

# PowerDrive™

## For power-operated root-canal cleaning and minimally-invasive operative caries removal with Carisolv™

### PowerDrive™ – a multifunctional electronic instrument!

PowerDrive™ is a multi-functional, power-operated instrument. A microprocessor is used to control the torque with high precision. Special emphasis has been placed on making the instrument user-friendly.

- An increasing number of dentists are using power-operated root-canal cleaning as it is thought to be a faster and far more convenient way of working compared with manual cleaning. PowerDrive™ for root-canal cleaning has been designed to meet dentists' demand for simplicity and a high degree of reliability.
- Minimally-invasive dentistry comprises biologically-oriented procedures in which the teeth are treated with precision and care. The purpose is that the teeth should last for as long as possible to avoid post-operative complications and to comply with the patient's expectations of high quality and comfort.

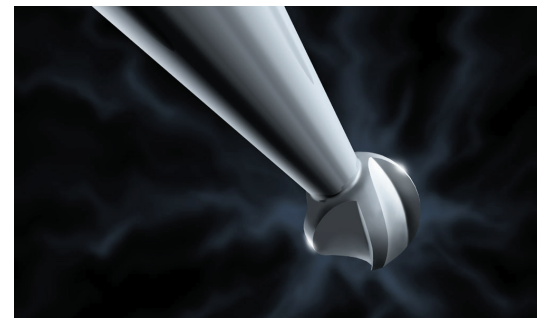
Carisolv™ is a minimally-invasive method for treating cavities. A gel softens the carious dentine, which can then be gently scraped away with specially-designed instruments. PowerDrive™ represents a fast and simple way to remove softened caries.



*A microprocessor is used to control the torque with high precision*

### PowerDrive™ for power-operated root canal cleaning

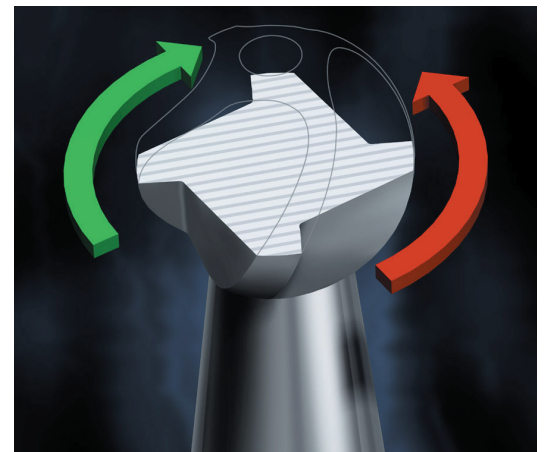
- High precision to reduce the risk of file fracture
- Self-instructive panel makes the instrument user-friendly
- Programs for five specific maximum torque values
- Light indicators on the panel show how much of the maximum torque is currently being used
- Light indicators on the contra-angle show when the maximum torque is approaching
- Light, small contra-angle provides high tactility and simple usage
- Low sound levels provide high comfort for patients
- Auto-reverse function; machine switches to reverse automatically if it stops during operation



*Specially-designed tips for treatment with Carisolv™*

### PowerDrive™ for caries removal with Carisolv™

- Selective and precise – removes only carious dentine
- Fast, simple and efficient removal of caries
- PowerDrive™ operates with high tissue control and at a low sound level
- The instrument tips are designed for different cavity geometries
- Minimises the need for drilling and anaesthesia
- Minimises patient pain and discomfort
- Patients can operate the control unit themselves. Useful for patients with dental phobia



*The tips for Carisolv™ perform different functions in different directions*

## Motor unit with contra-angle

The motor and the contra-angle are combined as one unit, which can be separated to enable the cleaning and autoclaving of the contra-angle.

## Control panel

The control panel has two separate parts, the upper one for power-operated root-canal cleaning (endodontic treatment) and the lower one for treatment with Carisolv™.

## Foot control

The PowerDrive™ for endodontic treatment must be used with the foot control.

The PowerDrive™ for Carisolv™ treatment can be used with or without the foot control. If the foot control is not connected, the rotation, clockwise or counter-clockwise, is activated by pressing the respective buttons. Pressing the STOP button stops the machine.

## Torque limiter

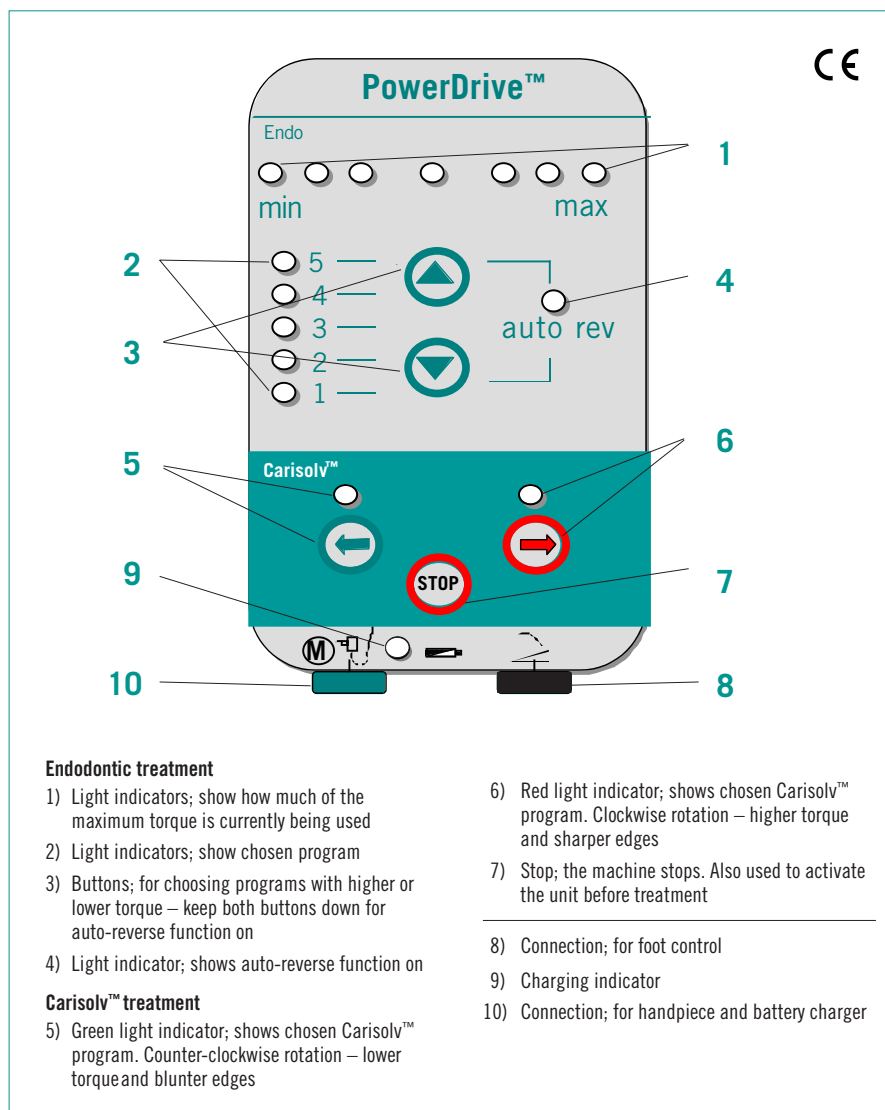
PowerDrive™ continuously measures torque and stops automatically when the limit is exceeded. When used for endodontic treatment, the auto-reverse function can be selected. The rotational direction then changes automatically when the torque limit is exceeded. The contra-angle is equipped with a light indicator which shows the actual torque level.

## Charging

The charging indicator on the panel indicates that the battery needs charging. When the battery is being charged, the light flashes and it then stops when the battery is fully charged.

*For detailed information, please refer to the instructions for use for Carisolv™ gel and PowerDrive™.*

*PowerDrive™ and Carisolv™ are protected by patents and patent applications.*



### Endodontic treatment

- 1) Light indicators; show how much of the maximum torque is currently being used
- 2) Light indicators; show chosen program
- 3) Buttons; for choosing programs with higher or lower torque – keep both buttons down for auto-reverse function on
- 4) Light indicator; shows auto-reverse function on

### Carisolv™ treatment

- 5) Green light indicator; shows chosen Carisolv™ program. Counter-clockwise rotation – lower torque and blunter edges

- 6) Red light indicator; shows chosen Carisolv™ program. Clockwise rotation – higher torque and sharper edges
- 7) Stop; the machine stops. Also used to activate the unit before treatment
- 8) Connection; for foot control
- 9) Charging indicator
- 10) Connection; for handpiece and battery charger

## Technical specifications

Model	PowerDrive™	
RPM	<b>Endodontic treatment:</b> 300 rpm (clockwise) 300 rpm (counter-clockwise)	<b>Carisolv™ treatment:</b> 350 rpm (green, counter-clockwise) 450 rpm (red, clockwise)
Torque	Program 1: 0.4 Ncm Program 2: 0.7 Ncm Program 3: 1.1 Ncm Program 4: 1.6 Ncm Program 5: 2.2 Ncm When running in reverse the torque will increase by 10%.	Clockwise: 1.2 Ncm Counter-clockwise: 1.2 Ncm
Program setting	Five torque settings Auto reverse function selectable	Two torque/speed combinations
Control	R x I compensation and torque limiter	
Power supply	Five integrated, rechargeable NiMh batteries, each 1.2 V, 1600 mAh	
Sterilisation	The contra-angle and the tips for Carisolv™ treatment can be sterilised at 135°C. The motor and other components can be washed with disinfectant. Cleaning and sterilisation of the endodontic files, according to the manufacturer's instructions for use.	

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