

THE BENEFITS

NO KEY!



The unique built-in arm eliminates a separate key, ensuring a straightforward activation process.

COMPLIANCE



The KKE eliminates non-compliance, as the expander can be easily activated by the patient or guardian.

HASSLE FREE



No more frustration over:

- Finding the tiny activation hole
- Making incomplete turns
- Screw back-spin
- Misplacing the key

FAST



Shorter treatment duration due to increased patient compliance.

SMALL SIZE



Its small size allows for deep placement, enabling true skeletal expansion and enhanced comfort.

QUICK FACTS

- **No Key!**
- **Fast treatment duration**
Complete expansion in less than 2 months by activating once a day
- **Available in 3 common sizes**
8mm, 10mm, or 12mm opening capacities
- **Easily activated by the patient**
Thanks to the built-in arm mechanism
- **Small Size**
Its small size allows for deep placement in the palate, increased comfort, and true skeletal expansion.
- **Arm may be cut during retention phase (optional)**
The arm can be cut with a carbide bur after expansion phase, if the doctor prefers. This prevents the child from continuing expansion.
- **Intentionally Reversible**
Just use the reversal kit!



CONTACT US



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AEGIS STAR
DENTAL TECHNOLOGIES

NO MORE RPE KEYS!



THE KELES™

KEYLESS EXPANDER

www.aegis-star.com

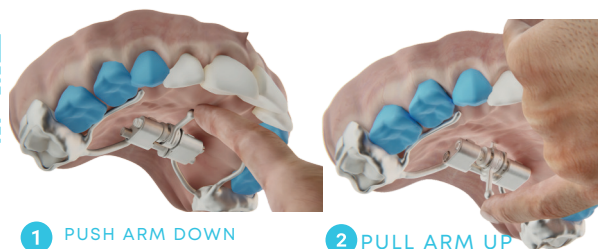
WHAT IS THE KKE?

The **Keles™ Keyless Expander (KKE)** is a rapid palatal expander that features a built-in activation arm. It stands out from other rapid palatal expanders by **eliminating the need for a separate key**, its small size, and ease of use. KKE offers numerous benefits, such as increased treatment adherence, short treatment duration, comfort, and effective patient-friendly treatment outcomes.

HOW TO ACTIVATE



SCAN TO VIEW
THE ANIMATION



TYPES OF DESIGNS



2 ARM DESIGN

4 ARM DESIGN



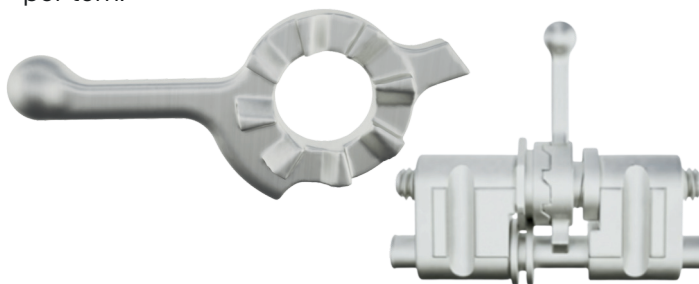
BONDED DESIGN

HYBRID DESIGN

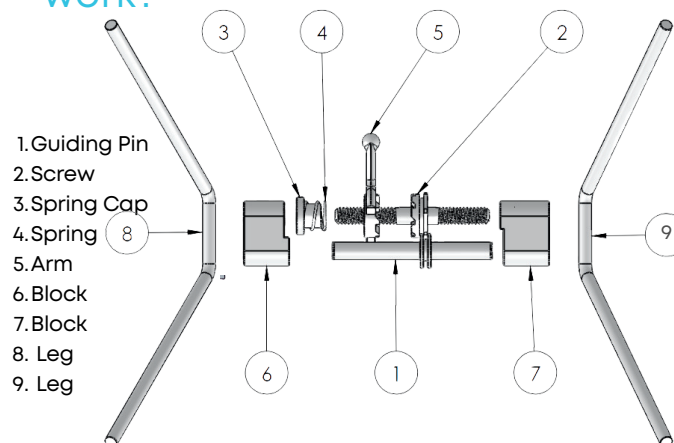
THE DESIGN

• Keyless Design

Features a built-in activation arm that applies intermittent force when activated and expands 0.2mm per turn.



• How does the mechanism work?



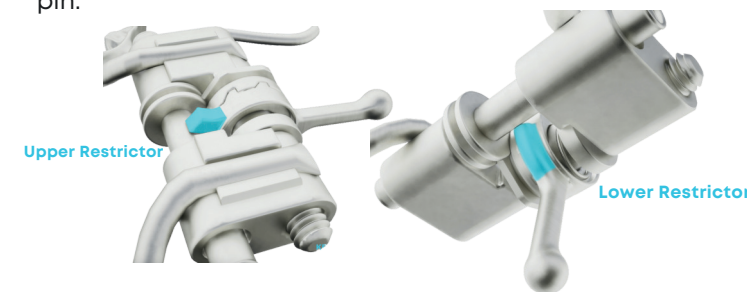
The Keles Keyless Expander (KKE) consists of 9 pieces, its activation mechanism includes an arm (5), a screw (2), a spring (4), and a spring cap (3). The arm's base and the screw's center contains gears. The teeth of the 2 gears interlock since a spring pushes them together (this spring is housed within the spring cap (3) and the arm (5)). When activated with a finger, the arm rotates the screw, moving the two blocks outward, expanding 0.2mm. After the activation is completed, the arm is pushed up, which disengages the teeth of both gears and the arm returns to its resting position, with each turn this cycle repeats

The Unidirectional Screw System allows the expander to turn one way, like a unidirectional ratchet/wrench. With this system there is **no screw back spiraling/reversing**.

If a Dr wants the **KKE can be reversed it with the Reversal Kit**

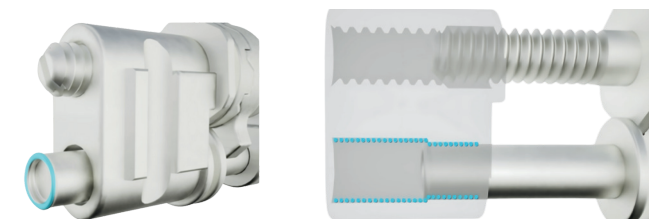
• Full Activation: 1 Turn (115°)= 0.2mm

The upper restrictor sets the arm's resting position, and activation completes when the lower restrictor meets the pin.



• Max. Expansion Locking System

When fully expanded, the stopper leans against the block's level change, preventing disassembly—a unique safety feature.



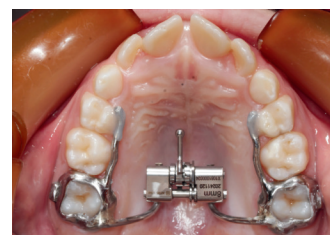
CLINICAL CASE



Before



After



Before



After

Patient M., a 9-year-old male with maxillary constriction, was treated with the **Keles™ Keyless Expander (2-Leg Design, 8mm size)** in **only 4 weeks**, with **only 3 clinic visits** (consultation & scan, delivery, follow-up).