

# Sagittal

JOHNS DENTAL  
OVER  
*70*  
Years  
FAMILY OWNED  
& OPERATED SINCE 1939

## ANTERIOR / POSTERIOR EXPANSION

## TECHNICAL BULLETIN



Our standard Upper 2-Screw Sagittal design from Johns Dental



Our lower 2-Screw Sagittal design shown here without occlusal pads.

The Sagittal was originally designed for anterior/posterior expansion, though additional expansion screws also allow for minor lateral expansion. This appliance encourages either forward or distal movement of teeth, depending on the anchorage.

### You'll love the versatility of the Sagittal designs.

The Sagittal can be constructed for either the upper or lower dentition, and utilizes from one to four (usually two) screws to develop the arches. The acrylic makes anterior contact in the cuspid area and posterior contact with bite pads. The screw cuts are typically distal to the cuspids, and create arch length when the screws are turned.

### Custom made at Johns Dental.

Working from a basic design, the Sagittal may take various forms, depending on the prescribed treatment. Johns Dental can customize your Sagittal to accomplish a number of treatment goals. Here are a few common case designs that we see:

- Class I crowded with diverging cuspids
- Class II, Division I crowded

This design involves removing 2nd molars and allowing 3rd molars to erupt.

*RESULTS: Approximately 80% distalization of posteriors, with about 20% forward movement of anteriors is expected when appliance is properly worn and adjusted.*

- Class II, Division 2

2nd molars are usually not removed for this solution and solid posterior occlusion and lower cuspid contact is essential.

*RESULTS: About 80% forward anterior movement, and 20% posterior distalization is expected when appliance is properly worn and adjusted.*

- Class II, maxillary arch slightly narrower than mandibular arch.

A center screw is added at the midline in this sagittal version, which can be used simultaneously with side screws.

*RESULTS: Doctors can achieve arch width and sagittal correction at the same time.*

- Class III

This Sagittal version encourages maximum premaxilla development.

*RESULTS: Predominantly forward movement of the maxillary anteriors.*

- Lower arch needs lengthened

This Sagittal version is often used after 2nd molars are removed, allowing 3rd molars to erupt in their place.

*RESULTS: For better patient compliance, lower sagittal treatment usually follows (one month after completion) of upper sagittal correction.*

### Wearing instructions:

Successful results can only be achieved when the Sagittal is worn 24 hours per day - **especially while eating.** (If the case appears to be advancing too quickly and isn't fitting properly in the anterior area, the patient probably isn't wearing it while eating.)

**Lab Technician Quote:**  
"The Sagittal appliance probably starts more ortho treatments than any other appliance."

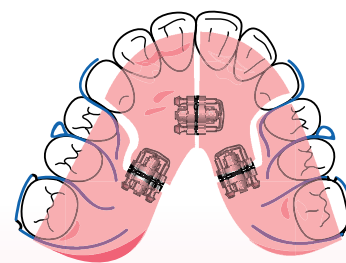
Other anterior / posterior expansion appliances from Johns Dental:

#### REMOVABLE:

- Evans

#### FIXED:

- CD Remodeler/Distalizer
- Magill Sagittal
- Sims Anterior or Distal Drive



This 3-screw Sagittal illustration shows A/P expansion while the mid-screw offers slight lateral expansion to help round out the arch.



We also offer a Sagittal flat plane splint to allow patients to guide into the best joint healing position.

**JOHNS DENTAL**  
LABORATORIES

Appliances that "snap in" the first time.

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Our appliances are proudly made in the USA and only with FDA approved materials.