

BioJVA™

All Occlusal Analysis Starts with the TM Joint

BioJVA Joint Vibration Analysis

BioJVA is a diagnostic aid used to measure how the patient's joints are functioning before starting any case that repositions the mandible. In less than 5 minutes, your team can provide a highly accurate, quantitative test analysing the stability and function of the Temporomandibular Joint.

BioJVA or "Joint Vibration Analysis" is a quick, non-invasive method for objectively evaluating the Temporomandibular Joints.

Much like the way dentists evaluate the wear on the teeth, JVA enables the dentist to assess the health of the jaw joint. BioJVA Joint Vibration Analysis is based on simple principles of motion and friction. When smooth surfaces rub together, they create little friction and little vibration. If these surfaces become rough and rub together, then friction and vibration are created.

Why JVA?

- Identifying a patient's joint problems before symptoms are present.
- Proactively guiding the dentist in treatment planning.
- Allowing the patient to be educated and understand the health of his or her TM Joints.
- Testing treatment impact instantly.



JVA provides a fast, noninvasive and repeatable measurement of TMJ function to aid in your diagnosis. Understanding TMJ function is vital anytime you are changing the vertical, lateral, or A/P position of the mandible. Common treatments that change mandibular posture such as TMD treatment, orthodontics, restorative, and sleep dentistry can benefit from JVA testing.

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BioEMG III™

Making Sense Out of Muscle Function

BioEMG allows you to evaluate the effectiveness of your patient's craniofacial musculature. Achieving optimal muscle function gives you the confidence that treatment will fit the patient's physiology.

BioEMG or "electromyography" allows the clinician to evaluate the efficiency of the patient musculature in rest, chewing, and clenching.

Using EMG allows for identifying improper muscle function over a period of time. Proper muscle function ensures the long term stability of the dental work.

Why EMG?

- Knowing what effect each dental procedure will have on patient muscle function.
- Understanding which dental interferences are of concern.
- Creating balance between muscle groups.
- Quantifying resting level.

Patients' View Compliance and case acceptance. Surface EMG is the worldwide standard method for recording muscle-specific activity in skeletal muscles. It has been proven reliable in numerous studies over many years and is a clinical procedure that can be performed in any dental office. This information is invaluable to the clinician who hopes to create beautiful dentistry that works with the patient's physiology for optimum results.

EMG is the only way to objectively measure the actions and reactions of the muscles of the head and neck. This provides the ability to test your treatments and bite positions before finalising the treatment position.

The BioEMG III electromyograph records electrical (bio-potential) activity from eight muscles simultaneously. Microvolt signals are amplified, virtually without noise, to 5000 times their original levels. Signals are displayed on a computer as original time domain waveforms and average levels that disclose contraction patterns and relative intensities.



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JT-3D™

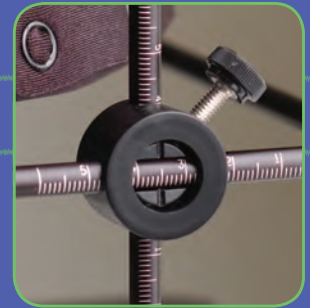
3D Movement and Position of the Jaw

Jaw Tracking generates the most accurate examination of mandibular movement available. Quantitative, reproducible data of deviations, deflections and range of motion provides an unparalleled analysis of mandibular kinesiology.

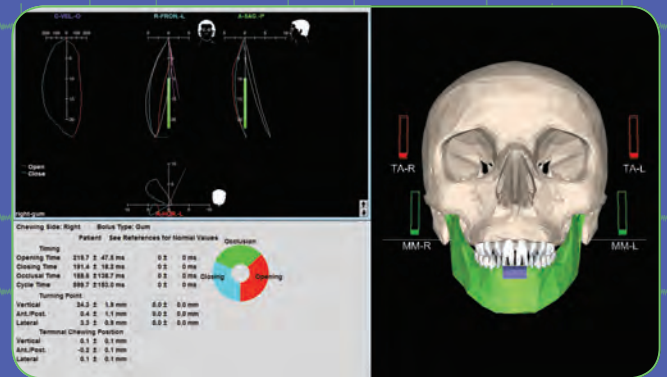
JT-3D, or "Jaw Tracking", allows the clinician to analyse jaw movement in a dynamic way. The most relevant procedures include chewing, speaking, range of motion, and swallowing.

The analysis of the pattern and speed provides tremendous insight in diagnosis and treatment planning.

The all-new JT-3D records incisor-point movements in three dimensions. A small magnet, attached to the labial surfaces of the mandibular incisors, is tracked by an array of sensors to produce vertical, antero-posterior and lateral components of movement. It mounts simply, yet securely on the head, and provides an incredibly stable base for the sensors. This provides spectacular resolution even on the smallest of mandibular movements.



Jaw tracking can assist in designing optimal chewing patterns as well as detecting abnormal function which can aid in more accurate diagnosis. It also can assist in recording accurate, reproducible "bite registrations".



Why track jaw movements? It has been widely accepted that certain aspects of mandibular movement are indicative of very specific types of TM Dysfunction. Limitation in opening, jaw movement deviations, opening deflections and restrictions in lateral or protrusive movements, along with other indications, are cited in accepted dental and medical journals and are routinely used in diagnosing stomatognathic conditions/diseases.

The JT-3D Jaw Tracker is compatible with all current versions of the BioPAK program and can be installed as a simple plug and play device.

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M-Scan™

Case Acceptance and Compliance Made Easy

M-Scan is specifically designed to record craniofacial muscle activity in both rest and function. This information is invaluable to the clinician who hopes to create beautiful dentistry that works with the patient's physiology for optimum results.

M-SCAN incorporates an intuitive display that is extremely fast and easy to interpret compared with conventional electromyography that must be connected to a computer. Patient functional acts are listed on the internal display. With M-Scan you can quickly and easily compare bilateral muscles

for symmetry of function. The M-Scan shows not only the microvolt levels for each muscle contraction, but also the difference between the left and right sides.

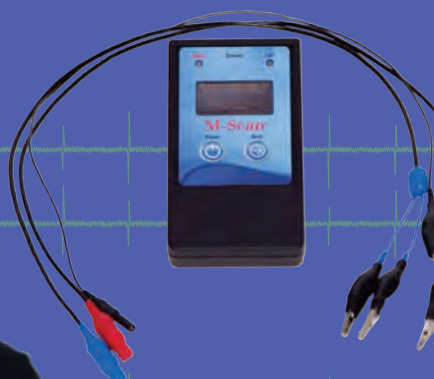
Surface EMG

Surface Electromyography (sEMG) is the only way to measure the activity and reactions of muscles of the head and neck. The clinician can test the patient before treatment, during treatment, and before finalising treatment.

Education Tool

M-Scan is a patient education tool that can demonstrate the value and efficacy of your appliance.

M-Scan can be used easily by Dentists, Hygienists, and Dental Assistants.



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