IP Network Amplifier Terminal T-881000B

Embedded software: IP terminal embedded software V2.113

Description

The network power amplifier is installed in the weak-current room or sub-control room of each broadcast management area. It has a built-in digital power amplifier and is used for program playback and local broadcasting in halls, corridors, outdoor areas and other areas.

Features

*The 19-inch cabinet is designed with all-metal materials and has good impact resistance. The industrial-grade painting process provides better protection and appearance for the machine.

*The panel is equipped with a 3.9-inch TFT color screen that can display high-definition dynamic images and the machine's working status; it has a self-spinning shuttle knob and a digital coding design that can control the terminal output volume.

*The panel has 3 custom function buttons, which can define the playback track, execution area, task volume, priority, duration, and playback mode. It can realize one-click triggering of the alarm function or playing holiday reminder audio function.

*It has a USB interface to enable local on-demand audio files. Functions such as play/pause can be controlled by buttons, and the operation is flexible and simple.

*It has 1 AUX input interface, 1 MIC input interface, and 1 EMC input interface (EMC input signal has the highest priority. Other signals are at the same level and can also be configured with priority through the server). The interface signals are mixed at the same time. The volume is controlled by an independent volume potentiometer, and the local paging function is supported when the network is disconnected

*It has 1-channel LINE OUT output interface , which is used for power amplification.

*It has 1-channel short-circuit input interface that can receive the trigger signal from an external device to start the terminal voice broadcast. This function can be used to trigger a preset voice prompt (or alarm), and can also be used to control the linkage input short-circuit signal of the access control system.

*It has 1-channel short-circuit output interface and supports alarm linkage triggering.

*It has 1-channel RS-485 control interface, which can be connected to the control panel to realize functions such as program selection, on-demand and volume adjustment.

*The dual network interface design and the terminal support redundant backup function effectively avoid the problem of the device being unable to permanently connect to the system due to a single point of failure.

*It has a 1-channel three-wire alarm forced cut interface and is compatible with 3 (4)-wire fire forced cut, with no limit on the number of audio controls, facilitating multi-function expansion connections.

*It has 1-channel 100V constant voltage signal backup input interface, which switches to the backup channel when the machine is not connected to the network to avoid crosstalk between local signals and backup signals. It can flexibly form a high-reliability public bell system with one master and multiple backups, multiple masters and one backup, or multiple masters and multiple backups.

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*Supports network and analog 100V main and standby switching functions. Supports automatic switching to the analog 100V constant voltage backup line when power is off or the network is disconnected. The delay of the hearing backup switching is less than 0.03 seconds. There is no delay, no lag, no dropout during the switching process, and it does not affect the normal broadcast; when the network and power supply return to normal, it automatically switches to the main channel. The switching time is less than 0.03 seconds. There is no delay, no lag, no dropout during the switching process, and it does not affect the normal broadcast.

*It has 1-channel 100V constant voltage power output interface and a built-in high-fidelity professional digital power amplifier with a 1,000W constant voltage 100V power output capacity.

*It supports continuous output power limiting function. When the software detects power overload, it automatically attenuates the playback volume. It has intelligent control of power amplifier output short circuit/overload protection. When a terminal fails, the software detects the faulty terminal and automatically shuts down the power supply of the power amplifier.

*Built-in on-demand acquisition module can realize real-time on-demand audio function of network media library.

*Built-in network audio decoding module, supports mainstream audio formats such as MP3, WAV, FLAC, OGG, AAC, OPUS, etc., and is compatible with the full sampling rate of 8kHz-48kHz.

*The device adopts ARM architecture high-performance quad-core CPU chip and exclusive audio algorithm processing technology, designed as a miniaturized hardware module, built-in DSP audio processing, supports ultra-low latency digital mixing, and 10-band EQ equalization configuration.

*Built-in 4-level priority settings: (1) Local EMC has the highest priority. (2) Network alarm signals have priority over MIC, AUX and network background music signals. (3) MIC, AUX and network background music signals can be customized by the user as needed. (4) 100V analog backup signal has the lowest priority.

*Supports local music playback, server music on demand, and volume control.

*Supports remote firmware upgrades and equipment maintenance via the network to reduce staff workload.

*The system uses a data redundancy encoding and decoding algorithm and supports anti-packet loss recovery function. When the network packet loss rate is 37.5% , the audio playback is smooth.

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Specification

Network interface	Standard RJ45×2 input
Transfer rate	100Mbps
Supported agreement	TCP/IP, UDP, IGMP, ICMP
Audio format	Supports mainstream audio formats such as MP3, WAV, FLAC, OGG, AAC, OPUS, etc.
Audio mode	16-bit CD-quality sound
Sampling rate	8kHz-48kHz
EMC alarm input level	775mV Industrial standard 3.81mm crimping terminal
AUX line input level	350mV Industrial standard 3.81mm crimping terminal
MIC input level	120 mV (6.35mm single plug interface)
Frequency response	80Hz-16kHz(+1/-3dB)
MIC frequency response	200Hz-10k Hz (+1/-3dB)
LINE OUT output distortion	≤0.1% (≤0.3% when MIC input)
Amplifier harmonic distortion	≤1%
LINE OUT output signal-to-noise ratio	≥73dB
Amplifier signal-to-noise ratio	≥70dB
LINE OUT output amplitude	1000mV Industrial standard 3.81mm crimping terminal
Amplifier protection circuit	Overload and short circuit protection circuit
Output power	1000 W
LINE OUT output impedance	470Ω
485 interface	Yes (RJ45 terminal)
Power consumption	200 W
100V constant voltage input backup	support
Short circuit input	Dry contact input industrial standard 3.81mm crimping terminal
Short circuit output	Dry contact output industrial standard 3.81mm crimping terminal
Operating temperature	5℃～40℃
Working environment humidity	20%～80% relative humidity, no condensation
Input power	～220V 50Hz
net weight	3.9 kg
Dimensions (L x W x H)	482.6× 258 × 44 mm

*This power is measured according to CEA-2006-B/CEA-490-A standard using 20ms pulse 1kHz sine wave at 1% total harmonic distortion

** Based on GB4943.1-2022 test method: measured at 1kHz sine wave rated load 1/8 power