

Bolero Charger

Quick Start Guide

A00



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.

This device is granted pursuant to the Japanese Radio Law (電波法) and the Japanese Telecommunications Business Law (電気通信事業法). This device should not be modified (otherwise the granted designation number will become invalid).



The device conforms to the EU guidelines

- EMV (EMC) 2014/30/EU
- NSR (LVD) 2014/35/EU

as attested by the CE mark.

Standards:

- EN 301 489-1/-3/-6/-17, EN 55022, EN 55024
- IEC/EN 60950-1
- ARIB STD-T66
- ARIB STD-T101

9001:2000:



DIN EN ISO 9001:2000
Zertifikat: 01 100 071754

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1 Preface

Thank you for choosing a Riedel product.

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

For further information, please download the full Bolero User Manual on the Riedel Website (www.riedel.net).

You need to login to access the download area (Services > Downloads)

For further information, please contact your local distributor or the Riedel headquarters in Wuppertal.

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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.


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	
	<p>To reduce the risk of electric shock do not remove cover or expose the products to rain or moisture.</p>

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

Battery Safety

The Bolero-Beltpacks are operated with the following battery type: Lithium-Ion, 3.6V, 4.8Ah, 17.3Wh, 11CP7/39/65-2, with integrated electronics. For best performance charge the battery fully before initial use or reusing it after being stored for a long period.

In order to ensure air transport safety, the Bolero Battery Pack is tested according to UN 38.3 – Transport of dangerous goods.


Warning	
	<p>There is a risk of fire and burns if the battery pack is handled improperly.</p> <ul style="list-style-type: none"> • Do not short-circuit. • Do not dismantle, open, crush, heat above 60°C (140°F) or incinerate. • Recycle or Dispose of property. • Charge before initial use. • Use the specified Riedel Bolero Charger only or charge the battery via the Beltpack. • Do not charge using any other equipment from either side. • Do not connect the contacts to any other equipment.
	<p>Further recommendations:</p> <ul style="list-style-type: none"> • Avoid storage in direct sunlight. • Do not subject batteries to mechanical shock. • In the event of a cell leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice. • Do not use batteries which are not designed for use with the Beltpack. • Keep batteries out of the reach of children. • Keep batteries clean and dry. • Wipe the battery terminals with a clean dry cloth if they become dirty. • Use the battery only in the application for which it was intended. • When possible, remove the battery from the Beltpack when not in use.

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.

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. It is an all-new wireless intercom system capable of supporting 10 Beltpacks per antenna and up to 100 antennas in a single deployment. 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.

Bolero 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.

Bolero is fully integrated in Riedel's Artist Matrix. Features like "Touch&Go" Beltpack registration, versatile operation as a wireless Beltpack, a wireless keypanel, and – in an industry first – a walkie-talkie pushing it beyond the limits of existing wireless intercom solutions.

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. The Bolero high-clarity voice codec provides both higher speech intelligibility and more efficient use of RF spectrum supporting a higher number of Beltpacks per antenna in the same audio bandwidth.

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 features 6 buttons for 6 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. 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 a Smartphone to be connected.

The Beltpack design with a combination of premium materials, including high-impact plastics and rubber overmolds make it both tough and comfortable to use in any situation.

Light and powerful high performance lithium rechargeable battery packs are used for the Beltpack. Battery packs are able to charge inside the Beltpack as well as separately in the 5-bay charger.

What is Bolero?

- A next generation high performance digital wireless intercom system
- License-free, cellular architecture with seamless hand-over
- Riedel exclusive advanced next generation DECT receiver with multiple-diversity and RF anti-reflection technology for greater RF robustness
- Efficient use of RF spectrum for a hasselfree operation even with high channel count

Riedel Bolero – Key Features

- 10 Beltpacks per Antenna
- 100 Antennas per system
- 100 Beltpack capacity per system
- Cellular architecture with seamless hand-over
- Standards-based, decentralized, AES67 IP-networked Antennas
- Fully integrated with Artist for point-to-point comms
- License free
- No registration headaches! Touch the Beltpack to the antenna and GO!
- Riedel-exclusive ADR receiver technology
- Up to six full-duplex keys plus convenient REPLY button
- Modern, high-clarity voice codec
- Integrated mic and speaker for headset-free operation
- Can be used as a Beltpack, a portable desktop keypad, or Walkie-Talkie
- Tough & ergonomic – Beltpack built to survive
- Bluetooth 4.1
- Weatherproof
- Bottle opener – just in case!

2 Bolero Charger

The Bolero 5-bay battery charger safely and quickly charges five Bolero batteries at the same time. Light and powerful high performance lithium rechargeable battery packs are used for the Beltpack. Battery packs are able to charge inside the Beltpack as well as separately in the 5-bay charger.

Via the additional USB Type A and USB Type C connectors on the front side, two additional Bolero Beltpacks or any other USB devices can be charged.

Charging starts automatically after inserting the battery into a charging slot. An empty battery is charged in about 180 minutes. If a Beltpack is in the charging station, the Beltpack automatically shuts down the radio. If a Beltpack is charged via USB connector, the radio is not shut down.

2.1 Operating Elements

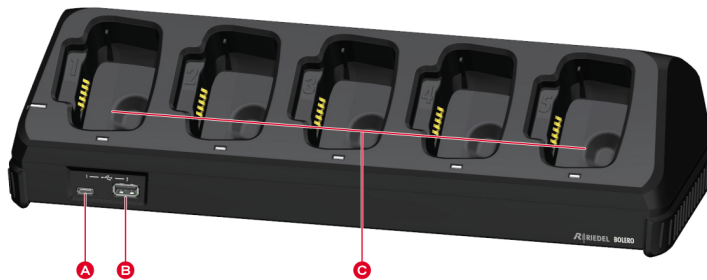


Figure 1: Charger (top view)



Figure 2: Charger (rear view)

- | | |
|----------|---|
| A | USB connector (USB Type-C) |
| B | USB charging connector (USB Type-A) |
| C | 5× charging slots for Batteries or Beltpacks |
| D | Mains connector |
| E | Network connector (RJ45) |

USB Type-C

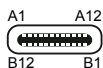


Figure 3: USB Type-C

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

The USB connector is used to update the firmware and to charge an additional Bolero Beltpack or any other USB device. The maximum output current is 1.5 A.

USB Type-A



Figure 4: USB Type-A

Pin	Description
1	VBUS
2	D-
3	D+
4	GND

The USB connector is used to charge an additional Bolero Beltpack or any other USB device. The maximum output current is 1.5 A.

RJ45



Figure 5: RJ45

Pin	Description
1	D1+
2	D1-
3	D2+
4	D3+
5	D3-
6	D2-
7	D4+
8	D4-

The RJ45 port supports links up to 1Gbps

2.2 Status LEDs

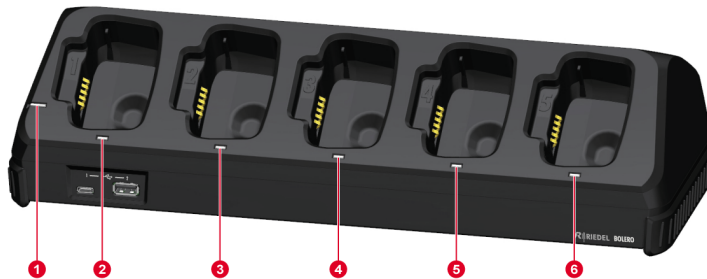


Figure 6: Charger (Status LED positions top)

System-LED **1**

off	no input power	
orange	on	booting
green	on	Charger ready

Slot-LEDs **2 - 6**

off	slot empty, not charging	
orange	blinking	charging, battery level 0–89% charged
green	blinking	charging, battery level 90–99% charged
	on	battery 100% charged
red	fast blinking	battery failure (not chargeable)



Figure 7: Charger (Status LED position rear)

Ethernet-LED 7

off	no data connection	
green	on	data connection ok
	blinking	data connection ok, traffic

2.3 Getting Started

- Connect the charger to mains.
The system LED indicates the overall status.
- Push the Beltpack or the battery in one charging slot.
The corresponding slot LED shows the charging state.
- Remove the Beltpack or battery out of the charger.

2.4 Technical Specifications

Charger Product Code	BL-CHG-1005	
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 / USB Type-C	<ul style="list-style-type: none"> For firmware update For charging a Beltpack, a phone, etc. via cable Max. 1.8 A 	
Power Socket	1x IEC	
Power Supply	100 ... 230 VAC	
Mounting	Stand-alone table mount, 2x wall mounts or 19" rack via optional accessory kit (1430045)	
Dimensions	Width	380 mm / 15"
	Height	95 mm / 3.8"
	Depth	135 mm / 5.3"
Weight	1140 g	
Operating Environment	Ambient Temperature	0° ... +45°C
	Humidity	20 % ... 90 % rel. (non-condensing)

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
- 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

Or use the contact form on our website:

www.riedel.net > Company > 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 > Services > Repairs

