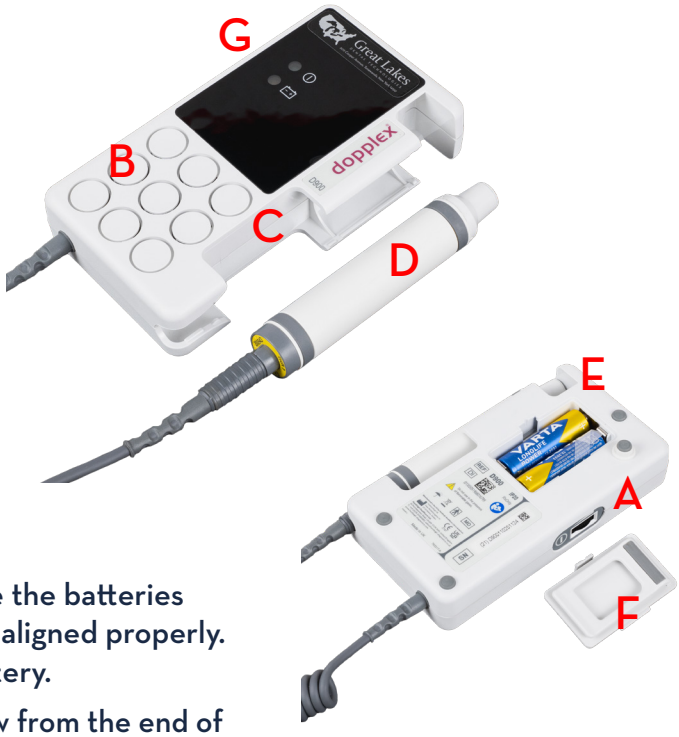
DOPPLER AUSCULTATION OPERATING INSTRUCTIONS

DOPPLER COMPONENTS

A. On/Off & Volume Control
B. Speaker
C. Transducer Holder
D. Transducer
E. Battery Compartment
F. Battery Compartment Cover
G. Power/Low Battery Indicator Panel



GETTING STARTED

- Remove contents from the case as well as the protective wrap from the batteries.
- Remove the compartment cover (F) and place the batteries into the unit (E) making sure the +/- poles are aligned properly. Replace the compartment cover over the battery.
- Attach the Transducer (D) by aligning the arrow from the end of the cord toward the open slot on the bottom of the unit.
- Turn ON the Doppler by pushing the dial (A) up on the side of the unit. A green power indicator light (G) will appear. The dial (A) also controls the volume of the unit.
- A low battery life indicator light (G) will illuminate when your batteries are low on power and need to be replaced.
- Your Doppler is now ready for use

WARRANTY

The central unit of the Doppler carries a 1 year warranty on parts and labor, and the Transducer carries a 1 year warranty. These warranties do not apply to batteries, the carrying case, or other accessories, damage from shipping, temperature, tampering, misuse or negligence.

For Repair Service: Contact Great Lakes Dental Technologies @ 800.828.7626

After receiving a Returning Goods Authorization (RGA) number, include a note regarding the problem, the RGA number, and return the unit for service.

Insure and send the unit to: Great Lakes Dental Technologies, Attention: Repair Department, 200 Cooper Avenue, Tonawanda, New York 14150

DOPPLER AUSCULTATION OF THE TMJ

The technique described below was developed by Dr. Mark Piper MD, DMD

INSTRUCTIONS

- Place your finger over the area the joint is located, and have the patient open and close. As they open and close, note where the joint is rotating, and translates out of its original position.
- Apply a liberal amount of ultrasound gel to that area. It is not recommended to place the gel directly on to the Transducer.
- With the Doppler power OFF, place the head of the Transducer over the gel (anterior to the tragus of the ear) at a 45° angle.
- Turn the Doppler ON.
- While maintaining the 45° posture, slowly move the Doppler around until the pulse from the Superficial Temporal Artery (STA) is distinctly heard. The STA runs distal to the capsule.
- Once the pulse is located, point the head of the Transducer slightly forward. Note: Do NOT move the entire Transducer forward. This will point the Transducer directly at the head of the condyle.
- To verify the Doppler is accurately pointed, have the patient open and close quickly, 2-3 times. A general loud, scratchy sound will be heard upon opening and closing during this rapid movement.
- To properly identify any joint crepitus and decipher disc position via these sounds, it is recommended that the patient open and close **slowly** in approximately 1-2 second movements, as quick movements can create a false positive.

TIPS & ADVICE

- Place the gel directly on the patient and not on the head of the transducer, as this will create undesired noises.
- Keep the Doppler OFF until you make contact between the gel and the head of the Doppler on the patient. This will also eliminate unwanted noise.
- It is not necessary to press the Transducer hard against the patient in order to pick up the proper sounds. Allow the gel to work in conjunction with the head of the transducer to bring out the sounds.
- The patient should open and close slowly, in a syncopated rhythm. Rapid movement will create a false positive.
- The Doppler will automatically enter a 'sleep' mode if left on for 10 minutes. To restart the Doppler, turn the On/Off/Volume control to the 'Off' position, then 'On' again.

DISCLAIMER

- Doppler Auscultation should only be utilized as one part of a complete, comprehensive examination and not solely for the diagnosis of any type of internal derangement of the Temporomandibular Joint and/or Disc Assembly.
- An MRI or CAT SCAN must always supersede any discerning information derived from Doppler Auscultation. These images shall be the determining factor as to the diagnosis of disc position.
- Neither Great Lakes Dental Technologies, nor the manufacturer of this Doppler Auscultation device, shall be held responsible for any interpretation or outcome; whether medical or dental, from the owner/operator of said device.