



PUBLIC ADDRESS SYSTEM

T-30T
T-60T
T-120T

PUBLIC ADDRESS AMPLIFIER



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 **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.

SAFETY PRECAUTIONS

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. GENERAL DESCRIPTION

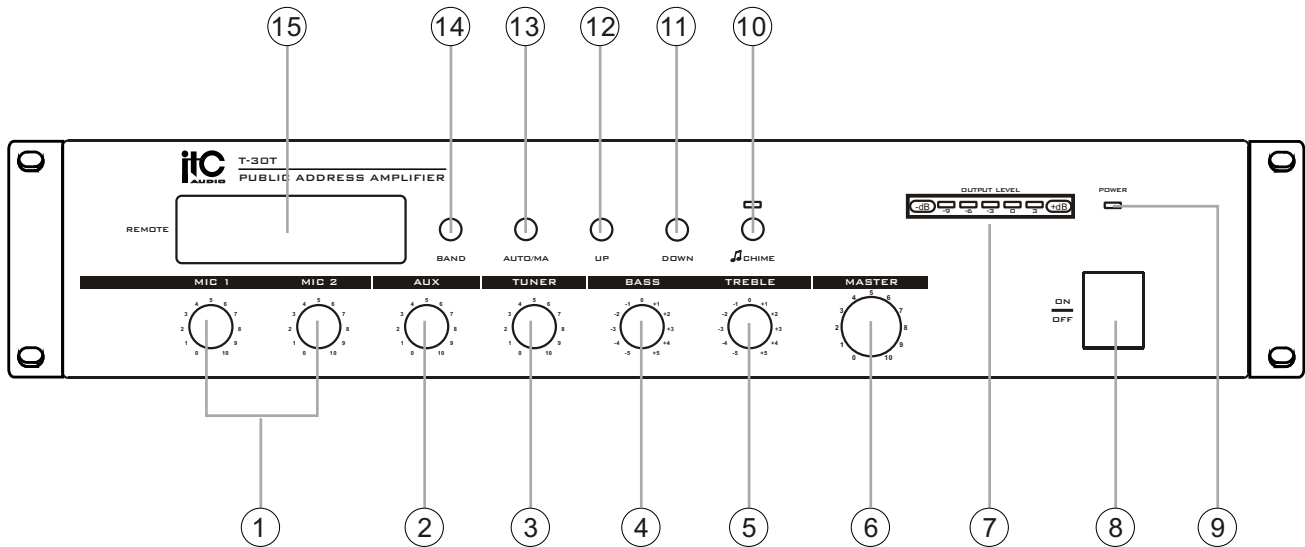
The T-30T/60T/120T will be right at home in large retail, commercial, and industrial paging and background music applications. Hotels and conference centers will appreciate the room combining and remote volume control features that this product provides.

3. FEATURES

1. Rated Power:30W/60W/120W.
2. 1 Aux input.
3. TEL priority input.
4. Built-in intelligent frequency flitter.
5. Input for extra chime equipment.
6. 2 XLR balanced microphone inputs.
7. Built-in tuner output monitor system.
8. Output level meter and power indicator.
9. Built-in 2 tone and 4 tone chime two options.
10. Mic 1 with priority over Mic 2, AUX and Tuner input.
11. Tel/Chime input with priority over MIC 2/AUX/TUNER.
12. Current limiter, overloading, short circuit and thermal protection.
13. Automatic search and memory function, AM and FM each memory up to 100 channels.
14. Constant voltage 100V and 70V lines and low impedance 4 ohms and 8 ohms speaker terminal .
15. 1 Pre Output and 1 AMP input for other signal processing equipments
13. Aux input with separate and master volume control .

4. NOMENCLATURE AND FUNCTIONS

4.1 FRONT PANEL



1. MIC1 \ MIC2

These knobs control the volume level of the inputs connected to the rear-panel Mic 1 and Mic 2 inputs.

2. AUX

This knob controls the volume level of the input connected to the rear-panel Aux Input.

3. TUNER

Tuner volume control

4. BASS CONTROL

The BASS CONTROL is a shelving type control which will boost or cut bass frequencies at 100Hz at the rate of ± 5 dB.

5. TREBLE CONTROL

The TREBLE CONTROL is a shelving type control which will boost or cut treble frequencies at 10kHz at the rate of ± 5 dB.

6. MASTER

This rotary switch controls the overall output volume of the amplifier's output signal.

7. OUTPUT LEVEL

Level meters 5 output level indicators

8. POWER SWITCH

Pressing this switch switches the unit on, as indicated by the power indicator LED above the switch. Pressing it again switches the unit off.

9. POWER LED

This LED will illuminate when the 30T/60T/120T is turned on.

10. CHIME AND CHIME LEVEL

Pressing this switch activates the chime circuitry. Chime level indicators

11. DOWN

Down search channel (Tuner)

12. UP

UP search channel (Tuner)

13. AUTO/MA

Auto/Manual band search button (Tuner)

14. BAND

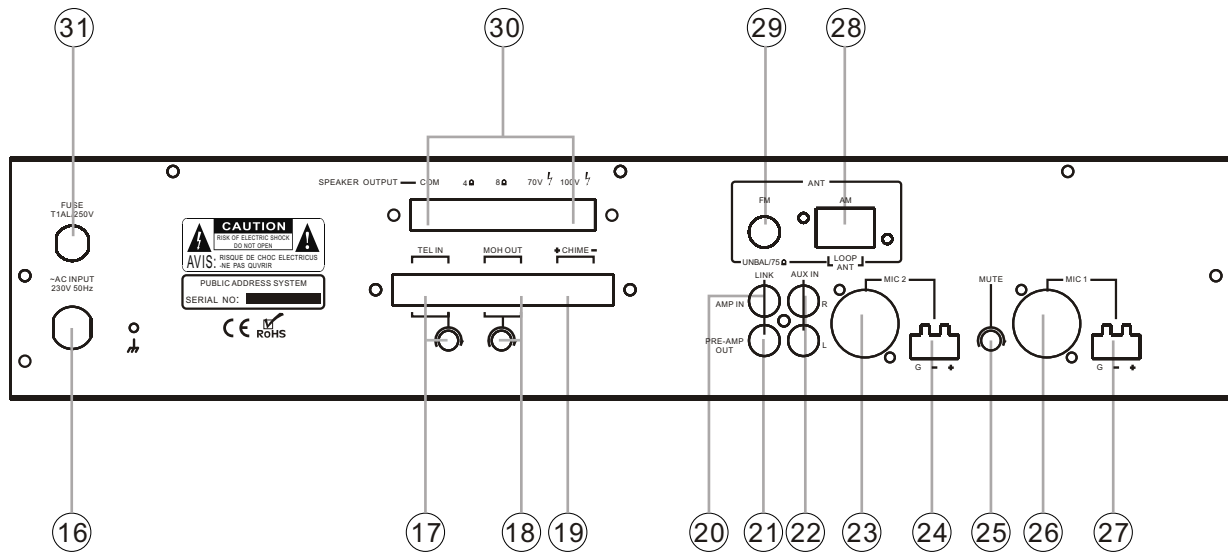
AM/FM Band select button (Tuner)

15. TUNING FREQUENCY DISPLAY

Displays the current frequency of the tuner.

4. NOMENCLATURE AND FUNCTIONS

4.2 REAR PANEL



16.AC POWER CABLE

Connect this cable to your AC outlet.

17.TELEPHONE IN TERMINAL AND VOL..

These terminals are used to connect to a telephone exchange system for paging purposes.

NOTE:When signal is present on the Telephone Input terminal, all other input signals (except Mic 1 and Chime) are muted.

18.MUSIC-ON-HOLD/TEL IN LEVEL CONTROLS AND VOL.

The Tel In Control regulates the volume of the signal from an external telephone signal connected to the Tel In Terminal. The Music-on-Hold Control regulates the volume of the signal from the internal tuner, as fed to the telephone connection.

19.CHIME TERMINAL

These terminals are provided for connection of an external chime generator, such as the CHIME MIC. It may also be used for remote control of the chime signal.

20.AMP IN

Amplifier Input.

21.PRE OUT

PRE-Amplifier Output.

22.AUX

Auxiliary input jack, Non-equilibrium of connecting peripherals signal.

23.MIC 2

MIC 2 balanced inputs.

24.MIC 2

MIC 2 are balanced, line or mic level. For wiring unbalanced inputs, tie (short) the (G) and (-) terminals together.

25.MUTE

Mute Microphone 1 mute level control.

26.MIC 1

MIC 1 balanced inputs.

27.MIC 1

MIC 1 are balanced, line or mic level. For wiring unbalanced inputs, tie (short) the (G) and (-) terminals together.

28.AM ANTENNA TERMINALS

The AM terminal accepts the lead wires of the provided AM antenna (or other suitable antenna). Antennaposition may affect performance so it may be necessary to reposition the antenna for the best reception.

29.FM ANTENNA TERMINALS

The FM terminal accepts a 75 Ohm Coaxial cable that terminates at an FM antenna.

30.SPEAKER TERMINALS

For loudspeaker connections, connect using the following information or proceed to the setup section for typical wiring diagrams.

COM - Speaker common or negative connection.

4 Ω - Connect to direct coupled loudspeakers.

8 Ω - Connect to direct coupled loudspeakers.

70V - Connect to transformer coupled, 70V loudspeakers with a total load impedance of no less than 82 Ω.

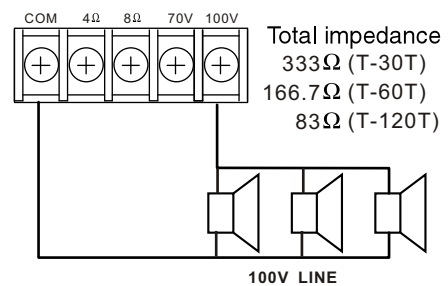
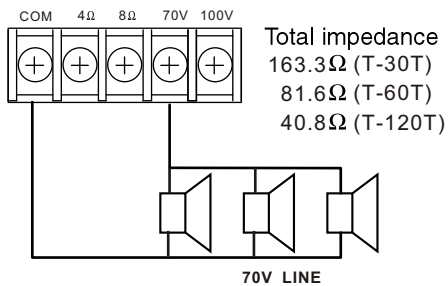
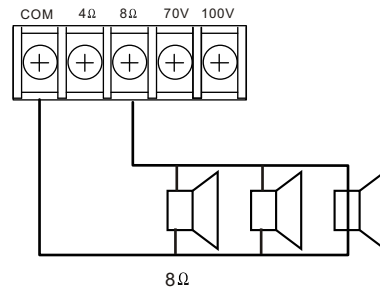
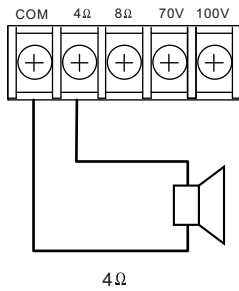
100V - Connect to transformer coupled, 100V loudspeakers with a total load impedance of no less than 163 Ω.

31.AC FUSE HOLDER

This holder contains the AC overload protection fuse.If the fuse has blown out, replace it with a fuse of the same type and rating.

5. CONNECTIONS

SPEAKER CONNECTIONS



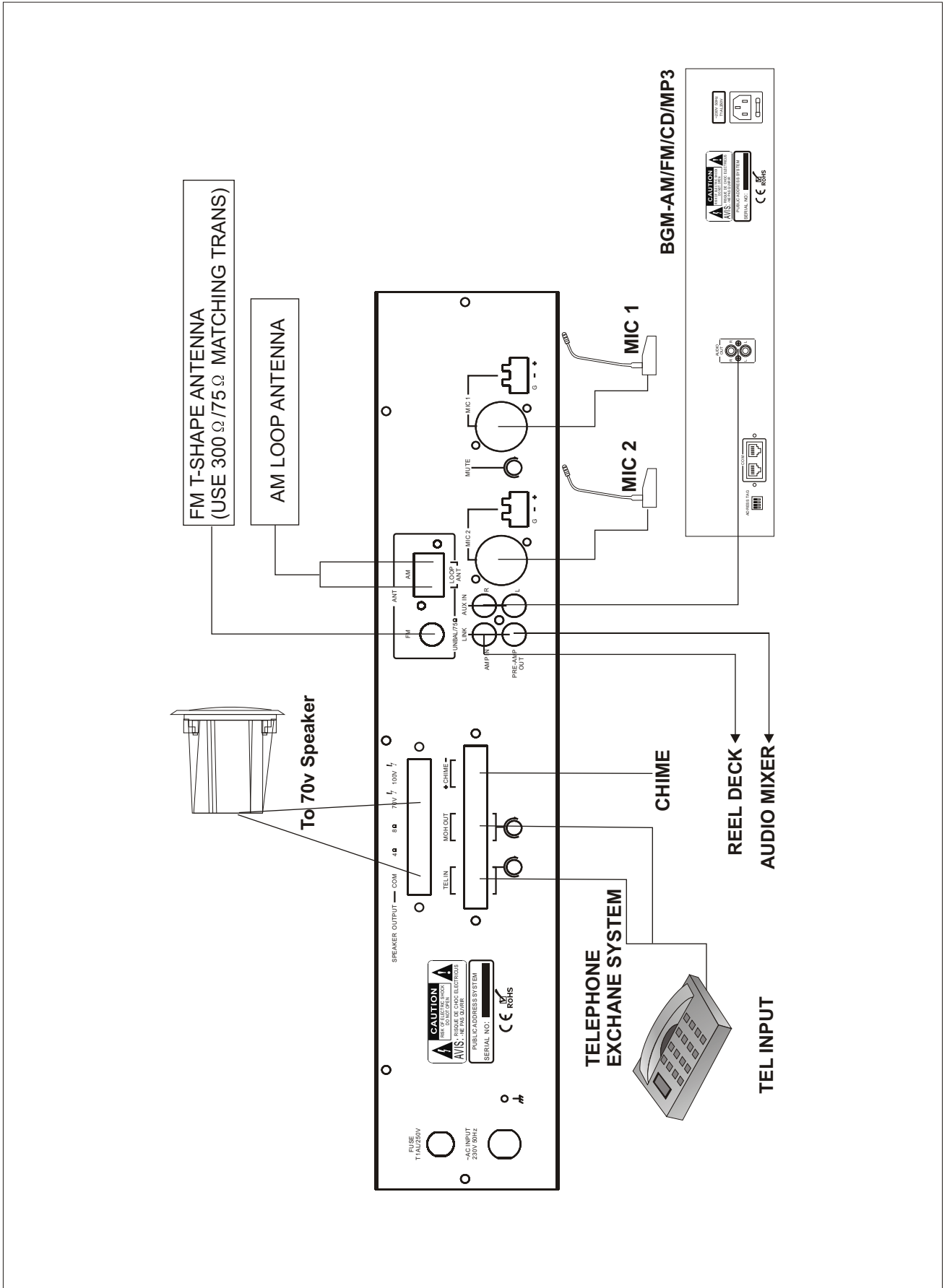
Notes

- Both the 4Ω/8Ω and 70V/100V terminals cannot be used at the same time.
- Impedances indicated in the figures represent the total speaker system (load) impedances.

WARNING

Be sure to attach the supplied terminal cover after connection completion. Because high voltage is applied to the speaker terminals, never touch these terminals to avoid electric shock.

6. APPLICATIONS

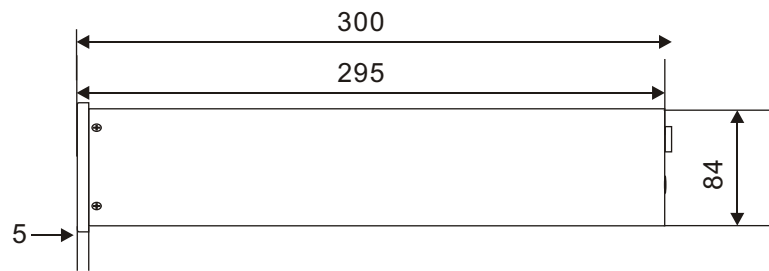
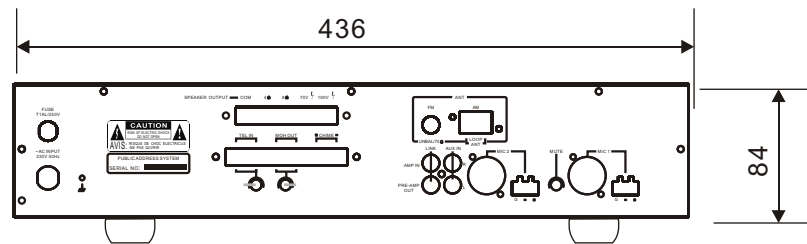
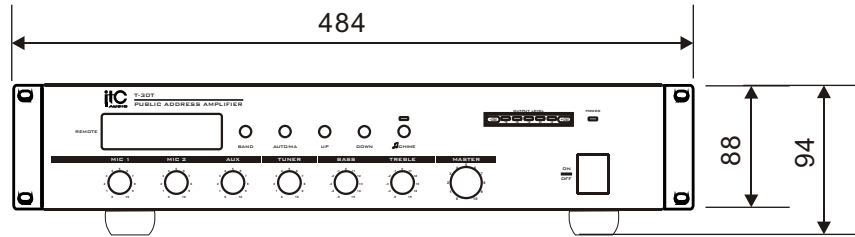


8. SPECIFICATIONS

PUBLIC ADDRESS AMPLIFIER			
MODEL	T-30T	T-60T	T-120T
RATED POWER OUTPUT	30W	60W	120W
SPEAKER LINE INPUT	4 Ω , 8 Ω , 70V, 100V		
FREQUENCY RESPONSE	60Hz~20KHz		
MIC 1 and MIC 2	2mV/10K Ω , Balanced 2mV/600 Ω , XLR connector		
AUX INPUT	150mV/10K Ω		
TELEPHONE INPUT	1V/10K Ω		
AMP INPUT	0.775V/600 Ω		
LINE INPUT/IMPEDANCE	1V/600 Ω		
MUSIC ON HOLD/IMPEDANCE	0.775V/600 Ω		
TUNER CHANNEL			
TUNING RANGE	FM:87.5-108.0MHz, AM:522-1620KHz		
ANTENNA INPUT	FM:75 Ω Unbal, AM:Low impedance Round ring antenna		
SENSITIVITY	FM:Less than 10uA,AM:Less than 100uA		
TOTAL DISTORTION	FM:Better than 50dB,AM:Better than 40dB		
AC MAINS	~230V/50Hz		
POWER CONSUMPTION	80W	120W	200W
DIMENSION(mm)	484X300X88		
NET WEIGHT	8.5Kg	9.1Kg	10Kg
GROSS WEIGHT	9.3Kg	10.2Kg	11.2Kg

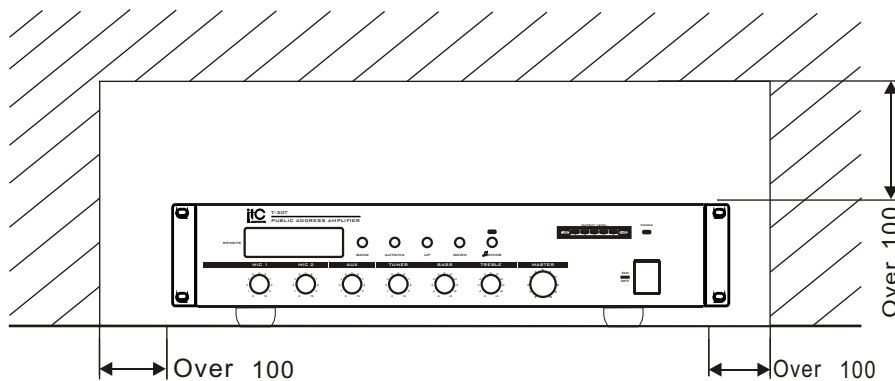
9. DIMENSIONAL DIAGRAM

UNIT :mm



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.

UNIT :mm



PUBLIC ADDRESS SYSTEM



Guangzhou ITC Electronic Technology Limited
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