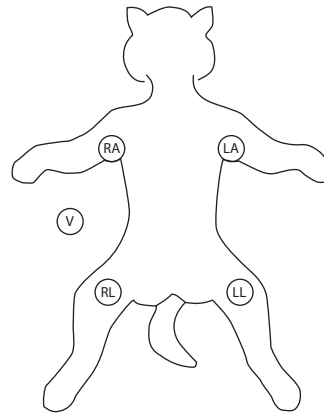
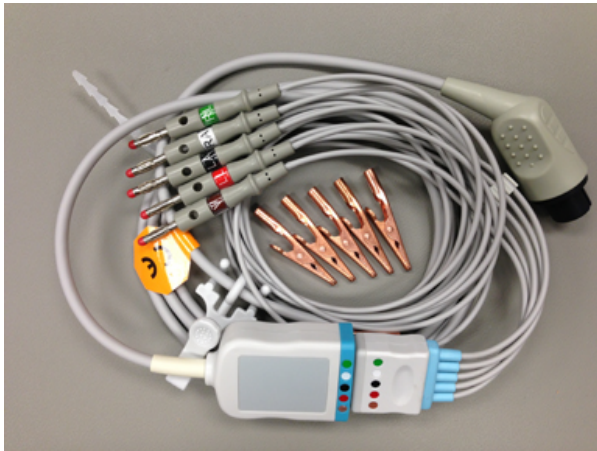


# CARDELL® Quick Reference Guide

Patient Connections v.10.2010 - For 9500 and MAX-12 Series Monitors

## ECG

1. Connect the copper clips to the banana plugs at the end of each lead wire.
  2. Connect lead wire set to its corresponding color-coded receptacle on the ECG trunk cable.
  3. Plug ECG trunk cable into receptacle on side of MAX-12 HD.
- It is not necessary for hair to be clipped over the lead site. If hair is thickly matted, only lightly clip.
  - Prepare the lead sites with alcohol, then use the supplied electrode paste/gel for better contact.
  - Avoid allowing the metal clips to contact conductive surfaces such as the table or other parts of the body.
  - Copper clips can be bent back to reduce tension; alligator teeth can be filed/bent to a less-aggressive angle.
  - In ECG Menu, adjust waveform gain to magnify, and toggle between ecg filter settings for optimal readout.



## CO2

Mainstream (Capnostat)/ Sidestream (LoFlo)

1. Insert the CO2 Probe/Module cable connector into the receptacle of the MAX 12 HD.
2. To remove the connector, grab the body portion of the connector and pull back. Do not pull the cord.

LoFlo – connect the sample line to the sensor module (clicks into place).

Capnostat – slide airway adapter onto sensor (clicks into place).



3. Select the correct adapter to minimize dead space.



Regular adapter (clear) – use with ET tubes > 4.5mm.

Pediatric adapter (purple) – use with ET tubes < 4.0mm.

4. Install the airway adapter between the ET tube and the anesthesia patient hose.

Note: Make sure the fitting is tight and secure.

5. Wait two minutes to allow the sensor/module to warm up.

Note: For LoFlo sidestream monitoring during anesthesia, use an exhaust tube to remove the sample gas to a scavenging system. Attach it to the sidestream module at the outlet port.

Caution: When evaluating measurements, any rise in inspired carbon dioxide values should be considered abnormal. This may indicate a problem with ET tube placement, re-breathing of CO<sub>2</sub> from the anesthesia circuit, depleted CO<sub>2</sub> absorbent, etc.

## Temperature

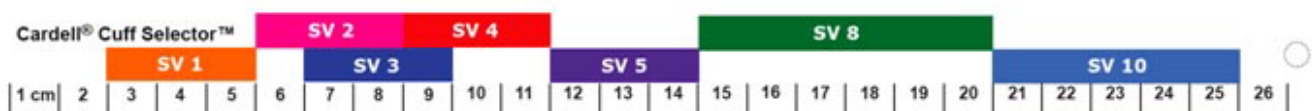
1. Insert the temperature probe into the temperature socket on the side panel.
2. Probe may be used either in the esophagus or the rectum of the patient.
3. To avoid cross-contamination, label the probe with tape indicating which way it's been used.



Note: It takes 10 seconds for the patient monitor to display stable reading.

## Blood Pressure

1. Connect black BP inflation hose to male connector post on side of monitor.
2. Determine cuff site and use Cardell Cuff Selector™ to choose proper cuff.



3. Connect cuff to inflation hose.

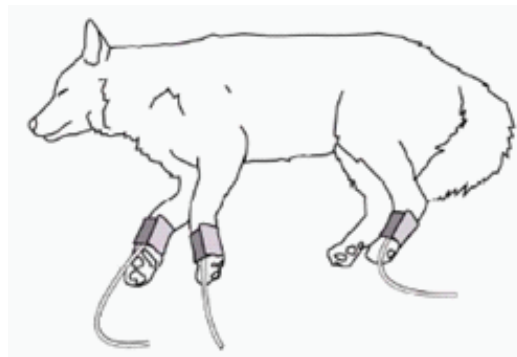


4. Wrap cuff around patient's limb for snug fit.

Cats - For the median artery on the foreleg, place the cuff around the forelimb, between the elbow and carpus. In cats less than five (5) pounds when measurements are difficult to obtain, place the cuff around the leg above the elbow to obtain measurements from the brachial artery.



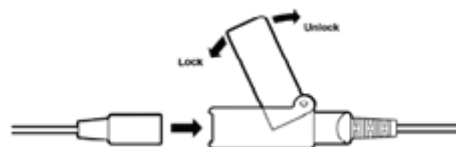
Dogs - Most surgeries are done on the posterior part of the body so the metacarpal area of the forelimb is most convenient. In situations where this is not possible, the cuff should be wrapped around the metatarsus just proximal to the tarsal pad or around the hind leg just distal to the hock.



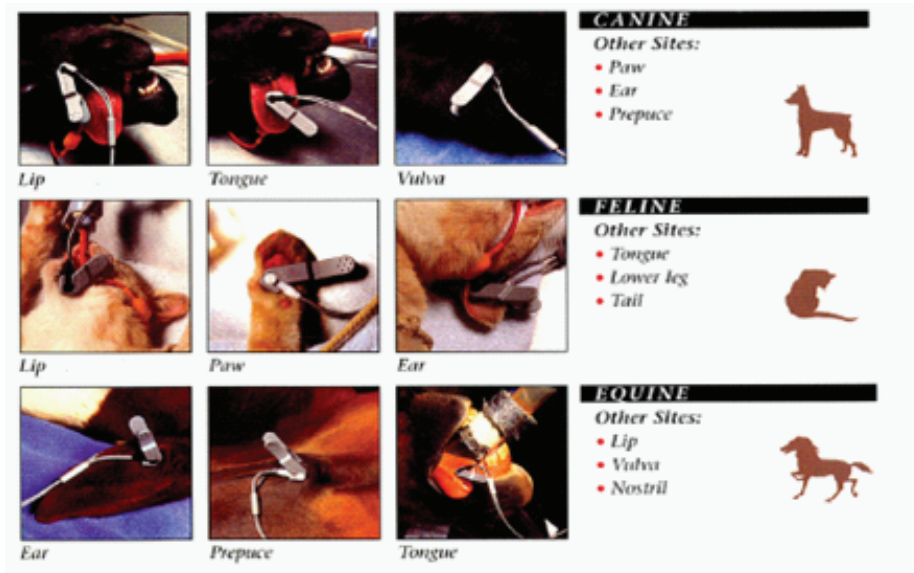
- Hair need not be clipped unless heavily matted
- Ensure that cuff position is at same plane as the heart
- If the Velcro fails, check that the cuff is snug, that the monitor is set to the proper size
- If the Velcro is worn, replace the cuff, as using tape can result in inaccurate readings
- Never use cuff on the same limb where a catheter is placed, or on an injured limb
- Do not use the tail site for monitoring BP under anesthesia

## SpO<sub>2</sub>

1. Select clip that is appropriate for the patient. There are two (2) sizes of VetSat veterinary sensor clips: Small and Large
2. Slide sensor into grooves of clip
3. Connect the sensor to the cable:
  - a. Lift the clear plastic cover
  - b. Plug the sensor into the cable
  - c. Close the clear plastic cover



4. Plug the cable into the SpO<sub>2</sub> port on the side panel of the monitor. Push until you hear a “click”.



Note: Clean the VetSat sensor and clip separately before and after each use by wiping with 70% isopropyl alcohol

- Extend the life of the sensor by hanging it (not winding or wrapping it) for storage.
- Unclip the sensor for removal or before moving the patient.
- In small patients, values may drop below 90% due to restriction of blood flow to the measuring site by the probe. Reposition the sensor periodically to avoid this problem.
- Use only on a cuff/catheter-free extremity.
- Cover site with opaque material (like blue surgical towels) to minimize interference from bright lights directed toward the patient.
- If slippage occurs on the tongue, use one layer of gauze around the tongue and then replace the sensor.
- For long term use, it is best to move sensor to new site every few hours to preserve tissue integrity.