



T-4012
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.

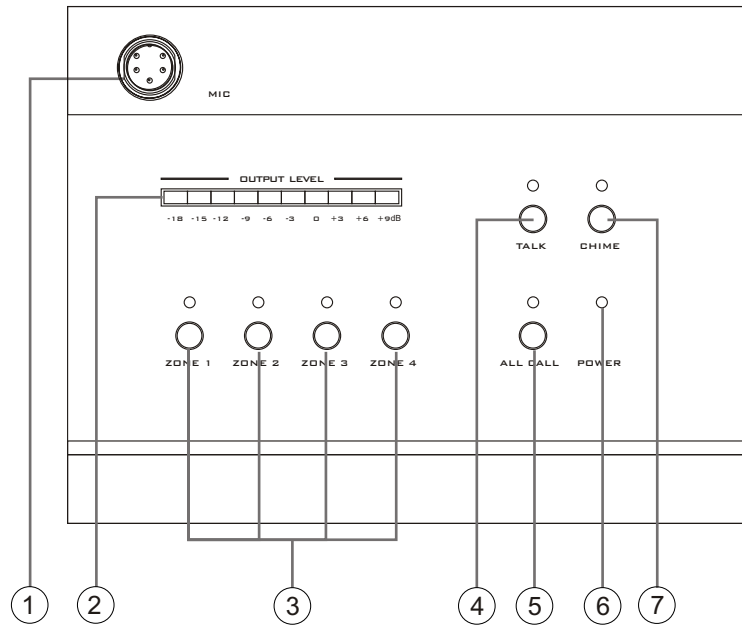
An all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated in the electrical installation of the building.

2. FEATURES

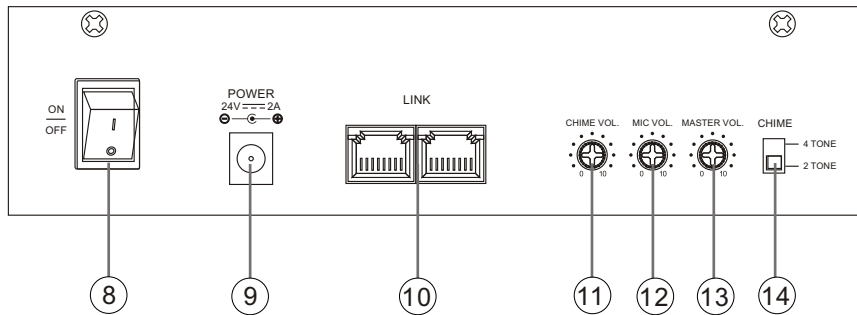
1. With zone, group zones and all zones paging by manual capacity;
2. It has online function and an online interface for LINK IN LINK OUT;
3. Built-in independent switching power supply;
4. Built-in chime, 2 & 4 tone selector;
5. MIC/Chime/master volume control;
6. With 10 segments level meter;
7. With 24V DC power input.

3. NOMENCLATURE AND FUNCTIONS

3.1 FRONT PANEL



3.2 REAR PANEL



- | | |
|------------------------------------|--------------------------------------|
| 1. Microphone | 8. power switching |
| 2. 10 segments level meter display | 9. DC 24V input interface |
| 3. zone selection button | 10. LINK online interface |
| 4. paging 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 MIC input

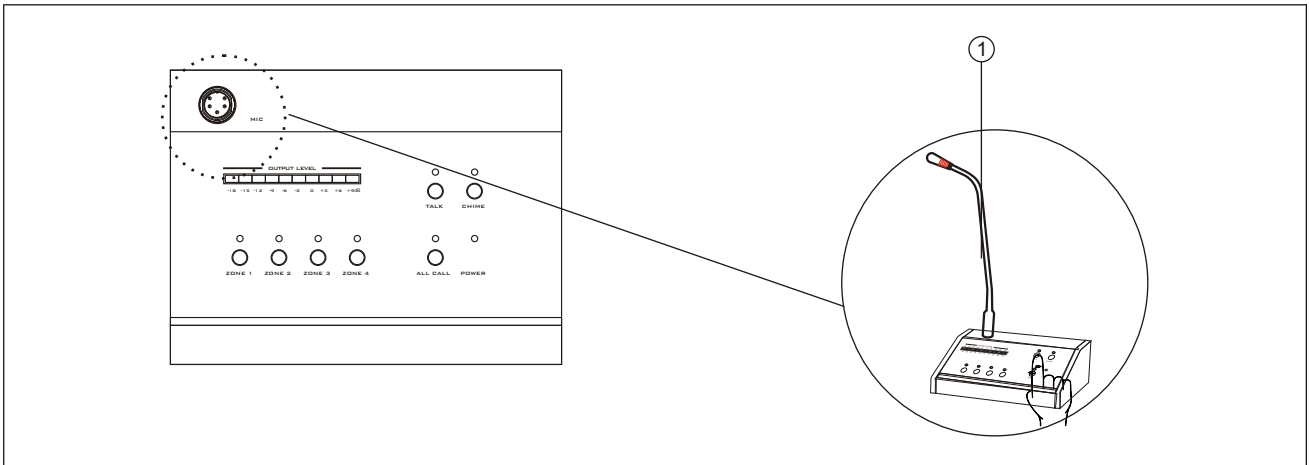


Fig 4.1

When input MIC, turn on the power, then press the call confirmation button, you can page to each zone independently or to all the zones. The volume could be adjusted by the volume control on the rear panel. When the call confirmation button is turned off, the call confirmation indicator will be off and there is no call signal output from the MIC.



Note:

1. When the MIC is connected, make sure there is power supply to the MIC, and the MIC could be turned on to work normally; or the MIC could not be paged.
2. Make sure the connection of the MIC is tightly to avoid any damage by falling off.

4.2 Power switching

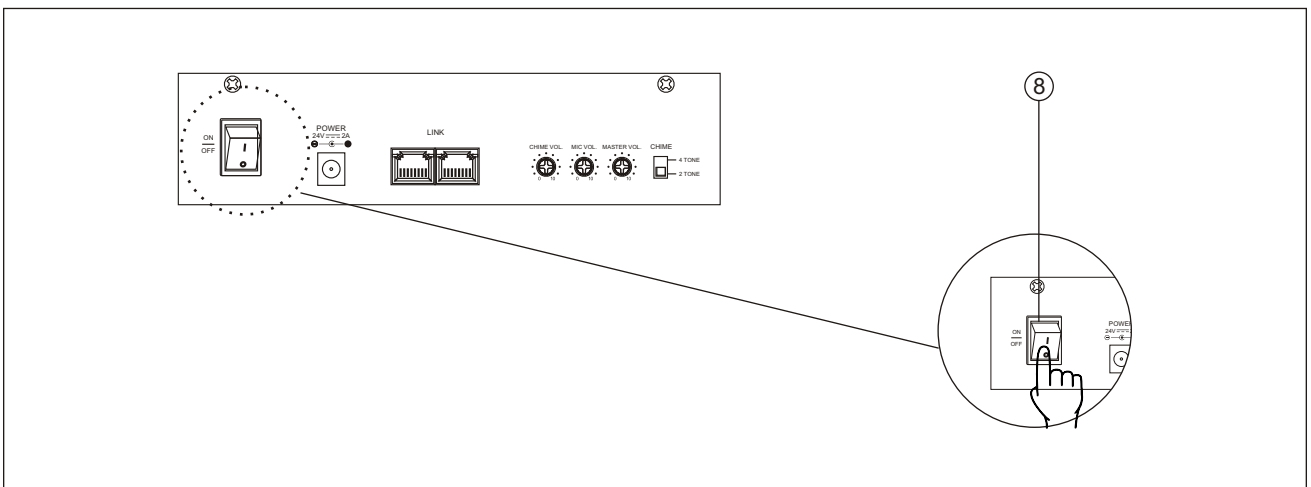


Fig 4.2

When the power switch is turned ON, the power starts and the indicator is on.
When the power switch is turned OFF, the power shuts off and the indicator is off.



Note:

Make sure the unit is in the power-on state to make it used normally. Or if there is any fault on the units, please contact with the supplier.

4.3 24V DC power input

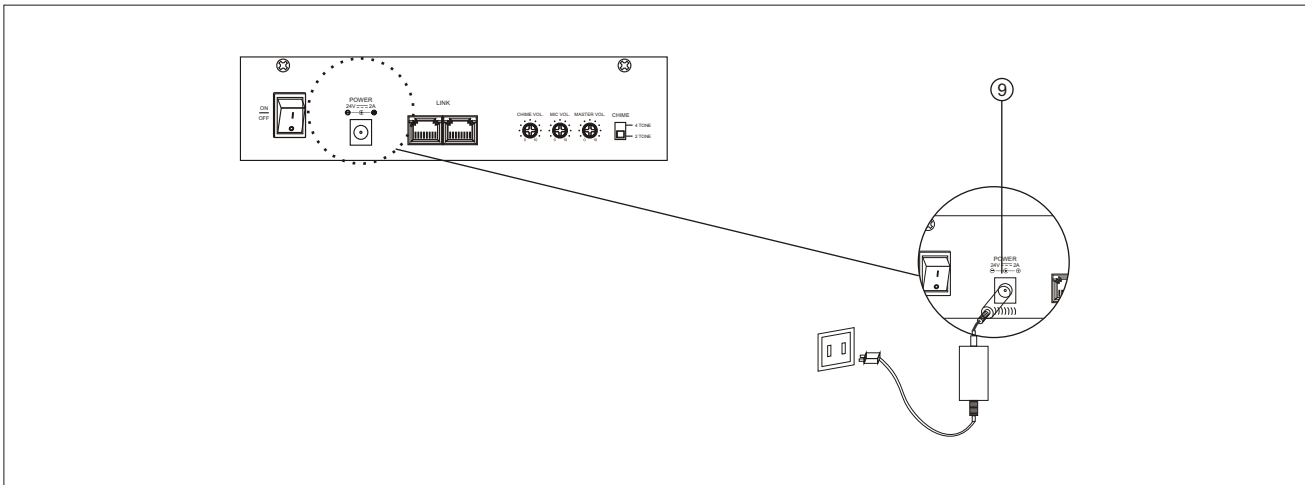


Fig 4.3
When the power supply of 24V DC starts, the unit can work normally.
When the power supply of 24V DC stops, the unit will stop working.

i Note:

1. Please make sure the power inputs are in the safety specified range to avoid any accidents.
2. The power supply is providing power source to the unit. Make sure the power supply is safely used and pull out the power cord when not using.

4.4 2 & 4 tone selector

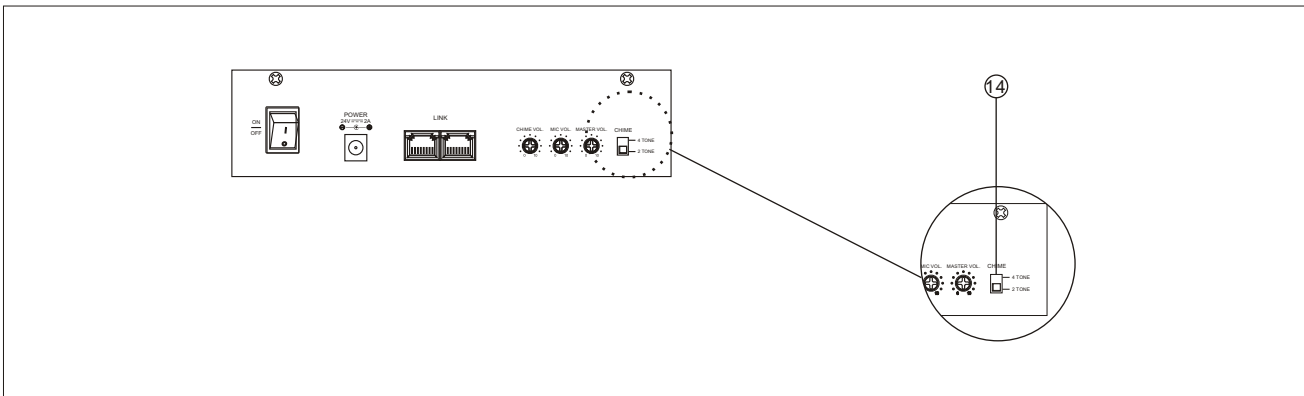


Fig 4.4
When the chime tone is turned to 2T, it means two audio signals are selected;
when turned to 4T, it means four audio signals are selected.

i Note:

1. Please be more careful when turning the chime tone selector to avoid any damage of the selector by excess force.
2. Do not turn the tone selector to the mid position while using in case the corresponding audio source could not be used.

4.5 Busy and wait in line as priority

when the other sub-units are working, that is one of the 4 analog ID is in lower level, pressing the call button on the local sub-unit, if the indicator will be red and flashing, it means there are other sub-units on conversation. Meanwhile the local sub-units are waiting in line. Once the current conversation between the sub-units are over, the waiting sub-units will have the chance to get the priority of calling. (Line-up sub-unit has the priority function, that is the priority time of the four sub-units are different. The settings from zone 1 to zone 4 are 50MS, 100MS, 150MS and 200MS; but the setting cannot be the same.) Once the conversation is over, if the local sub-unit has the priority, it will be into conversation state and the MIC light will turn to green.

4.6 Preemptive settings and cancel

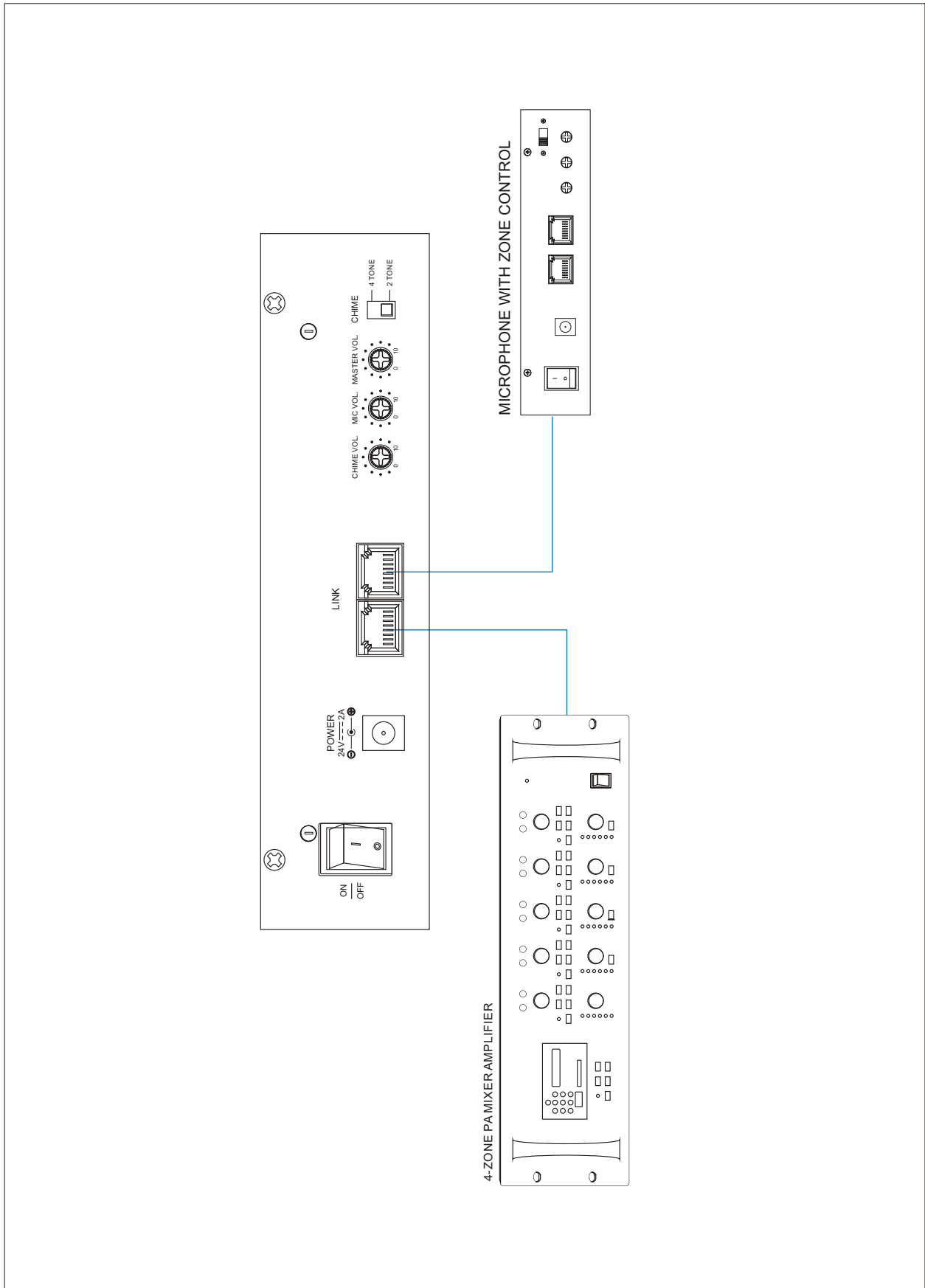
The preemptive settings from zone 1 to zone 4 can be setted as 50MS, 100MS, 150MS or 200MS. The selecting method: pressing the button of the zone before power-on, then boot to finish the settings. The setting figures could not be the same. Cancel method: Pressing call button before power-on, then boot to finish the settings.

4.7 Automatical standby function

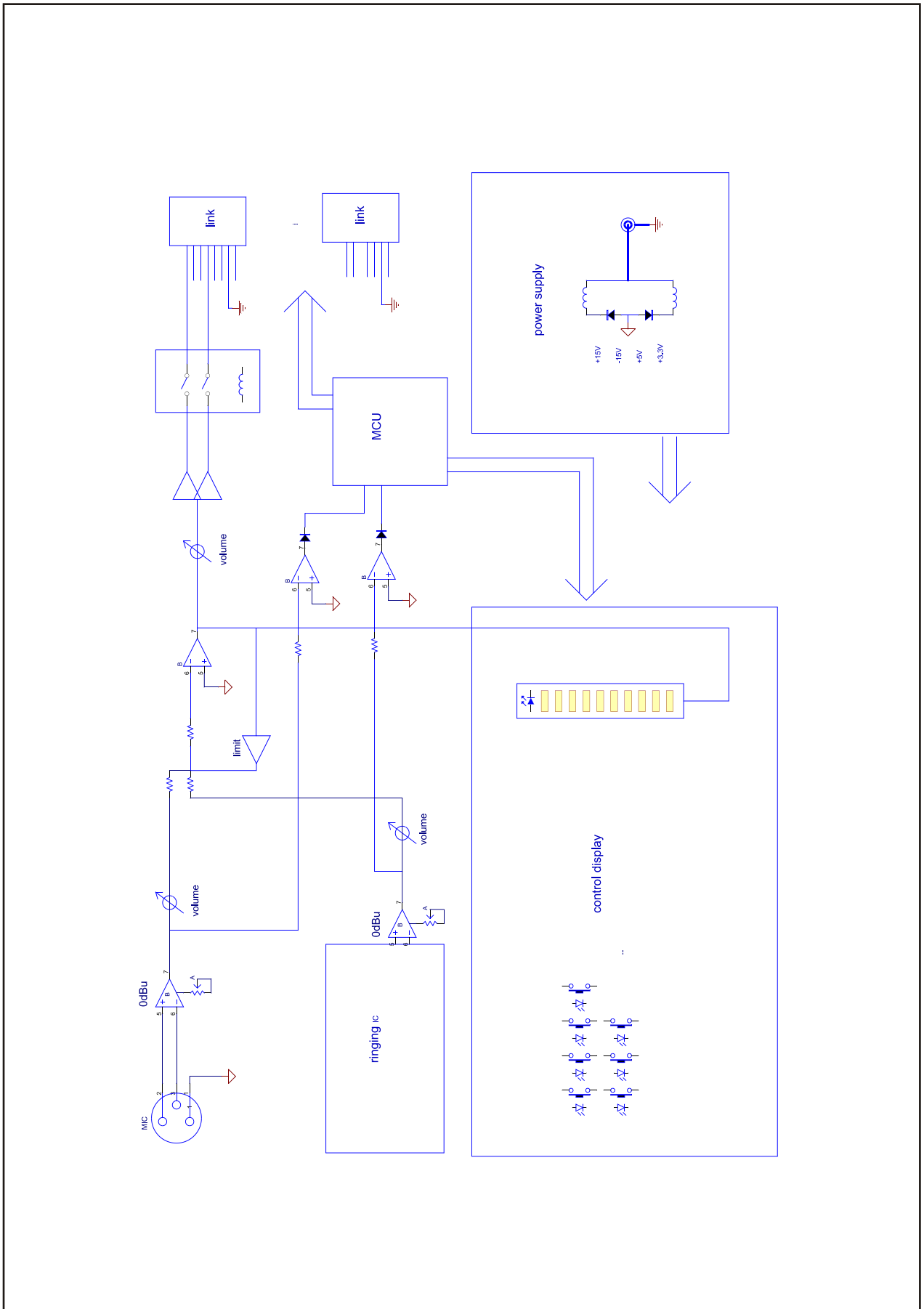
when there is no signal detected from the MIC for one min, the conversation will be stopped and the call button will be put off.

5. APPLICATIONS

REAR PANEL CONNECTIONS



6. BLOCK DIAGRAM



7. SPECIFICATIONS

MODEL	T-4012
MICROPHONE	Condenser microphone
COMMUNICATION MODE	Level control
CAPACITY	4 ZONE
OUTPUT LEVEL	1V/600 Ω
FREQUENCY RESPONSE	80-18KHz (\pm 3dB)
THD	\leq 1%
POWER CONSUMPTION	10W
COMMUNICATION DISTANCE	1KM
POWER SUPPLY	DC 24V
DIMENSION	197x115x43.5mm
WEIGHT	960g(Without Microphone)

PUBLIC ADDRESS SYSTEM

