

Bolero Beltpack

Quick Start Guide

A00



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This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications made to this equipment not expressly approved by Riedel may void the FCC authorization to operate this equipment.

Radiofrequency radiation exposure Information:

For body worn operation, this equipment has been tested and meets the FCC RF exposure guidelines when used with the Riedel accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

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1 Preface

Thank you for choosing a Riedel product.

This PDF document provides detailed information about the Bolero Beltpack, pin outs, mechanical and electrical data.

For further information, please refer to the [Riedel Website](#) or contact your local distributor or the Riedel headquarters in Wuppertal.

NOTICE

This manual, as well as the software and any examples contained herein are provided “as is” and are subject to change without notice. The content of this manual is for informational purpose only and should not be construed as a commitment by Riedel Communications GmbH & Co. KG & Co. KG or its suppliers. Riedel Communications GmbH & Co. KG & Co. KG gives no warranty of any kind with regard to this manual or the software, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Riedel Communications GmbH & Co. KG & Co. KG shall not be liable for any errors, inaccuracies or for incidental or consequential damages in connection with the furnishing, performance or use of this manual, the software or the examples herein. Riedel Communications GmbH & Co. KG & Co. KG reserves all patent, proprietary design, title and intellectual property rights contained herein, including, but not limited to, any images, text, photographs incorporated into the manual or software. All title and intellectual property rights in and to the content that is accessed through use of the products is the property of the respective owner and may be protected by applicable copyright or other intellectual property laws and treaties.

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Bolero Beltpack Quick Start Guide

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1.1 Information


Symbols

The following tables are used to indicate hazards and provide cautionary information in relation to the handling and use of the equipment.

Danger	
	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	The highlighted line indicates the activity to prevent the danger.


Warning	
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	The highlighted line indicates the activity to prevent the danger.

Caution	
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
	The highlighted line indicates the activity to prevent the danger.

	This text is for generally information . It indicates the activity for ease of work or for better understanding.
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Service


- All service has to be undertaken **ONLY** by qualified service personnel.
- There are no user serviceable parts inside the devices.
- Do not plug in, turn in or attempt to operate an obviously damaged device.
- Never attempt to modify the equipment components for any reason.

Caution	
	All adjustments have been done at the factory before the shipment of the devices. No maintenance is required and no user serviceable parts are inside the module.

Voltage

- The power cable should only be connected to a correctly grounded source.
- Do not use any adapters.
- Never bypass a ground contact.



Danger	
	To reduce the risk of electric shock do not remove cover or expose the products to rain or moisture.

Warning	
	Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.
	Apparatet må tilkoples jordat stikkontakt.
	Apparaten skall anslutas till jordat uttag.

Environment



- Never place the devices in an area of high dust particles or humidity.
- Never expose the device to any liquids.
- If the devices have been exposed to a cold environment and transferred to a warm environment, condensation may form inside the housing. Wait at least 2 hours before applying any power to the devices.

Declaration of Conformity

	The devices conforms to the EU guidelines EMV (EMC) 2014/30/EU NSR (LVD) 2014/35/EU RTTE (RED) 2014/53/EU as attested by the CE mark.
	FCC IDs: <ul style="list-style-type: none"> • YFJANT101019 (Bolero DECT Antenna / BL-ANT-1010-19) • YFJBPK100619 (Bolero Wireless Beltpack / BL-BPK-1006-19)
Industry Canada ICs:	<ul style="list-style-type: none"> • 8706A-ANT101019 (Bolero DECT Antenna / BL-ANT-1010-19) • 8706A-BPK100619 (Bolero Wireless Beltpack / BL-BPK-1006-19)
Standards:	<ul style="list-style-type: none"> • EN 300 328 V1.9.1 / ETSI EN 300 328 V2.0.20 • EN 300 330 V1.8.1 / ETSI EN 300 330V2.1.0 • EN 301 406 V2.2.1 • EN 301 489-1/-3/-6/-17, EN 55022, EN 55024 • IEC/EN 60950-1/-22 • ARIB STD-T66 • ARIB STD-T101

Disposal

Disposal of old Electrical & Electric Equipment (Applicable throughout the European Union and other European countries with separate collection programs)

 	<p>This symbol, found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources. For more detailed information about the recycling of this product please contact your local city office.</p>
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1.2 About Bolero

Bolero Wireless Intercom

The Riedel Bolero Wireless Intercom system is a digital, easy to use full-duplex communications solution for broadcast, security, industrial and theater applications as well as for sports and cultural events.

Bolero takes a completely new approach to wireless communications, pushing it beyond the limits of existing wireless intercom solutions.

Riedel's Bolero Wireless Intercom solution utilizes the benefits of the Digital Enhanced Cordless Telecommunications (DECT) standard's base layer. This provides a license-free, cellular architecture with seamless hand-over between cells, allowing each Bolero Wireless Beltpack to continuously monitor and automatically select the best connection to the Antenna. The audio transmission takes place directly via the antennas. There is no need for additional devices.

Light and powerful custom lithium rechargeable battery packs are used for the Beltpack and the Antenna to provide UPS power. Battery packs are able to charge inside the Beltpack, the Antenna as well as separately in the charger.

What is Bolero?

- Digital Wireless Intercom System
- based on the DECT standard

Riedel Bolero - Key Features

- Wireless Partyline and point-to-point communications
- 4 Wireless Partylines
- Cellular architecture with seamless hand-over
- Up to 10 individually addressable Wireless Beltpacks can be connected at the same time at one Antenna
- Excellent audio quality via VoIP-over-DECT technology (license-free worldwide)
- Connection of antennas via existing Ethernet infrastructure (PoE)
- No interference with radio microphones, In Ear Monitoring (IEM) or other UHF systems

2 Bolero Beltpack

The Bolero Wireless Beltpack is a light and compact, digital headset station with two individually configurable channels for intercom and IFB use. Two rotary level controls on the front of the Beltpack allows volume-control for each channel. Pushing the Talk key toggles talk on/ off with momentary or latching operation. Activation is indicated by a Talk LED, and a bright call light indicates an incoming call. The Beltpack features a color display which by default shows the labels for the four function keys. In addition, the display gives the user access to the intuitive configuration menu. The Bolero Wireless Beltpack has an XLR connector for headset and an USB port for firmware updates. A fully charged Bolero rechargeable Battery allows for 15 hours of operation. The rugged housing with rubber protectors houses the internal antenna.

2.1 Operating Elements



Figure 1: Beltpack (front/top and rear/bottom view)

A	Display
B	Mounting holes
C	Walkie-Talkie keys 5+6 (side)
D	Rotary encoder (B)
E	Speaker
F	Microphones
G	Channel keys 1...4 (top)
H	Rotary encoder (A)
I	Menu key
J	Reply key
K	NFC contact point
L	Belt clip
M	Charging contacts
N	Battery release button
O	Power button
P	Headset connector (XLR-4)
Q	Line-In, Charging sockets (3.5mm jack / USB Type-C)
R	Bottle opener
S	Battery

XLR-4 (male)

The headset connector is a 4-pole male XLR connector and supports mono headsets with electret or dynamic microphones, depending on the menu setting.

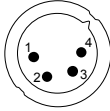


Figure 2: XLR 4 male

Pin	Headset
1	Microphon -
2	Microphon + (+5 VDC)
3	Earphones -
4	Earphones +

The microphone power (+5 VDC) will be switched on/off according to the menu setting.

3.5mm jack (female)

The 3.5 mm jack is a line input connector.



Figure 3: 3.5mm jack female

Pin	Line In 3.5mm jack
1	+
2	-

USB Type-C

The USB connector allows to charge the Beltpack. Furthermore the connector is used for firmware updates.

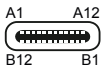


Figure 4: USB Type-C

Pin	Ladebuchse	Pin	Ladebuchse
1	GND	7	Dn1
2	SSTXp1	8	SBU1
3	SSTXn1	9	VBUS
4	VBUS	10	SSRXn2
5	CC1	11	SSRXp2
6	Dp1	12	GND

Charging is only possible with >500 mA USB ports. 100 mA are not supported.

2.2 Status LEDs



Figure 5: Beltpack (Status LED positions top)

Status-LED ¹

off	Beltpack is turned off	
green	on	Beltpack ready (System ok)
	blinking	connecting to the Antenna
red	on	<ul style="list-style-type: none"> booting low battery level outside the Antenna coverage area
	blinking	<ul style="list-style-type: none"> Partyline failure critical battery level (<15 minutes of operation)
	fast blinking	critical error (no function)
blue	on	Beltpack ready with Bluetooth connection (System ok)
	blinking	searching a device (Bluetooth or NFC)

Call-LEDs ² ³

off	no active call	
green	on	outgoing call active
yellow	blinking	incoming call active
red	blinking	active Antenna occupied (time slots are full)

2.3 Getting Started

- Charge the battery.
- Attach the headset to the headset connector at the Beltpack.
- Power up the Beltpack by pushing the **Power** key on the bottom.
- Open the Beltpack-Menu by pressing and holding (>2.5 sec.) the **Menu** key.
- Select the microphone type of the headset:
Menu page (Setup) > **Microphone Type: Auto detect, Dynamic, Electret**
- Register the Beltpack in the Bolero-Net:
Menu page (Setup)-> **Registration**
Hold the NFC contact point of the Beltpack close to the NFC contact point of the Antenna.

The Beltpack is now ready for operation.

All members can listen and talk to the members registered to the Bolero-Net.

Key Functions

Pushing one of the six keys allows to talk in the respective Partyline. The active Partyline has a colored indication in the display and the Call LED is on.

The keys 5 and 6 are non latching by preset. That means releasing this key will stop talking to this Partyline. The keys 1 to 4 are latching. Push again the key to deactivate the respective Partyline.

The closed Partyline is displayed in inactive color and the Call LED is off.

Volume Adjustment

Rotating either rotary encoder adjusts the master volume of the speaker or headset if the display shows the Main-View. The header shows a level meter of the current master volume.

To change the volume level of a single Partyline, press briefly the Menu key (<0.5 sec.).

Now the volume level of the Partylines (1+2) can be adjusted by the rotary encoders (A+B). The bars above the key labels indicate the individual adjusted volume level of the respective Partyline.

More briefly key presses on the Menu key switches to the next Partylines 3+4, 5+6 and finally to the Reply key. An additional key press switches back to the first Partylines.

After 3 seconds with no rotary encoder change, the Beltpack switches back to the Main-View.

2.4 Technical Specifications

Multi-path delay spread protection	Yes, ADR (Advanced DECT Receiver)	
Audio Bandwidth	200 Hz ... 7 KHz (-3dB)	
Mode of Operation	Full-duplex on all routes	
Encryption	AES256 Bit encryption	
Line in	3.5mm jack, 20Hz ... 20kHz	
Talk Controls	4 pushbuttons + reply key + 2 handheld keys (Momentary, latching & auto mode)	
Volume / Level Controls	2x Master or slave + menu navigation	
Display	High contrast sunlight readable full colour LCD	
Audio prompts	Out of range, Battery full, Battery good, Battery low, Belt pack registered	
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 ... >7kHz 80dB/SPL/0.5W/1m, @ <5% THD	
Remote Health Monitoring	Battery charge status, remaining time	
Battery	Lithium Ion external removable battery pack with user removable clip	
USB Charging	USB Type-C connector for firmware update and backpack charging	
Operation Time	~17 hours typical	
Headset Connector	4-pin male XLR, user replaceable	
Microphone Type	Electret (~5V bias voltage) or dynamic, user selectable or automatic	
Side-tone and microphone gain	Individually adjustable for each Backpack & via remote control	
Bluetooth	V4.1 (hands free profile & HSP Headset Profile)	
Bluetooth phone call mix into intercom	Yes	
Lanyard anchor points	Yes	
Dimensions	Width	86 mm / 3.4"
	Height	130 mm / 5.1"
	Depth	48 mm / 1.9"
Weight	420 g (inc. battery and clip)	
Environmental	IP65 sealing: dust tight + water jet from all angles	
Operating Environment	Temperature	-10° ... +55°C
	Humidity	0 % ... 90 % rel. (non-condensing), Ta=40°C
Storage Temperature	-20° ... +70°C	

3 Appendix

3.1 Service

If you have any further questions, we offer comprehensive customer service options for this product including:

- Telephone Service
- Email Service
- Skype Service
- Fax Service
- Configuration Support
- Trainings
- Repair

Your primary point of contact for any service issues is your local dealer.

In addition, Riedel Customer Service in Wuppertal, Germany is also available to assist you.

Telephone: +49 (0) 202 292 9400
(Monday - Friday, 8am – 5pm, Central European Time)

Fax: +49 (0) 202 292 9419

Skype: riedel.communications.service

Or use the contact form on our website:

www.riedel.net > Company > Riedel Communications > Contact > Wuppertal (Headquarters)

For repairs, please contact your local dealer. Your dealer will be able to help process your repair as fast as possible and/or arrange for the delivery of spare parts.

The address for repairs sent directly to Riedel Communications GmbH is:

Riedel Communications GmbH & Co. KG
- Repairs -
Uellendahler Str. 353
D-42109 Wuppertal
Germany

Please add a completed repair form to all your repairs.

The form can be found at the Riedel website:

www.riedel.net > Company > Services > Support > Contact

3.2 Notes

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