

Probe Design and Frequency:

Each probe consists of two crystals; one transmits ultrasound waves and one receives the reflected waves. The initial energy beam is as wide as the crystal.

The probe frequency is specific to each instrument. The probe's two connectors can be plugged into either of the two jacks on the Doppler unit that match the probe frequency. The frequency is identified on the panel next to the jacks and on the label attached to the probe cable (probes manufactured before September 2006 will only be inscribed). Disconnect the probes from the Doppler unit only for sterilization.

Remove the red protective covering from the probe tip before use.

⚠ Warning!

Damage to either crystal will impair or prevent probe function. The material covering the crystals can be damaged by ECG cream or paste, abrasion, soaking in alcohol or disinfectants, and excessive heat.

⚡ Inspect the Probe:

Before each use, inspect the probe for any cracks or breaks in the protective epoxy covering. Damage that could allow for ingress of conductive fluids, such as acoustical coupling gel, can create a shock or burn hazard if the Doppler unit's metal case is grounded and comes in contact with or is used with other electronic equipment.

Use Coupling Gel:

The probe requires a conductive medium to maintain an interface between the skin and the probe for signal transmission. Use only a coupling gel made for ultrasonic applications.

Technical Support:

If you experience problems that cannot be resolved by following the troubleshooting guide in the operating manual, visit our website or call technical support M-F, 7 AM - 3:30 PM, Pacific Time:

Flo-labs: 1-888-356-9522
All others: 1-800-547-6427, Option 4

Contact Information: Parks Medical Electronics, Inc.
Mailing: PO Box 5669 Aloha OR 97006-0669
Shipping: 19460 SW Shaw St Aloha OR 97078-1242
1-800-547-6427 · 503-649-7007 · Fax: 503-591-9753
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Doppler units *841-A and **641-A have a 3 ft standard cable length. 7 and 10 ft cable lengths are available by special order.

Standard Pencil Probe

Frequency: high: 8.0-9.9 MHz
low: 3.9-4.4 MHz

Diameter: high 3/8 in; low 1/2 in

Cable length*: 5 ft standard

Description: Standard diagnostic probe.



Skinny Pencil Probe

Frequency: 8.0-9.9 MHz

Diameter: 1/4 in

Cable length*: 5 ft standard

Description: Provides better resolution for small vessels. Concentrates power to produce a beam with higher intensity than the standard pencil probe.



Obstetrical Probe

Frequency: 2.10-2.25 MHz

Diameter: 3/4 in

Cable length**: 5 ft standard

Description: For 611-L, 614-B, 641-A and 917 only. Obstetrical probe for detecting fetal heartbeat. Not for continuous monitoring. Two semicircular crystals.



Precordial Probe

Frequency: 2.10-2.25 MHz

Diameter: 3/4 in

Cable length*: 5 ft standard

Description: For 915-BL only. Used for detecting air emboli in the heart. Two semicircular crystals.



Flat Probes



Infant



Adult

Frequency: 8.0-9.9 MHz

Size: Adult 5/8 in X 3/4 in; Infant 1/2 in X 5/8 in

Cable length*: 5 ft standard

Description: Easily taped into place for repeated measurements. Crystals are set into the plastic so that the ultrasound beam goes into the vessel at about 15 degrees from perpendicular.

PPG Sensor

Alden type twist-on plug with double shielded cable

Nexus type push-in plug

Diameter: 1/2 in -- Cable length: 5 ft standard

Description: For instruments with a PPG jack. An infrared signal is transmitted by a diode and received by a photo detector. USES NO GEL.



Care and Cleaning of the Probes



1. Remove the gel with a soft tissue after each probe use.
2. Wash any dried gel off the probe with running water.
DO NOT scrape off dried gel to avoid damaging the coating over the crystals.
3. User may opt to wipe probe tip with alcohol, surface germicidal cloth, or liquid disinfectant (do not soak). Rinse probe tip with warm water to remove any residue after cleaning/germicidal agent dries. Do not use bleach.

Do Not Autoclave the Probes



Temperatures above 57.2 degrees Celsius (135 degrees Fahrenheit) destroy the crystal activity and cause the covering over the individual cables and the outer sheath to shrink and crack. With a raised temperature, a severe loss of sensitivity will occur. Autoclaving will void the probe warranty.

PPG Sensor

The PPG sensor does not use coupling gel. User may opt to wipe with a small amount of alcohol, surface germicidal cloth, or liquid disinfectant after use. Do not use bleach. The PPG sensor must NOT be immersed for cleaning.

General Cleaning Information

Computer and Printer

For information on setting up, operating and servicing the computer and printer supplied with the Flo-Lab, see the 'Owners Manual' or 'Users Guide' supplied by the manufacturer of that equipment. These manuals or guides were included with the Flo-Lab when it was delivered.

Cleaning the Instrument

Turn off power and unplug instrument from wall outlet before cleaning. Loose dust accumulated on the outside of the instrument can be removed with a clean, soft cloth. Dirt which remains can be removed with a soft cloth dampened in a mild solution of disinfectant and sterile water. Abrasive cleaners should not be used.

Cleaning the Cuffs

If you need to wash the cuffs, remove the bladder first. The cuff covers are made of Nylon and Velcro, and may be washed by hand or washed in a washing machine using the gentle cycle. Hang the cuff on a line to dry.

Cleaning the Manometer

Remove loose particles with a soft cloth or small brush. Wash with a soft cloth dampened in a mild solution of detergent and water. Never use abrasive cleaners. To disinfect surface, use a soft cloth dampened with liquid disinfectant or use a surface germicidal cloth. After cleaning/germicidal agent dries, remove any residue with a soft cloth dampened with water.

Parks Medical Electronics, Inc. warrants probes against defects in materials and workmanship for a period of six months. Parks will, at its discretion, replace or repair free of charge, including labor, all parts which prove to be defective and subject to such warranty.

This warranty does not apply to any probe not used according to instructions or damaged by abuse, accident, alteration, misuse, and/or tampering.