BOLERO WIRELESS INTERCOM
INCLUDING STANDALONE APPLICATION

Riedel's state of the art, next-generation, wireless intercom system. Full artist-integration or standalone.

As an all-new wireless intercom system capable of supporting 10 beltpacks per antenna and up to 100 antennas in a single deployment, Bolero is a true game-changer. Bolero redefines the wireless intercom category with features such as ADR (Advanced DECT Receiver) with multiple-diversity and RF anti-reflection technology for greater RF robustness, complete integration with Riedel's Artist, "Touch&Go" beltpack registration, and versatile operation as a wireless beltpack, a wireless keypanel, and — in an industry first —a walkie-talkie.

When used with Artist, Bolero runs over a standards-based AES67 IP network with decentralized antennas connected to AES67 switches and to Artist frames equipped with AES67 client cards, providing a fully integrated point-to-point roaming intercom ecosystem. The more decentralized antennas added, the more robust the network becomes.

Bolero's Standalone Application is license-based and comes with several plug-and-play features. First, antennas can be used individually, in a ring structure, or daisy-chained as the situation demands. Also, up to 100 antennas and 100 beltpacks can be integrated into a single system. These antennas can be placed up to 300 meters apart and up to five can be powered via the CAT5 network using a new external PSU. The system is quickly and easily configured over the IP connection using a web browser. Finally, a throw-down box can be used to interface the standalone Bolero with other intercom systems via 4-wire.

The Bolero high-clarity voice codec provides both higher speech intelligibility and more efficient use of RF spectrum supporting twice the number of beltpacks per antenna for the same audio bandwidth as other DECT-based systems.

The Riedel-exclusive ADR technology, combines a unique receiver design with multiple diversity elements specifically designed to reduce sensitivity to multipath RF reflections, making Bolero useable in challenging RF environments where other systems have great difficulty.

The beltpack itself features six buttons for six intercom channels or point to point communications, plus a separate "Reply" button that easily facilitates a reply to the last person that called. Bolero's sunlight readable and dimmable display can be inverted so that it is readable in any orientation. Also, in an industry first, the beltpack can be used without a headset like a walkie-talkie radio utilizing an integrated mic and speaker.

Bolero beltpacks support Bluetooth 4.1, allowing either a Bluetooth headset or a Smartphone to be connected. When a Smartphone is connected, the beltpack can act like a car's "hands free" setup so the user can receive calls on their phone and talk and listen via their beltpack headset. Users can also inject phone calls directly into the intercom channels, providing new levels of workflow flexibility.
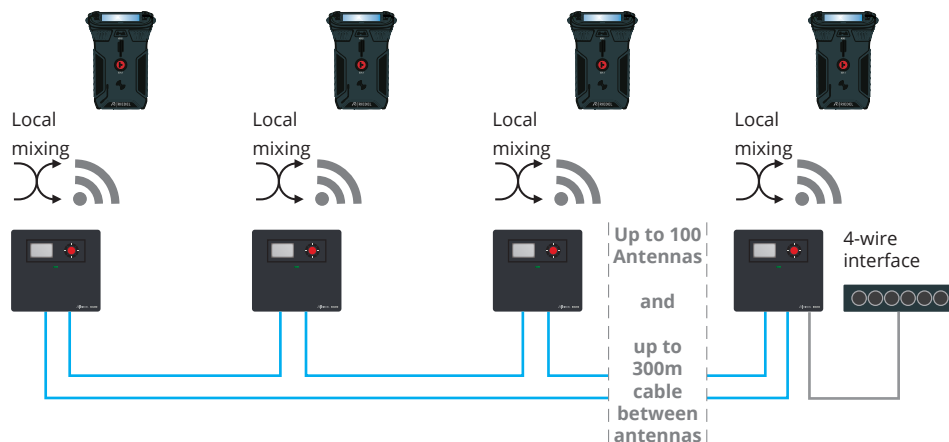
Based on Riedel's extensive rental experience, the beltpack uses a combination of premium materials, including high-impact plastics and rubber overmolds making it both tough and comfortable to use in any situation.

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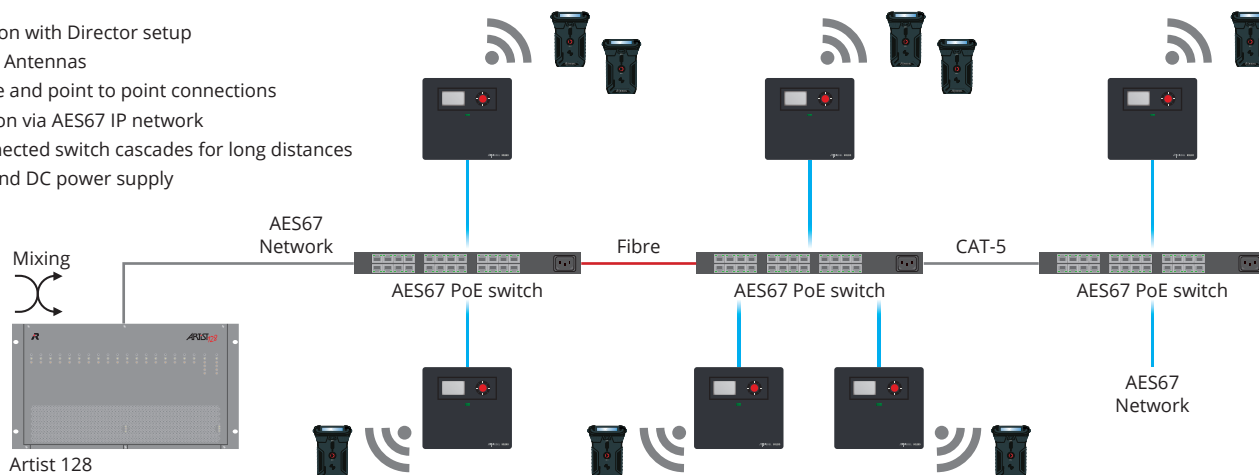## IS STATE-OF-THE-ART WIRELESS COMMUNICATION

BOLERO Standalone

· Daisy chain or redundant ring antenna network
· Redundant antenna power scheme
· Up to 300m CAT5 cable between Antennas
· 100 beltpacks, 100 Antennas,
· 12 Partylines and unlimited point to point connections
· Advanced DECT with seamless handover
· Simple OTA and NFC registration
· Integrated web browser for setup
· External 4W and GPIO Interface box

Local mixing

Local mixing

Local mixing

Local mixing

Up to 100 Antennas

and

up to 300m cable between antennas

4-wire interface

BOLERO Integrated

· Full Artist integration with Director setup
· 100 beltpacks, 100 Antennas
· Unlimited Partyline and point to point connections
· Antenna distribution via AES67 IP network
· Multiple fiber connected switch cascades for long distances
· Redundant PoE+ and DC power supply

Mixing

AES67 Network

Fibre

CAT-5

AES67 PoE switch

AES67 PoE switch

AES67 PoE switch

AES67 Network

Artist 128

THE TOUGH
MULTI-TALENTED
INTERCOM

100 antennas per system = industry-leading
100 beltpack capacity per system

Intelligent use of bandwidth
results in 10 beltpacks per antenna

Standards-based, decentralized,
AES67 IP-networked antennas

Fully re-programmable FPGA
to handle future networks

Up to six full-duplex keys plus
convenient REPLY button to last caller

Riedel-exclusive ADR receiver
technology overcomes multipath issues

Modern, high-clarity voice codec increases
beltpack to antenna density

Integrated mic and speaker
for headset-free operation

Can be used as a beltpack, a portable
desktop keypanel, or Walkie-Talkie

Fully integrated with Artist for point-to-point
comms and ease of use

NFC means no registration headaches!
Touch the beltpack to the antenna and GO!

Next generation, digital, global
license free, 1.9GHz DECT band

Tough, ergonomic, beltpack built to survive

Integrated Bluetooth technology for
wireless headsets or phone connection

Bottle opener – just in case!

IP-65 environmental sealing

ANTENNA	Bolero Active Antenna (BL-ANT-1010-19x)
No of beltpacks per antenna	10
Radio frequency range	1.880 - 1.930GHz (region dependant)
Antenna radio coverage range	Indoor (structure dependent): ca. 200-400m; Outdoor (free line of sight): ca. 300-500m
Beltpack to antenna range	Indoor (structure dependent): ca. 100-200m; Outdoor (free line of sight): ca. 150-250m
Programmable transmission power	Yes
Beltpack registration	1 touch NFC & over the air
Network connection	AES67 IP or direct cable connection in standalone mode
Display type	High contrast E-ink display
Power supply	PoE+ (802.3at, type 2, class 4, 15-30W) or 10 to 57 VDC
Power consumption	15W
Mounting points	Mic stand threaded socket 5/8" & 3/8" inside, spigot adapter with wing screw lock, Kensington lock hole, & screw hole for a safety wire mounting
Environmental	IP54 sealing; dust + water splashing from any direction
Operational temperature	-10 to 45 °C
Humidity	0-90%, non-condensing Ta=40 °C
Dimensions	210mm (W) x 66mm (D) x 190mm (H); 8.3" (W) x 2.6" (D) x 7.5" (H)
Weight	1380g

BELTPACK	Bolero 6-key beltpack (BL-BPK-1006-19-xx)
Multi-path delay spread protection	Yes, ADR (Advanced DECT receiver)
Audio bandwidth	200 Hz to 7 KHz (-3dB)
Mode of operation	Full-duplex on all routes
Encryption	AES encryption, 256 bit
Line in	3.5mm jack, 20Hz to 20kHz
Talk controls	4 pushbuttons + reply key + 2 walkie-talkie keys (momentary, latching & auto mode)
Volume / Level controls	2x Master or slave + menu navigation
Display	High contrast sunlight readable full colour LCD display
Audio prompts	Out of range, Bluetooth connected / disconnected; Beltpack registered / deregistered, Beltpack unregistered / not registered, Beltpack not connected, Battery low
No. of full-duplex audio paths	6 with individual level control
Handheld operation	Walkie-talkie mode
Vibrate module	Vibrate indicates incoming call or silent call is active
Internal loudspeaker	Freq. <500Hz to >7kHz 80dB/SPL/0.5W/1m, @ <5% THD.
Remote health monitoring	Battery charge status, via web browser
Battery	Lithium ion external removeable battery pack with user removeable clip
USB charging	USB Type C connector for beltpack charging and firmware update
Operation time	ca. 17 hours typical
Headset connector	4-pin male XLR, user replaceable
Microphone type	Electret (ca. 5V bias voltage) or dynamic, user selectable or automatic
Side-tone and microphone gain	Individually adjustable for each beltpack & via remote control
Bluetooth	v4.2 (hands free profile & HSP headset profile)
Bluetooth phone call mix into intercom	Yes
Lanyard anchor points	Yes
Environmental	IP65 sealing, dust tight + water jet from all angles
Storage temperature	-20 to 50 °C long term; -20 to 60 °C short term
Operational temperature	-10 to 55 °C
Humidity	0-90%, non-condensing Ta=40 °C
Dimensions	(W) 86mm, (D) 48mm, (H) 130mm; (W) 3.4" (D) 1.9" (H) 5.1"
Weight	420g inc. battery and clip

BATTERY CHARGER	5-bay drop in charger (BL-CHG-1005-R)
No of beltpack slots	5
Beltpack charge time	up to 3 hours
Charge status LEDs	1 per charge slot
Beltpack display	% charged, time to full, temperature, battery health
USB type A	for firmware update and charging a Phone or beltpack via cable
USB type C	for firmware update and charging a Phone or beltpack via cable
Power socket	1x IEC
Power supply	100-230VAC / 50 - 60 Hz
Mounting	2x wall mounts or 19" rack drawer via optional accessory kit

RIEDEL