



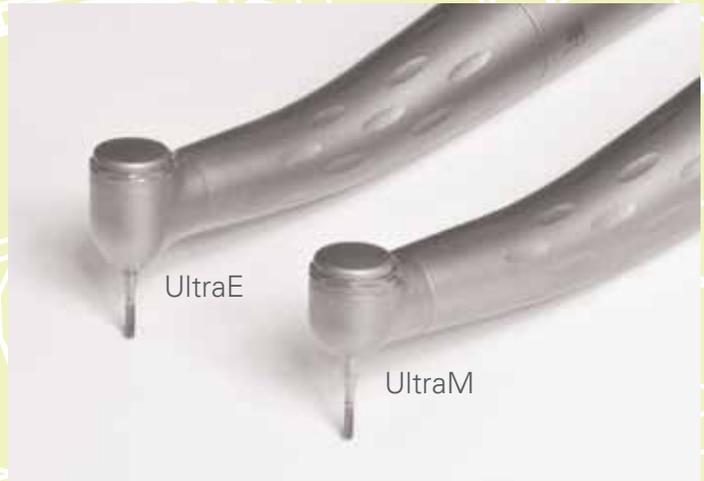
TwinPower Turbine<sup>®</sup> Ultra Series  
Even Smaller Design with More Power

Thinking ahead. Focused on life.



## Features at a Glance

**Compact Head Design**  
**Powerful**  
**Quiet**  
**Durable**  
**Zero Suck Back**



### **Powerful Micro Head**

The TwinPower Turbine Ultra Series handpieces offer a small compact head size for improved access and views in the oral cavity. This product line includes the new UltraM and UltraE.

Although these handpieces are mini in design, their power is equal to or greater than many high torque turbines.

### **Unique TwinPower Technology**

The torque produced by TwinPower technology provides steady, effective, and efficient drilling with a light touch.

### **Quick Stop Braking**

Rotation stops within 2 seconds even at the highest speeds. This feature offers added safety and prevents excessive drilling.

### **Bur Flexibility**

UltraM, which has the smallest head, accepts standard burs up to 20 mm in length as well as short shank burs. UltraE utilizes standard burs.

### **Zero Suck Back**

Unique, built-in technology prevents the intake of contamination and cutting debris when the handpiece stops rotating.

### **Long-lasting Ceramic Ball Bearings**

The ceramic ball bearings are exceptionally hard and light, making the bearings faster and more durable.

### **Aero-skirt**

The aero-skirt cuts down on the flow of air towards the treatment area. This, in turn, regulates the spray delivered to the treatment area and provides more efficient drilling and improved cooling.

### **Quiet**

Advanced fluid dynamic technology and high precision machining has significantly reduced the noise level in the 6,000 to 7,000 Hz range. This makes treatment more comfortable for the patient.

### **Glass Rod Optics**

The glass rod optics offer autoclave safe, highly focused and stable illumination (25,000 LUX).

# Compact, Powerful Design: UltraM and UltraE



The TwinPower Turbine Ultra Series is twice as powerful as other popular mini head handpieces.



The UltraM head is approximately 30% smaller than a TwinPower Turbine standard head. This gives the dentist a much better view of the treatment area. The UltraM head accepts a standard bur up to 20 mm in length. The usable portion of the bur (the part extending out of the head) is the same as that of a standard head.

## Head Type Comparison

### UltraM

UltraM delivers 18 watts, twice the power of some other popular mini handpieces, and offers an extremely compact head height for exceptional posterior access.

### UltraE

UltraE is a bit larger and more powerful at 20 watts, but still offers a compact head that improves the clinician's view when using a mirror or microscope.

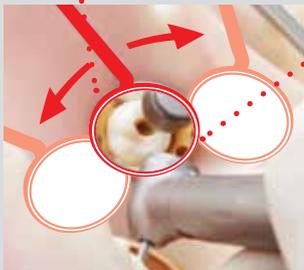


# Improved Access and Visibility

## Case 1. Tooth 16 Pulp Chamber Opening



UltraE (PAR-4HUEX-O)



The UltraE head facilitates an improved view with a mirror or a microscope. The bur can easily be seen while accessing the pulp chamber. The small head allows for improved mirror positioning and better vision.



Standard (PAR-4HEX-O)

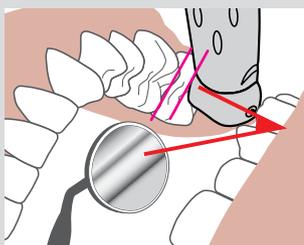


When using a standard sized head, the bur must be slanted for visibility which results in removal of more tooth structure than necessary.

## Case 2. Tooth 17 Cavity Preparation



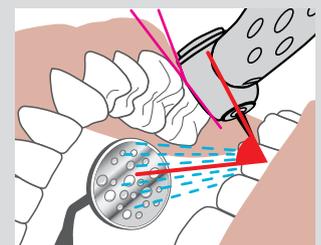
UltraM (PAR-4HUMX-O)



With UltraM, the bur can be held upright for use on molars (including wisdom teeth) or for patients who have limited opening.



Standard (PAR-4HEX-O)



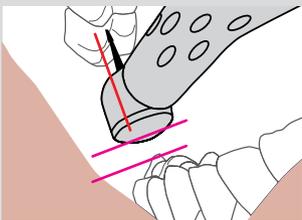
The bur must be slanted with a standard head to gain access which leads to excessive drilling of the tooth structure. The mirror is placed to the side of the handpiece head and gets wet resulting in poor visibility.

# More Comfortable for Patients

## Case 3. Tooth 47 Treatment Area



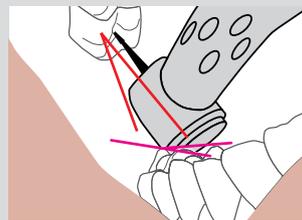
UltraM (PAR-4HUMX-O)



The UltraM head is more comfortable for patients and offers better access in the posterior region. It is especially helpful on the occlusal surface when the patient has limited opening.



Standard (PAR-4HEX-O)

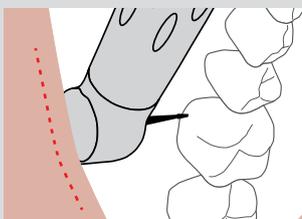


A standard sized head strikes opposing teeth in the treatment area. The sensation of this can be stressful and uncomfortable for patients.

## Case 4. Tooth 46 Caries Treatment



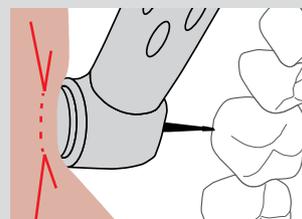
UltraM (PAR-4HUMX-O)



The handpiece head may be placed perpendicular to the tooth even in the posterior region. The labial and buccal gingiva do not prevent this due to the small head size of UltraM.



Standard (PAR-4HEX-O)



A standard size head presses up against the labial and buccal gingiva, which can be unpleasant for the patient.



### 15° head angle to hold bur parallel to tooth axis

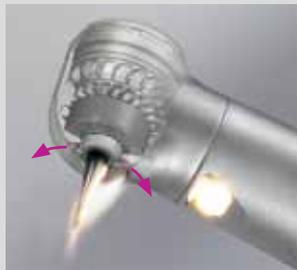
This is the ideal angle to hold the bur parallel to the tooth axis when resting your little finger on a tooth.

# TwinPower Turbine Technology



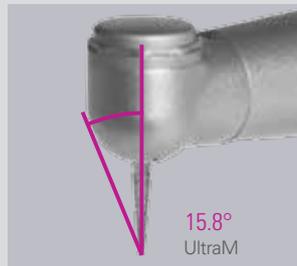
## Push Button Chuck

The metal push button chuck is durable and bur replacement is quick and easy.



## Aero-skirt

The aero-skirt cuts down on the flow of air towards the treatment area. This, in turn, regulates the spray and provides more efficient drilling and improved cooling.

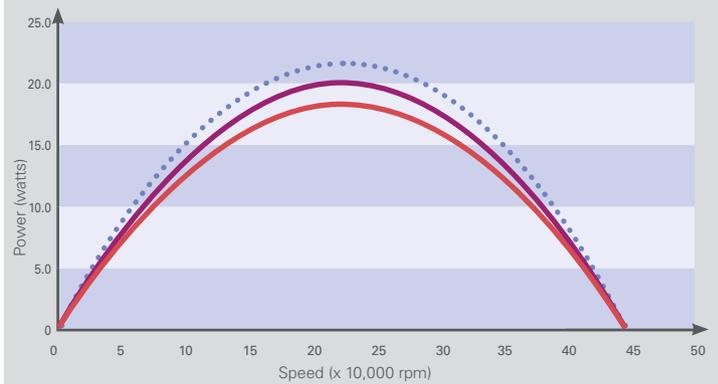


## Wide Field of View

A compact head leaves a wide field of view in line with the axis of the tooth. The dentist can see the tip of the bur during procedures.

(shown with 19 mm bur)

## Compact but Powerful Design



— UltraE — UltraM ●● Standard

TwinPower technology provides exceptional torque for the UltraM (18 W) and UltraE (20 W) heads. Steady and powerful, these heads can be used for both ceramic and metal prosthetics.



## All TwinPower Turbines can be equipped with LED lights

The LED coupler offers a bright, natural colored light with a wide field of illumination. This consistent and even lighting results in less eye fatigue and makes it easier to identify caries, diseases, and abnormalities.

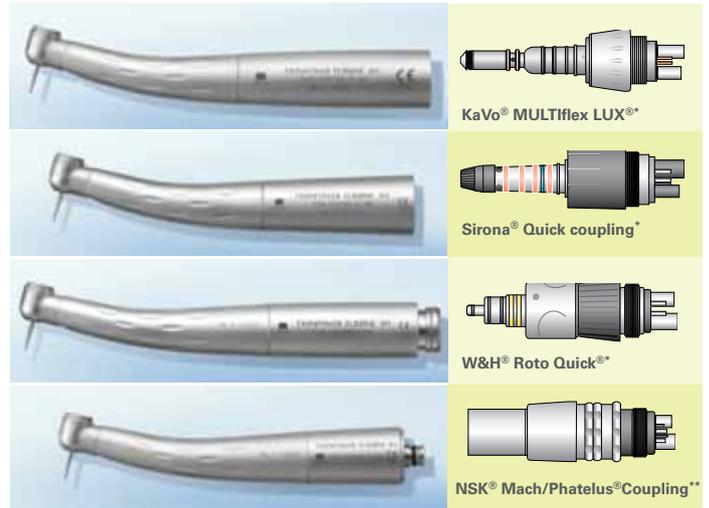
# Connection and Coupling Options



## 4-Hole Coupling (with LED light) CP4-LD

- Water adjustment valve
- Extremely smooth 360° axis rotation
- Coupling for 4-hole ISO 9168 Type 3 (formerly Type C) hose connection with non-retraction valve

\* KaVo MULTiflex LUX is a registered trademark of Kaltenbach & Voigt GmbH.  
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\*\*NSK and Phatelus are registered trademarks of NAKANISHI INC.  
Name of the coupling varies by country.



# Specifications and Ordering Information

## Specifications

Product Name	TwinPower Turbine 4H	
Head Types	 UltraM	 UltraE
Chuck Types	Push Button Chuck	
Models	PAR-4HUMX-O	PAR-4HUEX-O
Tube Connection	Morita, KaVo, Sirona, W&H, NSK	
Weight (g)	48 - 57 depending on connection type	
Suck Back* (mm / Aq)	0	
Stop Time	Less than 2 seconds	
Angle of View** (°)	15.8	16.6
Maximum Power *** (watts)	approx. 18	approx. 20
Speed *** (rpm)	370,000 ± 30,000	
Chip Air Ports	5	3
Water Ports	1	3
Head Diameter (mm)	9.0	
Head Height (mm)	10.6	12.7
Drive Air Pressure (MPa)	0.20 - 0.29	

## Ordering Information

TwinPower Turbine UltraM	
Morita (PAR-4HUMX-O)	16-5356989
KaVo (PAR-4HUMX-O-KV)	16-5357578
NSK (PAR-4HUMX-O-NK)	16-5357586
W&H (PAR-4HUMX-O-WH)	16-5357594
Sirona (PAR-4HUMX-O-SR)	16-5357608
TwinPower Turbine UltraE	
Morita (PAR-4HUEX-O)	16-5356970
KaVo (PAR-4HUEX-O-KV)	16-5357497
NSK (PAR-4HUEX-O-NK)	16-5357500
W&H (PAR-4HUEX-O-WH)	16-5357519
Sirona (PAR-4HUEX-O-SR)	16-5357527

\* Suction pressure  
\*\* With 19 mm bur  
\*\*\* Power and speed depend on pressure of drive air

## 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.

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Tel: 1-949-581-9600, Fax: 1-949-465-1095  
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Developed and Manufactured by

### **J. Morita Mfg. Corp.**

680 Higashihama Minami-cho, Fushimi-ku, Kyoto, 612-8533 Japan  
Tel: +81-75-611-2141, Fax: +81-75-622-4595  
[www.jmorita-mfg.com](http://www.jmorita-mfg.com)

### **J. Morita Corporation**

33-18, 3-Chome, Tarumi-cho Suita City, Osaka, 564-8650 Japan  
Tel: +81-6-6380-1521, Fax: +81-6-6380-0585

### **J. Morita Europe GmbH**

Justus-von-Liebig-Strasse 27A, D-63128 Dietzenbach, Germany  
Tel: +49-6074-836-0, Fax: +49-6074-836-299

### **Siamdent Co., Ltd.**

444 Olympia Thai Tower, 3rd Floor, Ratchadapisek Road, Samsennok, Huay Kwang, Bangkok 10310, Thailand  
Tel: +66-2-512-6049, Fax: +66-2-512-6099, [www.siamdent.com](http://www.siamdent.com)

### **J. Morita Corporation Australia & New Zealand**

Suite 2.05, 247 Coward Street, Mascot, NSW 2020, Australia  
Tel: +61-2-9667-3555, Fax: +61-2-9667-3577

### **J. Morita Middle East**

4 Tag Al Aoasaa, Saba Pacha 21311, Alexandria, Egypt  
Tel: +203-58-222-94, Fax: +203-58-222-96

Morita Global Website: [www.morita.com](http://www.morita.com)