



PUBLIC ADDRESS SYSTEM

OPERATION MANUAL

T-214B

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.

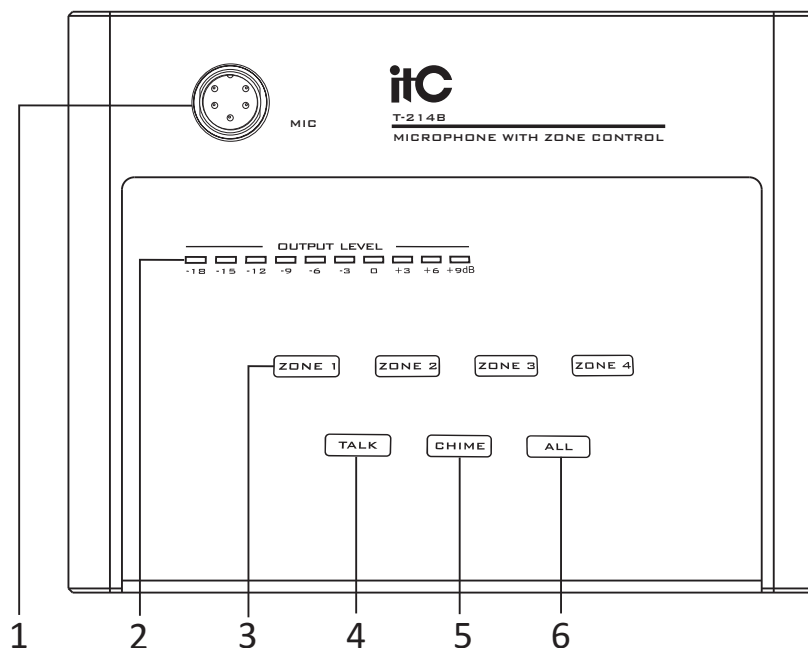
Due to product upgrades, while some of the features and specification in the user manual does not match the actual functions, sorry for any inconvenience and thanks for your kind understanding!

2. FEATURES

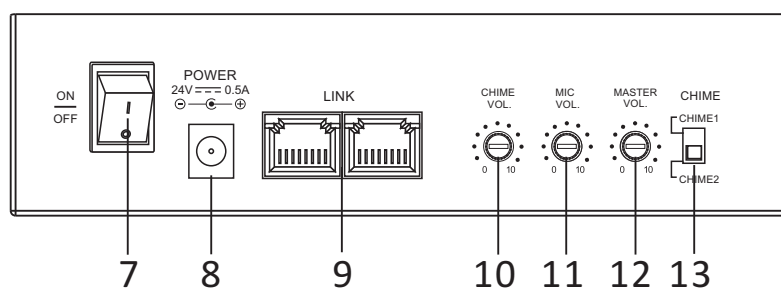
1. Touch screen function, zone selection button; there are optional functions between 1~4 zone and ALL zones.
2. High-fidelity microphone, call button and prompt tone button: When the prompt tone button is on, press the call button and it will ring first.
3. Prompt tone switch: There are 2 types of prompt tone for choice.
4. ID number setting: After powering on, long press ZONE1~4 buttons within 3 seconds after the button light is on. The fast red flashing indicates the setting is successful. It is not allowed to set the same number, when setting the respective ID numbers.
5. Automatic standby function, when the machine does not detect the signal for 1 minute, the call will be automatically closed, and the call button will be extinguished.
6. 24V DC power input.
7. RS485 online port, can cascade 4 T-214B.
8. Adjustment of MIC/chime/main volume.
9. There are 10-segment volume level display on the panel.
10. The microphone supports preemptive and queuing functions when used by cascaded.

3. NOMENCLATURE AND FUNCTIONS

3.1 FRONT PANEL



3.2 REAR PANEL



1. MIC port;
2. 10-segment volume level display;
3. Zone selection button;
4. Communication confirmation button;
5. Chime button;
6. All zone selection button;
7. Power switch;
8. DC 24V power interface;
9. RS-485 network connection;
10. Chime volume control;
11. MIC volume control;
12. Master volume control;
13. CHIME 1 or CHIME 2 selection switch.

4. OPERATION

4.1 Power switching

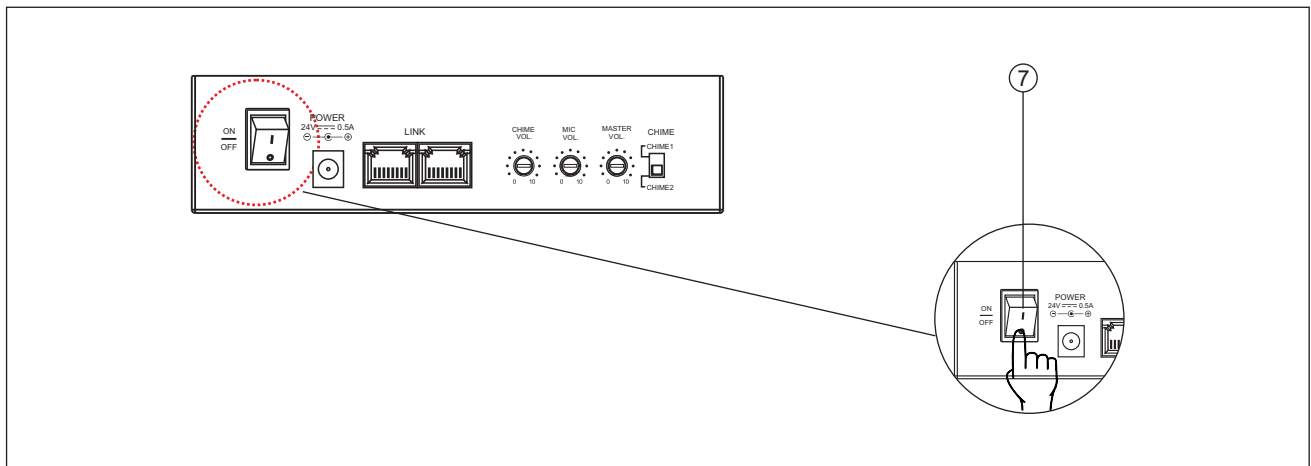


Fig 4.1

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

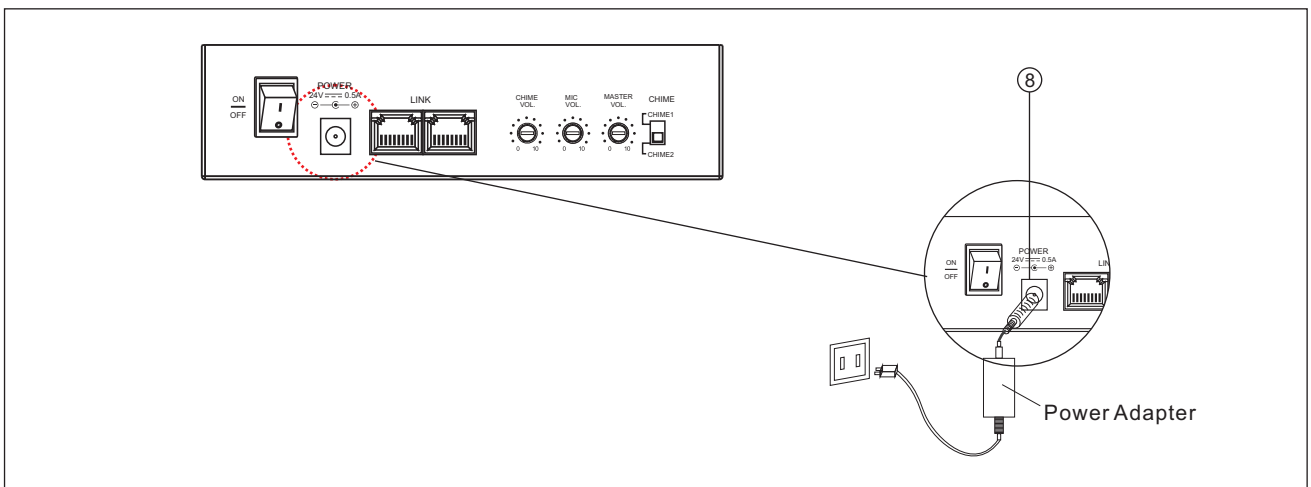


Fig 4.2

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.
In short-distance use, the host can directly supply power to the device through the network cable.



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

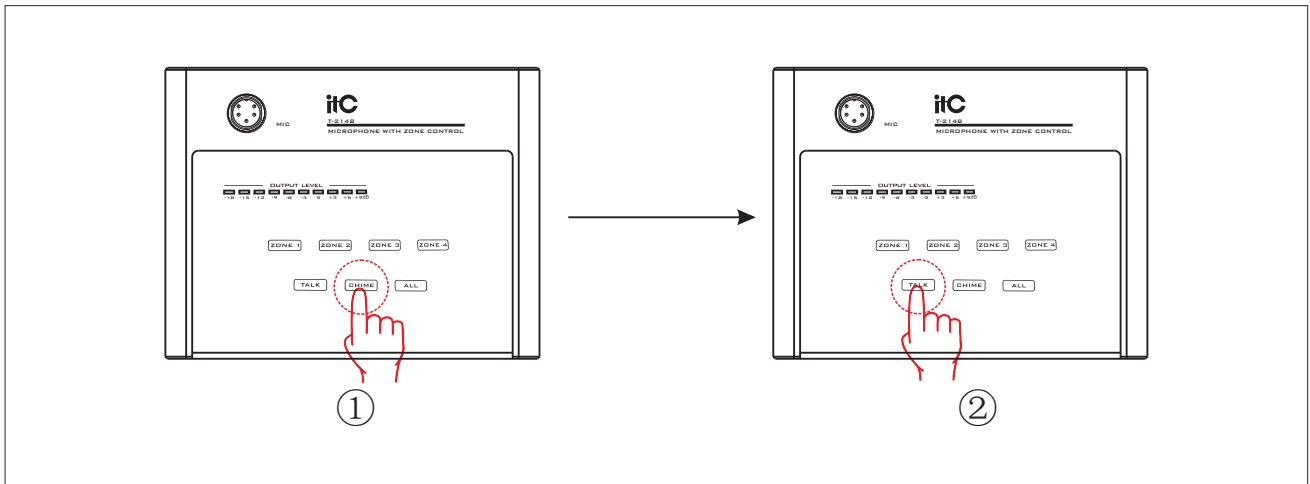


Fig 4.3

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 CHIME1/CHIME2 tones are optional for the chime

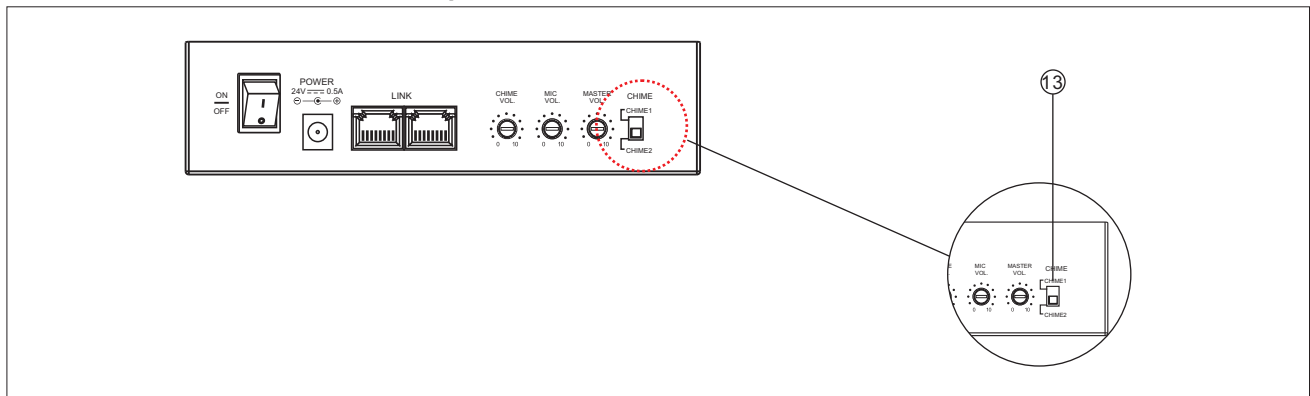


Fig 4.4

When the chime is tuned to CHIME1/CHIME2, it means that the CHIME1/CHIME2 sound switching mode is selected.



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

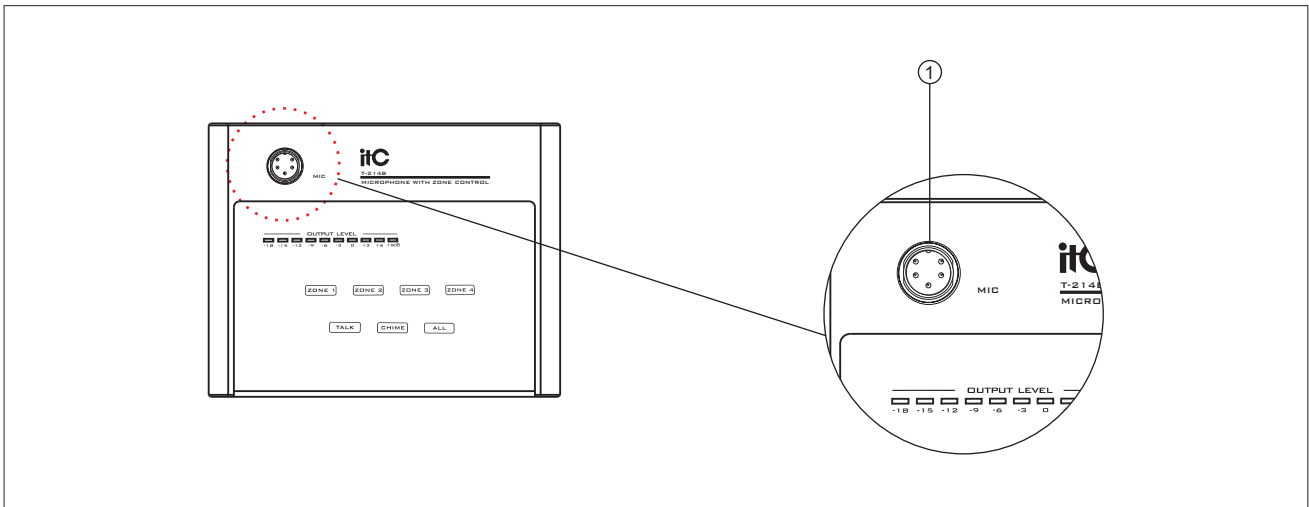


Fig 4.5

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 Call button and ring button

When the ring button is on, it will ring first and the MIC will be muted after pressing the call button, and the MIC muting will be automatically canceled after the ringing. You can speak at this time. When the ring button is off, press the call button to speak directly. (Note: The call button must be operated when at least one of the 1~4 zones is selected)

4.7 ID number setting

After powering on, press and hold the ZONE1~4 buttons respectively within 3 seconds after the button lights are on. The fast red flashing indicates that the ID number of the machine is set successfully. Different machines are not allowed to set the same ID number. After the machine ID is set successfully, the light of the corresponding zone will flash, which means the current ID number.

Note: Since touching the chip needs to sample the reference value, the button should be triggered at least half a second after power-on. Do not press and hold the button to power on.

4.8 Auto standby function

When the machine does not detect signal for 1 minute, the call will be automatically closed, that is, the call button will be extinguished.

4.9 LED display status

There are optional and automatic inclusion functions between 1~4 zone selection and ALL zone selection. The red indicator is the currently selected state, and the blue is the default state. The audio level indication is based on 0DB only.

4.10 Queue preemptively set

Press the call button of the local handset. If the button indicator is flashing red, it means there are other handsets in conversation. At the same time, the local handsets queue up to submit first, and start to wait for current call from the sub-handset to be ended. Once the call ends, if the local priority is grabbed, it will automatically switch to the call state.

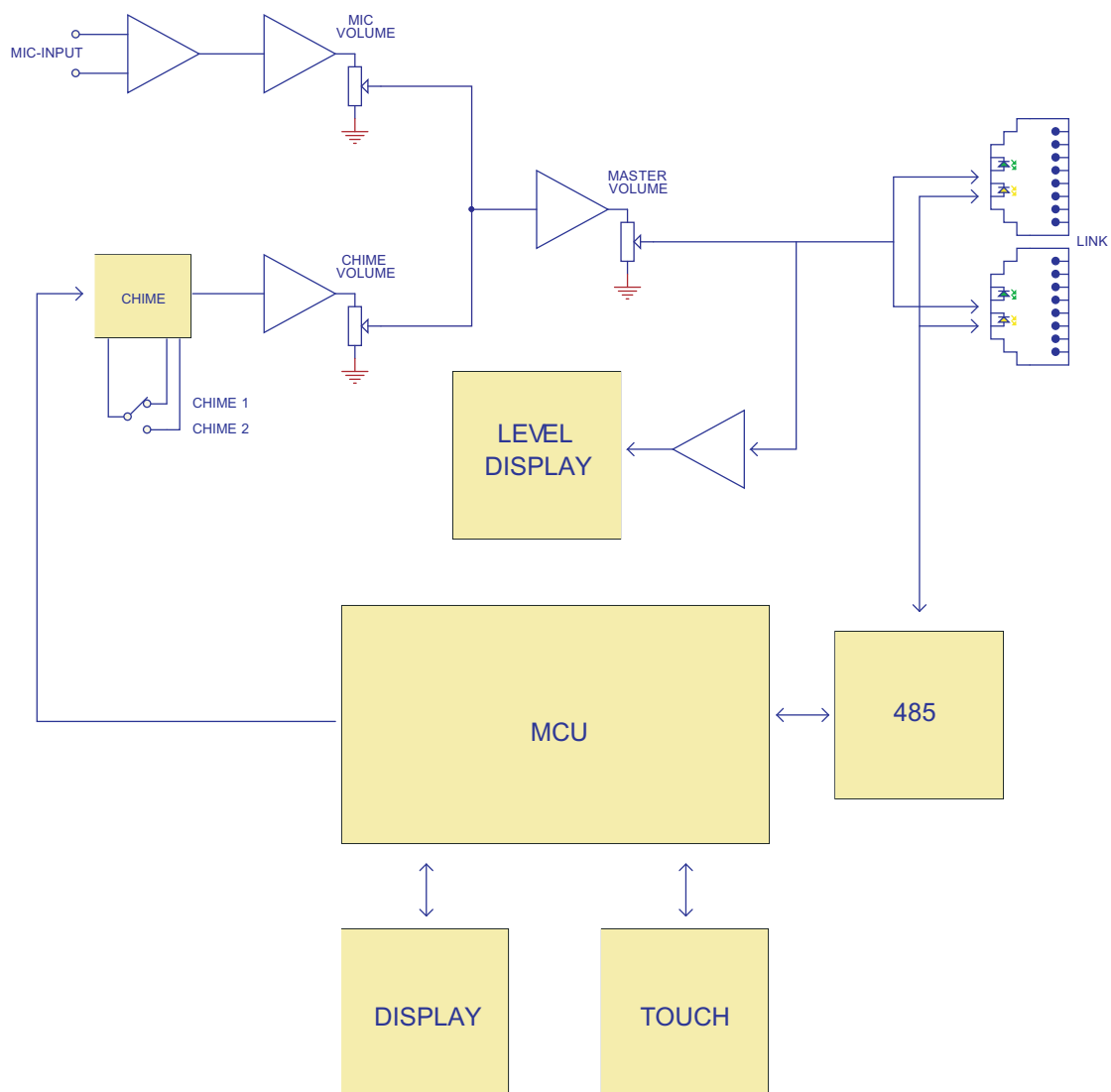
4.11 Other function description

- ① During the process of microphone paging to the host, if the microphone does not speak for more than 60 seconds or it is disconnected from the host, the current paging will be canceled automatically.
- ② During the speech, if all the zones are canceled, the TALK button will turn to blue.
- ③ When the alarm signal of the host computer cuts off the paging microphone, the microphone will display busy, and the LED corresponding to the TALK button will flash red.
- ④ The microphone applies to the host for paging when another microphone is in the paging, it needs to wait, and the LED corresponding to the TALK button flashes red.

5. APPLICATIONS

The diagram illustrates the connection between two T-214B Matrix Digital Mixer Amplifiers. The top unit, labeled T-214B, features a power switch (ON/OFF), a power input (24V, 0.5A), and two chime outputs (CHIME 1, CHIME 2). The bottom unit, also labeled T-214B, features a power switch (ON/OFF), a power input (24V, 0.5A), and two chime outputs (CHIME 1, CHIME 2). The connection is made via a cable linking the two units.

6. BLOCK DIAGRAM



7. SPECIFICATIONS

Model	T-214B
Microphone Type	Condenser Microphone
Communication Way	RS-485 Control
Capacity	4 Zones
Output Level	1V/600Ω
Frequency Response	80Hz-16KHz (+1/-3dB)
THD	≤1%
Power Consumption	10W
Communication Distance	1KM (when ≥50m, a separate 24V external power adapter is required)
Input Power	24V DC
Size	170x142x54mm
Weight	960g

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