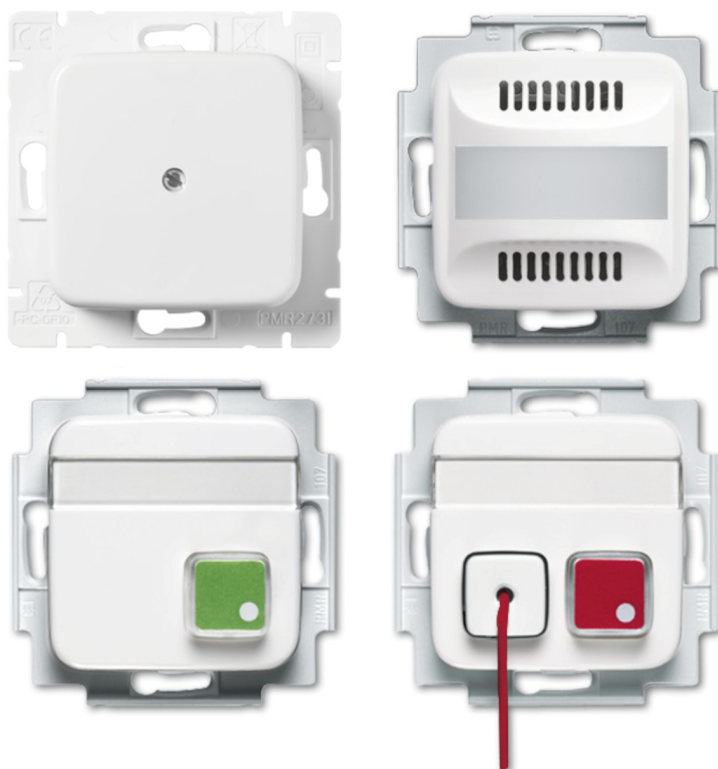


Busch-Infoline®

1510 UJ-...-101

Call set for handicapped toilet with battery buffer - VDE DIN 0834



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1 Notes on the instruction manual

Please read through this manual carefully and observe the information it contains. This will assist you in preventing injuries and damage to property, and ensure both reliable operation and a long service life for the device.

Please keep this manual in a safe place.

If you pass the device on, also pass on this manual along with it.

Busch-Jaeger accepts no liability for any failure to observe the instructions in this manual.

If you require additional information or have questions about the device, please contact Busch-Jaeger or visit our Internet site at:

www.BUSCH-JAEGER.de

2 Safety

The device has been constructed according to the latest valid regulations governing technology and is operationally reliable. It has been tested and left the factory in a technically safe and reliable state.

However, residual hazards remain. Read and adhere to the safety instructions to prevent hazards of this kind.

Busch-Jaeger accepts no liability for any failure to observe the safety instructions.

2.1 Information and symbols used

The following Instructions point to particular hazards involved in the use of the device or provide practical instructions:



Danger

Risk of death / serious damage to health

- The respective warning symbol in connection with the signal word "Danger" indicates an imminently threatening danger which leads to death or serious (irreversible) injuries.



Warning

Serious damage to health

- The respective warning symbol in connection with the signal word "Warning" indicates a threatening danger which can lead to death or serious (irreversible) injuries.



Caution

Damage to health

- The respective warning symbol in connection with the signal word "Caution" indicates a danger which can lead to minor (reversible) injuries.



Attention

Damage to property

- This symbol in connection with the signal word "Attention" indicates a situation which could cause damage to the product itself or to objects in its surroundings.



NOTE

This symbol in connection with the word "Note" indicates useful tips and recommendations for the efficient handling of the product.



This symbol alerts to electric voltage.

2.2 Intended use

The call set serves for setting up a call system in WCs for the handicapped according to DIN VDE 0834. The individual device inserts (see chapter 4.1 "Device overview" on page 9) are used for triggering and deactivating a call and for alerting a person.

2.3 Improper use

Each use not listed in Chapter 2.2 "Intended use" on page 5 is deemed improper use and can lead to personal injury and damage to property.

Busch-Jaeger is not liable for damages caused by use deemed contrary to the intended use of the device. The associated risk is borne exclusively by the user/operator.

The device is not intended for the following:

- Unauthorized structural changes
- Repairs
- Outdoor use

2.4 Target group / Qualifications of personnel

2.4.1 Operation

No special qualifications are needed to operate the device.

2.4.2 Installation, commissioning and maintenance

Installation, commissioning and maintenance of the device must only be carried out by trained and properly qualified electrical installers.

The electrical installer must have read and understood the manual and follow the instructions provided.

The electrical installer must adhere to the valid national regulations in his/her country governing the installation, functional test, repair and maintenance of electrical products.

The electrical installer must be familiar with and correctly apply the "five safety rules" (DIN VDE 0105, EN 50110):

1. Disconnect
2. Secure against being re-connected
3. Ensure there is no voltage
4. Connect to earth and short-circuit
5. Cover or barricade adjacent live parts

The call system must be installed by specialist staff according to DIN VDE 0834.

Batteries must be changed by the person designated in the plant operating log and responsible for maintenance. All work performed on the equipment must be carried out in accordance with the VDE 0834 standard.

2.5 Safety instructions



Danger - Electric voltage!

Electric voltage! Risk of death and fire due to electric voltage of 100 ... 240 V. Dangerous currents flow through the body when coming into direct or indirect contact with live components. This can result in electric shock, burns or even death.

- Work on the 100 ... 240 V supply system may only be performed by authorised and qualified electricians.
- Disconnect the mains power supply before installation / disassembly.
- Never use the device with damaged connecting cables.
- Do not open covers firmly bolted to the housing of the device.
- Use the device only in a technically faultless state.
- Do not make changes to or perform repairs on the device, on its components or its accessories.
- Keep the device away from water and wet surroundings.



Caution! - Risk of damaging the device due to external factors!

Moisture and contamination can damage the device.

- Protect the device against humidity, dirt and damage during transport, storage and operation.

3 Information on protection of the environment

3.1 Environment



Consider the protection of the environment!

Used electric and electronic devices must not be disposed of with domestic waste.

- The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

All packaging materials and devices bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.

The products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU Directive 2012/19/EU WEEE and 2011/65/EU RoHS)

(EU REACH ordinance and law for the implementation of the ordinance (EC) No.1907/2006).

4 Setup and function

4.1 Device overview

Alarm signalling insert

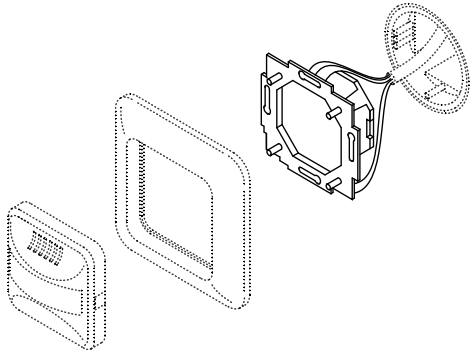


Abb. 1: 1515 U-...-101

Power supply with battery buffer

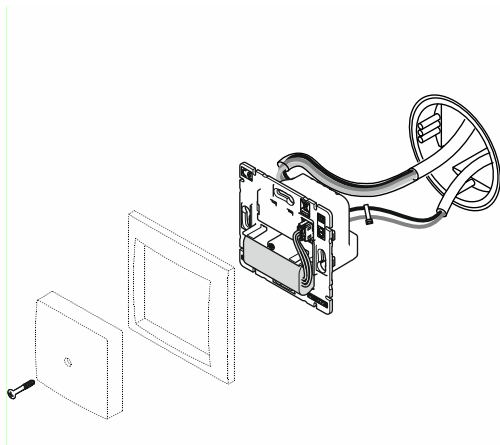


Abb. 2: 1519 U

signal/cancel push-button insert

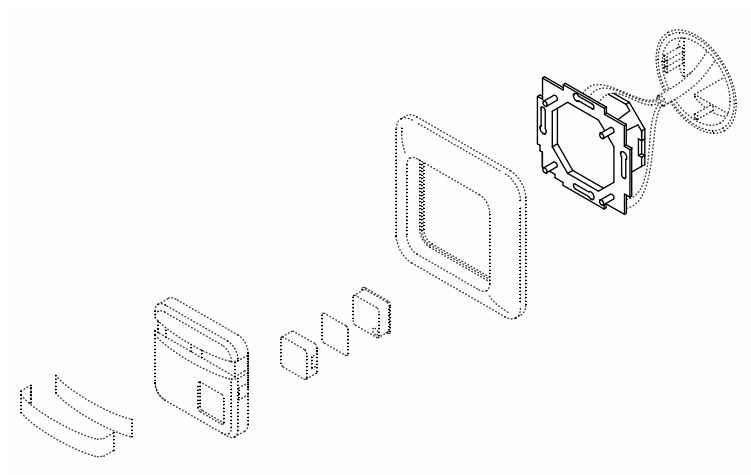


Abb. 3: 1520/1 UK-101



Note

A maximum of 8 signal/cancel push-button insert can be operated jointly in the system.

signal/cancel push-button insert with pull cord

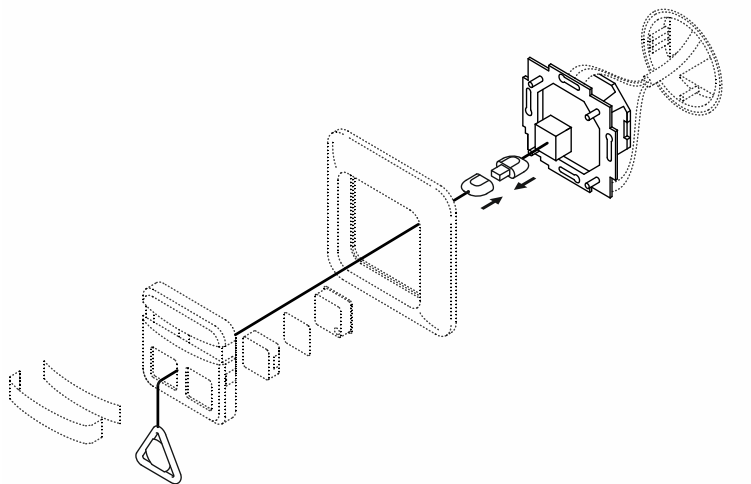


Abb. 4: 1520/1 UKZ-101

4.2 Functions

A call can be triggered via the signal push-button insert in the room (1520/1 UK-101 / 1520/1 UKZ-101). The call signal is transmitted to the alarm signalling insert (1515 U-...-101). After triggering a call, the alarm signalling insert creates a permanent acoustic and visual signal. The person requiring assistance is additionally signaled via comforting light integrated in the signal push-button that the call has been triggered.

The call is ended by pressing the cancel button.

A night light has additionally been integrated in the signal/cancel push-button insert 1520/1 UKZ-101. This makes it possible for the person seeking assistance and the helper to locate the button as quickly as possible also in the dark.

5 Connection, installation / mounting



Danger - Electric voltage!

Risk of death due to electrical voltage of 100 ... 240 V during short-circuit in the low-voltage conduit.

- Low-voltage and 100 ... 240 V conduits must not be installed together in a flush-mounted box!

5.1 Requirements for the electrician



Danger - Electric voltage!

Install the device only if you have the necessary electrical engineering knowledge and experience.

- Incorrect installation endangers your life and that of the user of the electrical system.
- Incorrect installation can cause serious damage to property, e.g. due to fire.

The minimum necessary expert knowledge and requirements for the installation are as follows:

- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
 1. Disconnect
 2. Secure against being re-connected
 3. Ensure there is no voltage
 4. Connect to earth and short-circuit
 5. Cover or barricade adjacent live parts.
- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the type of supply network (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).

5.2 Mounting



Caution! The device can sustain damage when coming into contact with hard objects!

- The plastic parts of the device are sensitive.
- Pull the attachment off only with your hands.
 - Do not lever parts off with screwdrivers or similar hard objects.

The flush-mounted insert must only be installed in flush-mounted boxes according to DIN 49073, Part 1, or suitable surface-mounted housings.

Recommended mounting heights

Signal/cancel push-button insert:	0.7 - 1.5 m height
	In bathrooms at least 20 cm above the highest possible point of the shower head. The pull cord must also be reachable by a person lying on the floor.
Alarm signalling insert:	1.5 - 2.2 m height

It is recommended to mount the cancel button insert directly next to the entrance door.

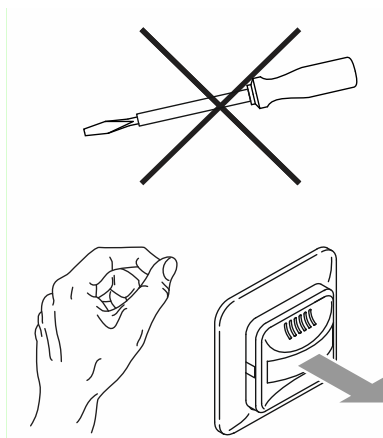


Fig. 5: Wall mounting: pulling off the attachment - Example 1515 U-...-101

- If the device is already mounted or assembled, pull the attachment off the flush-mounted insert with the aid of the cover frame.
- Pull the attachment off only with your hands!
- Do not lever parts off with screwdrivers or similar hard objects. This will damage the device.
- When pulling off, first the resistance of the spring clamps must be overcome.

Use the following steps to mount the device (Example 1519 U):

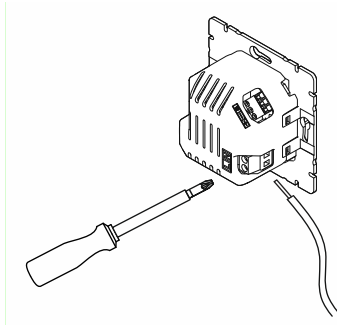


Fig. 6: Connecting the cables

1. Connect the cables to the flush-mounted insert.
 - For the connection assignment, see chapter 5.3 "Electrical connection" on page 16.

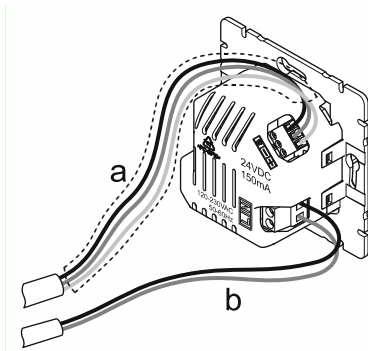


Fig. 7: Fixing the cables

2. Bundle the wires of the mains cable (230 V) with the cable binders included in the scope of supply [b].
3. Feed the low-voltage line through the supplied insulating tube [a]..

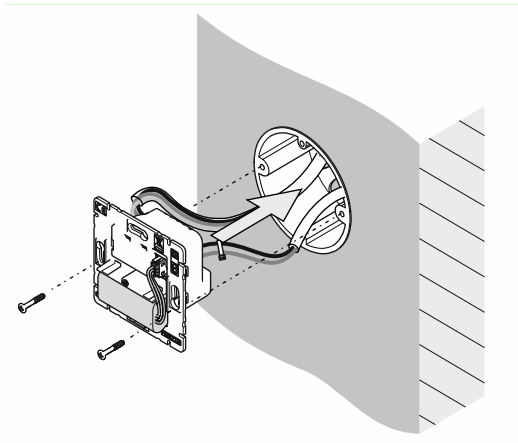


Fig. 8: Mounting the flush-mounted insert

4. Mount the flush-mounted insert in a flush-mounted box according to DIN 49073-1.
5. Fix the device in the flush-mounted box with screws.

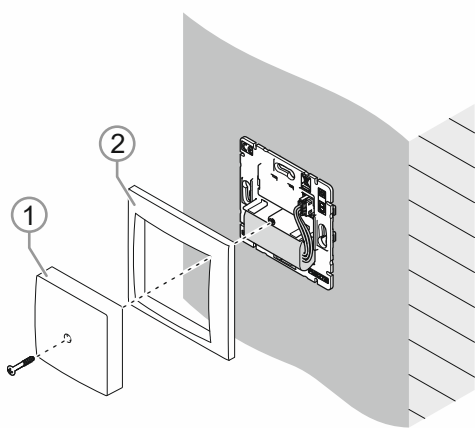


Abb. 9: Put on covers

6. Push the design cover [1] together with the cover frame [2] onto the flush-mount insert.
7. Fasten the design cover [1] to the flush-mount insert with a screw.

The device is now mounted.

5.3 Electrical connection



Note

- The lines of the call system must not be installed in a multi-wire cable together with conductors which carry mains voltage.
- The lines of the call system must not be installed in an installation tube together with conductors which carry mains voltage.
- The lines of the call system may only be installed at a minimum distance of 30 cm to lines which carry mains voltage. In case of connections with a line length of < 10 meters, a minimum distance of 10 cm is sufficient.
- All standards applicable to security technology for the installation of electrical systems, as well as guidelines for wiring call systems in medical care facilities according to DIN EN 793 must be adhered to.
- All interfaces to other call systems conform to standard EN 60950-1 (VDE 0750-1).
- A maximum of 8 signal/cancel push-button insert can be operated jointly in the system.

Consider the following points when installing the line:

- Fireproof installation in escape routes
- Safe electrical insulation against systems with high voltage
- Prevention of faults caused by other systems
- Reliable wire connection



Note

A separate uninterruptible power supply (UPS) is not necessary for the risk of a power failure. The device is already equipped with a battery buffer.

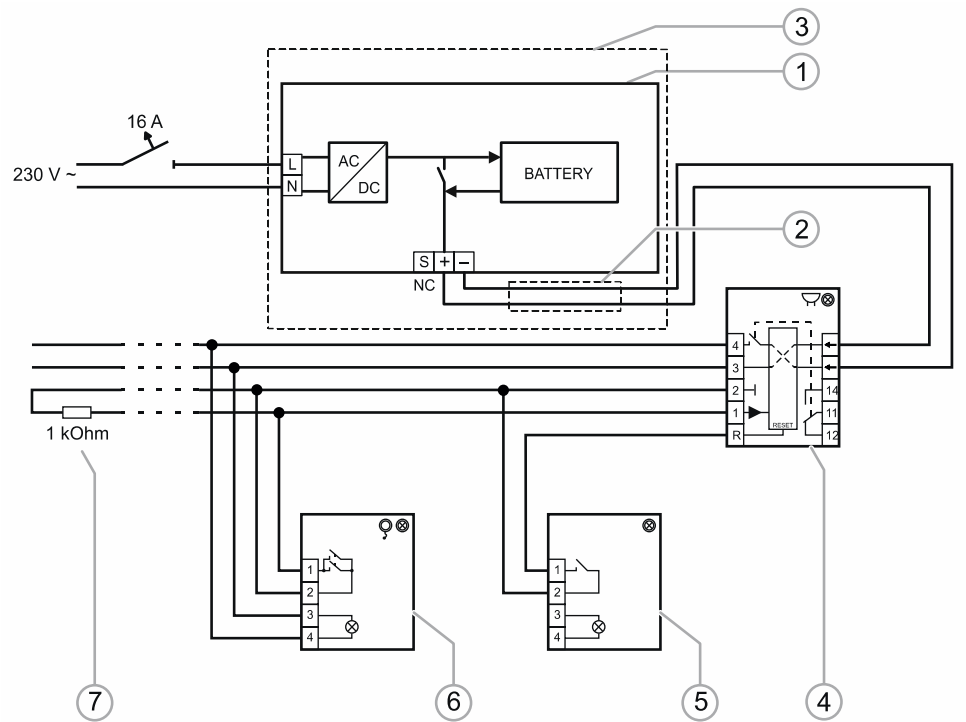


Fig. 10: Circuit diagram

- [1] Power supply insert
- [2] Protective insulation
- [3] Separate device installation box
- [4] Alarm signalling insert
- [5] Cancel button insert
- [6] Signal push-button insert with pull cord
- [7] Terminal resistor

6 Commissioning

Check the functions of all devices as follows:

1. Measure the operating voltage (see chapter 9 “Technical data“ on page 23).
2. Press the signal push-button. / Pull at the pull cord of the signal push-button insert.
3. Check whether the comforting light is on in the signal push-button insert and the alarm signalling insert sends an acoustic and visual signal.
4. Press the cancel button to deactivate the call.

7 Operation

7.1 Triggering a call

There are two ways to trigger a call:



Fig. 11: 1520/1 UK-101

- Press the signal push-button in the 1520/1 UK-101.



Fig. 12: 1520/1 UKZ-101

- Pull at the pull cord or press the signal push-button of the 1520/1 UKZ-101.

The comforting light in the signal push-button insert signals to the person requiring assistance that the call has been triggered.

7.2 Call display

As soon as a call has been triggered, the alarm signalling insert creates an acoustic and visual signal to alert a helper.

7.3 Deactivating the call



Abb. 13: 1520/1 UK-101

The call is deactivated by pressing the cancel button.



Note

If a call has already been deactivated but assistance is still required, the call button must be pressed again.

8 Maintenance

8.1 Cleaning

**Caution! - Risk of damaging the device!**

- When spraying on cleaning agents, these can enter the device through crevices.
 - Do not spray cleaning agents directly onto the device.
- Aggressive cleaning agents can damage the surface of the device.
 - Never use caustic agents, abrasive agents or solvents.

Clean dirty devices with a soft dry cloth.

- If this is insufficient, the cloth can be moistened slightly with a soap solution.

8.2 Battery change



Note

The battery must be checked and replaced annually in accordance with DIN VDE 0834.

Follow these steps to change the battery:

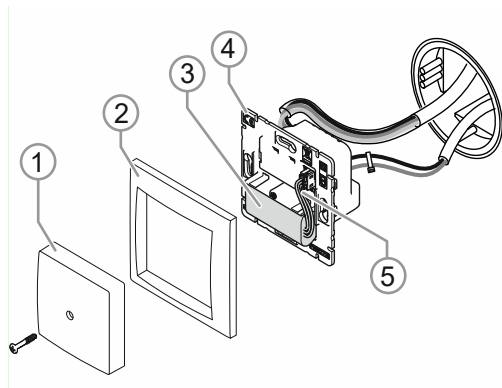


Abb. 14: Remove covers

1. Remove the design cover [1] and the cover frame [2] from the flush-mount insert [4]. The battery [3] is now exposed.
2. Pull the cables [5] of the battery [3] out of the flush-mount insert [4].
3. Pull the battery out of the flush-mount insert [4].

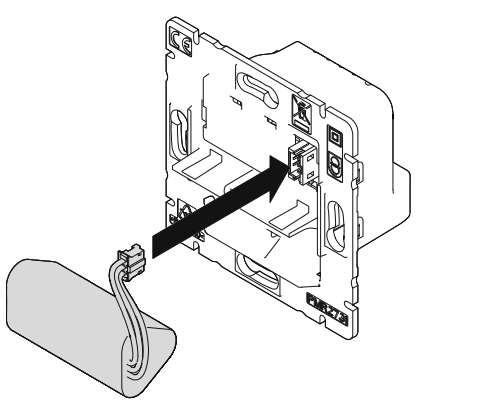


Abb. 15: Insert battery

4. Plug the cables of the new battery into the connector of the flush-mount insert.
 5. Insert the battery into the flush-mount insert.
 6. Plug the design cover and the cover frame onto the flush-mounted insert.
- The battery is changed.

9 Technical data

Designation	Value
Nominal voltage:	120 ... 230 V AC, $\pm 10\%$
Nominal current:	60 mA
Output voltage:	24 V DC
Power loss:	2 W
Loop current:	5 mA
Tripping delay:	0.1 s
Sound frequency:	2,3 kHz
Sound pressure level:	65 dB / 2 m
Temperature range:	+5°C to +40°C
Storage temperature:	-10°C to +60°C
Protection type:	IP 20 / IP 22
Minimum cable cross-section	0,6 mm
Interfaces to other call systems	According to EN 60950-1 (VDE 0750-1)
Switching contacts	
Normally open contact (potential-bound):	1 A, 30 VA / W
Change-over contact (floating)	40 V AC / 60 V DC, 30 VA / W

Table 1: Technical data

The devices in the " Call set for handicapped toilet with battery buffer" set can be operated with different voltage ranges. However, the 1519 U power supply unit insert is recommended for joint operation.

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