Bionet
www.BionetUS.com
714-734-1760
support@BionetUs.com

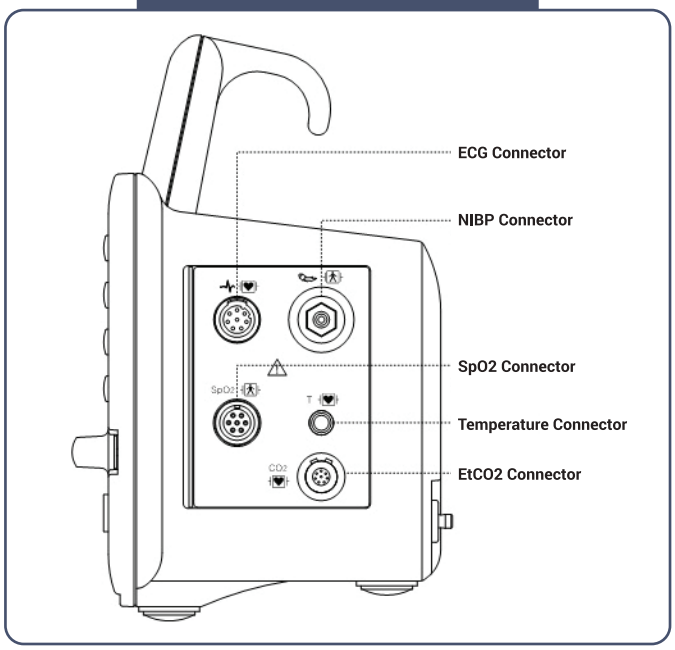
PATIENT MONITOR
QUICK GUIDE

This guide will cover the basics for the BM1Vet, BM3Vet series, BM5Vet, and BM7Vet.

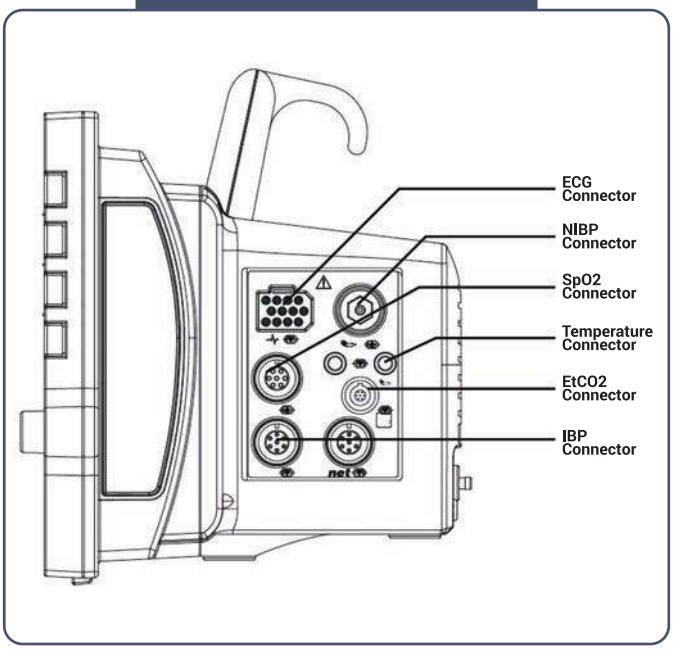
1. Unpacking

Unpack your monitor and plug every thing in. All the cables are keyed so they will only plug in where they are supposed to go. You may plug and unplug your sensor cables at any time whether the power is on or off.

Connector position for BM3Vet Next and BM3Vet Touch

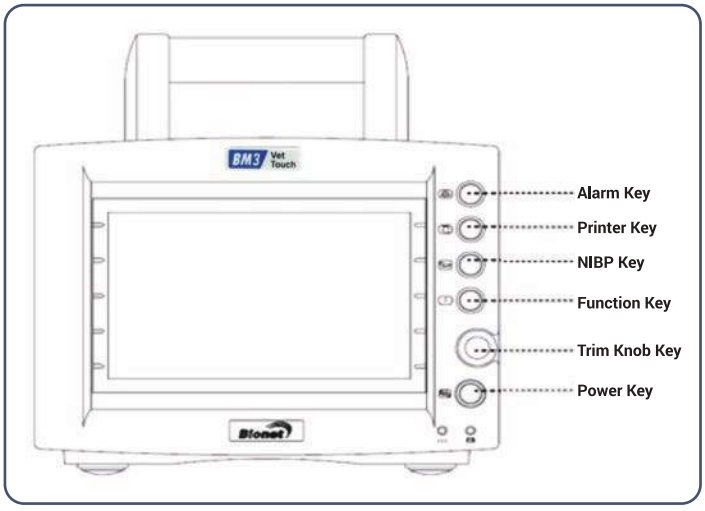


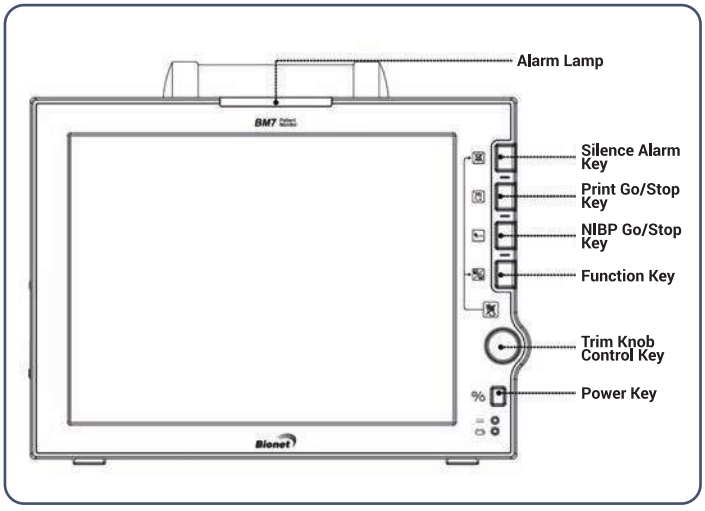
Connector position for BM5Vet and BM7Vet



2. Menu Selection

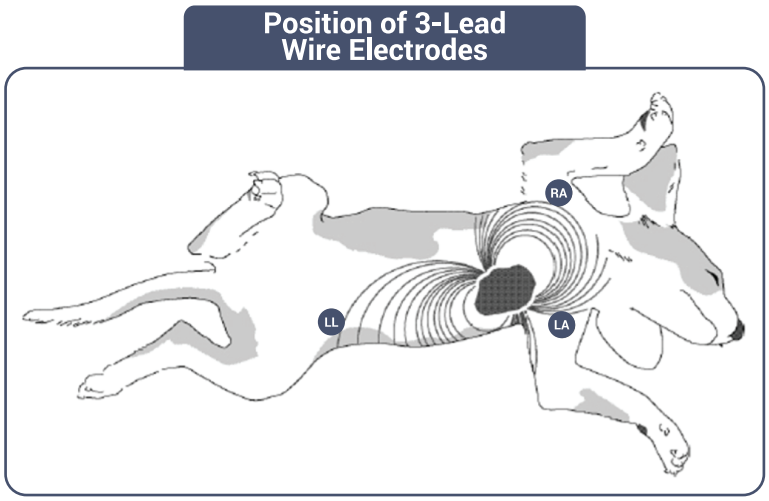
Turn your monitor on. The BM1Vet has a touch wheel and the rest have a trim knob to the right of the display screen. Turn this to move the cursor around the screen. Press the center of it to select the highlighted item.

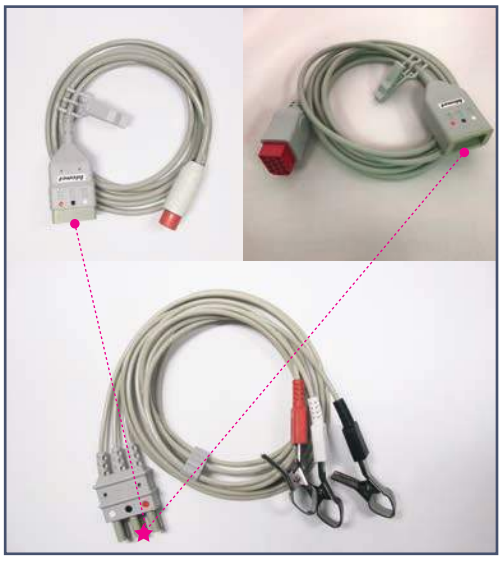




3. ECG (Does not apply to BM1Vet)

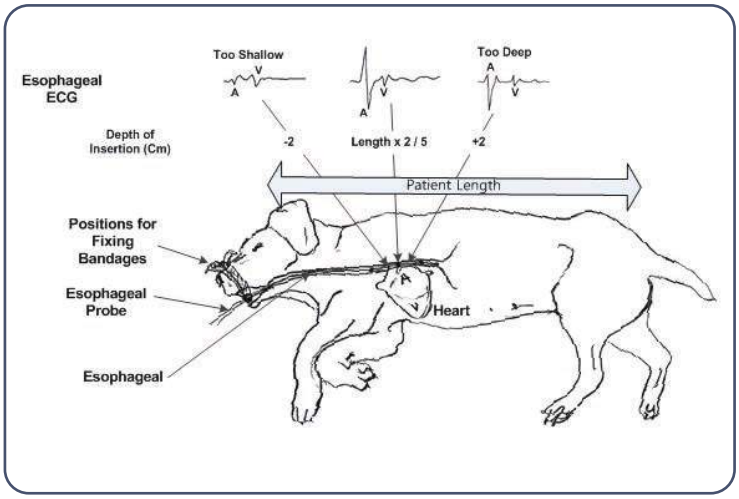
You will have both a 3 lead alligator clip and an esophageal ECG/Temperature probe. Either one will plug into your ECG extension cable.

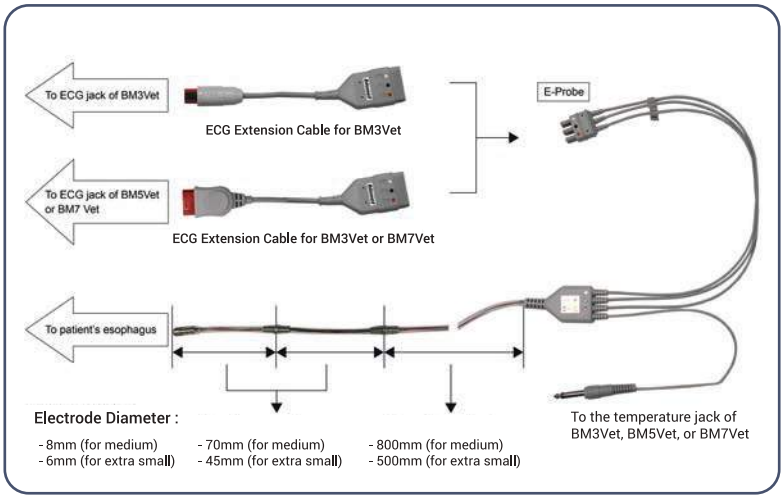




The esophageal ECG will provide you with both 3 lead ECG and temperature. IMPORTANT: The default respiration (labeled RPM with an icon of yellow lungs on the display) is dependent on using the alligator clips. If you use the esophageal probe then you must monitor respiration using an alternative means such as the End Tidal CO2 option.

Before inserting the esophageal probe into your patient's esophagus, measure against the patient so that you do not insert it further than the base of the sternum. Then, while slowly inserting the probe into the esophagus, watch the ECG tracing. When you get a good QRS signal stop and tie the esophageal probe in place to minimize movement. If you get an inverted R-wave, then you have inserted the probe too far and must back it out until the QRS is normal.





4. SpO2

You will have two sensors for SpO2. One is the classic “Y” clip sensor. Commonly called a lingual clip, this can be used on the lip, tongue, vulva, prepuce, webbing between the toes and the webbing behind the tendon on the hind leg.

Y Clip Sensor

The other is a transflectance probe. This is often mistaken as a rectal probe. While it can be used rectally, we do not recommend rectal pulse oximetry. To be successful, you would need to perform pre-surgical enemas on your patients. This probe works best wrapped to the underside of the base of the tail. In some cases, you may to have to shave some fur. You may also use this probe on the inside of the thigh, the midline of the belly, and the back of the leg just above the pads of the feet.

Transflectance Probe

Spo2 Extension Cable

***Both probes simply plug into the SpO2 extension cable.**

5.Non-invasive Blood Pressure

a The most important factors in getting a successful and accurate blood pressure are proper cuff size selection and placement.

The cuffs are all graduated so you can easily find the correct sized cuff to use. There is an index point marked on the leading edge of the cuff. When wrapped around the limb, this index point must be within the graduated scale.

Child cuff showing Index Line and Graduated Scale

Cuff is too small. Index edge won't fall within scale.

Cuff is too large. Index line won't fall within scale.

Cuff is correct size.

b The hose should line up with the vessel that you are trying to measure. When using a leg, this is on the underside (backside) of the leg.

Incorrect Placement

Correct Placement

Note: The cuff must be at the same level as the patient's heart for best accuracy.

6. End Tidal CO2

This document will focus on the main stream Capnostat 5 sensor. If you purchased the side stream LoFlo sensor please contact technical support with any questions.

On the BM1Vet, the EtCO2 is plug and play. The BM1Vet will automatically detect the sensor and turn on the parameter.

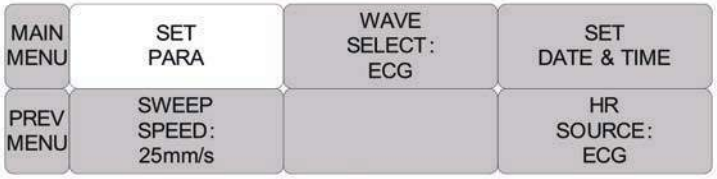
For all other monitors, you will need to manually turn on the EtCO2 parameter.

6.1 A. Select the WRENCH icon

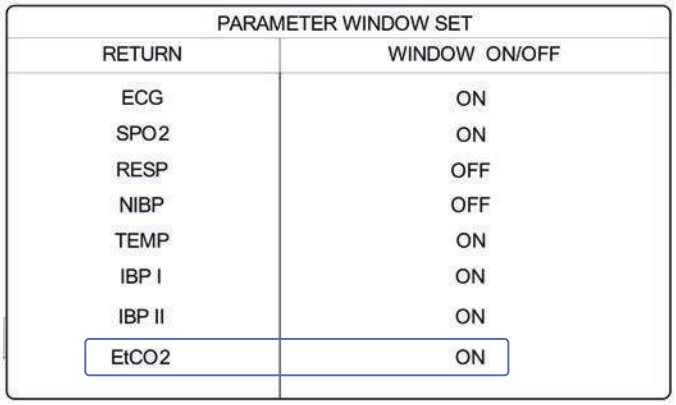
B. Then select DISPLAY

MAIN MENU	DISPLAY		USER SERVICE
PREV MENU	KEY SOUND: ON	DEMO: ON	MAKER SERVICE

C. Then select SET PARA



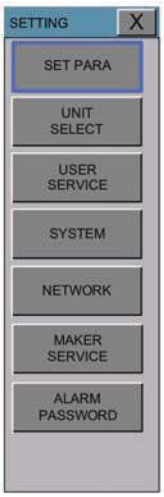
D. Turn EtCO2 to ON then back out of the menus.



6.2 EtCO2 Parameter On -- BM3Vet Touch / BM7Vet

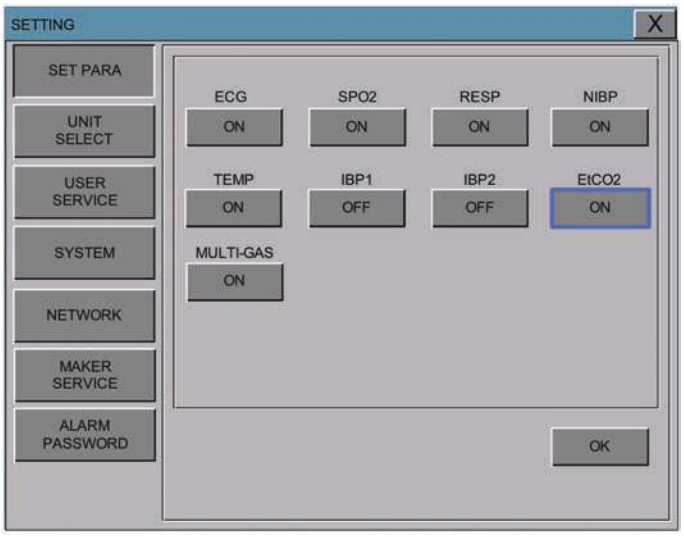
A. Select the GEAR icon on the bottom of the screen

B. Then select SET PARA and



C. Turn EtCO2 to ON. Back out of menus.

***** Must click "OK" button to apply the changes*****



6.3 Sensor Warmup

When you plug in your Capnostat or turn on your monitor with the Capnostat installed it will go through a SENSOR WARMUP process. You must wait for this to complete (about 60 seconds) before you proceed with any EtCO2 operations.

6.4 Airway Adapter

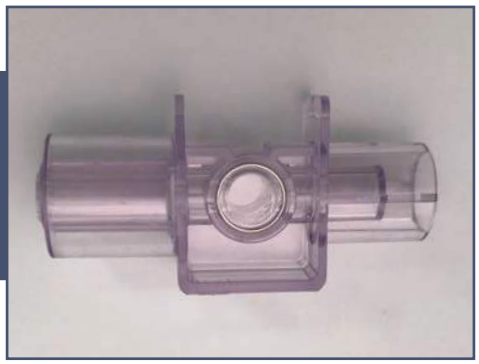
There are two airway adapters that come with the Capnostat. The purple one is for endotracheal tubes that are 4mm and smaller. The clear airway adapter is for endotracheal tubes larger than 4mm.

The airway adapters for mainstream intubated applications

6063-00

Single-Animal Use Airway Adapter
For endortracheal tubes that are larger than 4mm

6312-00

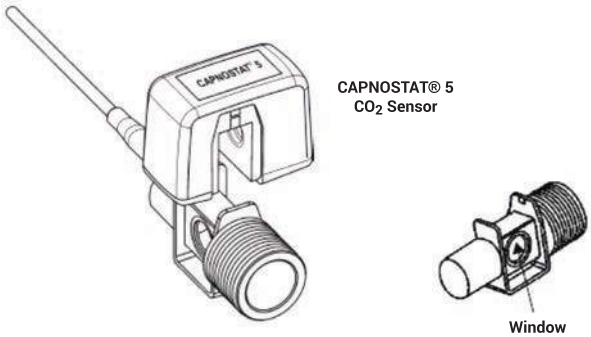


Single-Animal Use Airway Adapter
For endotracheal tubes that are 4mm and smaller

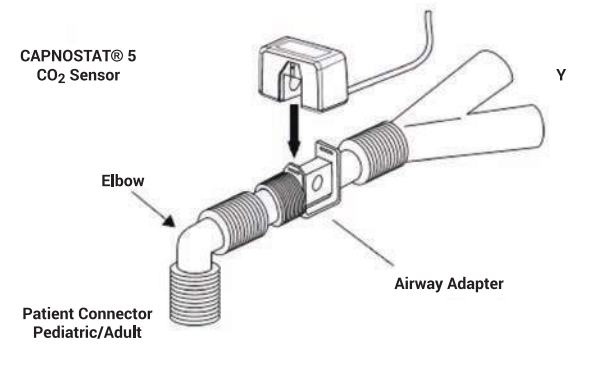
There is an arrow on the airway adapter and a matching arrow on the Capnostat. These need to be pointing at each other when you install the airway adapter.

Shown below is the CAPNOSTAT 5 CO2 Sensor connection to a Respironics Novametrix CO2 adapter.

Connect: Slides on.
Clicks into place.
Remove: Slides off.



Shown below is the CAPNOSTAT 5 CO2 Sensor with an animal circuit:



6.5 Zeroing - BM3Vet Next and BM5Vety Adapter

Each time you install an airway adapter (before you connect the Capnostat to your patient and anesthetic machine) you need to zero it. This calibrates the sensor for the room air and for the installed airway adapter. With an airway adapter installed, select the EtCO2 window then select ZERO. You will see a ZERO IN PROGRESS message appear on the EtCO2 window that will last about 15 seconds. Once this clears, you are ready to connect to your patient.

ⓐ Select EtCO2 parameter window by trim knob.

ⓑ Select ZERO by trim knob. Then zeroing will progress.

******Airway adapter must be installed before zeroing***

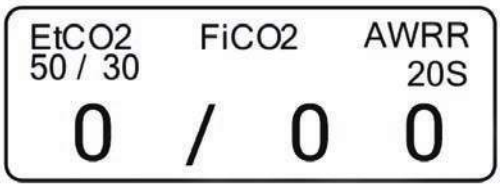
******For best result, connect the CAPNOSTAT 5 CO2 Sensor to an adapter and wait 2 minutes before performing the Adapter Zero procedure.***

This is required anytime an adapter is installed in the sensor.

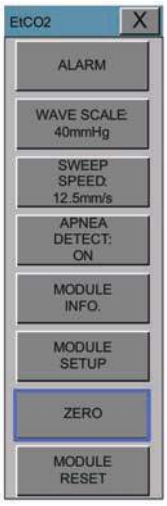
ⓒ Zeroing progress screen.

6.6 Zeroing - BM3Vet Touch and BM7Vet

ⓐ Select EtCO2 parameter by trim knob or touch.



ⓑ Select ZERO by trim knob or touch. Then zeroing will progress.



******Airway adapter must be installed before zeroing***

******For best result, connect the CAPNOSTAT 5 CO2 Sensor to an adapter and wait 2 minutes before performing the Adapter Zero procedure.***