MindVet Journal

The Veterinary Clinical
Application of Esophageal
ECG Probes









LEARNING OUTCOMES

1. Clinical value of esophageal ECG probes 2. How to use the esophageal ECG probe

THE ESOPHAGEAL ECG PROBE

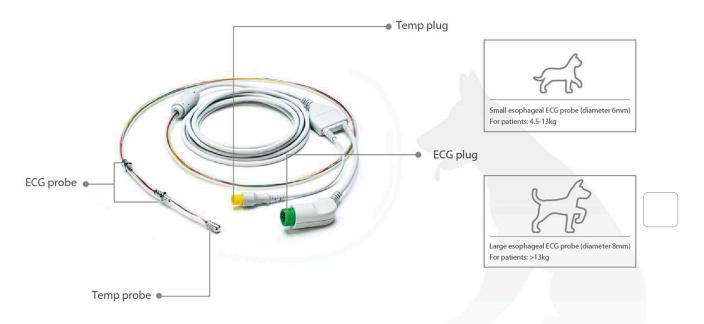
The intended use of the esophageal ECG probe is to monitor ECG, heart rate and temperature. Compared with the traditional ECG electrodes, the probe will enable you to better detect ECG signal in a simplified way.

Precision

- With heart rate, ECG waveform and intracavitary temperature monitoring function
- Stable signal, suitable for long operation
- Strong anti-movement ability to avoid intraoperative interference of accidental contact
- The stronger ECG signal is conducive to arrhythmia analysis

Easy to use

- Without electrode ECG connection process
- Integrated design, avoid cable winding, simple and efficient
- No skin damage, no need to keep the probe moist
- Reduce equipment alarm, reduce operating room noise







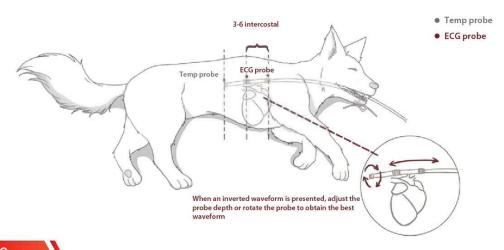
THE ESOPHAGEAL ECG PROBE OPERATION GUIDE

How to connect the monitor

- 1. Connect the ECG cable plug to the ECG port of the monitor. Connect the temperature plug to the temperature port.
- 2. Click ECG Settings. Lead Settings are recommended to be set as lead II. Lead Type to be set as Automatic or 3-lead.

How to use the probe

- 1. The heart area (3-6 intercostal) is located between the two electrometal leads to obtain a better ECG signal. Before placing the probe, the depth of the probe should be estimated outside the animal to avoid the depth exceeding the chest cavity.
- 2. Apply a lubricant to the probe and gently insert the probe through the mouth into the esophagus.
- 3. When the monitor shows good ECG waveform and the waveform amplitude is the largest, fix the probe to the mandible of the animal with gauze.
- 4. If there is an inverted R wave, the probe may be placed too shallow or the position is not correct, try to rotate the probe or change the depth to get the best waveform.



Notice

- The probe should be placed neither too deep nor too shallow, otherwise the ECG waveform generated will be inverse.
- This probe does not offer the breathing rate monitoring function, please refer to other parameters for breathing rate (such as EtCO₂).
- Do not place the end of the probe into the abdominal cavity.
- Improper probe size may cause baseline drift of ECG waveform.
- After each use, please wipe the probe with 70% isopropyl alcohol, active dialdehyde or sodium hypochlorite disinfectant.

 Do not immerse the probe in disinfectant or sterilize it at high temperature.
- Never use an esophageal ECG probe on a patient that is awake.
- Do not insert the esophageal ECG probe rectally.
- Do not use electro-surgical units, lasers, magnetic resonance units or any other electronic instruments near the monitor when the esophageal ECG probe is in use. The patient may be susceptible to injury when this occurs. Mindray Animal Inc. does not accept responsibility for the misuse of the E-probe. The end user is solely responsible for the safety associated with the use of this product.