

Treatment of dental and skeletal Class IIs remains a major concern for orthodontists. Hubert Droy, a dental prosthodontics technician specializing in orthodontics for the past 15 years, has thought long and had about the conventional systems.

Attentive to orthodontists' needs and drawing on his own ideas, he first devised in 2007 an innovative mandibular propulsion system, the Optimax laboratoire, equipped with non-dismountable vertical ball and socket joint which is both compact and perfectly adapted to the physiology of mandibular movements. This system has been tried and tested on numerous prototypes and has proven its efficacy in the propulsive correction of Class II malocclusions while enhancing patient comfort, the quality of sagittal discrepancy corrections and occlusion stability. The combination of a multi-attachment appliance and Optimax Lab has also been possible thanks to the adoption of an original retention system by means of molar hooks as well as the use of slide tracks. Optimax Lab is CE certified by the LNE (the French national test laboratory), a sure guarantee of quality. Since 2009 and Hubert Droy's encounter with the orthodontist, Dr Benoit THEBAULT, Optimax Lab has been improved still further to provide a system which is now totally reliable, meeting the needs and demands of both patients and practitioners.

Pooling their creativity, they have now developed Optimax Lab into Optimax Fix. The guiding principle underlying Optimax Fix has been to preserve the innovative solutions provided by Optimax Lab (comfort, functionality, reliability) and to combine them with a global multi-attachment technique while eliminating as far as possible the defects of existing systems (unwanted parasite movements, debonding, etc). Thus, Optimax Fix still boasts the efficacy and functionality of the original appliance, ensuring comfort, esthetics and the integrity of the multi-attachment appliance while reducing to a minimum any undesirable dental effects, notably at the mandibular incisors.

Class IIs, however, are not all of mandibular origin. Maxillary dental retraction, combined or not with mandibular dental advancement, is another possible cause. In order to achieve immediate distalization of the lateral segments without prior levelling, Optimax Distaler was devised. The distalizing force is provided by inter-maxillary traction supported by mandibular anchorage or by elastic modules secured to temporary anchorage devices (TADs). The Optimax Distaler can also be used on the mandible.

In summary, Optimax Laboratoire, Optimax Fix and Optimax Distaler, gathered under the "Optimax Global Class II treatment" concept, offer a broad range of therapies capable of resolving the majority of non-surgical Class II treatment indications.

### The Optimax System

- \* A system suited to all patients
- \* A system suited to all practitioners
- \* A system adaptable to all techniques

Optimax Fix	Nom	GCO Part N°
Kit Optimax Fix Round insert	Kit Optimax Fix Round insert	92-3004-0000
Kit Optimax Fix Square insert	Kit Optimax Fix Square insert	92-3005-0000
Optimax Screw Driver	Optimax Fix Screw Driver	92-3011-0000
Optimax Gauge	Optimax Fix Gauge	92-3012-0000
Sterilisation Box	Optimax Fix Sterilisation Box	92-3013-0000
Stop Forward 1 mm (X 20)	Stop Forward (X 20)	92-3010-0000
Stop Forward 2 mm (X 20)	Stop Forward (X 20)	92-3020-0000

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Modus Operandi



**Hubert DROY** (Designer)  
and Doctor **Benoît THEBAULT** (Qualified DFO specialist)





Optimax Fix (O.Fix) is not just another fixed mandibular propulsion system.

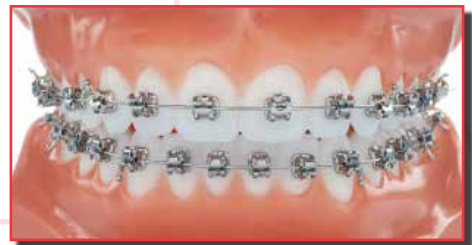
- Anchored to the maxillary and mandibular 6s, it ensures stability and efficacy without calling on the multibracket appliance.
- Its dismountable design allows in situ adjustments at all times during treatment.
- Its vertical ball and socket hinges limit appliance volume and ensure excellent function, patient compliance and predictable results.

### \* Step 1: Multiband appliance

1. Band the maxillary 6s fitted with EOT tubes to which the maxillary clip of the Optimax Fix is secured



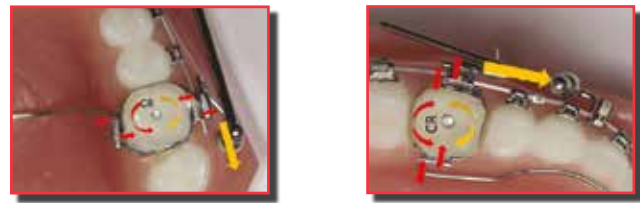
2. Band the mandibular 6s fitted with EOT tubes or a rectangular twin tube to which the Optimax Fix mandibular auxiliary is secured.
3. Classic multibracket appliance bracket information and sizes at the practitioner's discretion.



4. Leveling to the correct dental alignment and compensation of the natural curves.

**Nota bene** : Thanks to the action of the Optimax Fix, using a lingual archwire and/or a transpalatal

arch provides optimum control over arch form eliminates unwanted induced movements.



Optimax Fix can be adapted to the lingual technique:

- \* Specific molar bands are used (buccal tubes).



- \* Specific support is also created at 33 and 43.

- \* Optimax Fix dispenses with the need for heavy steel archwires and can be used during leveling using flexible NiTi-type archwires.

### \* Step 2: Try-out and placement of Optimax Fix

Optimax Fix comprises two components:

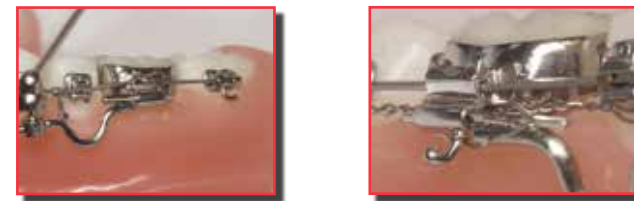
- \* A maxillary clip supporting the maxillary hinge and inserted into the EOT tube on the molar band. No adjustment of the maxillary clip is required. Only the length of the rod tube needs adjustment.



- \* A dual support mandibular auxiliary to be adjusted in situ according to mandibular morphology.

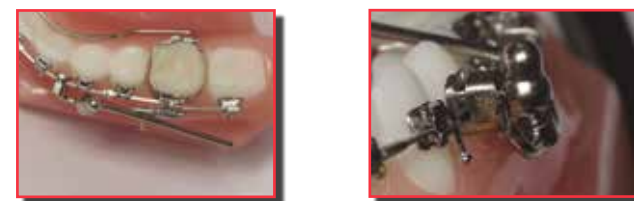
Time required for placement and adjustments: ½ hour

1. Try-out and adjustment of the mandibular auxiliary
  - a. Insertion of the posterior segment into the molar buccal tube as far as the stop.



**Nota bene**: The posterior segment can be rectangular in order to allow insertion into a Ricketts-type twin tube.

- b. Adjustment of the auxiliary length and shape. The mandibular multibracket archwire is inserted in the anterior lock but not fixed, thus avoiding possible deformation.



2. In situ propulsion of the mandible at the discretion of the practitioner.
3. A gauge is used to measure the distance between the anterior aspect of the EOT tube and the middle of the mandibular lock (middle of the tightening screw).



**Nota bene**: Measurements must be taken on both sides

4. Placement of maxillary clip for verification. The clip is inserted in the EOT tube up to the stop.
5. Removal of the mandibular auxiliary and the maxillary clip.
6. The two components are assembled back to front. The length and cross-section of the tube and rod are cut in one step. Polishing.



7. Final placement in the mouth:
  - a. Placement of the mandibular auxiliary. The posterior segment is ligated to the band.
  - b. Insertion of the maxillary tube in the mandibular rod. Rotation of the entire tube and rod appliance with mouth open and insertion of the maxillary clip in the EOT tube. The length is checked. The clip is firmly ligated (0.12 ligature) to the molar band.



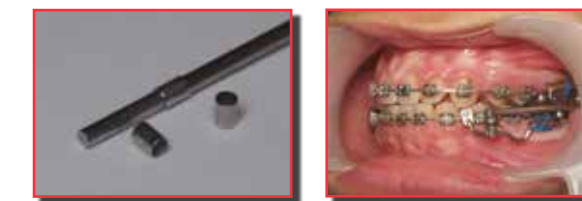
8. Verification of function (complete mouth opening, lateral movement) and of patient comfort. The double ball and socket hinge system permits perfect function.



### \* Step 3: adjustments during propulsion.

The system is checked after two months:

1. Removal of the maxillary clip. The mandibular clip is not removed. The ligatures are checked. The therapeutic impact is observed.
2. Adjustments during propulsion.
  - a. Positioning of mini 1 or 2 mm propulsion rings according to needs.

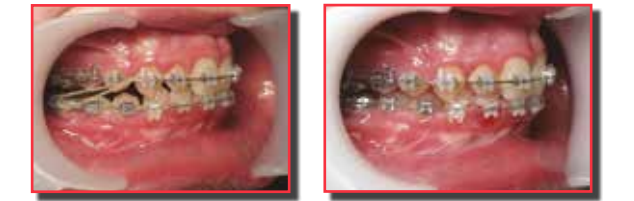


3. The maxillary clip is put back in place and ligated. Verification of function (complete mouth opening, lateral movements) and patient comfort.

### \* Step 4: Following achievement of a Class I

On average, in the absence of any treatment complication, the Class II is corrected within 6 months.

- \* Removal of the Optimax Fix. Stabilization of the Class I until occlusal interdigitation is obtained using Class II traction elastics.



- \* Finishing

### \* Step 5: Debanding

Conventional flexible or rigid splint-type retainers. In extreme cases involving a risk of relapse, Optimax Lab retainers can be requested.

