     |

## 4. OPERATION

### 4.1 Power switching

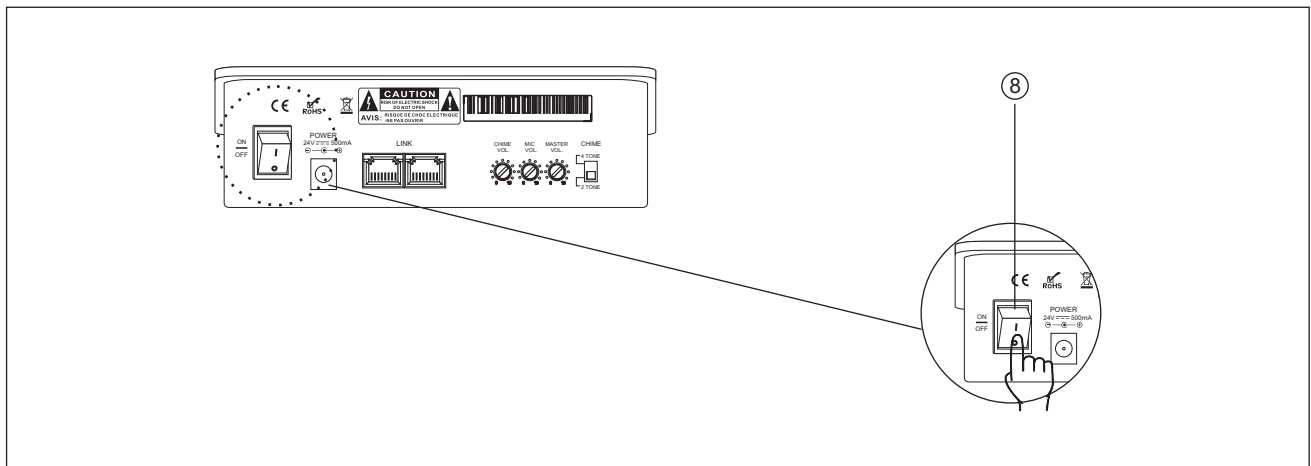


Fig 4.1

When the power switch to "ON", power supply is started, the power indicator light turn on.  
When the power switch to "OFF", the power is been shut down, the power indicator light turn off.



**Note:**

The equipment can be normally used if the equipment in normally power supply state.  
Otherwise, please contact with the supplier if the machine malfunction.

### 4.2 24V DC power input

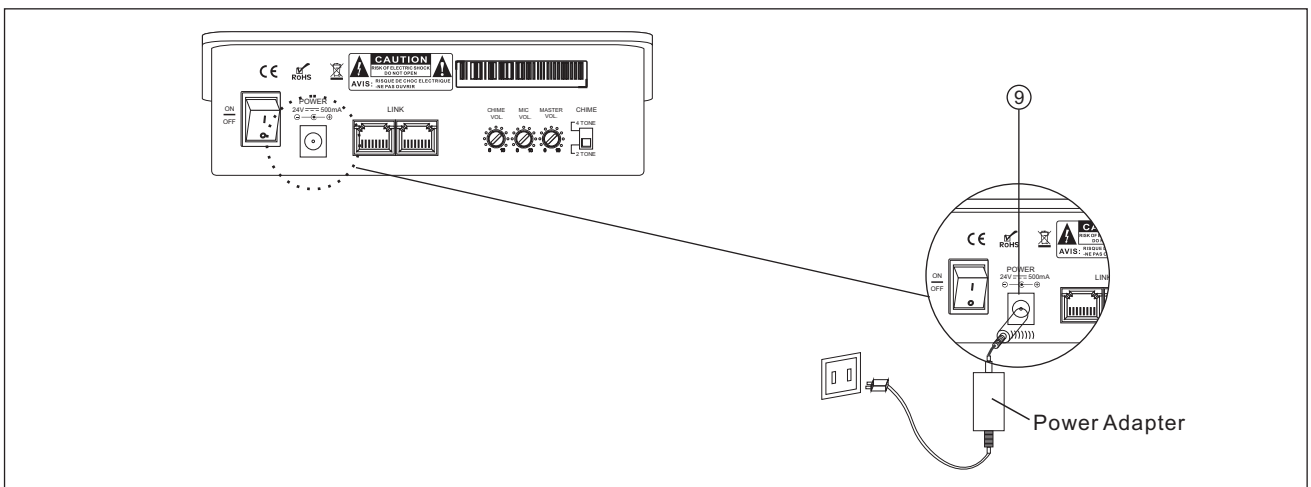


Fig 4.2

The equipment is start to work when the 24V DC power start to power supply.  
The equipment stop to work when 24V DC power stop the power supply.



**Note:**

1. Power supply input must fall into safety scope when you use the equipment, to avoid safety, accidents.
2. Power supply is to provide power for equipment, must use the power safely, please pull out the power plug when it not in use.

## 4.3 Application way of Chime

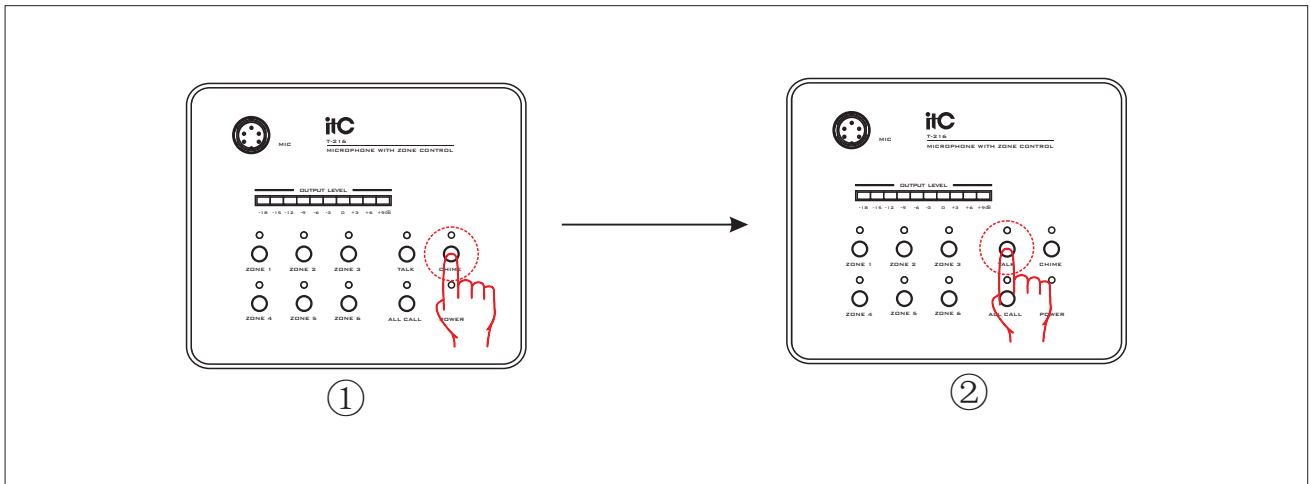


Fig 4.3

Press "CHIME" on the panel on normal working status to make the indicator light to turn on , then press "TALK" button, the Chime will normally output.

## 4.4 2T/4T tone can be chosen in Chime

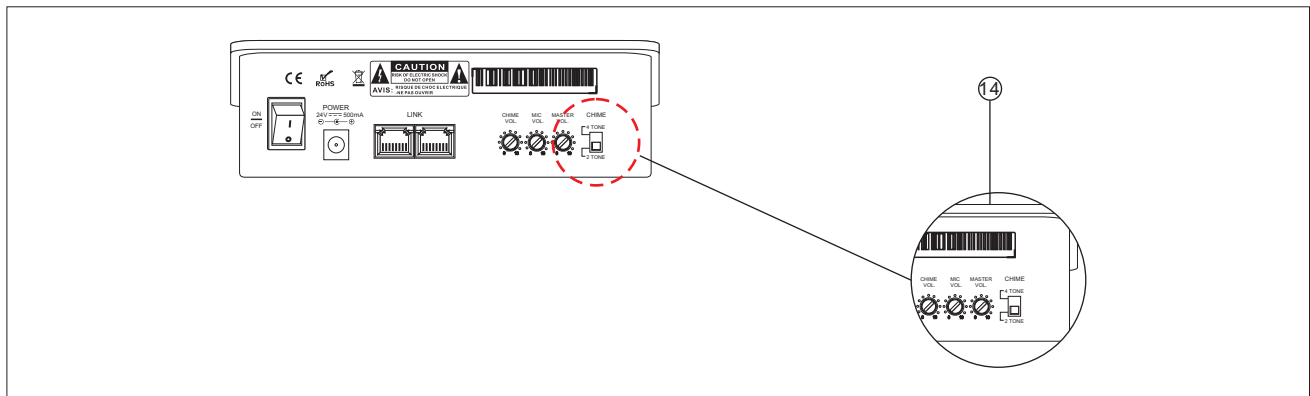


Fig 4.4

When the tone is in 2T/4T position, it means in the switching mode of two/four audio signal.



Note:

1. Using a bell tones, please be careful, to avoid excess forcibly to broke tones.
2. Don't put the tone to the middle position. Otherwise, it can't use the corresponding type audio source.



## 4.5 MIC input

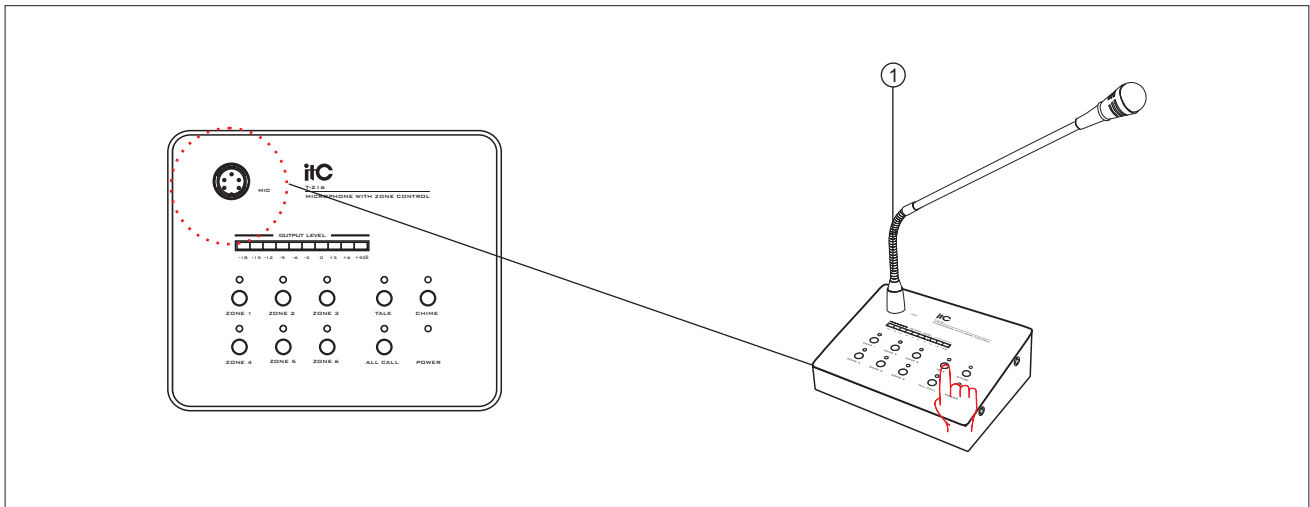


Fig 4.5

When microphone insertion, the power supply will start-up, then start calling button, can call each separated zones or whole zones. The volume can be adjusted by the controller on the rear panel; When shut off communication confirm button, the indicator light of communication is turn down, MIC call has no signal output.



Note:

1. Ensure the equipment has power supply when it connected with Mic. then it can work properly. Otherwise, the Mic can't call out.
2. Ensure Mic. inserting port is fully contacted and firmly to ensure it can't fall out, which is avoid unnecessary losses.

## 4.6 Priority queue setting

When other sub-paging mics are over conversation, that is when any one of the 6 analog ID is in low electrical level, pressing local paging mic button, the conversation indicator will be in flashing red, which means there are other paging mics in conversation. Meanwhile, the local paging mic will start the priority queue function and wait until the current conversation ends. (There is priority function in the priority queue, that is the 5 priority scanning time is different. ) Once the conversation ends, if the local mic has the priority then it will turn into conversation status automatically and the mic light will turn into green.

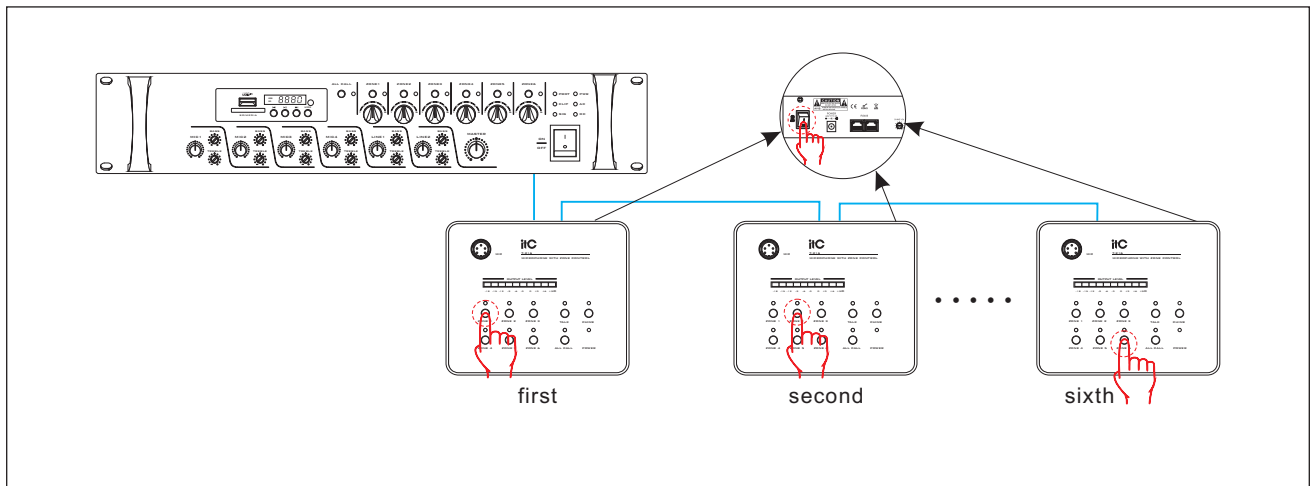
## 4.7 Automatic stand-by function

If the MIC cannot receive any signal for more than 1 min, the conversation function will be turned off and the conversation button light will be off as well.

### 4.8 Online operation approach with MP3 6-zone mixer amplifier

REMOTE MIC interface on TI-1206S: It is connected with T-216 as the remote paging mic to realize any-zone calling, all-zone calling, and chime control. The maximum mics qty is 6 units. The first T-216 has the priority function in the online units.

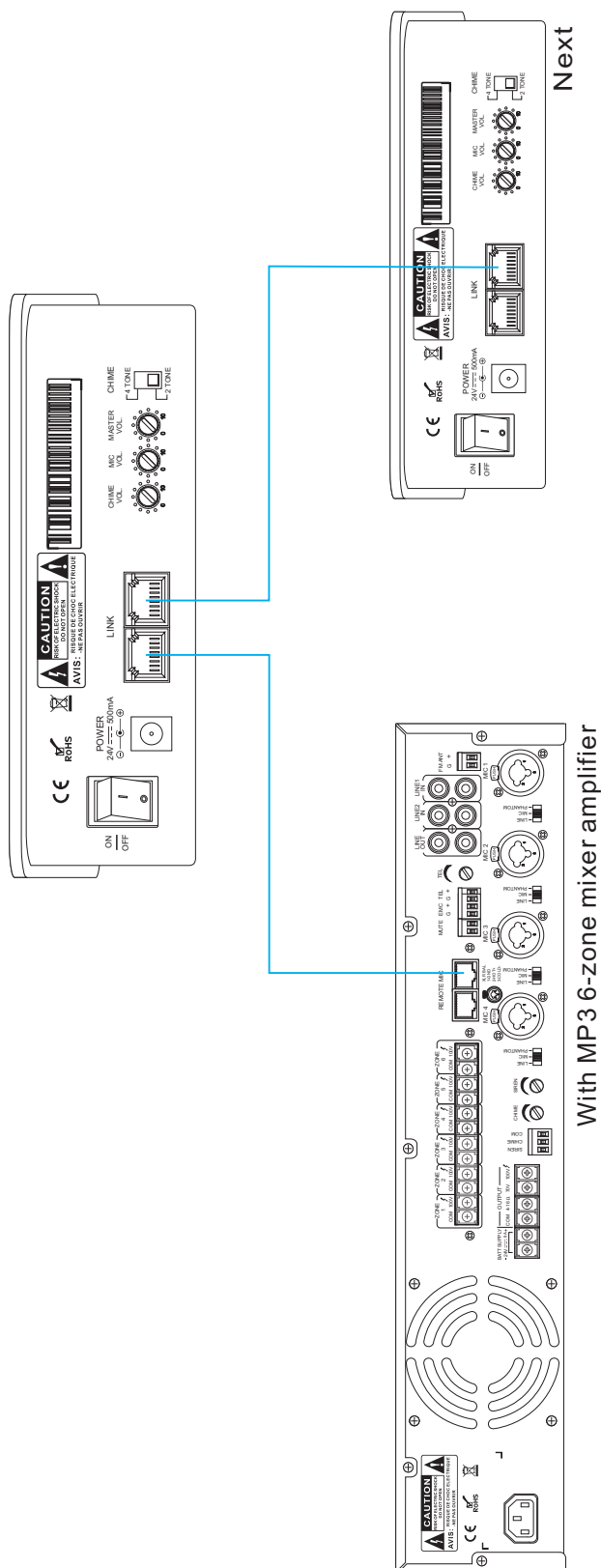
When it is online, T-216 should pair with TI-1206S to make communicating. Online method: pressing ZONE1 button on the panel of T-216, turn on power switch at the same time, ZONE1 indicator will be flashing, let go when flashing is over to complete the matching. (To match the second unit, you should press ZONE2 on the panel in the same operation approach.) Please see below picture shown:



Note: one main unit can only connect with 6 units of T-216 and make sure to set up different ID number in every unit.

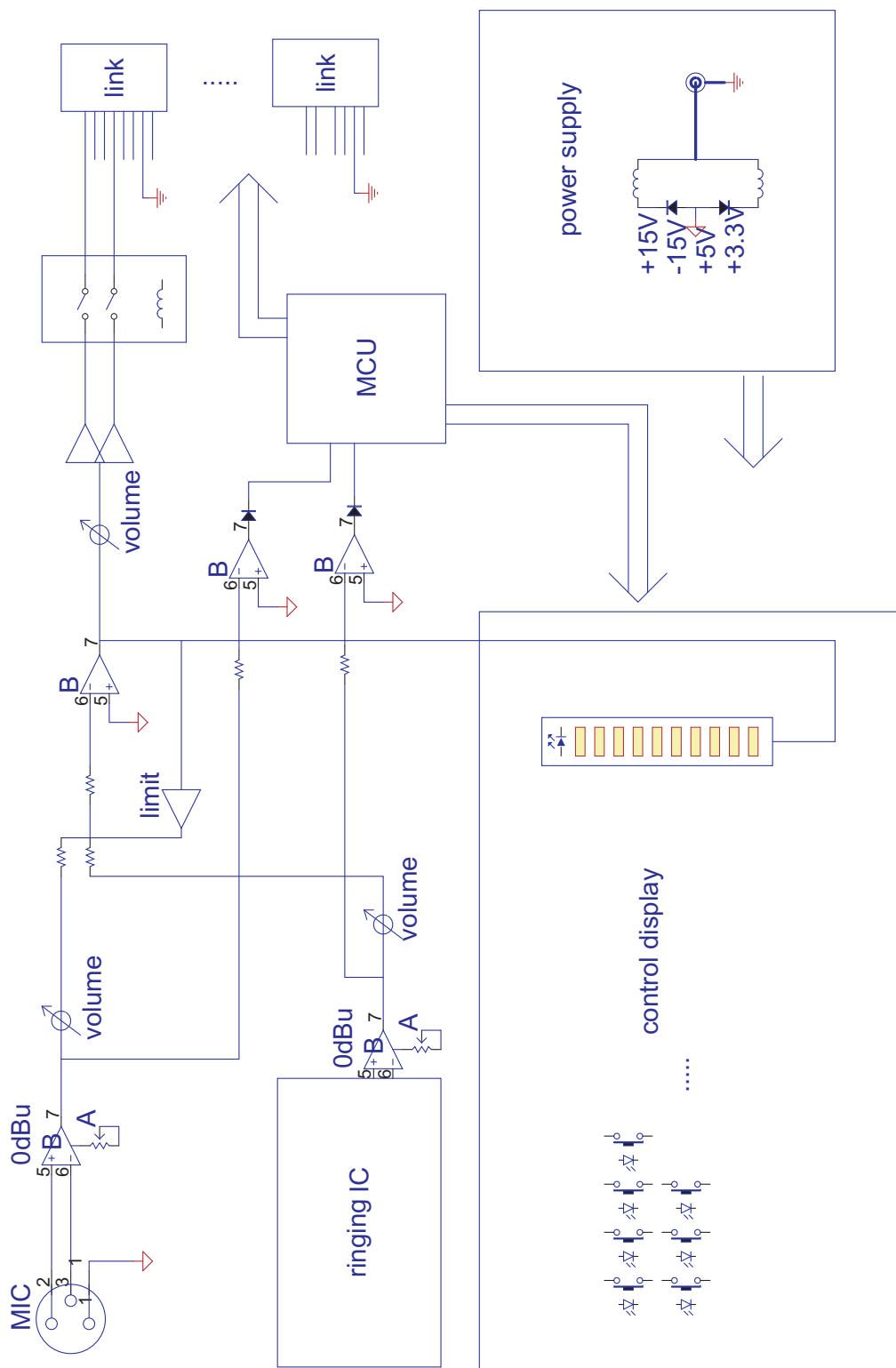
## 5. APPLICATIONS

### REAR PANEL CONNECTIONS



With MP3 6-zone mixer amplifier

## 6. BLOCK DIAGRAM



## 7. SPECIFICATIONS

Model	T-216
Mic	Condenser microphone
Communication Mode	RS-485
Capacity	6 zone
Input Sensitivity	10mV
Frequency response	80-16KHz ( $\pm 3\text{dB}$ )
Harmonic Distortion	$\leq 1\%$
Power Consumption	10W
Transmission distance	1Km(Configure 24V External power supply is needed when distance more than 50m)
Supply voltage	DC 24V/500mA
Dimension	175x147x54mm
Weight	1Kg(with microphone)

# PUBLIC ADDRESS SYSTEM

