How to Prepare a Patient for an Electrocardiogram (ECG)

An ECG is a valuable tool for diagnosing arrhythmias as well as monitoring cardiac therapy patients and perioperative patients. Follow the procedures below to help ensure accurate ECG results with your IDEXX CardioPet® ECG Device.

Take care to place color-coded ECG cables correctly, 1”–2” below each joint (elbows and knees), as follows:

- Black: left-front leg
- White: right-front leg
- Red: left-rear leg
- Green: right-rear leg

Place the patient on a padded surface; don’t let the patient or the clips touch metal.

Place the patient in right-lateral recumbency when possible. Please note this is the only position valid to determine the ECG axis. Other acceptable positions include standing or sternal, however, we need the position included in the history if not in right-lateral recumbency.

Try these techniques to minimize panting, shaking or purring:

For animals that are shaking try placing your hands on either side of the chest and apply moderate pressure.

To reduce baseline respiratory artifact caused by panting, open mouth breathing or purring, move clips distal on the limbs away from the body, below the area where the limb overlaps the body.

Using CardioPet® Comfort Clips

- Make sure that the patient’s limbs do not touch each other.
- Make sure cables and electrodes do not touch each other or anything metal.
- Use alcohol or ultrasound gel for conduction between the patient skin and comfort clip electrode.
- Part the fur for good skin contact and attach clips 1”–2” below elbows and knees. Clip back dense fur.

How to get a chest lead

A chest lead may be helpful if the P wave is not clear or if the complexes are small.

- Follow the general instructions for using clips, but clip the black cable to the left side of the chest, between fourth and fifth ribs, wherever you feel the strongest heartbeat.
- Place the other clips on the limbs, as previously described.

Successful ECG capture

Feline

Possible causes for bad ECG results

- Loose or detached clips or artifact
- No alcohol on clips
- Inaccurate clip placement

What you’ll need:

- CardioPet® ECG Device
- Pad or blanket
- Alcohol
- An assistant (in some cases)