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LaON 5GHZ INTERCOM

Channel rich, Scalable, Stable and Seamless Wireless Intercom solution



LAON TECHNOLOGY CO., LTD.

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CONVERGED DIGITAL IP INTERCOM SYSTEM

GENIE

IP Key Panel + IP Beltpack 5GHz Wireless Beltpack + Wireless Receiver connections in One(1) system



GENIE is the industry's first converged digital IP intercom system enabling IP Key Panels, 5GHz Wireless Intercom and Wireless Receiver connections with a single Base Station. With GENIE, 6 Remote Antennas, 60 Repeaters and 128 IP Key Panels or IP Beltpacks can all be connected through PoE(Power of Ethernet) while having 128 Wireless Beltpacks and Receivers connections at the same time.

With this boundaryless hybrid solution, GENIE offers a high flexibility and scalability in system configurations. It is easy to extend the system from a simple to a large scale of configuration without a high-cost analog based matrix system and meet the complex communication requirements depending on the work flows.

Also, GENIE provides full connectivity with other devices and supports critical remote productions by connections through an internet. And an integrated management of the system configuration, setting and monitoring can be fulfilled with GENIE Configuration Manager (GCM) with full visibility.

License-free 5GHz UNII BAND

GENIE operates in 5GHz UNII band, the worldwide license-free frequency band that provides approximately up to 30 RF channels depending on the regions as opposed to few RF channels on 2.4GHz ISM band. With the advantages high frequency band offers, GENIE is also hardly affected by high-power digital equipment such as amplifiers and speakers. Users can enjoy pleasant wireless communications with the minimized traffics or interferences.

Highly efficient PoE configurations

GENIE is a PoE scalable system that transmits both data and power through PoE for all GENIE Ethernet products. In view of system redundancy, loopback can also be set by building a ring connection. You can easily wire and install complex systems using light weight Cat5/6e STP or fibre cable.





GENIE **FEATURES**

IDUSTRY'S FIRST BOUNDARYLESS HYBRID INTERCOM SYSTEM



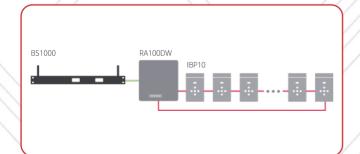
- Hybrid system enabling IP Key Panel, IP Beltpack, Wireless Beltpack and Receiver connections with a single Base Station
- Base Station, Remote Antenna, IP Key Panel & Beltpack, W/L Beltpack & Receiver, Line Router and WAN Link in configuration

MATRIXLESS IP INTERCOM YET SUPER-SCALABLE SOLUTION



- 70 Full-duplex Talk & unlimited Listen ch. for Wireless
- 128 ch. for IP Key Panels or IP Beltpacks
- 66 Wireless Antennas connections
- 128 W/L Beltpack or Receiver connections per any Antenna

SEAMLESS, SCALABLE, FLEXIBLE, RELIABLE, AND EASY-TO-DESIGN & EXTEND



- Highly efficient daisy-chain enabled PoE scalable system
- Ethernet Synchronization for system stability
- Dual power Base Station & Key Panels
- Power and Data redundant system by PoE

MULTI-CHANNEL ETHERNET DEVICES IN THE SYSTEM

BS1000 & KEY PANEL
4W/2W CH. TALKKEY

4/8
16/32
Highly
Scalable
Multi-channel
Digital IP
system

- 4 Lines Base Station with 8 Talk channels & Keys
- 4 Lines Key Panels with 8/16/32 Keys
- Ethernet Beltpack with 8 Talk channels & 4 Keys
- Line Router & WAN Link for Remote Communications

LICENSE-FREE AND CHANNEL-RICH 5GHz UNII BAND



- GENIE wireless devices operate in channel-rich 5GHz UNII band
- Up to 30 RF channel options offer a reliable connectivity
- High performance audio quality with extra low latency
- Enhanced wireless coverage based on in-house RF technology

SETTING AND MONITORING WITH GENIE CONFIGURATION MANAGER (GCM)



Convenient tool enabling Integrated system management

- Configuration and setting over an Ethernet connection
- Monitoring Setting value, Freg. channel, Connectivity & RSSI
- Setting for WAN Link, Line Router and IFB communications
- Integrated system management and restoration

GENIE **DEVICES**



GENIE Base Station | BS1000





- 4 Channels for 4-Wire or 2-Wire
- 8 Talk keys and Volume switches, GPIO, Relay, Opto Input
- PoE OUT x 2, PoE IN x 1
- Built-in loudspeaker and an either Gooseneck mic. or Headset
- 70 Full-duplex Talk & unlimited Listen ch. for Wireless
- 66 Wireless Antennas, 128 Key Panels, 128 W/L Beltpacks connections
- Automatic seamless roaming between Wireless Antennas
- Wireless Antenna signal and dual power

GENIE Base Station | BS850



- 2 Channels for 4-Wire
- LAN x 1
- 1 Talk key and a Headset connection for communication
- 40 Full-duplex Talk & unlimited Listen ch. for Wireless
- $\bullet\ 33\ Wireless\ Antennas, 128\ Key\ Panels,\ 128\ W/L\ Belt packs\ connections$
- Wireless Antenna signal and automatic roaming between Antennas

Remote Antenna | RA100DW



- Internal antenna and environmental sealing
- Connecting GENIE IP devices (Repeater, Key Panel & IP Beltpack)
- 6 x RA100DW per BS1000, 10 Repeater connection per RA100DW
- Adding 10 Full-duplex Talk ch. per device with unlimited Listen ch.
- Up to 128 Wireless Beltpacks or Receivers connections
- 48V DC, PoE OUT x 2, PoE IN x 1

Remote Antenna | RA100



- External antenna
- Connecting GENIE IP devices (Repeater, Key Panel & IP Beltpack)
- 6 x RA100 per BS1000, 10 x RBS85 Repeaters per RA100
- Adding 10 Full-duplex Talk ch. per device with unlimited Listen ch.
- Up to 128 Wireless Beltpacks or Receivers connections
- PoE IN x 1

Wireless Repeater | RBS85



- Expansion of wireless coverage
- 10 x connection per Remote Antenna RA100DW/RA100
- Up to 128 Wireless Beltpacks or Receivers connections
- Sharing the Full-duplex ch. with the corresponding Remote Antenna
- PoEIN x 1

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GENIE IP KEY PANEL INTERCOM

Scalable, Flexible and Efficient Matrix-free IP Intercom solution



GENIE **DEVICES**



IP Key Panel | GRP32





- 2U type Key Panel
- Color TFT display
- 4 Channels for 4-Wire
- 32 Talk channels for 32 Talk keys, 32 Call buttons
- GPIO, Relay, Opto, PoE IN x 1, LAN x 2
- Built-in loudspeaker and an either Gooseneck mic. or Headset
- On a Key, 20 Key Panels and GENIE Group Conference ch. can be allocated
- WAN Link, Line Router and IFB communications in configuration
- PoE IN and 12V DC dual power

IP Key Panel | GRP16





- 1U type Key Panel
- Color TFT display
- 4 Channels for 4-Wire
- 32 Talk channels with 16 Talk keys, 16 Call buttons
- GPIO, Relay, Opto, PoE IN x 1, LAN x 2
- Built-in loudspeaker and an either Gooseneck mic. or Headset
- On a Key, 20 Key Panels and GENIE Group Conference ch. can be allocated.
- WAN Link, Line Router and IFB communications in configuration
- PoE IN and 12V DC dual power

IP Key Panel | GDP16





- Desk type Key Panel
- Color TFT display
- 4 Channels for 4-Wire
- 32 Talk channels with 16 Talk keys, 16 Call buttons
- GPIO, Relay, Opto, PoE IN x 1, LAN x 2
- Built-in loudspeaker and an either Gooseneck mic. or Headset
- On a Key, 20 Key Panels and GENIE Group Conference ch. can be allocated.
- WAN Link, Line Router and IFB communications in configuration
- PoE IN and 12V DC dual power

IP Key Panel | GRP8-12V





- 1U type Key Panel
- 4 Channels for 4-Wire
- 16 Talk channels with 8 Talk keys, 8 Volume switches
- GPIO, Relay, Opto, PoE IN x 1, LAN x 2
- Built-in loudspeaker and an either Gooseneck mic. or Headset
- On a Key, 20 Key Panels and 5 GENIE Group Conference ch. can be allocated
- WAN Link, Line Router and IFB communications in configuration
- PoE IN and 12V DC dual power

IP Key Panel | GDP4





- Desk or Wall attached Key Panel
- 4 Talk channels with 4 Talk keys
- Built-in loudspeaker and an either Gooseneck mic. or Headset
- On a Key, 20 Key Panels and 5 GENIE Group Conference ch. can be allocated
- WAN Link, Line Router and IFB communications in configuration
- PoF IN x 1
- · Optional desk and wall brackets

GENIE **DEVICES**

GENIE Line Router | GLR4



GENIE WAN Link | GWL



Dante/AES67/USB Audio Interface | GAIF



IP Beltpack | IBP10



Wireless Beltpack | BP850 & BP851





Wireless Receiver | WR850



- LINE audio routing to 128 Key Panels flexibly
- 4 Channels for 4-Wire
- GPIO, PoEIN x 1, LAN x 2
- PoE IN and 12V DC dual power
- GLR4 in Master Mode Without a Base Station, configure a wired intercom system with Key Panels and IP Beltpacks and provide 5 GENIE Group Conference channels to the Genie IP devices.
- Support for Remote Connections of GENIE devices through an internet
- 6 Full-duplex communication channels per WAN Link
- 4 Channels for 4-Wire
- GPIO, PoEIN × 1, LAN × 2
- PoE IN and 12V DC dual power
- USB or Dante/AES67
- 4 x 4 audio channels
- 2 x USB audio ports
- 2 x External LAN, PoEIN x 1, LAN x 2
- 12V DC dual power
- 8 Talk channels with 4 Keys
- 1 x PoE IN and 1 x PoE OUT
- 6pin connector headset or TRRS ear set
- Call tone and vibration
- 5 Group Conference channels
- BP850 2 Groups simultaneous communication with 2 Keys
- BP851 4 Groups simultaneous communication with 2 Keys
- Beltpack in Master Mode Communications without a Base Station
- Pairing with 5 Base and a Base selection from the Beltpack's screen
- Call tone, Key lock
- Ni-MH rechargeable batteries or AA Alkaline batteries
- Wireless IFB Receiver that operates with GENIE and LT150 Mobile System
- Internal antenna
- 3.5mm jack earphone connection
- 5 positioned navigation switch
- Rechargeable battery or AA Alkaline batteries
- Neck strap or Belt clip

GENIE **ACCESSORIES**



Double muff headset | LSH-S125D



Light weight headset | LMH-10



Earphone | LME-880



Single muff headset | LMH-125D



Neck worn ear set | LNH-20D



Tube type ear set | PTE-850



| Headset Model | Ear Type | Microphone Type | Impedance Mic/Earpiece | Connector Type | |
|---------------|----------|-----------------|------------------------|----------------|--|
| LSH-S125D | Double | Dynamic | 1.5 K / 32 Ohm | 6-pin mini-DIN | |
| LMH-125D | Single | Dynamic | 600 / 32 Ohm | 6-pin mini-DIN | |
| LMH-10 | Single | Dynamic | 200 / 32 Ohm | 6-pin mini-DIN | |
| PTE-850 | Single | Electret | 2.2K / 32 Ohm | 6-pin mini-DIN | |
| LNH-20D | Single | Dynamic | 200 / 80 Ohm | 6-pin mini-DIN | |
| LME-880 | Single | / (- | - / 32 Ohm | 3.5ØTRRS | |

GENIE **ACCESSORIES**

Gooseneck microphone



- GM 26: 7.9 (454mm) 26.2inch (665mm) telescoping
- GM 8: 7.58inch (192mm)

Rechargeable battery | BAT50





- Ni-MH rechargeable battery for Beltpacks
- Complimentary battery sled for AA Alkaline batteries

Battery charger | BATCHG125



- 7 ports battery charger
- 5 ports for charging batteries which are equipped in the Beltpacks and 2 ports for charging batteries
- 4 hours for full charging

Battery charger | BATCHG225



- 8 ports battery charger
- 8 ports for charging batteries and 8 ports for storing batteries
- 4 hours for full charging

Beltpack pouch | BPPCH100



· Robust and soft silicon pouch for the Beltpack protection

Antenna holder | RHD1000



- A designated holder for Remote Antenna and Repeater
- Installable on the wall, camera tripod and stand
- LAN RJ-45 Neutrik connector on the bottom
- Optional 'L' shape additional bracket available

BS1000 BASE STATION



FRONT



- 01 Power switch
- 02 Loudspeaker
- 03 MIC on/off button (LED)
- **04** Loudspeaker on/off button (LED)
- 05 MENU button (LED)
- 06 Master Volume and select DIM, CUT, Sidetone
- 07 RMK button (LED)
- 08 SA button (LED)
- 09 TTA button (LED)
- 10 CH1 Volume, push to call
- 11 CH1 Talk button (LED)

- 12 CH3 Volume, push to call
- 13 CH3 Talk button (LED)
- 14 Display screen 1
- 15 CH2 Talk button (LED)
- 16 CH2 Volume, push to call
- 17 CH4 Talk button (LED)
- 18 CH4 Volume, push to call
- 19 CH5 Volume, push to call
- 20 CH5 Talk button (LED)
- **21** CH7 Volume, push to call
- 22 CH7 Talk button (LED)

- 23 Display screen 2
- 24 LEDs for LAN status
- 25 CH6 Talk button (LED)
- 26 CH6 Volume, push to call
- 27 CH8 Talk button (LED)
- 28 CH8 Volume, push to call
- 29 Headset connector

21 48VDC

22 48VDC for duplex

- **30** Gooseneck microphone connector
- 31 Antenna mounting hole
- 32 Ear for rack mounting

REAR



- 01 Antenna
- 02 2-Wire NULL control
- 03 2-Wire channel A
- 042-Wire channel A
- 05 2-Wire channel B
- 06 2-Wire NULL control
- 07 4-Wire channel A
- 08 4-Wire channel B
- 09 4-Wire channel C input
- 10 4-Wire channel Coutput

- 11 4-Wire channel D input
- 12 4-Wire channel D output
- **13** SA
- 14 Multi-Sync
- 15 Antenna
- 16 PC PROG
- 17 Relay, Opto, GPIO
- 18 Daisy-chain PoE LINE 1
- 19 Daisy-chain PoE LINE 2
- 20 PoE input

| CONVER | CONVERGED DIGITAL INTERCOM SYSTEM | | | | |
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GENIE WIRELESS IFB RECEIVER

Scalable yet cost efficient Magic wish Intercom



GENIE **SYSTEM USAGE**



GENIE SOLO | BS1000 Full Configuration

