

Medical hardware for highest expectations



# User Manual

MULTIPLE SOCKET  
OUTLETS  
MED4-Q400AN EU  
MEDX ZPA  
MED5 ZPA

# Typographic conventions

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- 1 Consecutive digits indicate action steps, with the numbering starting again with the digit 1 for each new sequence of actions.
- **Dots indicate individual actions or different possible actions.**
- Dashes indicate enumerations of data, options, or objects.
- (A) Letters in parentheses refer to elements in the corresponding figure.
- A** Letters in figures indicate elements referred to in the text. Bold and italicized text represents labels on the device.

# Definition of safety information

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## **WARNING**

An important piece of information concerning a potentially hazardous situation which, if not avoided, could result in death or serious injury.

## **CAUTION**

An important piece of information concerning a potentially hazardous situation which, if not prevented, may result in minor or moderate injury to the user or patient, or damage to the medical device or other property.

## **NOTE**

An additional piece of information used to avoid difficulties in operating the medical device.

## Tasks of the operator

The tasks described in this document define the requirements that must be fulfilled by individual target groups.

The operator of this product must ensure the following:

- The target group has the required qualifications (e.g., has undergone specialized training or has acquired specialized knowledge through experience).
- The target group has been trained in the performance of the task.

The target group has read and understood the chapters required to perform the task.

## Description of the target groups

The target groups may only perform the following tasks if they meet the appropriate requirements.

### Maintenance personnel

Task	Requirement
Installation	Expertise in electrical and mechanical systems
Basic maintenance work (inspection, maintenance according to chapter „Maintenance“)	Experience in the maintenance of medical devices

### Reprocessing personnel

Task	Requirement
Reprocessing	Expert knowledge in the field of reprocessing medical devices

## General safety information

The following texts marked with WARNING or CAUTION are general safety information on the operation of the product.

Texts marked WARNING or CAUTION that refer to specific parts or functions of the product appear in the relevant sections of this manual or in the user manual of another product used together with this product.

**Pay close attention to the instructions for use**

### WARNING

**Risk of incorrect operation and use**

Any use of the product requires the exact knowledge and observance of all chapters of this manual. The product may only be used for the purpose specified under „Intended use“.

Carefully observe all safety information marked with WARNING or CAUTION in this manual as well as the information on the product labels.

Disregarding this information is use of the product outside its intended purpose.

### WARNING

**Danger if maintenance is not carried out regularly**

If maintenance is not performed regularly, malfunctions may occur that can lead to personal injury and damage to property.

Perform maintenance in accordance with the chapter „Maintenance“.

### WARNING

**Explosion and fire hazard**

**The multiple socket is not approved for operation in areas where oxygen concentrations above 25 vol%, flammable or explosive gas mixtures may occur.**

### WARNING

**Risk of equipment malfunction**

In the event of a mains power failure in the hospital, the equipment connected to the multiple socket will not be supplied by the uninterruptible power supply.

- Do not connect any life-support equipment without an internal backup battery to the power strip.
- Ensure alternative power supply for connected devices.

### WARNING

**Risk of electric shock**

Penetrating liquid can disrupt the function of the multiple socket, damage the device and endanger the patient or other persons.

- Install the multiple socket in a place where no liquids or electrically conductive elements can penetrate the sockets.
- Follow the instructions for use of the basic unit regarding the correct positioning of the multiple socket.

## WARNING

### Risk of electric shock

Connecting devices to the power strip may increase the leakage current. If the protective conductor of one of these devices fails, the leakage current may exceed the permissible value.

- Connect devices to the multiple socket only with the consent of the respective manufacturer.
- Use the multiple socket only to supply devices which are to be part of the medical system.
- Use the multiple socket only to supply devices for which no isolating transformer is required.
- Have leakage current checked by maintenance personnel.
- If the permissible value is exceeded, ensure that the correct connection is made between the additional protective earth conductor of the multiple socket to the potential equalization socket in the wall.
- If the permissible value is still exceeded after connecting the additional protective earth conductor, connect the respective device to a power outlet.

## WARNING

### Danger due to modifications

Modifications to the product can lead to malfunctions and unforeseen risks. This may result in injury to the patient or user or damage to property.

Do not make any modifications to this product.

## WARNING

### Risk of injury

The multiple socket is not designed for use in magnetic fields.

Do not use the multiple socket in magnetic resonance environments.

## WARNING

### Risk of electric shock

If the multiple socket is connected to a socket outlet without a protective earth conductor, dangerous potential differences may occur which may endanger the patient.

Always connect the multiple socket to a socket outlet with a protective earth conductor.

## Intended purpose

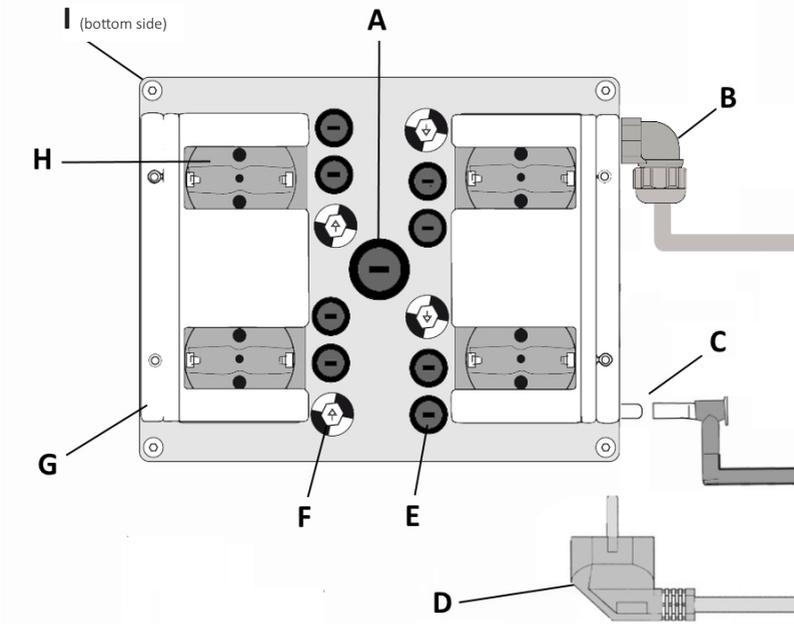
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The multiple socket outlet has several sockets with which several medical electrical devices can be supplied with power simultaneously.

# Overview multiple socket outlets

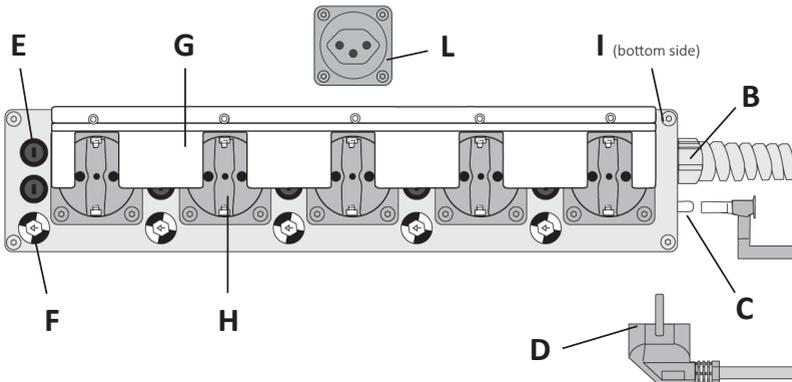
## MED4-Q400AN EU

The following figure shows a sketch of the multiple socket MED4-Q400AN EU



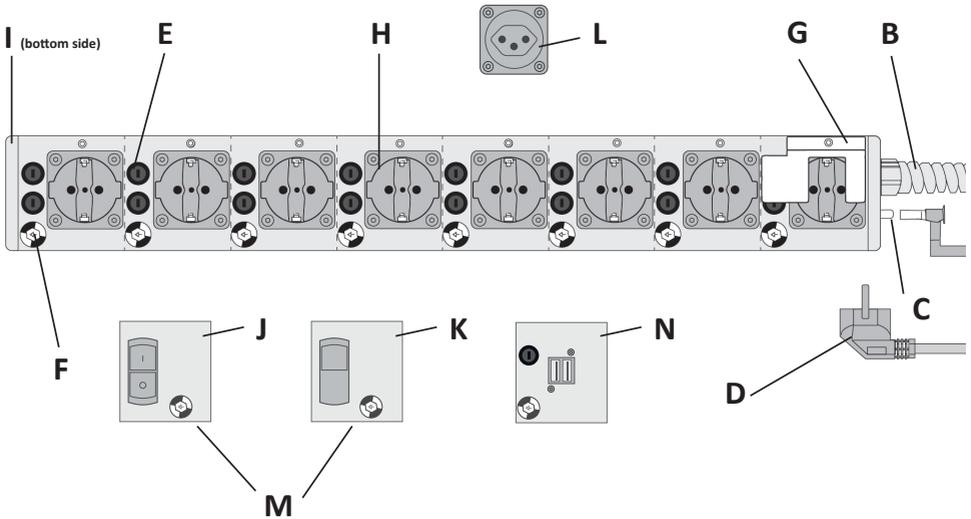
## MED5 ZPA

The following figure shows a sketch of the multiple socket MED5 ZPA



## MEDX ZPA

The following figure shows a sketch of the multiple socket MEDX ZPA



- A** (Resettable)\* Cable protection fuse
- B** Strain relief
- C** Connection of the supply line for additional potential equalization
- D** Power plug of the supply line for connection to the mains.
- E** Fuses per socket, 2 each
- F** Potential equalization connections
- G** Mountable Guards
- H** Socket outlets SCHUKO DE
- I** 4 x M4 mounting holes (bottom side)
- J** Option: Module switchable thermal pushbutton circuit breaker
- K** Option: Module resettable thermal pushbutton circuit breaker
- L** Option: SCHUKO CH sockets
- M** Option for module J or K: ZPA supply line on top, omitted for this C
- N** 2-fold USB A module

\*Model dependent

# Symbols

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Connection for potential equalization



Attention! (safety symbol)



Warning! Strictly observe the user manual



MR-unsafe



Protective Earth



Manufacturer



Date of manufacture

**SN**

Serial number

**REV**

Order number



Storage temperature



Relative humidity



Atmospheric pressure



WEEE Mark



Nominal weight: 3 kg



Manufacturer's declaration for applied standards and directives



Power off/reset



Power switch



2-fold USB A port

## Positioning the multiple socket

### WARNING

#### Electrical hazard

**The multiple socket is intended to be permanently fixed and must therefore not be used on the floor. When mounting, follow the instructions in this manual as well as the instructions for use of the components to which the multiple socket is mounted.**

- Observe IEC/EN 60601-1.
- Observe the conversion instructions for the basic unit.
- Observe the user manual of the basic unit.

When using the multiple socket, the requirements of the IEC / EN 60601-1 standard in the currently valid version must be observed. When used in combination with anesthesia equipment, the requirements of the ISO 60601-2-13 or IEC / EN 60601-2-13 standards, as amended, must be observed.

## Connecting the multiple socket

### Important notes

- During operation, consider the possible effects of tripping downstream overcurrent protection devices, which may inadvertently disconnect life-supporting medical equipment from the mains power supply.

### WARNING

#### Risk of equipment malfunction

**Exceeding the maximum amperage for each outlet or the maximum total amperage for the multiple outlet may cause overheating or interruption of power to connected equipment.**

**Do not exceed the maximum amperage for each outlet or the maximum total amperage specified on the equipment.**

### NOTE

**The power plug of the multiple socket must be easily accessible so that the power supply can be quickly interrupted in the event of a device failure.**

- Modifications to the medical electrical system must not be made without the approval of qualified maintenance personnel.
- The multiple socket must be connected to a socket outlet with a suitable protective earth conductor.
- If the maximum permissible leakage current according to IEC / EN 60601-1 of the currently valid version is exceeded, proceed as follows:

- Reduce the number of connected loads.

or

- Use an upstream isolating transformer with sufficient power, tested according to IEC / EN 60601-1.

## WARNING

### Risk of equipment malfunction

The use of this multiple socket does not ensure the conformity of a medical system with standards or regulations (such as local codes).

- The system must comply with the requirements for medical electrical systems as specified in IEC 60601-1 of the current version.
- Knowledge of IEC 60601-1 (Current Edition) and expertise in medical electrical systems is required to set up a medical electrical system.
- Only trained specialists may equip a medical electrical system with this multiple socket.

## WARNING

### Electrical hazard

Do not connect any other multiple sockets or extension cords to the multiple socket.

The multiple socket must not be connected to devices which have an integrated multiple socket.

### Additional potential equalization Connection (optional)

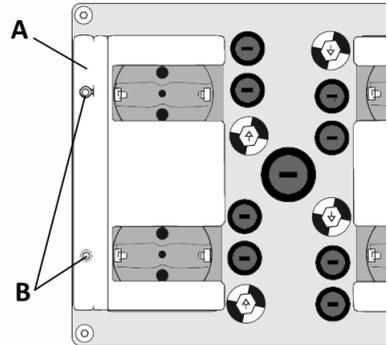
- Connect the plug for additional potential equalization to the potential equalization socket in the wall and connect it to the multiple socket.

## WARNING

### Connection of medical electrical equipment

In this case, the plug for additional potential equalization must be connected to the potential equalization socket in the wall and connected to the multiple socket.

### Connecting a device to the multiple socket outlet



1. First remove the fuse (A) by loosening the fixing screws (B).
2. Connect the mains plug of the device to be connected to the socket.
3. Finally, install the trigger guard (A) by tightening the fastening screws (B).

If the connected device has a connection for additional potential equalization, connect it to the connection for additional potential equalization of the used socket.

## NOTE

During disassembly, the mains plug of the multiple socket must be disconnected from the mains.

## NOTE

The power plug of the multiple socket must not be permanently fixed to a wall socket, e.g. using screws.

## Disconnecting a device from the multiple socket outlet

1. If necessary, remove the respective pull-off safety guard by loosening the screw.
2. Disconnect the power plug of the connected device.

## Immediate disconnection of all devices

1. Identify the power outlet to which the power cord of the multiple socket is connected.
2. Disconnect the power plug of the multiple socket

## Troubleshooting

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### The fuses have tripped

1. Disconnect the power cord of the multiple socket from the mains.
2. Remedy the cause/fault.
3. Replace blown glass fuses.
4. Activate the resettable line fuse by pressing it.
5. Reconnect the power cord of the multiple socket to the mains.

#### NOTE

Always use the appropriate fuses according to the table on page 14.

## Reprocessing

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### Disinfection

1. Disconnect the supply line of the multiple socket from the mains.
2. Immediately remove any contamination. Use a cloth moistened with a 70% alcohol solution for this purpose.
3. Perform a surface disinfection.
4. Wipe with a cloth dampened with water and allow to dry.
5. Reconnect the supply line of the multiple socket to the mains.

#### WARNING

##### Risk of electric shock

**Penetrating liquid can interfere with the function of the multiple socket, damage the device and endanger the patient or other persons.**

**When disinfecting the multiple socket, perform surface disinfection only by wiping.**

**Do not allow any liquids to penetrate the multiple socket. Follow the user manual of the basic device.**

## Safety information

### WARNING

#### Patient hazard

If maintenance measures are performed during operation, this poses a risk to the patient.

Only perform maintenance procedures when no patient is connected to the unit.

### WARNING

Danger if maintenance is not carried out regularly

Wear and material fatigue of the components can lead to equipment failure and malfunctions.

Perform maintenance at the specified intervals.

### WARNING

#### Danger from improperly prepared products

The product may be contaminated with pathogens.

Before carrying out maintenance work and before sending the product for repair, the product must be reprocessed in accordance with the „Reprocessing“ chapter.

### WARNING

Danger if maintenance is not carried out properly

Personal injury and damage to property may occur if maintenance is not carried out properly.

Maintenance must be carried out by the target groups assigned to this specific task.

### WARNING

#### Danger when opening the housing

There are current-carrying components under the housing which can cause an electric shock.

The housing may only be opened by target groups assigned to this specific task.

### WARNING

In the event of failure in combination with anesthesia workstations, lack of immediate access to appropriate other means of ventilation may result in patient harm.

## Definition of maintenance terms

Term	Definition
Maintenance	All activities (inspection, maintenance, repair) that serve to maintain or restore the functionality of a product.
Inspection	Activities to assess the current condition of a product
Servicing	Regular, specified activities to maintain the functionality of a product.
Repair	Activities to restore the functionality of a product following a malfunction

## Inspection

Regular inspections must be performed according to the following specifications and at the specified intervals.

Inspections	Interval	Responsible personnel
Inspection and safety checks	every 24 months <sup>1)</sup>	Maintenance personnel

1) If the multiple socket is used together with a medical device whose inspection interval is shorter, the interval of the medical device also applies to the multiple socket.

## Safety checks

1. Check accompanying documents: Current Instructions for Use is available.
2. Check the device combination for proper condition:
  - Labels complete and legible.
  - No visible damage to:
    - Housing parts
    - sockets
    - cables
    - Strain relief
  - Fuses accessible from the outside are in accordance with the specified values
3. Electrical safety test according to IEC62353

### WARNING

#### Risk of malfunction

**If the safety checks are not carried out regularly, the function of the multiple socket outlet may be endangered.**

**Perform the safety checks at the specified intervals.**

# Repair

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For repairs, we recommend the e-medic service and the use of original e-medic spare parts.

# Disposal of the product

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Dispose of the product at the end of its useful life in accordance with the applicable legal regulations.

# Technical data

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## Environmental conditions

### Operating conditions

Temperature	0 to 40 °C (32 to 104 °F)
Ambient pressure	8.27 to 15.95 psi (570 to 1100 hPa)
Relative humidity	5 to 95 % (non-condensing)

### Storage Conditions

Temperature	14 to 140 °F (-20 to 60 °C)
Ambient pressure	500 to 1100 hPa (7.25 to 15.95 psi)
Relative humidity	5 to 95 % (non-condensing)

## Device characteristics and fuses

All device types:

**Supply voltage:** 220V to 240V AC

**Mains frequency:** 50 / 60 Hz

All fuse types:

**Mains voltage:** 220 - 240 V AC

**Mains frequency:** 50 / 60 Hz

**Fuses Standard:** IEC 60127-2

Fuse selection and sizing must be adjusted by trained personnel to meet electrical and environmental requirements. Only fuses complying with the standard IEC 60127-2 250V standard. The following fuses are provided ex-works.

### WARNING

#### Risk of malfunction

**If the characteristics of the fuses used are changed, the permissible load of the multiple socket changes. The operator is responsible for proper testing, approval, labeling and, if necessary, documentation.**

Max. power of the multiple socket outlet depending on the fuses used

Thermal fuse	Fuse socket insert	Max. permissible total load	Max. permissible power per socket insert
none	10 A	3600 W	2000 W
15 A	10 A	3300 W	2000 W
15 A	4 A	3300 W	900 W
15 A	3.15 A	3300 W	750 W
14 A	10 A	3300 W	2000 W
14 A	3.15 A	3300 W	900 W
8 A	3.15 A	1800 W	750 W

Optional USB charging module:

**Supply voltage:** 220V to 240V AC

**Mains frequency:** 50 / 60 Hz

**Output voltage:** DC 5.1 V / 4 A max.

**Output total:** 20.4 W

**Dimensions, (W x H x D)**

MED4-Q400AN EU	190 x 150 x 83 mm (7.48 x 5.91 x 3.26 in)
MED5 ZPA	350 x 80 x 80 mm (13.78 x 3.15 x 3.15 in)
MEDX ZPA	59 x 78 x 76.6 - 612.8 mm (2.32 x 3.07 x 3.01- 24.12 in)*

\*Depending on model

**Weight, without power cord**

MED4-Q400AN EU	approx. 3 kg (approx. 6.61 lb)
MED5 ZPA	approx. 3.4 kg (approx. 7.50 lb)
MEDX ZPA	approx. 1.8- 4.1 kg (approx. 3.97- 9.70 lb)*

\*Depending on model

**Electrical safety**

tested according to IEC 60601-1:2005 / A1:2012  
Edition 3.1

**Special provisions**

for safety including essential performance characteristics for anesthesia - workplaces.

ISO 80601-2-13:2011 / A1:2015 with the exception of clause 201.11.6.3 (Liquid ingress).

**Ingress of liquids**

IP X0 according to IEC 60529. The product is not protected against the ingress of liquids.

**Device combinations**

This product can be used in combination with other medical electrical equipment. The operator must ensure that a device combination complies with the requirements of the applicable European directives for medical devices and standards for medical electrical devices and systems.



# EU - Konformitätserklärung

*EU declaration of conformity*

## **Baaske Medical GmbH & Co. KG**

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erklärt in alleiniger Verantwortung, dass die Produkte  
*declares in sole responsibility, that the products*

Typ: **MED4-Q400AN EU**

**MED5 ZPA**

**MEDX ZPA** (X steht für die Anzahl der Schutzkontakt-Steckdoseneinheiten: 1, 2, 3, 4, 5, 6, 7, 8)

*(X stands for the number of earth contact socket units: 1, 2, 3, 4, 5, 6, 7, 8)*

mit den grundlegenden Vorschriften der folgenden EG-Richtlinien übereinstimmt,  
wenn es für seinen bestimmungsgemäßen Zweck verwendet wird:

*complies with the essential requirements of the following EC-Directives,  
if used for its intended use:*

EMV-Richtlinie 2014/30/EU

*EMC Directive 2014/30/EU*

Niederspannungsrichtlinie 2014/35/EU

*Low-Voltage Directive 2014/35/EU*

Angewandte harmonisierte Normen oder normative Dokumente:

*Applied harmonized standards or normative documents:*

IEC 60601-1:2005 + A1:2012

IEC 60601-1:2005 + A1:2012/AMD1:2012

ISO 80601-2-13:2011/AMD1:2005

Lübbecke, 29.10.2019

Andreas Baaske (GF)

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Ort und Datum der Ausstellung

*Place / Date*

-----  
Angaben zum Unterzeichner

*Issuer*

-----  
Unterschrift

*Signature*

Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, beinhaltet jedoch keine Zusicherung von Eigenschaften. Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.

*This declaration certifies the conformity with the named directives, but does not contain any assurance of quality. The safety instructions of the instruction manual are to be followed.*

## Manufacturer contact

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Item no. 2012330

Baaske Medical GmbH & Co. KG

Issue/Revision: 2.3

Date: 15.02.2021

Baaske Medical reserves the right to make changes to the product without prior notice.

Medical hardware for highest expectations



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