

# Instructions for Use



CE  
0297

implantmed

SI-915 / SI-923

# Contents

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<b>Symbols</b> .....	4
<b>1. Introduction</b> .....	8
<b>2. Unpacking</b> .....	10
<b>3. Scope of delivery</b> .....	11
<b>4. Safety notes</b> .....	12
<b>5. Description</b> .....	17
of front panel .....	17
of rear panel .....	18
of foot control .....	19
<b>6. Start-up</b> .....	20
<b>7. Control unit</b> .....	21
<b>8. Control unit operation</b> .....	22
Changing program (P1 – P5) .....	22
Changing speed (P1 – P3) .....	23
Changing torque (P4 – P5) .....	24
Changing coolant volume (P1 – P5) .....	25
<b>9. Operation</b> .....	26
<b>10. Restoring factory settings</b> .....	28
<b>11. Thread cutter function (chip breaker mode)</b> .....	29
<b>12. Error messages</b> .....	30

# Contents

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<b>13. Hygiene and maintenance.....</b>	<b>31</b>
General notes .....	31
Limitations on processing.....	32
Initial treatment at the point of use .....	33
Manual cleaning .....	34
Manual disinfection .....	35
Automated cleaning and disinfection .....	36
Drying.....	37
Inspection, maintenance and testing .....	38
Packaging.....	39
Sterilization .....	40
Storage .....	42
<b>14. Servicing .....</b>	<b>43</b>
<b>15. Accessories, consumables, spare parts and other recommended medical devices by W&amp;H.....</b>	<b>45</b>
<b>16. Technical data .....</b>	<b>47</b>
<b>17. Data on electromagnetic compatibility according to IEC/EN 60601-1-2 .....</b>	<b>49</b>
<b>18. Disposal .....</b>	<b>52</b>
<b>W&amp;H course certificate .....</b>	<b>53</b>
<b>Explanation of warranty terms .....</b>	<b>57</b>
<b>Authorized W&amp;H service partners.....</b>	<b>58</b>

# Symbols



**WARNING!**  
(if persons could be injured)



Sterilizable up to the stated  
temperature



Consult Instructions for Use



**ATTENTION!**  
(if property could be damaged)



CE marking with identification  
number of the Notified Body



Do not dispose of with  
domestic waste



General explanations, without  
risk to persons or property



Manufacturer



DataMatrix code for product  
information including UDI  
(Unique Device Identification)



Medical Device



Date of manufacture



Serial number



Thermo washer disinfectable



Catalogue number

# Symbols



Follow Instructions for Use

**VA**

Power consumption  
of the control unit

**A**

Supply current



Class II equipment



Electric fuse

**Hz**

Frequency of the  
alternating current



Foot control



Earth



MEDICAL – GENERAL MEDICAL  
EQUIPMENT AS TO ELECTRICAL  
SHOCK, FIRE AND MECHANICAL  
HAZARDS ONLY IN ACCORDANCE  
WITH ANSI/AAMI ES60601-  
1:2005/[R]2012 + A1:2012 +  
C1:2009/[R]2012 + A2:2010/  
[R]2012, ANSI/AAMI ES60601-  
1:2005/A2:2021, CAN/  
CSA-C22.2 No. 60601-1:14,  
CAN/CSA-C22.2 No. 60601-  
1:14/A2:22, IEC 80601-2-  
60:2019. 25UX – Control No.



Off

**V**

Supply voltage  
of the control unit



On

**AC**

Alternating current

# Symbols

**rpm**      Revolutions per minute  
(= rpm)



This way up



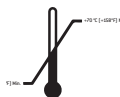
Fragile, handle with care



Keep dry



“Der Grüne Punkt” (The Green Dot) trademark of Duales System Deutschland GmbH



Temperature limitation



Humidity limitation



Data structure in accordance with Health Industry Bar Code



Trademark of RESY OfW GmbH for identification of recyclable transport and outer packaging of paper and cardboard

**R<sub>x</sub>**<sub>only</sub>

Caution! According to Federal law restricts this device to sale by or on the order of a physician, dentist, veterinarian or with the descriptive designation of any other practitioner licensed by the law of the State in which the practitioner practices to use or order the use of the device.

# Symbols



Batch code



Use by



Latex-free



Not for re-use



Do not use when package is damaged



Sterilization with ethylene oxide



Do not resterilize



Keep away from heat



Single sterile barrier system

# 1. Introduction

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## **For your safety and the safety of your patients**

These Instructions for use explain how to use your medical device. However, we must also warn against possible hazardous situations. Your safety, the safety of your team and, of course, the safety of your patients, are of paramount importance to us.



Observe the safety notes.

## **Intended use**

Mechanical drive unit with coolant supply for transmission instruments with ISO 3964 (DIN 13940) compatible coupling system, for use in dental surgery, implantology and maxillofacial surgery (CMF).



Misuse may damage the medical device and hence cause risks and hazards for patients, users and third parties.



## **Qualifications of the user**

Only suitably qualified medical, technical and specialist trained staff may use the medical device. We have based our development and design of the medical device on the “physician” target group.



# Introduction

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## Responsibility of the manufacturer

The manufacturer can only accept responsibility for the safety, reliability and performance of the medical device when compliance with the following instructions is ensured:

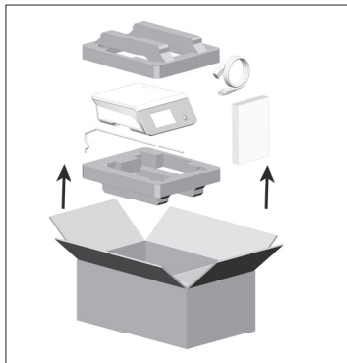
- > The medical device must be used in accordance with these Instructions for Use.
- > The medical device has no components that can be repaired by the user.
- > Modifications or repairs must only be undertaken by an authorized W&H service partner (see page 58).
- > The electrical installation at the premises must comply with the regulations laid out in IEC 60364-7-710 (“Installation of electrical equipment in rooms used for medical purposes”) or with the regulations applicable in your country.
- > Unauthorized opening of the control unit invalidates all claims under warranty and any other claims.

Improper use, unauthorized assembly, modification or repair to the medical device, non-compliance with our instructions or the use of accessories and spare parts which are not approved by W&H, invalidates all claims under warranty and any other claims.



Any serious incident that has occurred in relation to the medical device should be reported to the manufacturer and the competent authority!

## 2. Unpacking



Lift out the insert with the control unit. Remove the mains cable, irrigant support, universal support and Instructions for Use.

W&H packaging is environmentally friendly and can be disposed of by industrial recycling companies. However, we recommend that you keep the original packaging.

### 3. Scope of delivery

Control unit		SI-923 (230 V) 30286000/30286001	SI-915 (120 V) 30287000/30287001
REF 07721800	Universal support		X
REF 04005900	Irrigant support		X
Mains cable country-specific			X

#### Optional included in set

REF 04363600	Irrigation tubing set 2.2 m (6 pcs, disposable)
REF 30185000	EM-19 motor without electrical contacts with 1.8 m cable
REF 30285000	Foot control S-N2

## 4. Safety notes

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- > Before using the medical device for the first time, store it at room temperature for 24 hours
- > Check the medical device for damage and loose parts each time before using.
- > Do not operate the medical device if it is damaged.
- > Check the parameter settings every time the device is restarted.
- > Perform a test run prior to every treatment.
- > The responsibility for the use and timely shutdown of the system lies with the user.
- > Ensure that it is possible to complete the operation safely should the units or instruments fail.



The medical device is not approved for operation in potentially explosive atmospheres.  
The medical device is not approved for operation in oxygen rich Environment.

## Safety notes

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- > Use only original W&H fuses
- > Never touch the patient and the electrical contacts on the control unit simultaneously.



The control unit is classed as “conventional equipment” (closed equipment without protection against the ingress of water).



Use the control unit in P4 and P5 programs exclusively with the surgical contra-angle handpieces approved by W&H. Use of other contra-angle handpieces may result in deviation from the indicated torque. The user alone is responsible for the above. The manufacturer does not accept any liability.



### **Power failure**

In the event of a power failure, if the control unit is switched off, or when switching between programs, the last values set are saved and re-activated on power-up.

### **System failure**

A total system failure does not constitute a critical fault.

## Safety notes

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### **Mains cable / Power switch**

- > Only use the mains cable supplied.
- > Plug the mains cable only into an earthed power socket.
- > Set up the control unit so the power switch and the socket are easily accessible at all times.



### **Disconnect the control unit from the power supply in case of danger.**

- > Turn off the control unit at the power switch.
- > Pull the power plug out of the socket.



Observe the manufacturer's speed and torque specifications for retaining screws for superstructures.  
Adjusting these retaining screws with an electric motor presents a potential risk as described above.

Note that when using or setting low speeds, the operation or run-down of rotary instruments is more difficult to detect.

## Safety notes

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### **Risks due to electromagnetic fields**

The functionality of active implantable medical devices (AIMD) (e.g. cardiac pacemaker, ICD) can be affected by electric, magnetic and electromagnetic fields.

Find out if the patient has active implantable medical devices (AIMD) before using the medical device and inform about the risks.



Follow the directions and safety notes in the Instructions for Use of the foot control, the electric motors and the transmission handpieces.

## Safety notes

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### Coolant supply



The medical device is designed for use with physiological saline solution.



- > Always ensure correct operating conditions and that sufficient and adequate coolant is delivered.
- > Always provide sufficient coolant and ensure the appropriate suction.
- > Use only suitable coolants and follow the manufacturer's medical data and instructions.
- > Only use an irrigation tubing set approved by W&H or accessories approved by W&H.

### Irrigation tubing set



- > Note the expiration date and only use disposable irrigation tubing with undamaged packaging.
- > Replace the disposable irrigation tubing immediately after every treatment.
- > Follow your local and country-specific laws, directives, standards and guidelines for disposal.

### Hygiene and maintenance prior to initial use

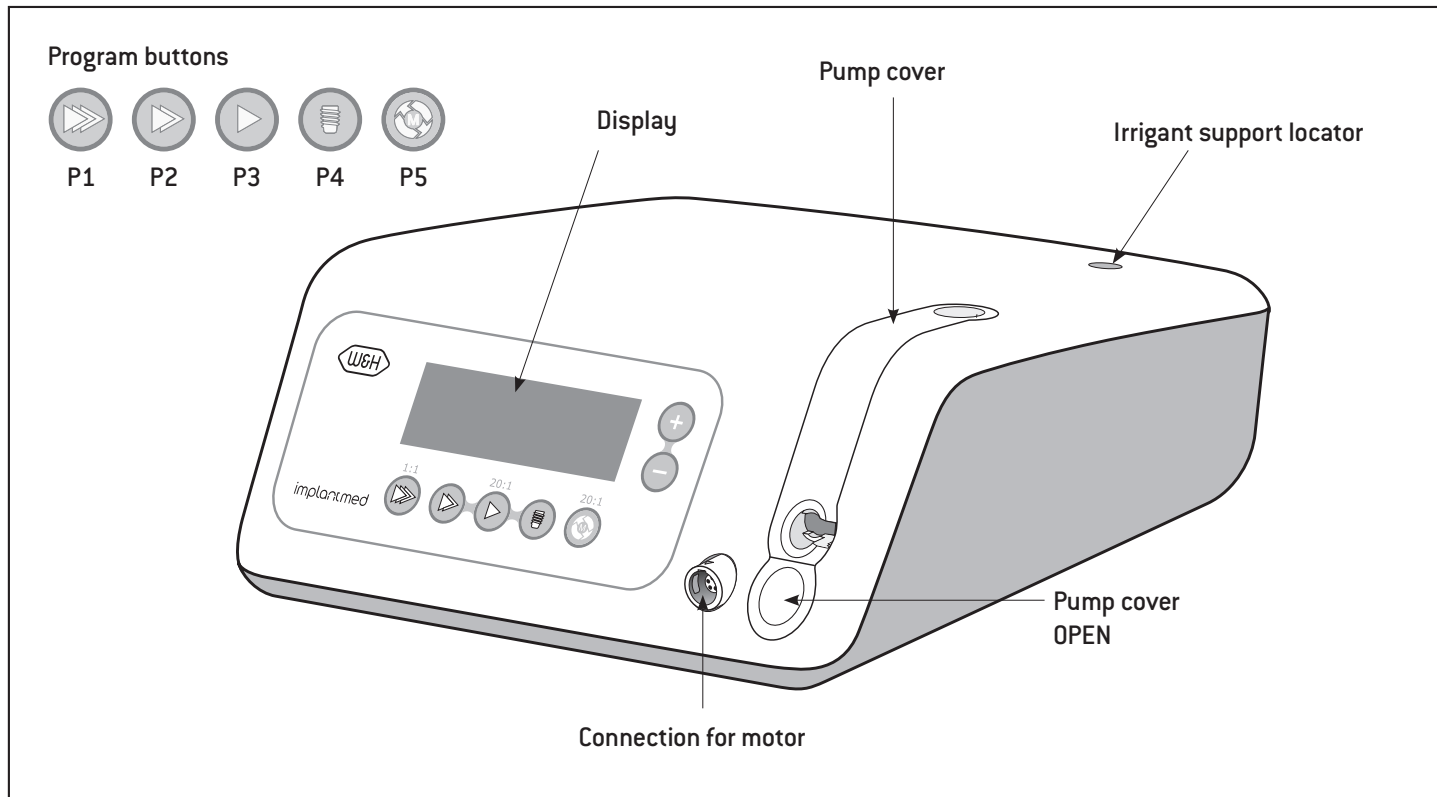


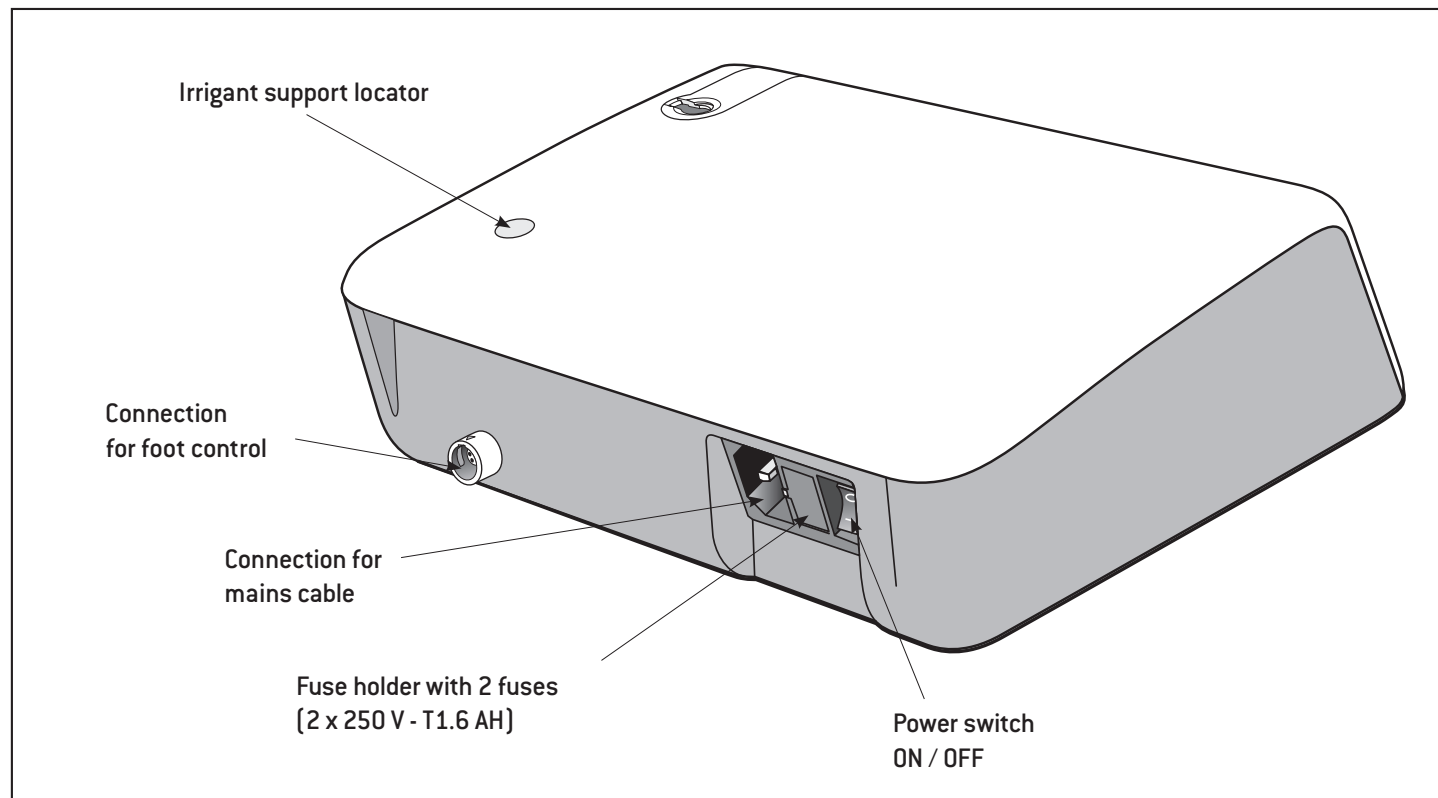
- > Clean and disinfect the control unit, the universal support and the irrigant support.
- > Sterilize the universal support.

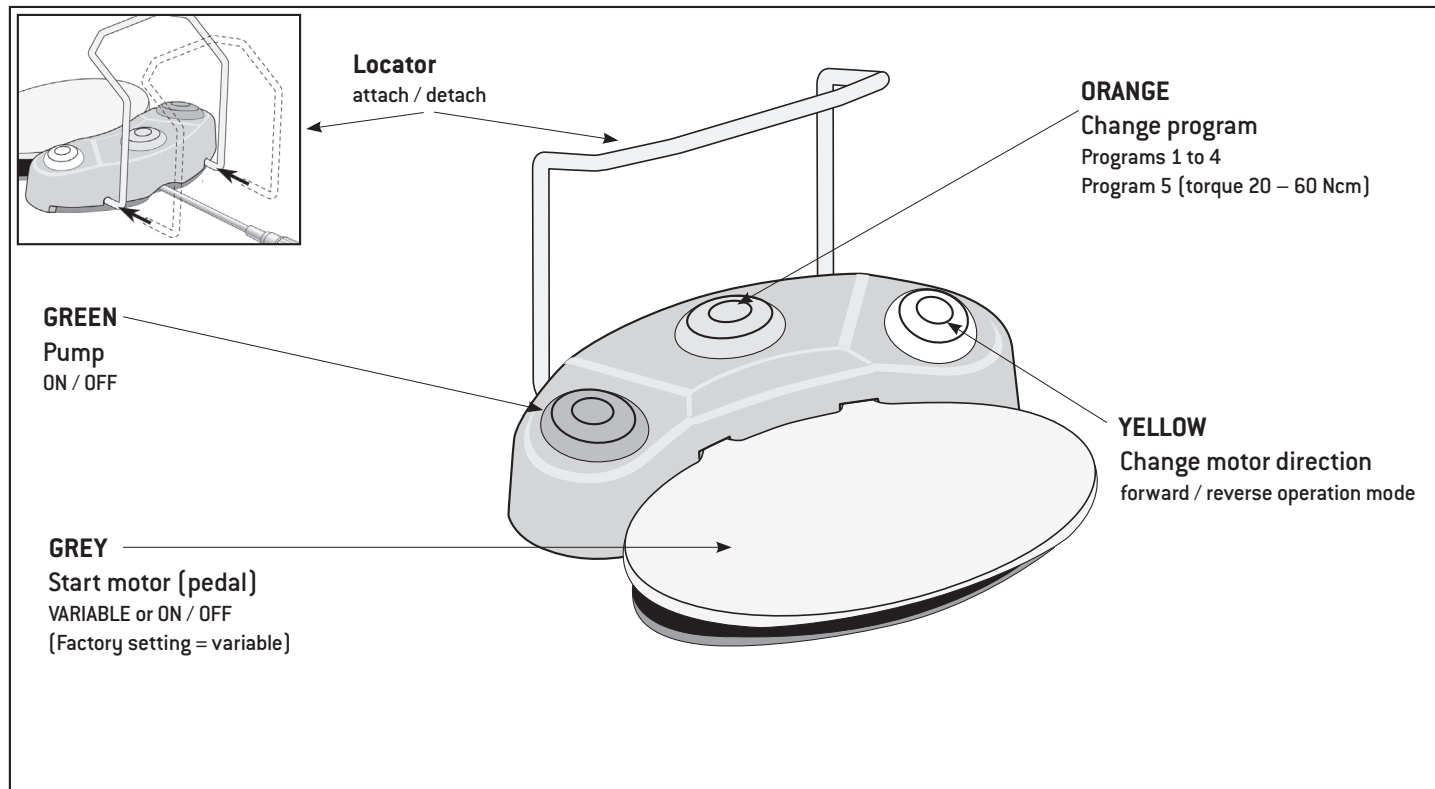


## 5. Description

of front panel







## 6. Start-up

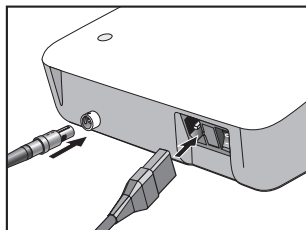
## General



Place the medical device on a flat level surface.

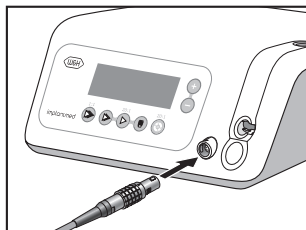


Ensure that the medical device can be disconnected easily from the power supply.



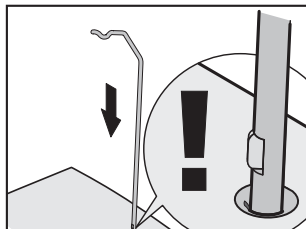
- 1** Connect the mains cable and foot control.

Pay attention to the positioning!



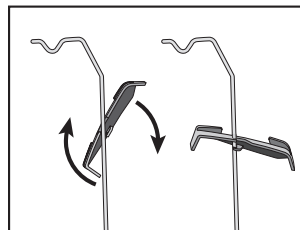
- 2** Connect motor cable.

Pay attention to the positioning!

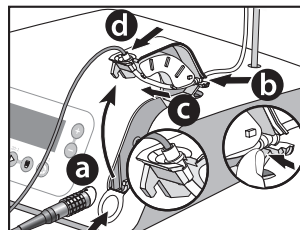


- 3** Insert the irrigant support.

Pay attention to the positioning!  
[maximum load capacity 1.5 kg]



- 4** Attach the universal support and lock it.

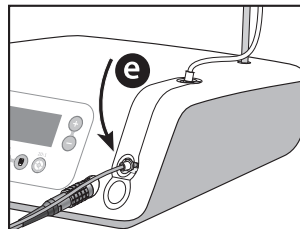


- 5** Insert/remove the irrigation tubing.  
 Pay attention to the correct order.

> Open the pump cover [a].

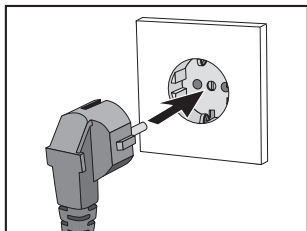
> Insert/remove the irrigation tubing [b, c, d].

> Close the pump cover [e].



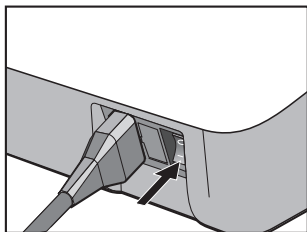
## 7. Control unit

## Switch on / switch off

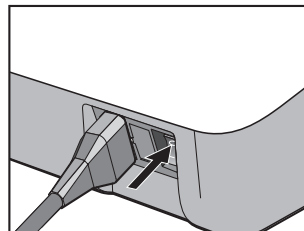


### Switch on Control unit

- ❶ Connect the control unit to the power supply.

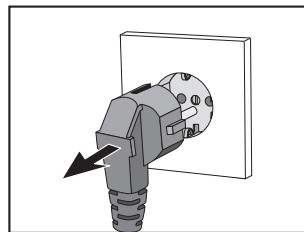


- ❷ Switch on the control unit at the power switch.



### Switch off Control unit

- ❶ Switch off the control unit at the power switch.



- ❷ Disconnect the control unit from the power supply.



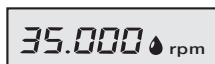
Always make sure that the LED displays on the buttons and the display itself are all on when switching on the medical device.

## 8. Control unit operation

## Changing program (P1 – P5)

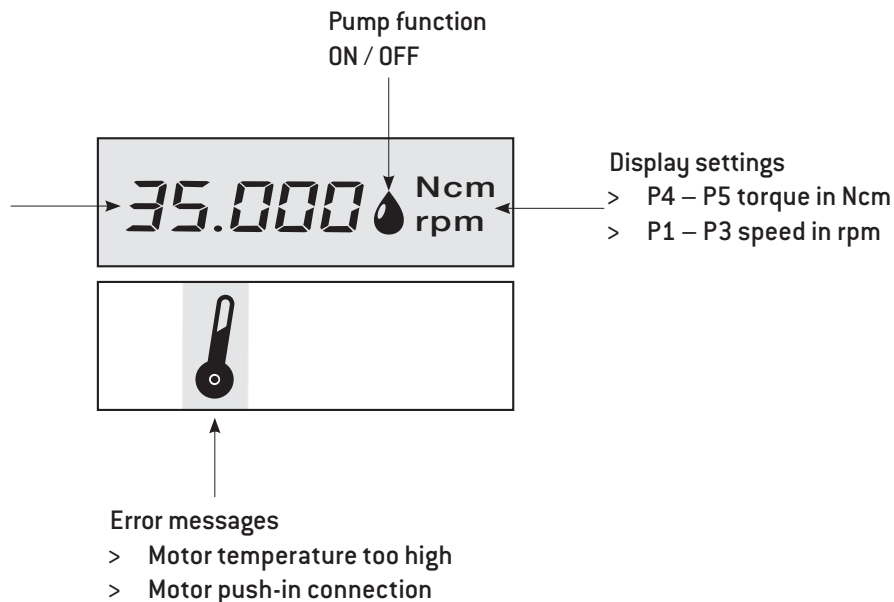


Activate the desired program (P1 – P5) by pressing the corresponding program button.  
During selection an audible signal can be heard and the Program button lights up.  
The selected program appears on the display with the adjusted range in rpm, e.g. for P1:



Display settings

- > P1 – P3 speed
- > P4 – P5 torque





Pressing and holding PLUS / MINUS depressed activates the repeat function and the values are continuously increased / decreased.

❶ Press program button (P1–P3)




❷ Increase speed



❸ Decrease speed



At 40,000 rpm the accuracy of the speed set is  $\pm 10\%$ .

-  Program P4: range 5 – 70 Ncm, intermediate stage 32 Ncm.  
The motor switches off automatically when the set torque is reached in forward and reverse operation modes.
- Program P5: range 20 – 60 Ncm.  
The control unit automatically switches to reverse operation when the set torque is reached.  
Disengaging and then re-engaging the pedal will switch the device back to forward operation.

Pressing and holding PLUS / MINUS depressed activates the repeat function and the values are continuously increased / decreased.

A longer confirmation signal is heard on changing from 5 to 70 Ncm (20 to 60) and 70 to 5 Ncm (60 to 20).



- ❶ Press the program button (P4 or P5)



- ❷ P4: increase torque in 5-Ncm steps  
P5: increase torque in 10-Ncm steps



- ❸ P4: decrease torque in 5-Ncm steps  
P5: decrease torque in 10-Ncm steps



The accuracy of the set torque in the 20 – 50 Ncm range for the W&H WI-75 E/KM contra-angle handpiece is  $\pm 10\%$ .  
Greater deviations may be encountered with other instruments.





Factory setting 100 % Range 65 %, 80 % and 100 %.

Press and hold the PLUS / MINUS button to continuously increase or decrease the values.



Press and hold program button P2 during this procedure.



- 1 Press and hold P2 for approx. 4 seconds  
[the set coolant volume is shown]



- 2 Continue to press P2 and press PLUS  
to increase the flow rate



- 3 Continue to press P2 and press MINUS  
to decrease the flow rate



After adjusting, program button P2 is illuminated and active.

### Change program

Press the ORANGE button to select programs 1 – 4 in ascending order. In program 5 switch the torque steps from 20 – 60 Ncm. The motor direction is automatically set to forward operation every time the program is changed.



When changing from program 4 to program 1 and in program 5 from 60 Ncm to 20 Ncm, a longer acknowledgment signal sounds (risk of injury).

### Pump ON / OFF

Only when the motor is at complete standstill can the pump be switched on or off by pressing the GREEN button of the foot control. If the pump function is activated, the pump symbol is shown on the display.

### Reverse operation

Press the YELLOW button to change from forward operation to reverse operation. On selecting reverse operation, an audible signal can be heard and the selected program button flashes. Before the motor starts in reverse operation, 3 audible warning signals are given.

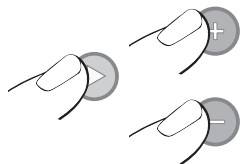
To change from VARIABLE to ON / OFF



Keep program button P3 depressed throughout this procedure.



❶ Keep P3 depressed for approx. 4 seconds



❷ Continue to keep P3 depressed and simultaneously press the PLUS and MINUS buttons



❸ Continue to keep P3 depressed and adjust the setting.



01 = VARIABLE (factory setting) – press PLUS button



00 = ON/OFF – press MINUS button



After adjusting, program button P3 is illuminated and active.

## 10. Restoring factory settings

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The factory setting always starts with program 1 (P1).

- ❶ Switch off the control unit



- ❷ Press and hold P1 and simultaneously switch on the control unit

- ❸ Press and hold P1 until the display shows the setting “DE FAU”

## 11. Thread cutter function (chip breaker mode)



When the thread cutter function (P5) is activated, the speed in both forward and reverse operation modes is 20 rpm and can no longer be changed.



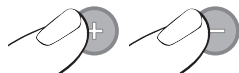
When the motor button (grey) on the foot control is pressed, the thread cutter rotates inwards until the set torque is reached. The control unit automatically switches to reverse operation when the set torque is reached. Disengaging and then re-engaging the motor button will switch the control unit back to forward operation.



If the thread cutter function is in reverse operation mode, the control unit can also start with the maximum torque.




❶ Press P5 program button.



❷ Use Plus/Minus to increase or decrease the torque.

## 12. Error messages

Error no.	Description	Solution
00	Electronics overheated – safety shutdown	Switch off device, allow device to cool for at least 20 minutes, re-start
01	Electronics overloaded	Switch off device, allow device to cool for at least 10 minutes, re-start
02	Voltage too high	Switch off device, check voltage, re-start
07	Initialization error	Switch off device, re-start, do not actuate foot control and display when switching on
09	Foot control error	Switch off device, check plug contacts of foot control, re-start
19	Running time limiter	Switch off device and re-start
99	System failure	Switch off device, allow device to cool for at least 10 minutes, re-start
	Motor plug-in connection	Switch off device, check plug contacts, re-start

- > If the described problem cannot be resolved, the unit will need to be inspected by an authorized W&H service partner.
- > In case of a total system failure, switch the control unit off and on again.



Follow your local and national laws, directives, standards and guidelines for cleaning, disinfection and sterilization.



Wear protective clothing, safety glasses, face mask and gloves.



Use only oil-free, filtered compressed air with a maximum operating pressure of 3 bar for manual drying.



### **Cleaning agents and disinfectants**

- > Read the notes, follow the instructions and heed the warnings provided by the manufacturers of cleaning agents and/or disinfectants.
- > Use only detergents which are intended for cleaning and/or disinfecting medical devices made of metal and plastic.
- > It is imperative to comply with the concentrations and exposure times specified by the manufacturer of the disinfectant.
- > Use disinfectants which have been tested and found effective by the Verbund für Angewandte Hygiene e.V. (VAH = Association for Applied Hygiene), the Österreichisch Gesellschaft für Hygiene, Mikrobiologie und Präventivmedizin (ÖGHMP = Austrian Society for Hygiene, Microbiology and Preventive Medicine), the Food and Drug Administration (FDA) and the U.S. Environmental Protection Agency (EPA).
- > The user is responsible for validating its process if the specified cleaning agents and disinfectants are not available.



The product lifetime and the medical device's ability to operate correctly are mainly determined by mechanical stress during use and chemical influences due to processing.

Send worn or damaged medical devices and/or medical devices with material changes to an authorized W&H service partner.



### **Processing cycles**

We recommend a regular service for the W&H universal support after 250 processing cycles.





- > Clean the medical device immediately after every treatment.
- > Wipe the control unit, the universal support and the irrigant support with disinfectant.



Note that the disinfectant used during pre-treatment is only for personal protection and cannot replace the disinfectant step after cleaning.

### Universal support / Irrigant support



Do not immerse the universal support or the irrigant support in liquid disinfectant or in an ultrasonic bath.

### Universal support / Irrigant support

- > Clean the universal support and the irrigant support under running tap water (< 35°C / < 95°F).
- > Rinse and brush off all internal and external surfaces.
- > Remove liquid residues using compressed air.

### Control unit



Do not immerse the control unit in water or clean under running water.



Evidence of the medical device's basic suitability for effective manual cleaning was provided by an independent test laboratory using tap water < 35°C and towels/cloth »WIPEX® WET DESI premium« (NORDVLIES GmbH, Bargteheide).

### Control unit / Universal support / Irrigant support



W&H recommends wipe-down disinfection.



Evidence of the basic suitability of the control unit, motor with cable and the irrigant support for effective manual disinfection was provided by an independent test laboratory using the disinfectants “mikrozydR AF wipes” (Schulke & Mayr GmbH, Norderstedt) and “CaviWipes™” (Metrex).

### Universal support / Irrigant support



W&H recommends automated cleaning and disinfection using a washer-disinfector (WD).

Read the notes, follow the instructions and heed the warnings provided by the manufacturers of washer-disinfectors, cleaning agents and/or disinfectants.



The control unit is not approved for automated cleaning and disinfection.



Evidence of the basic suitability of the universal support and the irrigant support for effective automated disinfection was provided by an independent test laboratory using the “Miele PG 8582 CD” washer-disinfector (Miele & Cie. KG, Gütersloh) and the “Dr. Weigert neodisher® MediClean forte” cleaning agent (Dr. Weigert GmbH & Co. KG, Hamburg) according to ISO 15883.

- > Cleaning at 55 °C (131°F) – 5 minutes
- > Disinfection at 93 °C (200°F) – 5 minutes

### Universal support / Irrigant support



- > Ensure that the universal support and the irrigant support are completely dry internally and externally after cleaning and disinfection.
- > Remove liquid residues using compressed air.

### Inspection – Universal support / Irrigant support



- > Check the universal support and the irrigant support after cleaning and disinfection for damage, visible residual soiling and surface changes.
- > Reprocess any universal support and irrigant support that are still soiled.
- > Sterilize the universal support following cleaning and disinfection.

### Universal support



Pack the universal support in sterilization packages that meet the following requirements:

- > The sterilization procedure must meet the applicable standards in respect of quality and use and must be suitable for the sterilization method.
- > The sterilization package must be large enough for the sterilization goods.
- > The loading sterilization package must not be under tension.

### Universal support



W&H recommends sterilization according to EN 13060, EN 285 or ANSI/AAMI ST55.




- > Read the notes, follow the instructions and heed the warnings provided by the manufacturers of steam sterilizers.
- > The program selected must be suitable for the universal support.

### Recommended sterilization procedures

- > “Dynamic-air-removal prevacuum cycle” (type B) / “Steam-flush pressure-pulse cycle” (type S)\*/\*\*  
134°C (273°F) for at least 3 minutes, 132°C (270°F) for at least 4 minutes
- > “Gravity-displacement cycle” (type N)\*\*  
121°C (250°F) for at least 30 minutes
- > Maximum sterilization temperature 135°C (275°F)



 Evidence of the basic suitability of the universal support for effective sterilization was provided by an independent test laboratory using the LISA 517 B17L\* steam sterilizer (W&H Sterilization S.r.l., Brusaporto (BG)), the Systec VE-150\* steam sterilizer (Systec) and the CertoClav MultiControl MC2-S09S273\*\* steam sterilizer (CertoClav GmbH, Traun).

“Dynamic-air-removal prevacuum cycle” (type B): 134°C (273°F) – 3 minutes\*, 132°C (270 °F) – 4 minutes\*/\*\*  
“Steam-flush pressure-pulse cycle” (type S): 134°C (273°F) – 3 minutes\*, 132°C (270 °F) – 4 minutes\*/\*\*  
“Gravity-displacement cycle” (type N): 121°C (250°F) – 30 minutes\*\*

### Drying times:

“Dynamic-air-removal prevacuum cycle” (type B): 132°C (270°F) – 30 minutes\*\*  
“Steam-flush pressure-pulse cycle” (type S): 132°C (270°F) – 30 minutes\*\*  
“Gravity-displacement cycle” (type N): 121°C (250°F) – 30 minutes\*\*

\* EN 13060, EN 285, ISO 17665

\*\* ANSI/AAMI ST55, ANSI/AAMI ST79

### Universal support



- > Store sterile goods dust-free and dry.
- > The shelf life of the sterile goods depends on the storage conditions and type of packaging.

## 14. Servicing

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### **Periodic inspection**

Regular periodic inspection of the function and safety of the medical device is necessary and should be carried out at least once every three years, unless shorter intervals are prescribed by law.

The periodic inspection covers the complete medical device and must only be performed by an authorized service partner.

# Servicing

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## Repairs and returns

In the event of operating malfunctions immediately contact an authorized W&H service partner.  
Repairs and maintenance work must only be undertaken by an authorized W&H service partner.



Ensure that the medical device has been completely processed before returning it.



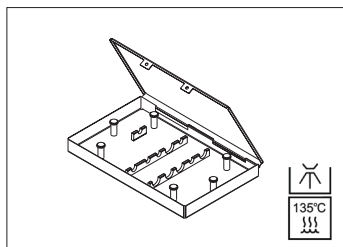
Always return equipment in the original packaging.

## 15. Accessories, consumables, spare parts and other recommended medical devices by W&H



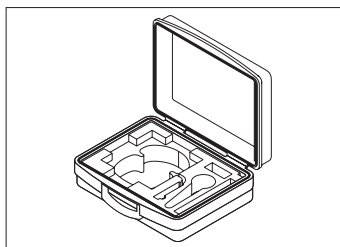
Use only original W&H accessories and spare parts or accessories approved by W&H.

Suppliers: W&H partners (Link: <https://www.wh.com>)



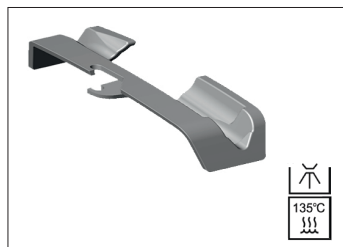
**04013500**

Cassette



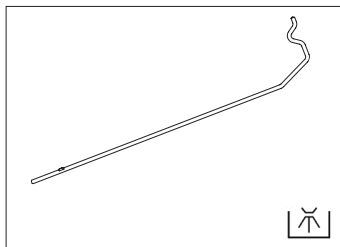
**07948730**

Transportation case



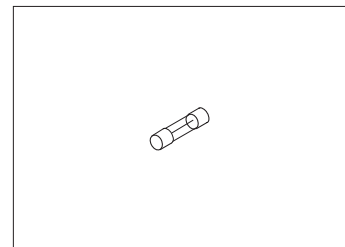
**07721800**

Universal support



**04005900**

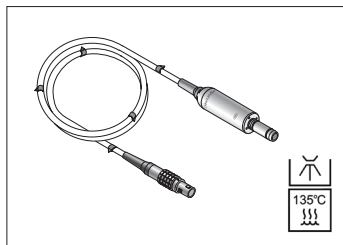
Irrigant support



**06352200**

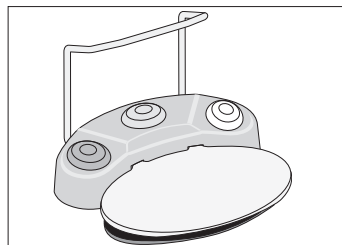
Fuse (250 V - T1.6AH)

## Accessories, consumables, spare parts and other recommended medical devices by W&H



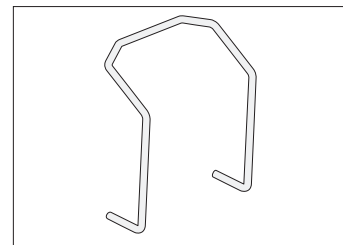
**30185000**

EM-19 motor without  
electrical contacts  
and 1.8 m cable



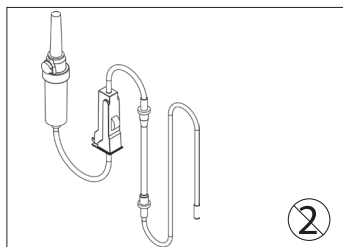
**30285000**

Foot control S-N2



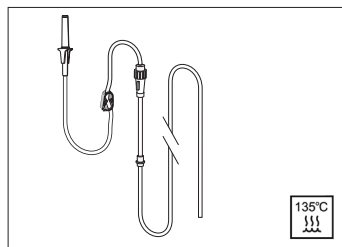
**04653500**

Locator for foot control



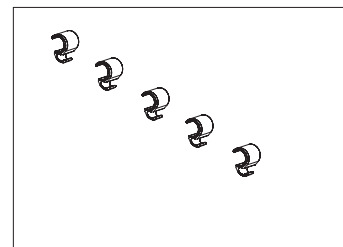
**04363600**

Irrigation tubing set 2.2 m (6 pcs)



**04719400**

Irrigation tubing set 2.2 m



**06290600**

Hose clips (5 pcs)

## 16. Technical data

Control unit	SI-923	SI-915
Mains voltage:	230 V	120 V
Permissible voltage fluctuation:	220 – 240 V	110 – 130 V
Rated current:	0.3 – 0.8 A	0.3 – 1.6 A
Frequency:	50 – 60 Hz	
Mains fuse (2 pcs):	250 V – T1.6 AH	
Maximum power consumption:	160 VA	
Maximum power output:	80 W	
Maximum torque at motor:	5.5 Ncm	
Motor speed range in the rated voltage range:	300 – 40,000 rpm	
Coolant flow rate at 100 %:	min. 90 ml/min	
Dimensions in mm (height x width x depth):	100 x 235 x 240	
Weight in kg:	2.7	


### Ambient conditions

Temperature during storage and transport:	-40 °C to +70 °C [-40°F to +158°F]
Air Humidity for storage and transport:	8 % to 80 % (relative), non-condensing
Temperature in operation:	+10 °C to +35 °C [+50°F to +95°F]
Air Humidity in operation:	15 % to 80 % (relative), non-condensing

## Technical data

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**Classification according to Paragraph 6 of the General Specifications for the Safety of Medical Electrical Equipment according to IEC 60601-1/ANSI/AAMI ES 60601-1**

 Class II medical electrical equipment (protective earth conductor used for functional earth connection only!)

Pollution level:	2
Overvoltage category:	II
Altitude:	up to 3,000 m above sea level



## 17. Data on electromagnetic compatibility according to IEC/EN 60601-1-2

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### **Operating environment and EMC warning notes**

This medical device is neither life-sustaining nor coupled to the patient. It is suitable for operation both in domestic healthcare and in facilities used for medical purposes except rooms/areas, in which EMC interference of high-intensity may occur.

The customer and/or the user should assure that this medical device is set up and used in an environment of the specified type and/or in accordance with the specifications of the manufacturer. This medical device uses RF energy only for its internal functions. Therefore, its RF emissions are very low and not likely to cause any interference in nearby electronic equipment.

No special precautions are necessary to maintain the basic safety and essential performance of this medical device



### **Essential performance**

This medical device has no critical functions and therefore does not have any essential performance features.

## Data on electromagnetic compatibility according to IEC/EN 60601-1-2

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### **RF communication equipment**

Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to the medical device. Otherwise, degradation of the performance of this medical device could result.



W&H guarantees the compliance of the device with the EMC requirements only when used with original W&H accessories and spare parts. The use of accessories and spare parts not approved by W&H can lead to an increased emission of electromagnetic interference or to a reduced resistance against electromagnetic interference.



Use of this medical device adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this medical device and the other equipment should be observed to verify that they are operating normally.



The medical device is not intended for use in the vicinity of HF surgical devices.

# Results of the electromagnetic tests

Requirement	Class / Test Level*		
Electromagnetic emissions			
Mains terminal disturbance voltage [Conducted Emissions] CISPR 11/EN 55011 [150 kHz – 30 MHz]	Group 1 Class B		
Electromagnetic radiation disturbance [Radiated Emissions] CISPR 11/EN 55011 [30 MHz – 1000 MHz]	Group 1 Class B		
Harmonic distortion IEC/EN 61000-3-2	Class A		
Voltage fluctuations and flicker IEC/EN 61000-3-3	–		
Immunity to electromagnetic interference			
Electrostatic discharge [ESD] IEC/EN 61000-4-2	Contact discharge: ±2 kV, ±4 kV, ±6 kV, ±8 kV Air discharge: ±2 kV, ±4 kV, ±8 kV, ±15 kV		
Radiated RF electromagnetic fields IEC/EN 61000-4-3 [80 MHz – 2,7 GHz]	10 V/m		
Proximity fields from RF wireless communications equipment IEC/EN 61000-4-3	710 / 745 / 780 / 5240 / 5500 / 5785 MHz		9 V/m
	385 MHz		27 V/m
	450 / 810 / 870 / 930 / 1720 / 1845 / 1970 / 2450 MHz		28 V/m
Electrical fast transients / bursts IEC/EN 61000-4-4	Mains supply: ±2 kV Input and output ports: ±1 kV		
Surges IEC/EN 61000-4-5	±1 kV L – N	±2 kV L – PE	±2 kV N – PE
Conducted disturbances induced by RF fields IEC/EN 61000-4-6	3 V 6 V in ISM bands and in amateur radio bands		
Power frequency magnetic fields IEC/EN 61000-4-8	30 A/m		
Voltage dips, short interruptions and voltage variations IEC/EN 61000-4-11	0% for 0.5 cycle at 45° steps from 0°-315° 0% for 1 cycle 70% for 25/30 cycles 0% for 250/300 cycles		
Proximity magnetic fields IEC/EN 61000-4-39	30 kHz		8 A/m
	134,2 kHz		65 A/m
	13,56 MHz		7,5 A/m

\* There are no deviations or simplifications to IEC/EN 60601-1-2.

## 18. Disposal

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Ensure that the parts are not contaminated on disposal.



Follow your local and country-specific laws, directives, standards and guidelines for disposal.

- > Medical device
- > Waste electrical equipment
- > Packaging

# W&H course certificate

for the user

The user has been trained to use the medical device correctly in accordance with the legal regulations (medical devices marketing regulations, medical devices act). Particular attention has been paid to the chapters on safety notes, start-up, operation, hygiene and maintenance, and service (regular inspections).

Product name	Serial number (SN)
Manufacturer with address	
Distributor with address	

Name of the user	Date of birth and/or personnel number
Hospital/dental practice/department with address	
Signature of the user	
The signature confirms that the user has been trained to use the medical device and has understood the content.	

Name of the instructor	Date of instruction
Address of the instructor	
Signature of the instructor	





## W&H course certificate

**for the instructor**

The user has been trained to use the medical device correctly in accordance with the legal regulations (medical devices marketing regulations, medical devices act). Particular attention has been paid to the chapters on safety notes, start-up, operation, hygiene and maintenance, and service (regular inspections).

Product name	Serial number (SN)
Manufacturer with address	
Distributor with address	



Name of the user	Date of birth and/or personnel number
Hospital/dental practice/department with address	
Signature of the user	
The signature confirms that the user has been trained to use the medical device and has understood the content.	



Name of the instructor	Date of instruction
Address of the instructor	
Signature of the instructor	





# Explanation of warranty terms

This W&H medical device has been manufactured with great care by highly qualified specialists. A wide variety of tests and controls guarantees faultless operation. Please note that claims under warranty can only be validated when all the directions in the Instructions for Use have been followed.

**As the manufacturer, W&H is liable for material or manufacturing defects within a warranty period of 12 months from the date of purchase. Accessories and consumables are not covered by the warranty.**

We accept no responsibility for damage caused by incorrect handling or by repairs carried out by third parties not authorized to do so by W&H!

Claims under warranty accompanied by proof of purchase must be sent to the vendor or to an authorized W&H service partner. The provision of service under warranty extends neither the warranty period nor any other guarantee period.

**12 months warranty**

## Authorized W&H service partners

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Find your nearest authorized W&H service partner at <http://wh.com>  
Simply go to the menu option “Service” for full details.

Or simply scan the QR code.





Software version:

User interface: 01.03.00

MC-1.0 IP: 01.06.00



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**wh.com**

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**Rev. 009 / 10.06.2024**  
**Subject to alterations**