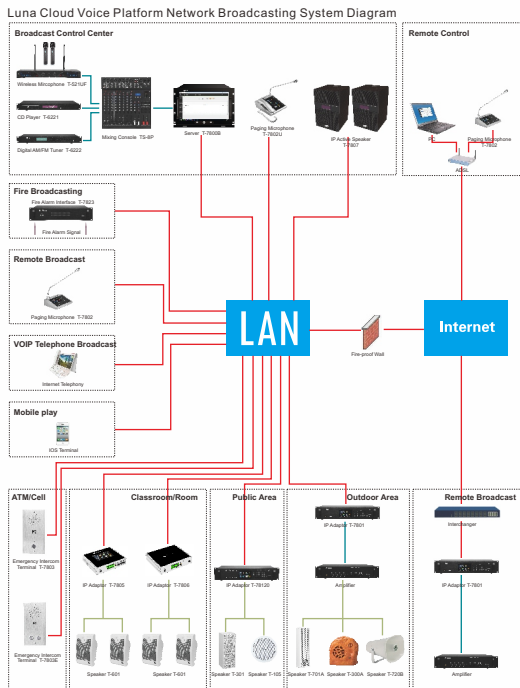




# Luna Cloud Voice Platform Network Broadcasting System



## Description:

The IP network digital broadcasting system, using modern communication network, digital IP/TCP communication protocol that based on network transmission data, transfers the analog digital audio signal encoding in form of data packets in LAN and WAN. It can be multiplexed, one-way or two-way transmission. With standard TCP/IP protocol, it supports cross network, cross routing, Internet transmission and audio transmission network. It is one of the world's most advanced technologies; It completely solves the defects of the traditional broadcasting system like short distance, poor audio quality, complicated maintenance and management, poor interaction and so on. It fully embodies the advanced and superior technology.

The brand new generation Luna cloud voice platform network broadcasting system (Luna cloud for short) technological is achievement of the backbone of R & D personnel R & D team of ITC company Luna project team 3 years scientific research; Luna cloud system is a voice communication operation system based on embedded industry server system (Linux system), with independent intellectual property rights of the ipallocator communication protocol, Cloud Architecture (B/S Architecture) system model "(WEB) and access control mode, gigabit network communication technology and digital audio transmission services. It is a high quality voice intercom system that can form large architecture public broadcasting platform etc.; It realizes real-time broadcast, timing broadcast, zone broadcast, telephone broadcast, free broadcast, off-line broadcast, fire linkage, power control, on site monitoring, two-way intercom, trigger linkage, call recording, log records and other functions, completely covering all the functions of the traditional broadcasting system.

Luna cloud industry applications: internal communication and external communication applications (banks, factories and mines, transportation, prisons, hospitals and so on), broadcasting application (airport, teaching, community, parks, buildings, stadiums, stations, terminals, etc.).

## Function Highlights

### Cloud Architecture

\* Luna cloud system is based on the Linux system, using the cloud architecture to support the three models of erection:

- 1) single mode / standby mode: Support maximum 10000 devices and 2500 real-time tasks.
- 2) P2P: Support a maximum 300000 devices and 150000 real-time tasks.
- 3) convergence pattern: Support maximum 1000000 devices and 500000 real-time tasks, with load balancing, fault redundancy and N2O x 1 intelligent operating platform.



### New Communication and High Security

- \* With independent intellectual property rights ipallocator communication protocol.
- \* According to the application requirements of broadcasting and communication platform, upgrade, expansion, data encryption etc.
- \* Data security encryption communication protocol support up to SSL, can be applied to the internal communication system security organ.



### High-definition Sound Quality, Low Bandwidth

- \* Professional grade audio solution supports user-defined audio stream and network bandwidth occupancy rate; Supports 756Kbps stream to meet the demand of high-end customers; minimum supports 8Kbps stream to solve the problem of insufficient network resources.



### Cross Platform, Free Installation Control

- \* Luna cloud IOS, fully supports Android, OSX, Chro, meOS, Linux, Windows, WP seven operating system platform.
- \* Brand-new web control, using the most fluent HTML5 technology, bootstrap interactive experience, background automatically push, real-time state, real dynamic drag and drop.
- \* Free installation.





## Air Play Wireless Technology, Interconnection

\* Luna cloud system integrated Air Play wireless technology, all the mobile phones, tablet PC that support Air Play features, can be worry-free access to use, it has unparalleled ease of use; Air Play also has a piece of the same broadcast, song information display and other features. Air Play also features a simulcast, song information display and other functional advantages, The traditional broadcast control platform is out of reach.



## Innovative Industrial Design

\* Terminal is with 7-inch industrial 10-spot touch screen , Gorilla glass, high-end design.  
\* With industrial-grade full aluminum case, small and exquisite appearance, excellent heat dissipation to ensure stable 7 x 24 hours operation.  
\* Slide-type construction and installation, elegant and reliable design.  
\* 17 inch large and multi-spot touch screen, flexible and reliable integration IPC with keyboard.



## Ultra Strong Network Adaptability

\* Terminal is built in native Gigabit Ethernet, standard dual NIC (individual models exceptions), supports switch mode, real-time automatic standby redundant mode (no need third-party switch support), routing mode, dual-card mode, load balancing mode, it can be flexible application and exact match in any network requirements and environment.



## Dual Power Supply Design

\* Dual power supply design, which is built-in professional-grade server, more secure and reliable compared to UPS standby power mode.



## User-defined Task Priority

\* The system supports user-defined task priority.  
\* Includes the local message priority, intercom priority, music and the timing broadcast priority, flexible matching application with of various application requirements.



## Local Media Push

\* Terminal supports USB2.0 HS and SDHC high-speed storage devices, to reach stable and reliable media push .



## VOIP Phone Broadcasting

\* Luna cloud system adopts standard SIP protocol, supports IP network telephone access based on standard SIP protocol, to fulfill IP network telephone broadcasting.



## Various Events Management

\* The system supports a variety of events management, including failure, on-line, offline, emergency, short circuit, ambient sounds pressure.



## Multi-party Call Access

\* The system supports up to 128 professional multi-party call access, highly integrated to unified communications platform.



## Authorization Management

\* The system supports the user authorization and user equipment management, scope management, meanwhile the system UI is with feature of intelligent assign for authorization.



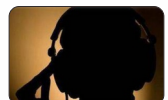
## Logging Management

\* System has powerful log record and management function. Device configuration, user playback, operation records, fault events, all is the fundamental basis to ensure the system stable operation and achieve unified management.



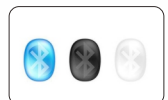
## Environment Monitor

\* IP network audio terminal is built in pickup microphone, to monitor the sound environment of the terminal location from the control room, and does not affect the terminal audio broadcast; it can be used to teaching evaluation and sounds fault detection.



## 2.4G Bluetooth Microphone

\* IP network terminal is built in 2.4G wireless audio module, working with 2.4G wireless microphone to fulfill local wireless broadcasting.





## Background Recording

\* Each terminal server can be real-time recording or broadcasting intercom audio information, convenient information query.



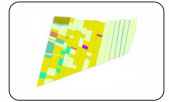
## Intercom

\* It supports audio terminal full-duplex real-time two-way intercom and emergency communications; support various modes, such as one key to ask for help, one key to broadcast, one key to monitor, multi-party online call mode; supports user-defined setting for timing and call transfer policy, supports other user-defined functions such as, calling time limit, automatically hang up if no sound, time delay and so on.



## Unlimited Zones

\* The digital IP network system can achieve unlimited zones, very easy to extend zones and functions on demand.



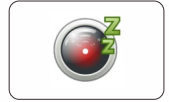
## Touch-screen Control

\* Can operate on touch screen display of controller or terminal.



## Terminal Sleep

\* IP network terminal will automatically go into standby mode when there is no signal, to be energy saving and environmental protection.



## Fault Detection

\* According to the IP address, the IP broadcast server can detect the working status like each terminal line, volume..... very easy for maintenance.



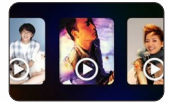
## Radio Establishment

\* It can collect and play the audio files on server to realize multiple audio program broadcasting, loop play, and user defined broadcasting way, which meet the user's demands very well!



## Free on Demand

\* Through the remote control, touch screen, or equipment panel buttons to operate the IP network audio terminal and achieve the music library server program on demand; the LCD screen on the Network adaptor has a directory and can support fast forward, fast down, reread, broadcasting speed change, segment play, loop playback, timing and select to play, etc.



## Multi-channel Real-time Broadcast

\* It can collect multichannel audio at the same time through the server sound card. Different zone play different audio source, Max support 14 audio collection at the same time.



## Offline Program Broadcast

\* IP network audio terminal built-in 2Gbyte SSD, support the remote server management, limited bandwidth background download and idle time automatic download to reduce the burden of network; support media library files offline automatic playback function.



## Integrated Fire Trigger

\* Luna cloud server support a variety of solutions like fire alarm, alarm demolition, sound pressure testing, terminal online, terminal offline, terminal fault linkage trigger etc, it can trigger linkage the network audio terminals to achieve files offline play timely, recording, send short messages, emails, short circuit output, media library broadcast, radio, and other functions.



## Server Backup

\* Server support backup function, the increased standby server connected with the main server through network to achieve real-time synchronization data sharing and automatic be detected on time and replacement and backup when the main server failed, very reliable!



## Three-wire Cut Out

\* The IP network audio terminal come with three-wire system cutout signal output, which solved limit of the signal transmission distance and volume control quantity of the traditional 24V cutting model and save the cables and tubes.

