Root ZX® II – Endodontic Predictability
Morita Modular Innovation
Thinking ahead.
Focused on life.
Root ZX II and Additional Modules –
The Possibilities Are Endless...

With proven accurate apex location, Morita’s Root ZX II also serves as a docking station for dental modules, delivering true instrument versatility.
Root ZX II Key Features

**Modular Root Canal Treatment Instrument**
By attaching modules to the Root ZX II apex locator, the dentist can prepare canals and use a LED curing light device.

**Multi-Joint Connection**
Simply switch handpieces to use whichever function you need.

**Compact and Lightweight Handpieces**
The Low Speed Handpiece and the LED Curing Light Handpiece are ergonomically designed to be well-balanced and to fit perfectly in your hand.

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**Root ZX II and Modules – Features at a Glance**

**Root ZX II – Apex Locator**

**Continuous, Accurate Measurement**
Root ZX II accurately and precisely locates the position of the file inside the root canal.

**No Zero-Adjustment**
It is not necessary to set the device on zero before measuring each individual canal.

**Automatic Calibration**
Automatic calibration ensures accuracy and eliminates the effect of changes in temperature, moisture, etc. inside the canal even during treatment.

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**Low Speed Handpiece Module – Canal Preparation Instrument**

**Prepare Canals While Simultaneously Taking Measurements**
Accurate and precise preparation of the root canal.

**Motor Flexibility: 8 Speed Settings**
150, 200, 250, 300, 400, 500, 600, 800 rpm

**5 Automatic Safety Functions**
- Auto Motor Start/Stop
- Auto Torque Reverse
- Auto Torque Slow Down
- Auto Apical Reverse
- Auto Apical Slow Down

**Fully Programmable Settings**
Root ZX II is equipped with 3 programmable memory modes.

**Compact and Lightweight Handpiece Design**
The Low Speed Handpiece features complete ergonomic design with ideal angles for maximum balance and access to the oral cavity.

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**LED Light Cure Module**

**Powerful, Parallel Light Beam Intensity of 1,000 mW/cm²**
Provides a uniform, even cure and maintains power intensity even at a distance of 10 mm from the curing interface.

**Compact Design**
Ergonomic, similar to a dental handpiece for superior accessibility.

**High Performance LED Technology**
High performance and durable LED’s (light emitting diodes) with low power consumption.
Root ZX II – Apex Locator
World’s Best Selling Unit

Root ZX II measures root canals accurately and precisely.

Built on the industry standard Root ZX technology, Root ZX II will measure in both wet or dry canal conditions with class-leading accuracy of 96.2%.*

Accurate Measurement

The ratio technique used in the instrument provides a highly accurate detection of the file’s location. The accuracy of the measurement is not affected by the presence or absence of blood, other discharges, electrolytes, saline, tap water, or hydrogen peroxide.

No Zero-Adjustment

It is not necessary to set the device on zero before measuring each individual canal.

Automatic Calibration

Automatic calibration ensures accuracy and eliminates the effect of changes in temperature, moisture, etc. inside the canal, even during treatment.

Large Color Liquid Crystal Display (LCD)

The large color LCD screen is easy to read, and provides a clear progressive display with high contrast.

* Independent study, data on file
The Root ZX II with Low Speed Handpiece combination prepares root canals while displaying precise and accurate measurements of the root canal.

By offering multiple automatic safety controls, the Root ZX II Low Speed Handpiece is the clear choice for today’s Dentist or Endodontist. It allows you to prepare canals with accuracy and precision, providing the predictability that is expected in today’s dental practice. Root ZX II Low Speed Handpiece - Safety First!

**5 Automatic Safety Functions:**
- Auto Motor Start/Stop
- Auto Torque Reverse
- Auto Torque Slow Down
- Auto Apical Reverse
- Auto Apical Slow Down

**Foot Switch for Easy Operation**

When a canal measurement is not possible (or required) the Low Speed Handpiece has an optional foot switch. This enables the operator to use Root ZX II as a standard micromotor. The foot switch is especially useful for preparing the coronal third of the root canal.

No foot switch required **Auto Motor Start and Stop**

Motor starts when file is inserted and stops when it is withdrawn.
The Low Speed Handpiece is ergonomically designed to minimize fatigue and fingertip stress. It is lightweight and ideal for endodontic access.

- **Weight:** only 2.47 oz. (70 g) (approx.)
- **Speed:** 150 to 800 rpm with 8 speed options
- **Compact head size:** only .49” (12.5 mm)

Reduced file breakage
**Auto Torque Reverse**
File stops and reverses if the torque goes over the set torque limit. With 11 torque limit options, the Root ZX II Low Speed Handpiece is ideal for all today’s rotary NiTi file systems.

Reduced file breakage
**Auto Torque Slow Down**
File slows down as the torque approaches the set torque limit.

Accurate preparation
**Auto Apical Reverse**
File stops and reverses when it reaches the end of the set working length. You can also set stops manually or adjust the interval between stopping and reversing.

Precise control
**Auto Apical Slow Down**
File slows down as it approaches the end of the set working length, ensuring safe and accurate preparations.

Multi-Joint Handpiece Connection
Simply exchange the handpiece option by using the quick connect joint for either light curing or rotary endodontic preparations.
Ergonomic Design
Lightweight and compact for optimum performance and handling.

Superior Access
The head of the LED rotates up to 300 degrees to ensure ideal access for all surface areas of the oral cavity.
- Head diameter: .61” (15.5 mm)
- Head height: .63” (16 mm)
- Weight: approx. 2.12 oz. (60 g)
- Head rotation: 300°

Perfectly Balanced
Ergonomically designed for optimum handling, the handpiece is perfectly balanced and designed to fit comfortably in your hand to reduce stress and load on your fingertips.

Powerful Parallel Light Beam
Even at a distance of 10 mm from the curing interface, the LED Curing Light retains 80% of its power intensity.

Exceptional Depth of Cure
This unit is especially suitable for curing and bonding of fiber posts due to its unique power retention.

Exceptional Depth of Cure
The images above show the unique parallel beam of Morita’s LED Curing Light technology. Note the intense blue spot has not altered in size, whether it is 1 mm or 10 mm from the surface (curing interface).

Accessibility throughout the oral cavity is maximized by the unique “high speed handpiece” design style.

Root ZX II LED Light Cure Module
High-Powered, Parallel Curing

The Root ZX II LED Light Cure Module is a powerful curing unit which delivers high intensity light of 1,000mW/cm². Morita’s unique parallel light beam is the key that ensures uniform light activation, every time.
Specifications

1 Root ZX II
   Rating: DC 4.5 V
   Power Consumption: 0.135 VA
   Size: W x D x H
       4.13” x 4.13” x 4.53”
       (105 x 105 x 115 mm)
   Weight: approx. 13.05 oz. (370 g)

2 Low Speed Handpiece / LED Module
   Power consumption: 1.92 VA
   Charger: Rapid Charge Type
   Size: W x D x H
       4.13” x 5.00” x 4.53”
       (105 x 127 x 115 mm)
   Weight: approx. 10.58 oz. (300 g)

3 Root ZX II Main Tubing
   For Low Speed Handpiece and LED Light Cure Handpiece

4 Root ZX II Micromotor and Contra Angle Handpiece
   Diameter: max. .71” (18 mm)
   Length: 6.50” (165 mm)
   Weight: approx. 2.47 oz. (70 g)
   (including contra angle handpiece/head)

5 LED Light Cure Handpiece
   Diameter: max. .71” (18 mm)
   Length: 6.89” (175 mm)
   Weight: approx. 2.12 oz. (60 g)

Trade name: Root ZX II
Model: DP-ZX-VL
Manufacturer: J. Morita Mfg. Corp.

Accessories

1 x handpiece rest
1 x AR oil
1 x AC adapter (100 V–240 V 50/60 Hz)
20 x plastic sleeves

Root ZX II - Apex Locator

Root ZX II and Low Speed Handpiece Module
Apex Locator and Canal Preparation System Combination
Accessories
1 x handpiece rest
1 x AR oil
1 x AC adapter (100 V–240 V 50/60 Hz)
20 x plastic sleeves

Root ZX II, Low Speed Handpiece and LED Light Cure Module
Apex Locator, Canal Preparation and Curing Light System Combination
Accessories
1 x handpiece rest
1 x AR oil
1 x AC adapter (100 V–240 V 50/60 Hz)
20 x plastic sleeves
1 x eye protector
1 x disposable covers (1 box of 100)

Design and specifications are subject to change without notification.
Morita’s Tri Auto ZX was the first rotary, endodontic handpiece ever produced. With a built-in apex locator, it allows the clinician to electronically monitor the root canal before, during, and after instrumentation. During shaping and cleaning, the position of the file tip is displayed on the LED control panel located on the handpiece for easy viewing. Combined with the technology of the Root ZX apex locator, it significantly increases accuracy and safety and helps prevent destruction of the natural configuration of the root.

- **3 Automatic safety functions**
- **Built-in apex locator (Root ZX technology)**
- **Portable and cordless**
- **Speed: 280 ± 50 rpm (with no load at 3.6 VDC)**
- **Push button chuck release**
- **Choice of automatic or manual mode**

Manufacturer: J. Morita Mfg. Corp.

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**Auto Start and Stop:** The handpiece automatically starts when the file enters the canal and stops when the file is removed from the canal.

**Auto Torque Reverse:** The handpiece automatically stops and reverses the rotation of the nickel titanium file when too much pressure is applied.

**Auto Apical Reverse:** The handpiece automatically stops and reverses the rotation of the file when the tip reaches a distance from the apex preset by the clinician.

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**Specifications**

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Handpiece Weight</td>
<td>5.6 oz. (160 g)</td>
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<tr>
<td>Handpiece Outer Dimensions</td>
<td>1.2” x 1.5” x 8.3”</td>
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<tr>
<td></td>
<td>(30 x 37 x 212 mm)</td>
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<td>Charger Outer Dimensions</td>
<td>3.1” x 4.8” x 2.2”</td>
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<td></td>
<td>(80 x 123 x 55 mm)</td>
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<tr>
<td>Package Includes</td>
<td>1 x handpiece</td>
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<td></td>
<td>1 x contra head</td>
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<td>1 x charger</td>
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<td></td>
<td>1 x battery</td>
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<td></td>
<td>1 x probe cord</td>
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<td>1 x function tester</td>
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<td>3 x file holders</td>
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<td>5 x contrary electrodes</td>
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<td>1 x practice model</td>
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<td></td>
<td>1 x instructional video</td>
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</tbody>
</table>

**Automatic Safety Functions**

1. **Auto Start and Stop:** The handpiece automatically starts when the file enters the canal and stops when the file is removed from the canal.

2. **Auto Torque Reverse:** The handpiece automatically stops and reverses the rotation of the nickel titanium file when too much pressure is applied.

3. **Auto Apical Reverse:** The handpiece automatically stops and reverses the rotation of the file when the tip reaches a distance from the apex preset by the clinician.

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Tri Auto ZX gives the clinician the capability and convenience to electronically monitor the root canal before, during and after instrumentation.
Thinking ahead. Focused on life.

In 1916, Junichi Morita started to import products of the leading dental equipment manufacturers into Japan, where demands for modern dentistry were growing. His venturesome attempts of supplying selected products for oral healthcare has grown steadily by receiving valuable support and guidance from the dental profession. His enterprising spirit lives through the decades, and all Morita Group Companies join in continuing to pursue marketing, distribution and services, as well as R&D and manufacturing, in collaboration with world leaders in healthcare products and research organizations.