



# Embedded software: Digital IP network terminal embedded software V2.0



## Description

AI anti-bullying alarm terminals are installed in classrooms, dormitories, toilets or corners where no one is around. They can detect and analyze on-site voices in real time, automatically identify fights, mutual assaults or bullying, and trigger warning voice broadcasts and intercom assistance functions to prevent campus violence from happening in a timely manner.

## Features

- \*The equipment supports wall-mounted and ceiling-mounted installation. The wire connection is convenient and simple, and can be completely sealed and buried in the wire trough.
- \*It has 1 DC power interface, 1 RJ45 network interface, 1 built-in Reset button opening, and 1 Type-C interface, and the whole machine is fully functional.
- \*The panel has 4 ring array MICs for real-time sound pickup, and automatically identifies and alarms through AI intelligent algorithms. It supports at least 10 keyword detection, noise sound pressure detection and other conditions for identification and alarm. It can achieve the purpose of stopping campus violence in a timely manner. AI sound pickup recognition distance  $\geq 5$  meters.
- \*Supports full-duplex intercom or one-way broadcast initiated by the management center, with functions such as 4-microphone noise reduction, voice enhancement, reverberation suppression, echo cancellation, etc. Communicate with the alarm scene in real time about the specific situation and stop violent behavior.
- \*Built-in Class D digital amplifier chip module ensures high-fidelity sound quality restoration and provides a clear sound experience. With 6W (MAX) output power, it meets the audio amplification needs of various spaces.
- \*Panel light status:
  - 1)Unauthorized: The device is offline: the blue light is always on; the device is online: the blue light flashes once every 3 seconds.
  - 2)Authorized: Device offline: green light is always on; Device online: green light flashes once every 3 seconds; Device upgrade: green light flashes continuously for 500ms until the upgrade is completed; Flash alarm: red and blue light flash quickly with an interval of 300ms.
- \*Supports mobile phone Bluetooth wireless connection, use APP to configure the device network and connect to the server; supports remote firmware upgrades, maintains the device through the network, and reduces the workload of personnel.
- \*The campus anti-bullying early warning system can view the recording files before and after the alarm as evidence of violent behavior.
- \*Supports expansion of telephone voice gateway equipment, supports receiving alarm information reminders via mobile phone calls or text messages, and supports free setting of number whitelists.



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### Specification

Network interface	Standard RJ45 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
Identifying sound pressure levels	70dB
Sound pickup distance	≥5m
Output power	6W(MAX)
Frequency Response	300Hz-16kHz(+1dB,-3dB)
Signal-to-Noise ratio	95dB
Speaker sensitivity	75dB(@1m/1W)
Maximum sound pressure of speaker	88dB@1m
Short circuit input	3-way dry contact input terminal
Protection level	Ip54
Wi-Fi	2.4G 802.11b/g/n
Bluetooth	Supports Bluetooth 5.2
SIM card holder	Nano-SIM card support
Working power supply	DC12V/2A (power adapter)/IEEE 802.3af
Operating temperature	-10°C ~ 45°C
Working environment humidity	45% ~ 75%
Power consumption	4W
Installation	Wall/ceiling
Dimensions (L x W x H)	120×120×37.5mm
Net weight	0.32kg

\*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