






- Diagnostic and Imaging Equipment 
- Treatment Units 
- Handpieces and Instruments 
- Endodontic Systems 
- Laser Equipment 
- Laboratory Devices 

**Fast. Safe.  
Gentle.**

DentaPort ZX with OTR function



Something so precious  
deserves gentle treatment

**Experience endodontics of the highest class**

People regard their teeth as extremely valuable. Providing the best possible care for this precious material has absolute priority. For this reason, the DentaPort ZX Set OTR has been fitted with the innovative Optimum Torque Reverse function. Thanks to this measurement and canal preparation system, you can protect teeth and reduce file breakage to a minimum. Enjoy the feeling of even greater safety – for fast, highprecision endodontic treatment.



# OTR – Gentle and safe root canal preparation

Treatment with the DentaPort ZX Set is particularly gentle and offers a decisive advantage: it minimizes the risk of microcrack development in the tooth. This is achieved with the Optimum Torque Reverse function (OTR) of the innovative module system, which operates with very low torque levels. It allows you to ensure optimal tooth protection.



The New Movement  
in Endodontics

— Cutting direction  
— Non-cutting direction

## Optimum Torque Reverse: Safe protection

In the root canal, the file is always subject to mechanical influences that act against the drive torque of the endomotor. These can lead to torsion and, consequently, result in a file breaking. In order to protect both file and teeth, it is therefore vital to restrict the torque acting on the file. With the OTR function, the file changes its rotational direction as soon as a specific torque level has been reached. After a reverse turn of just 90° it reverts back to the cutting direction. The advantage: this procedure is only repeated after a further turn of 180° if the file is under any strain. If there is no strain on the file, it continues cutting. You can now benefit from the simple work processes as you now only need between one and a maximum of three files for safe preparation and can use all prevalent file systems except Reciproc. You save both material and time as the safe removal of debris, improvement of canal access and retention of the original canal contour can all be achieved much more quickly.

# What combination would you like today?

You don't just want reliable measurements, you also want root canal preparation with visual monitoring and comfortable finishing? Simply adjust the DentaPort ZX Set OTR to suit your requirements. With its modular design, the combination system for convenient and safe endodontics turns the device into exactly what you want whenever you need it.

## Reliable apex localization



### Precise measurement: DentaPort Root ZX module

The apex locator, the base module of the DentaPort ZX Set, is characterized by its high measurement precision irrespective of rinsing fluids, an easy-to-use control panel and a large color display for exact illustration and acoustic monitoring of file positions. You'll appreciate the automatic calibration feature – even when canal conditions change! With its light and simultaneously sturdy housing, the successor to the legendary Root ZX is arguably the best-selling apex locator worldwide – and its excellent references are further proof of its high quality.

## Safe root canal enlargement



### Comfortable preparation: DentaPort TriAuto OTR

The DentaPort TriAuto OTR is an endomotor with which the DentaPort Root ZX can be upgraded to an intelligent canal preparation motor at any time. It already monitors the file position visually and acoustically during canal enlargement to provide both you and your patients with even more safety. Speeds between 100 and 800 rpm can be selected depending on the operating mode. At the same time, the automatic apical control functions provide active protection against over-instrumentation and the auto torque functions safeguard against file breakage. Benefit from up to 6 automatic safety functions provided by the light and compact handpiece - and from a contra angle which has not only a particularly small head diameter but is also equipped with an internal file electrode for an even better view and more working length.

## Efficient polymerization



### Fast finishing: LED module / Curing light

Simply replace the motor handpiece with the curing handpiece in order to switch over to adhesive treatment. This high-performance module shows you all parameters clearly on a large display. It has three memory locations and allows a countdown which can be set in 8 stages between 5 and 40 seconds. Benefit from the thermal control, acoustic signals, a concentrated light beam for high light intensity without any scattering loss and a small head for very easy access to the molars. Operation can be triggered optionally using the foot control or the button on the handpiece.

# The right reaction – at the right moment

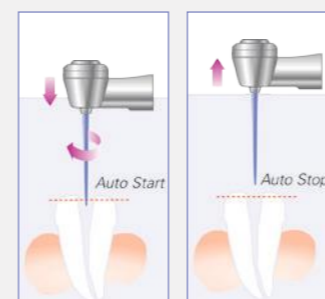
You can rely on the integrated safety system: the DentaPort ZX Set OTR always knows what to do. The file starts to rotate as soon as it enters the root canal – and stops again as soon as it is removed. And the automatic safety functions are activated as soon as file rotation gets close to the individually set torque limits or the reference point.



## Individual adjustment

It's in your hands: You set the required torque levels yourself beforehand. As soon as these values are reached during treatment, the file reacts by stopping, slowing down or reversing rotational direction.

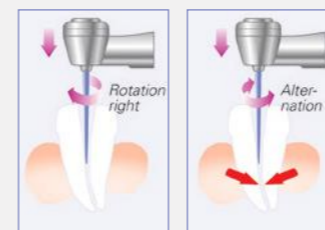
## Ready when you are



### The automatic start-stop-function

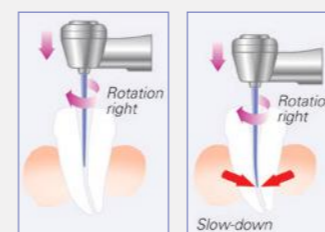
How would you like to start? The automatic motor control regulation by the apex locator offers you the option of Auto Start and Auto Stop. Alternatively, you can use the supplied foot control or the manual start where the measuring function does not take over any control of the handpiece.

## Active protection against file breakage



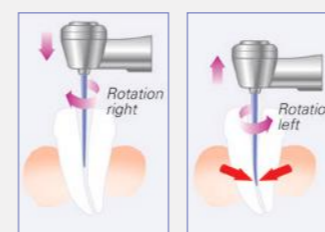
### Optimum Torque Reverse

The file rotates in the cutting direction without strain. If the preset torque is exceeded, it alternates 180° forwards and 90° back.



### Auto Torque Slow-down

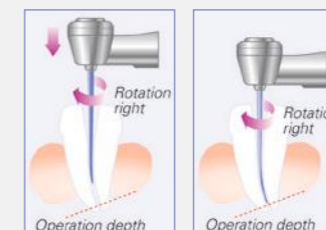
The rotational speed is reduced as soon as the file approaches the preset torque limit.



### Auto Torque Reverse

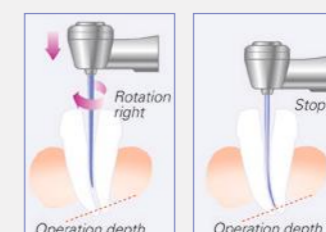
The file stops automatically upon reaching a specific torque and changes its rotational direction.

## Intelligent instrument controls



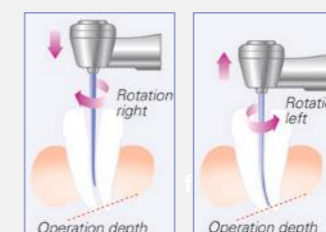
### Auto Apical Slow-down

The rotational speed is reduced as soon as the file approaches a previously set reference point to the apex.



### Auto Apical Stop

The file stops automatically upon reaching a stipulated reference point.



### Auto Apical Reverse

The file stops automatically and rotates in the opposite direction as soon as a stipulated reference point has been reached.

Automatic and safety functions	Auto Torque Reverse (Standard)	Optimum Torque Reverse (New)
<b>Auto Start/Stop</b>	✓	✓
<b>Speeds</b>	150 – 800 rpm in 8 stages	100 – 500 rpm in 3 stages
<b>Permanent length control during treatment</b>	✓	✓
<b>Auto Apical Slow-down</b>	✓	–
<b>Auto Apical Stop</b>	✓	✓
<b>Auto Torque Reverse</b>	✓	–
<b>Optimum Torque Reverse</b>	–	✓
<b>Auto Torque Slow-down</b>	✓	–
<b>Torque values</b>	0.2 – 4.9 N/cm in 11 stages	0.2 – 1.0 N/cm in 4 stages