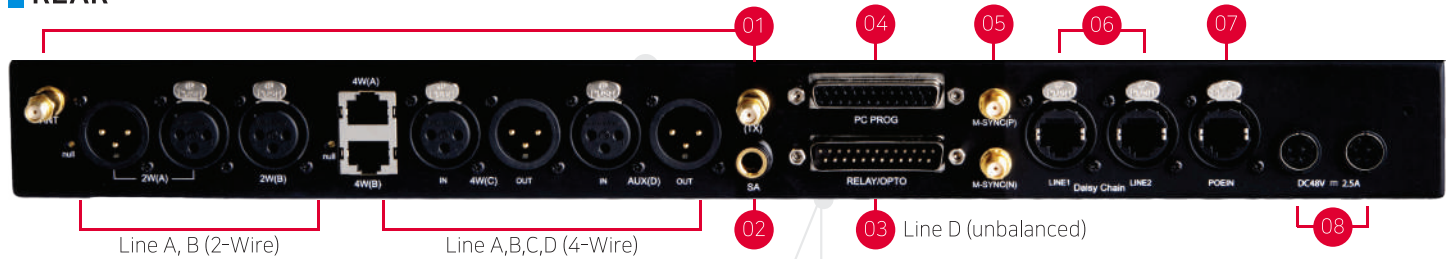# GENIE Base Station **BS1000**

FRONT

01 Loudspeaker
02 Microphone on, Loudspeaker on, Menu (LED indicator)
03 Remote Mic. Kill, Stage Announce, Talk To All (LED indicator)
04 Master Volume, Push to select DIM, CUT, Sidetone
05 CH1-CH8 Volume, Push to Call

06 CH1-CH8 Talk key (LED indicator)
07 Headset connector (6pin Mini-Din Receptacle)
08 Gooseneck microphone connector(XLR3F)
09 Antenna mounting hole
10 Display screen

REAR

Line A, B (2-Wire)   Line A,B,C,D (4-Wire)   Line D (unbalanced)

01 Antennas
02 Stage Announce
03 Relay/Opto/Line D

04 Firmware upgrade (D-sub 25pin Female)
05 Multi-Sync (Ethernet Synchronization)
06 Daisy-chain PoE Line Out

07 PoE input
08 48VDC 2.5A Power input

Genie is the industry's first converged digital IP intercom system enabling both IP Key Panel and 5GHz wireless communications in one system. Genie is a daisy-chain PoE scalable solution facilitating connections across an entire studio, theatre or stadium through CAT5e STP or fiber cable offering various communication routings with the best-in-class audio clarity and low system latency. The system comprises a Base Station, IP Key Panel, Remote Antenna, Repeater, IP Beltpack, Wireless Beltpack, Wireless IFB Receiver, Line Router and WAN Link. Depending on the system configuration and requirement, Genie offers various redundant solutions with an optional dual power.
Genie Key Panels are matrix-free IP networking intercom system designed to be used independently or in conjunction with Genie wireless devices. The Key Panels provide various audio paths such as peer-to-peer talk and listen, allocation of multiple key panels on a key (group key), interoperability with Genie group channels(conference mode), Line connections, Line audio routings and IFBs. Also, a license-free and channel-rich 5GHz UNII band secures for the better reliability on wireless connections and communications in congested environments. GCM(Genie Configuration Manager) supports for an integrated system management with an efficient configuration and setting. The connection status and RF channel in use of each antenna can be monitoring with full visibility.

GENIE devices at a glance

Model	Product name	Talk key	4W or 2W Line	4W Line	Daisy-chain PoE	PoE In	Relay	OPTO Input	Multi-Sync	Power Redundancy
BS1000	Base Station	8	2	2	2	1	2	2	O	(2 x PSU) + PoE
BS850	Base Station	1	-	2	-	-	-	-	O	PSU
RA100DW	Remote Antenna, IP53-65 sealing	-	-	-	2	1	-	-	-	PSU + PoE
RA100	Remote Antenna	-	-	-	-	1	-	-	-	PoE
RBS85	Repeater	-	-	-	-	1	-	-	-	PoE
BP850(851)	Wireless Beltpack	2 (4*)	-	-	-	-	-	-	-	Battery
WR850	Wireless Receiver	-	-	-	-	-	-	-	-	Battery
IBP10	Ethernet Beltpack	4	-	-	2	-	-	-	-	PoE

GENIE system capacity

Description	Base Station BS1000	Base Station BS850	Remote Antenna	Repeater RBS85
Connections of Remote Antenna RA100DW/RA100	6	3	–	–
Connections of Repeater RBS85	60 with 6 Remote Antennas	30 with 3 Remote Antennas	10	–
Connections of Wireless Beltpack BP850/BP851	128	128	128	128
Connections of IP Beltpack IBP10	120 with 6 Remote Antennas	60 with 3 Remote Antennas	20	–
Simultaneous Talk paths	70 with 6 Remote Antennas	40 with 3 Remote Antennas	10	10 with a Remote Antenna
Listen paths	Min. 128	Min. 128	Min. 128	Min. 128

Description	Connections
Recommended multiple Base Stations connection	Up to 5
Base Stations paired with a BP850/BP851/WR850	Up to 5
Base Stations paired with IBP10	Up to 2

BS1000 Main features

- Hybrid Base Station for Wireless Beltpack, Wireless IFB Receiver, IP Beltpack and IP Key Panel connections
- 8 Talk keys and Call buttons
- Operates in channel-rich 5GHz UNII band frequency
- Highly scalable Ethernet Remote Antenna and Repeater solution
  - Up to 6 Remote Antennas and 60 Repeaters connection
- 128 Key Panels or IP Beltpacks connection per system
- 128 Wireless Beltpacks or Wireless IFB Receivers are freely connected to any Genie antennas
- Any of 128 Wireless Beltpacks can be in master mode
- 5 Genie group channels(conference mode) for all Genie devices

- A Base Station with 6 Remote Antennas provides up to 70 simultaneous Talk paths and unrestricted Listen paths.
- Excellent audio clarity with 7.2KHz audio bandwidth and 23ms low latency
- Top security with AES 256 bits level III encryption
- 4 Lines (4-wire, 2-wire and AUX I/O), Relays and Opto-isolated inputs
- Direct connection with a Walkie Talkie system (Unbalanced audio)
- Ethernet synchronizations to avoid possible RF interference, packet loss, delay or jitter
- PoE Daisy-chain ring connection or Star topology enabled
- Optional dual power and on-demand redundant solutions
- System configuration, setting and monitoring with GCM

BS1000 Specification

RF Frequency	Use 20Mhz channels within the 5GHz UNII band from 5180 - 5845MHz depending on regions
Antenna	2 x external 1/2 –wave dipole, SMA female
RF Modulation	QPSK
Beltpacks per Base Station	128 Wireless Beltpacks or Receivers can be paired with a Base Station. 10 Talk and 128 Listen paths are supported without an additional Remote Antenna.
Genie group channels	Five(5) conference channels
Audio Bandwidth	200 Hz to 7.2 KHz
Loudspeaker	3watts
Headset output	500mW, 32 Ohm
Latency	One-way system latency less than 23ms direct
Communication Security	256 bits key AES level 3 Encryption
Front Panel Display	Two OLED
Front Panel Button	8 Talk key, LED indicated Buttons and Rotary encoders
Headset	Dynamic or Electret, 6-pin Mini-Din male, Receptacle
Gooseneck mic.	Dynamic or Electret, XLR-3F

Line A (2-Wire)	XLR-3F with XLR-3M loop through
Line B (2-Wire)	XLR-3F
Line A and Line B (4-Wire)	Two RJ-45, 600Ω balanced, level adjustable
Line C (4-Wire)	Input: XLR-3F Output: XLR-3M, 600Ω balanced, level adjustable
Line D (4-Wire)	Input: XLR-3F Output: XLR-3M, 600Ω balanced, level adjustable
Stage announce Output	Phone Jack (6.3Φ), Transformer isolated, Line-level output
Multi-Sync ports	SMA Female, Up to 5 Base Station connections
PC PROG	25-pin D-type female, Upgrading the firmware
Relay/Opto/AUX(D)	3 x Relay outputs, 2 x Opto inputs, AUX I/O (Unbalanced)
PoE Input	RJ-45 Connector, 100Mbps Standard PoE specification
Daisy-chain PoE Line 1, Line 2	Two PoE RJ-45 Connectors, 100Mbps Standard PoE specification
Power Input	Consumption: 17 watts Two 48-56VDC inputs, PoE input An external PSU provides 48VDC 2.5A, 100-240VAC, 47-63Hz
Operating Temperature	0°C to 50°C (32° F to 122° F)
Dimensions	16.83W x 8.03D x 1.73H inch (42.75W x 20.4D x 4.4H cm)
Weight	7.72 lb (3500g)

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