itc
IP NETWORK PA SYSTEM

IP

- ■ **T-77120W/77240W/77350W/77500W**
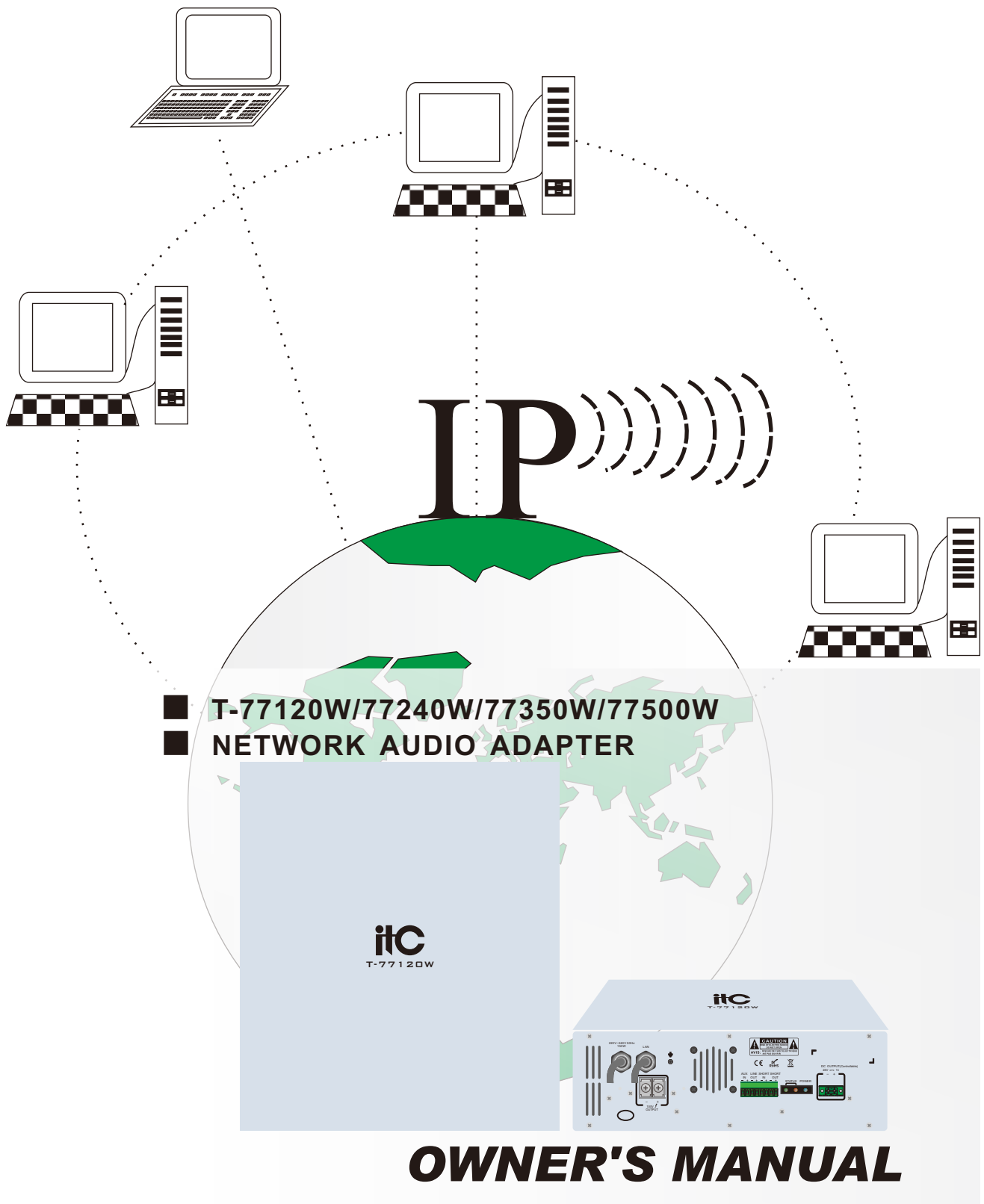- ■ **NETWORK AUDIO ADAPTER**

itc
T-77120W

OWNER'S MANUAL

itc 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!
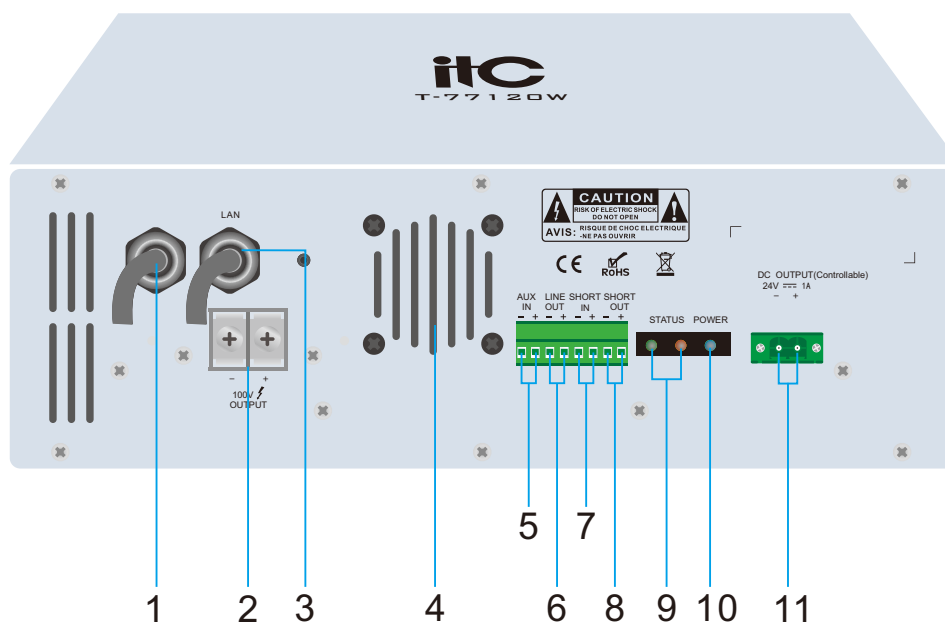
2. GENERAL DESCRIPTION

The equipment adopts the integrated design of digital power amplifier module and metal cover, with waterproof and rustproof cover structure; install in outdoor columns of various broadcasting management areas, used for program broadcast and local broadcast in parks, squares, streets, tourist attractions and other outdoor places. Support outdoor use in extremely low temperature environments.

3. FEATURES

1. Three-sided all-metal closed structure design, good box sealing performance, professional waterproof and rust-proof treatment, in line with the use requirements of outdoor harsh environments.
2. Built-in 1-channel IP network audio decoding module, support IP/TCP, UDP and other communication protocols, realize the network transmission of 16-bit CD-quality audio signals.
3. Built-in 1 channel D class 120W/240W/350W/500W digital power amplifier module, 1 channel constant voltage 100V output interface.
4. With 1 channel AUX IN input and LINE OUT output interface for external auxiliary audio source and extended power amplifier amplification.
5. With 1 short-circuit input and 1 short-circuit output interface, connect to the alarm short-circuit input and external sound and light alarm.
6. Built-in semiconductor air-conditioning system, achieve automatic constant temperature adjustment through the built-in temperature monitoring module, so that the equipment can be used in extremely low temperature environment, the lowest can reach -70℃.
7. Support sever unified authorization operation and unified configuration management of user and password; support 100-level custom audio priority mute control function.
8. Digital products, easy to expand, not limited by geographical location, no need to increase equipment room management equipment, and easy to install.
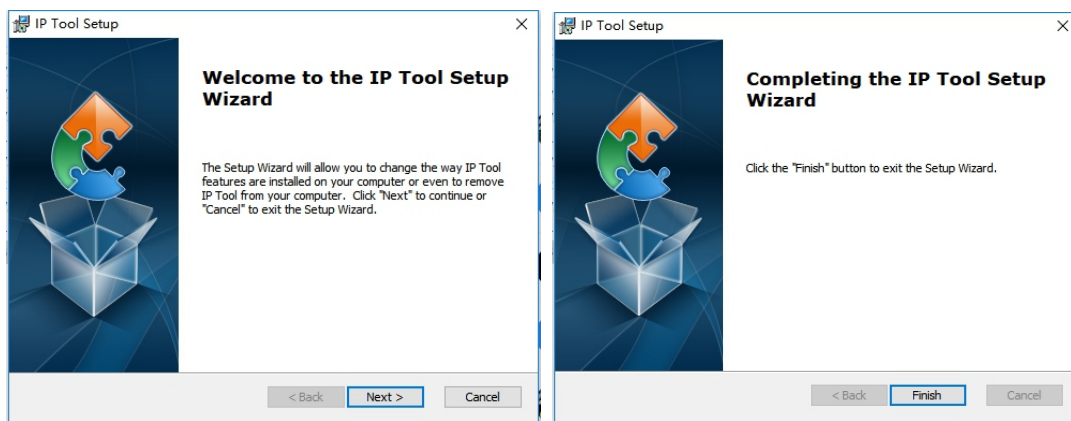
1. AC power cord;
2. 100V speaker output interface;
3. Network port;
4. Cooling fan;
5. AUX IN—Auxiliary input interface;
6. LINE OUT—Line output interface;
7. Short circuit input interface;
8. Short circuit output interface;
9. Red/green LED indicator light control output pins:
   Mode 1: It is normally connected and idle, the red light and the green light are alternately lit, with an interval of 1.0 seconds;
   Mode 2: Play music, the red light turns off, the green light flashes slowly, with an interval of 1.0 seconds;
   Mode 3: Call and shout [to be broadcast], the red and green lights flash slowly at the same time, with an interval of 1.0 seconds;
   Mode 4: The server cannot be connected, both the red light and the green light turns to [yellow light] and flash quickly, with an interval of 0.2 seconds;
   Mode 5: The network is not connected, the red light flashes quickly, the green light goes out, with an interval of 0.2 seconds.
10. Power indicator light;
11. DC 24V output interface.

Note: When the ambient temperature is about minus 70°C, and the device is powered on for the first time when it is cold, the device needs to be preheated. After reaching a certain temperature, the heating will stop, and the device will go online normally after about 5 minutes. When the ambient working temperature is about minus 45°C to 60°C, the device does not need to be preheated when it is powered on. At this time, you should only wait for the terminal to go online normally.

The terminal needs to be configured before installation, before installation, need make a installation plan including terminal name, terminal IP address, gateway IP address, server IP address, location of terminal installation, and label the information on the terminal to ensure the convenient use of the device. Please save the plan as an electronic document for future maintenance. After the system planning is completed, please configure parameters of each terminal includes "terminal IP address, subnet mask, gateway and server address".
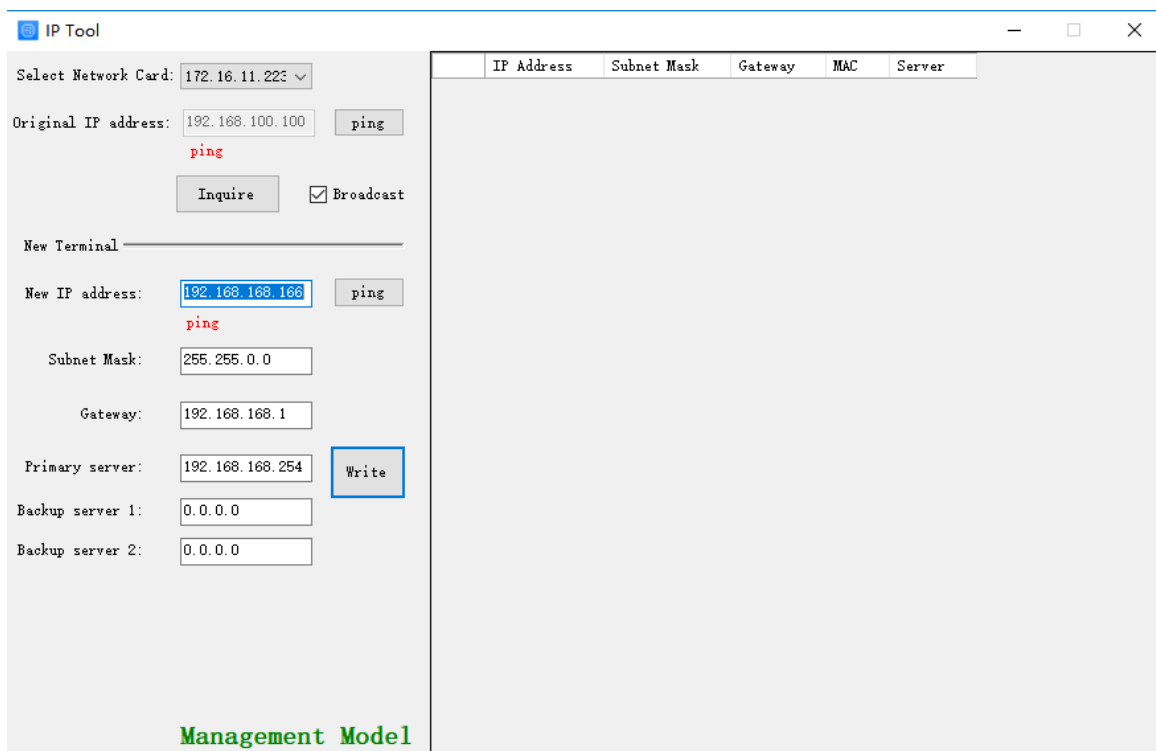
1. Installing software. Find the IP network broadcast system software installation package, double-click to open it, click on the program "terminal configuration tool", after the installation of the program is completed, as shown below:

2. After the program is installed, a icon is generated on the desktop, as shown below:

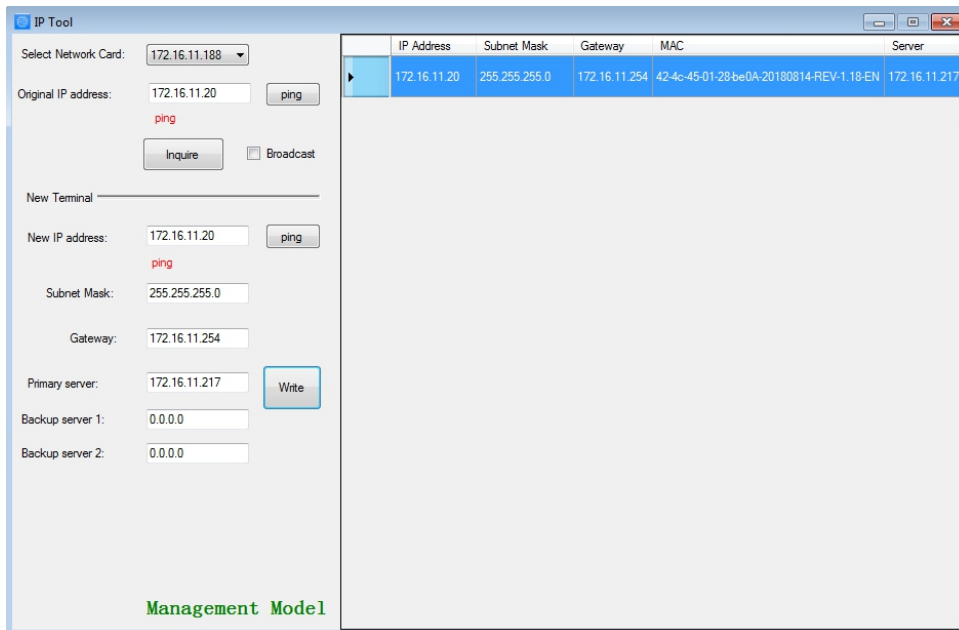3. Double-click the icon to run, and the "terminal configuration tool" window will pop up, as shown below:
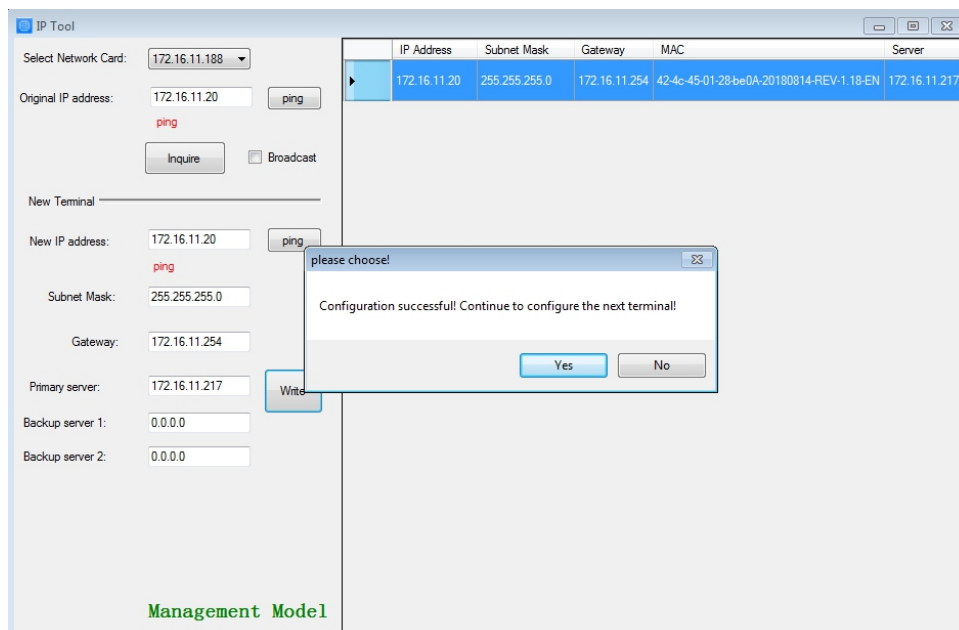
The configuration steps:

Step 1: Connect the terminal and the computer installed with the terminal configuration tool program by the network wire, Plug in the power until the termianl power indicator is on.

Step 2: double-click to open the shortcut icon of " terminal configuration tool", select the network card first, and left-click the "query" button in the window, to query the terminal's original IP address. Please pay attention to: local IP address of the computer should be set in the same network segment as the terminal, because the default IP of terminal is : 192.168.168.166, so the computer's local IP address should also be set to: 192.168.168.X, otherwise it maybe not match the IP terminal address.

Step 3: In the window of "Terminal Configuration Tool" , fill in correct "IP address", "Subnet mask", "Gateway IP" and "Server IP", as below :
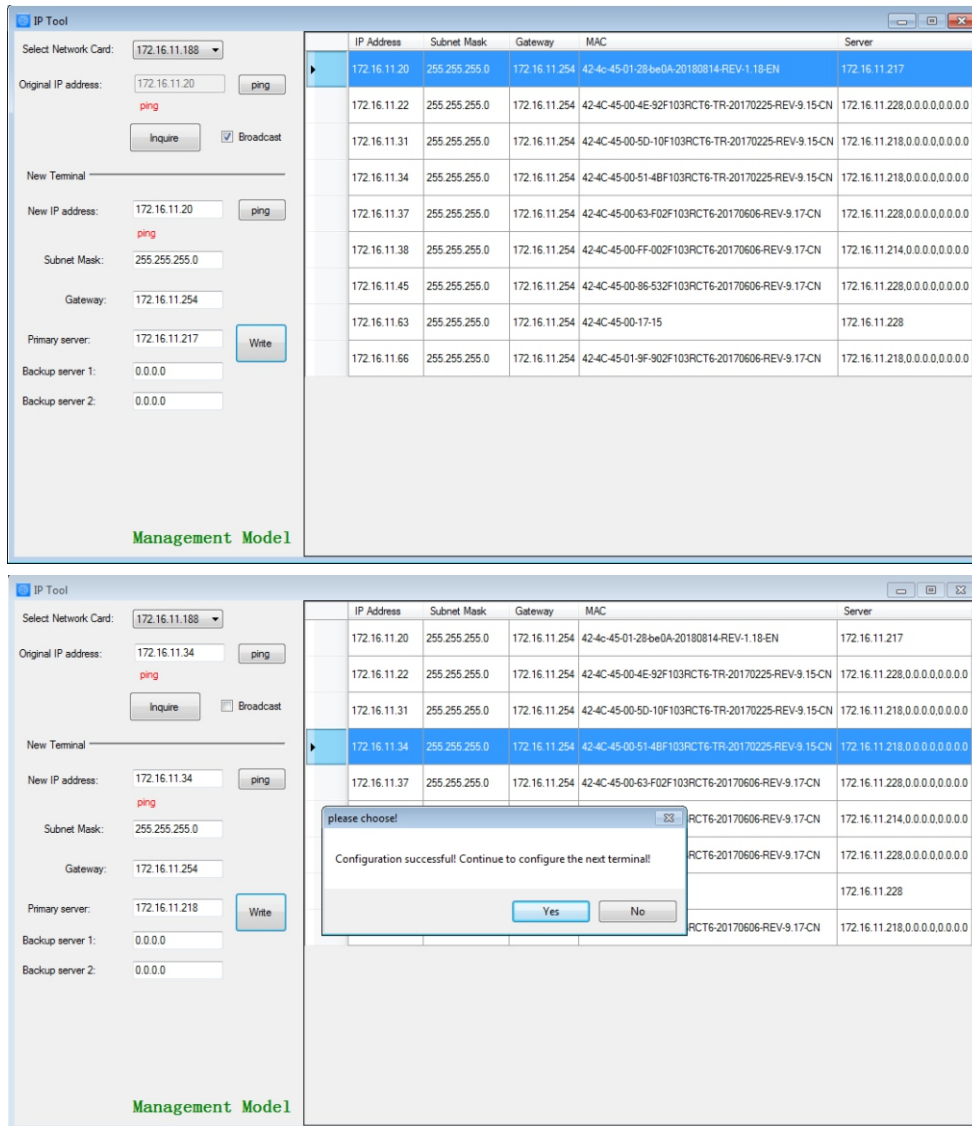

Step 4: left click on the "write" button, there will be a window prompt after the successful configuration; after that, left click on the "query" button, the parameters of the terminal will be re-read by the configuration program, if it display as the same as entered one, means that the configuration was successful.
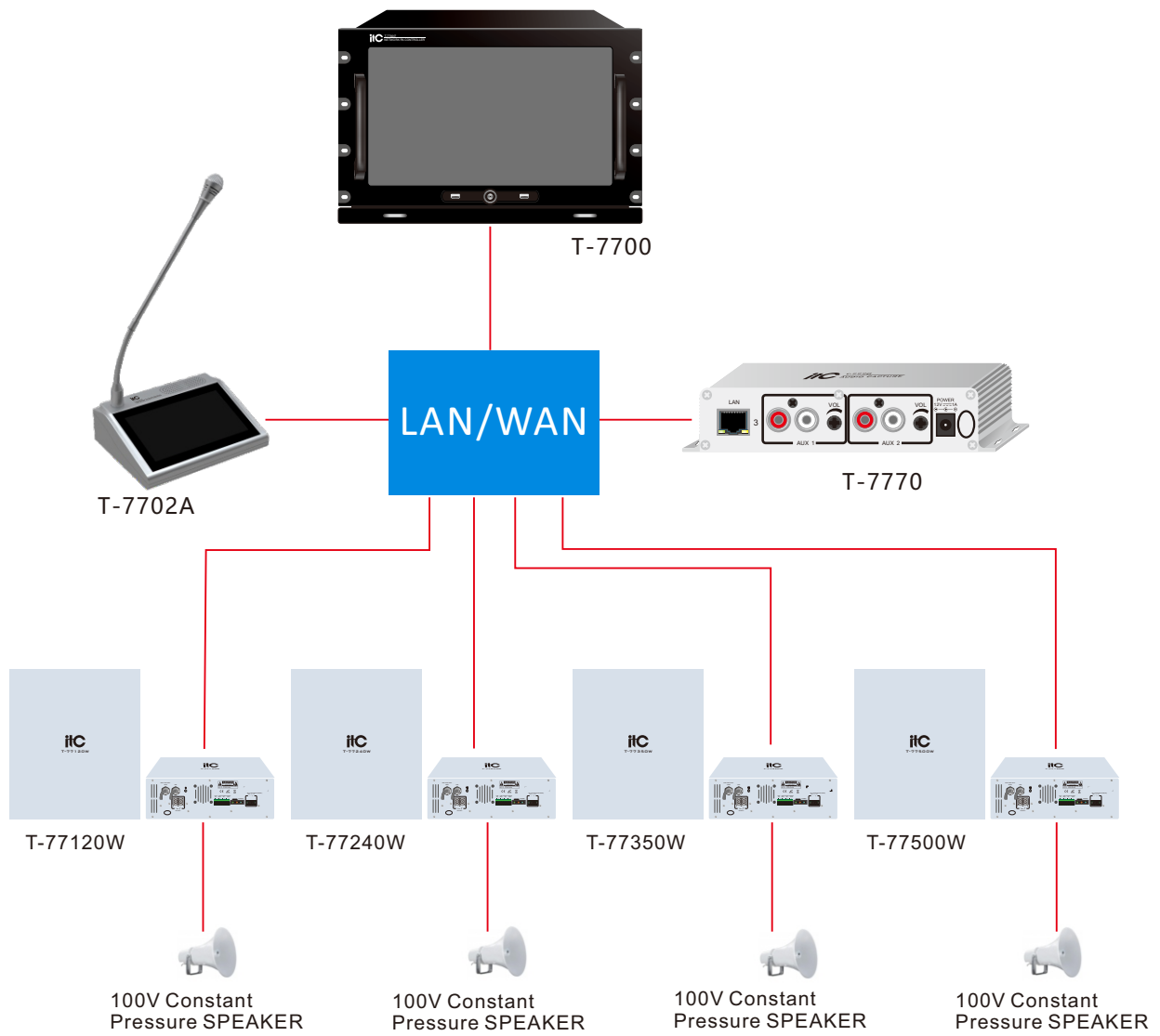
Step 5: If multiple terminals are in the same network segment, you only need to modify the IP address of one terminal, it is needed to click on the terminal in the queried terminals list, then cancel the choice of broadcast on the left interface, modify the IP address and click for configuration.
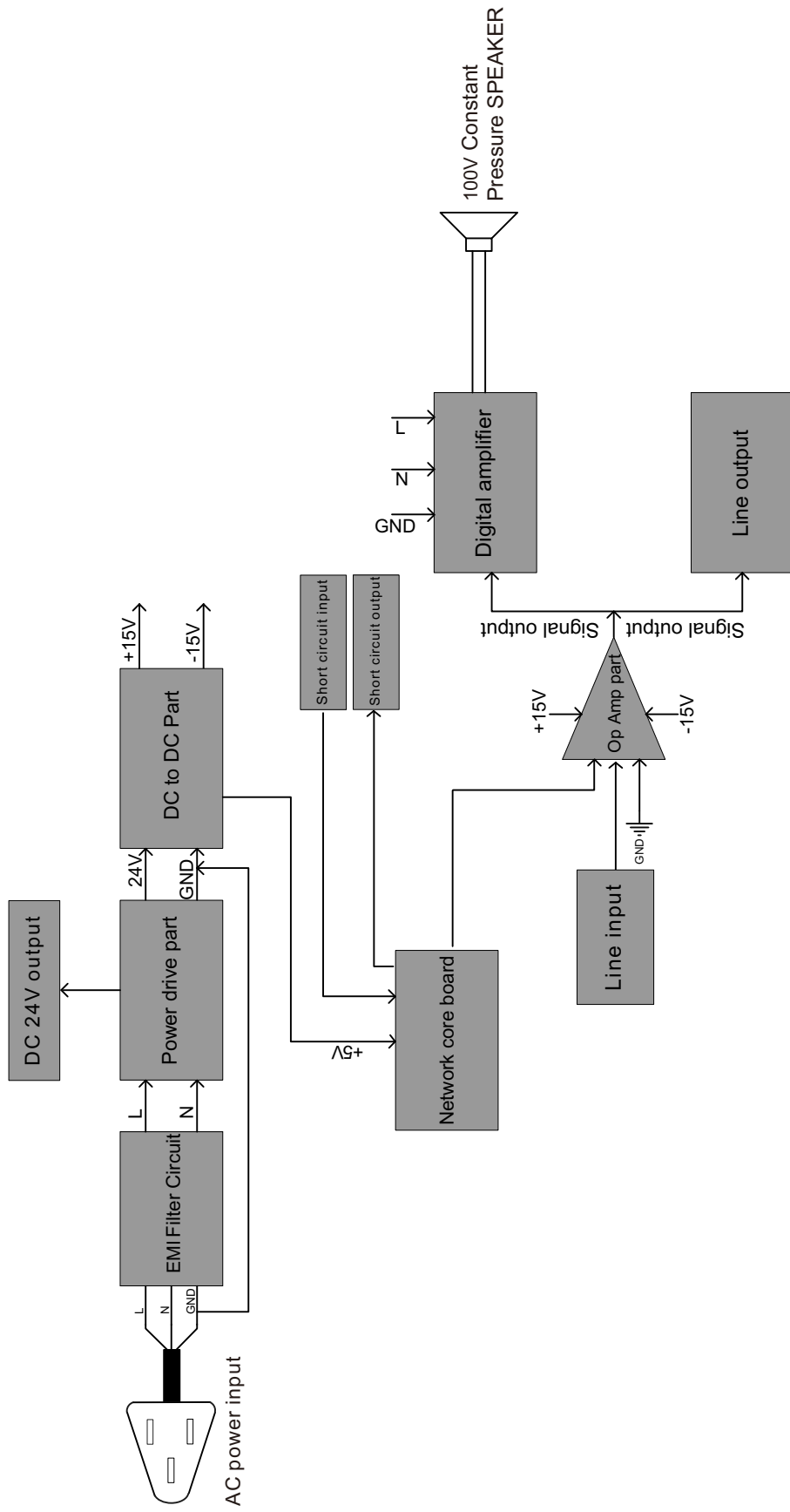

Notes: If the terminal data can't be queried or the network is blocked, the pop-up window will say Reconfigure the IP address or IP adress writing error. In this case, please reconfigure the network, check the network cable, and turn off the firewall, etc.
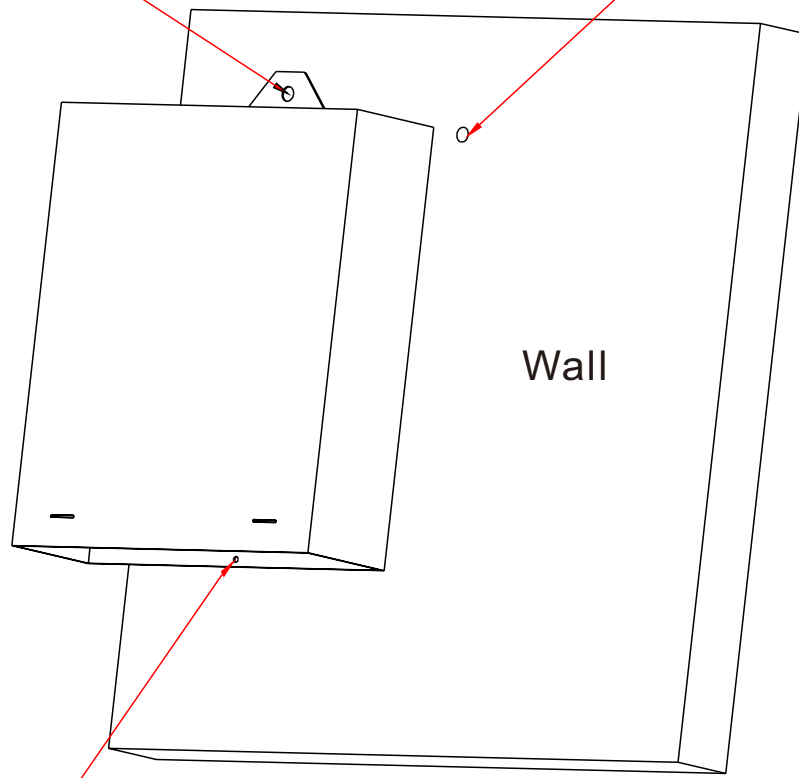
T-7700

T-7702A

LAN/WAN

T-7770

T-77120W

T-77240W

T-77350W

T-77500W

100V Constant
Pressure SPEAKER

100V Constant
Pressure SPEAKER

100V Constant
Pressure SPEAKER

100V Constant
Pressure SPEAKER

100V Constant Pressure SPEAKER

Digital amplifier

L

N

GND

Line output

+15V

-15V

DC to DC Part

Short circuit input

Short circuit output

Signal output

Signal output

Op Amp part

+15V

-15V

Line input

GND

24V

GND

DC 24V output

Power drive part

Network core board

+5V

L

N

EMI Filter Circuit

L

N

GND

AC power input

8. SPECIFICATION

Model	T-77120W	T-77240W	T-77350W	T-77500W
Network interface	Standard RJ45 input			
Transmission rate	100Mbps			
Support protocol	TCP/IP, UDP			
Audio format	MP3			
Audio mode	16-bit CD sound quality			
Sampling Rate	8K~48KHz			
Rated power	120W	240W	350W	500W
Power consumption	150W	300W	400W	600W
Frequency response	80Hz~16KHz（+1/-3dB）			
THD	THD≦1%			
SNR	≧68dB			
Working temperature	-70℃~60℃			
Working humidity	20%~80% relative humidity, no condensation			
Working voltage	☐ ~110V 50Hz ☐ ~110V 60Hz ☐ ~120V 50Hz ☐ ~120V 60Hz ☐ ~220V 50Hz ☐ ~220V 60Hz ☐ ~230V 50Hz ☐ ~230V 60Hz ☐ ~240V 50Hz ☐ ~240V 60Hz			
Size	409×260×85mm			
Weight	5Kg	5.2Kg	5.4Kg	5.6Kg

Align and tighten
the expansion screw
with the mounting hole

The wall opening is 10mm,
and 8mm expansion screws
are embedded

Wall

After adjusting the vertical direction of the whole machine,
use 4mm self tapping to hit the wall for fixation to prevent swinging

IP NETWORK PA SYSTEM

Version 0.1

itC