

Алматы (7273)495-231  
 Ангарск (3955)60-70-56  
 Архангельск (8182)63-90-72  
 Астрахань (8512)99-46-04  
 Барнаул (3852)73-04-60  
 Белгород (4722)40-23-64  
 Благовещенск (4162)22-76-07  
 Брянск (4832)59-03-52  
 Владивосток (423)249-28-31  
 Владикавказ (8672)28-90-48  
 Владимир (4922)49-43-18  
 Волгоград (844)278-03-48  
 Вологда (8172)26-41-59  
 Воронеж (473)204-51-73  
 Екатеринбург (343)384-55-89  
 Иваново (4932)77-34-06  
 Ижевск (3412)26-03-58  
 Иркутск (395)279-98-46  
 Казань (843)206-01-48

Калининград (4012)72-03-81  
 Калуга (4842)92-23-67  
 Кемерово (3842)65-04-62  
 Киров (8332)68-02-04  
 Коломна (4966)23-41-49  
 Кострома (4942)77-07-48  
 Краснодар (861)203-40-90  
 Красноярск (391)204-63-61  
 Курск (4712)77-13-04  
 Курган (3522)50-90-47  
 Липецк (4742)52-20-81  
 Магнитогорск (3519)55-03-13  
 Москва (495)268-04-70  
 Мурманск (8152)59-64-93  
 Набережные Челны (8552)20-53-41  
 Нижний Новгород (831)429-08-12  
 Новокузнецк (3843)20-46-81  
 Ноябрьск (3496)41-32-12  
 Новосибирск (383)227-86-73

Омск (3812)21-46-40  
 Орел (4862)44-53-42  
 Оренбург (3532)37-68-04  
 Пенза (8412)22-31-16  
 Петрозаводск (8142)55-98-37  
 Псков (8112)59-10-37  
 Пермь (342)205-81-47  
 Ростов-на-Дону (863)308-18-15  
 Рязань (4912)46-61-64  
 Самара (846)206-03-16  
 Саранск (8342)22-96-24  
 Санкт-Петербург (812)309-46-40  
 Саратов (845)249-38-78  
 Севастополь (8692)22-31-93  
 Симферополь (3652)67-13-56  
 Смоленск (4812)29-41-54  
 Сочи (862)225-72-31  
 Ставрополь (8652)20-65-13  
 Сургут (3462)77-98-35

Сыктывкар (8212)25-95-17  
 Тамбов (4752)50-40-97  
 Тверь (4822)63-31-35  
 Тольятти (8482)63-91-07  
 Томск (3822)98-41-53  
 Тула (4872)33-79-87  
 Тюмень (3452)66-21-18  
 Ульяновск (8422)24-23-59  
 Улан-Удэ (3012)59-97-51  
 Уфа (347)229-48-12  
 Хабаровск (4212)92-98-04  
 Чебоксары (8352)28-53-07  
 Челябинск (351)202-03-61  
 Череповец (8202)49-02-64  
 Чита (3022)38-34-83  
 Якутск (4112)23-90-97  
 Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

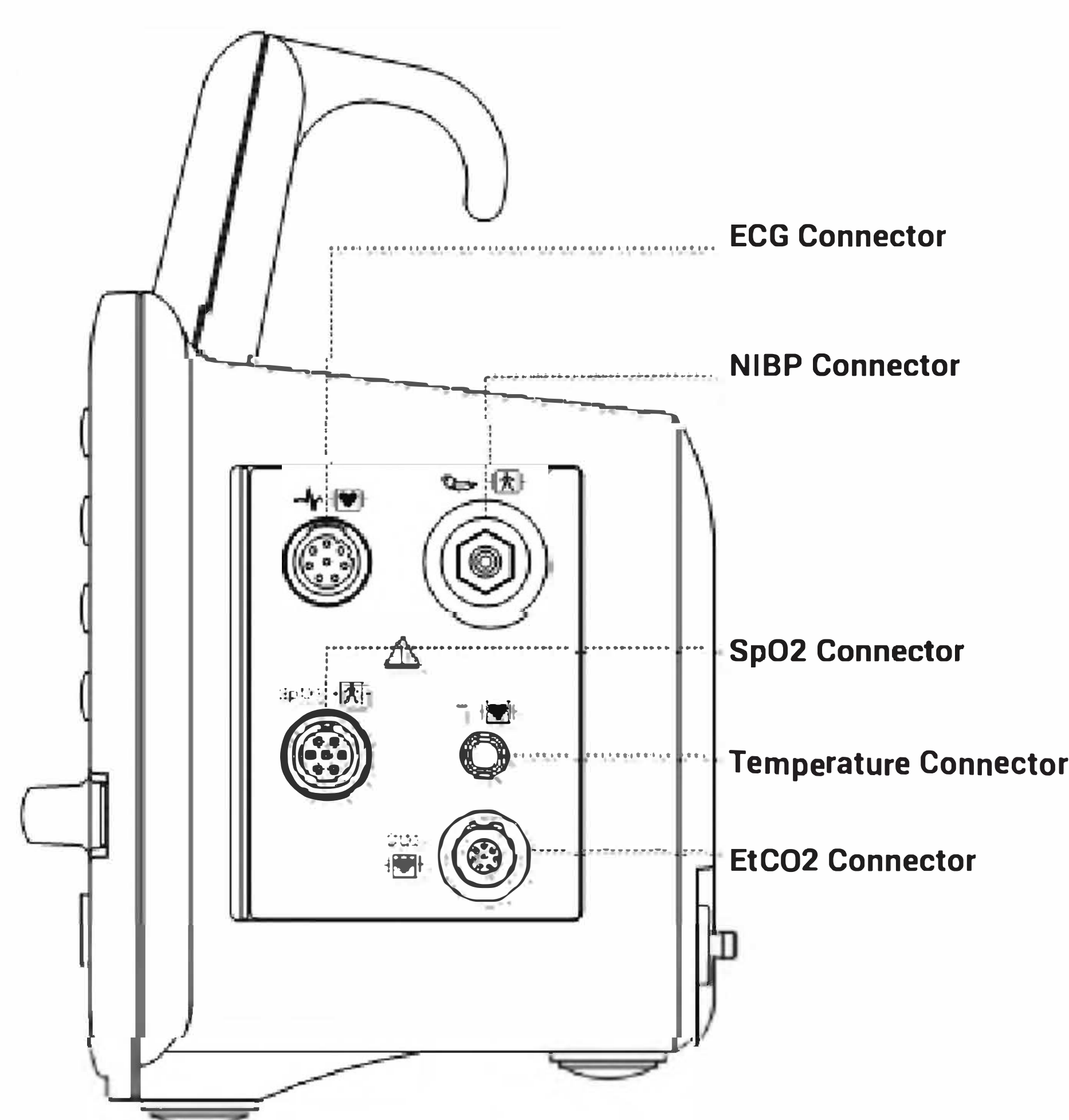
Киргизия +996(312)96-26-47

bea@nt-rt.ru || <https://bionet.nt-rt.ru/>

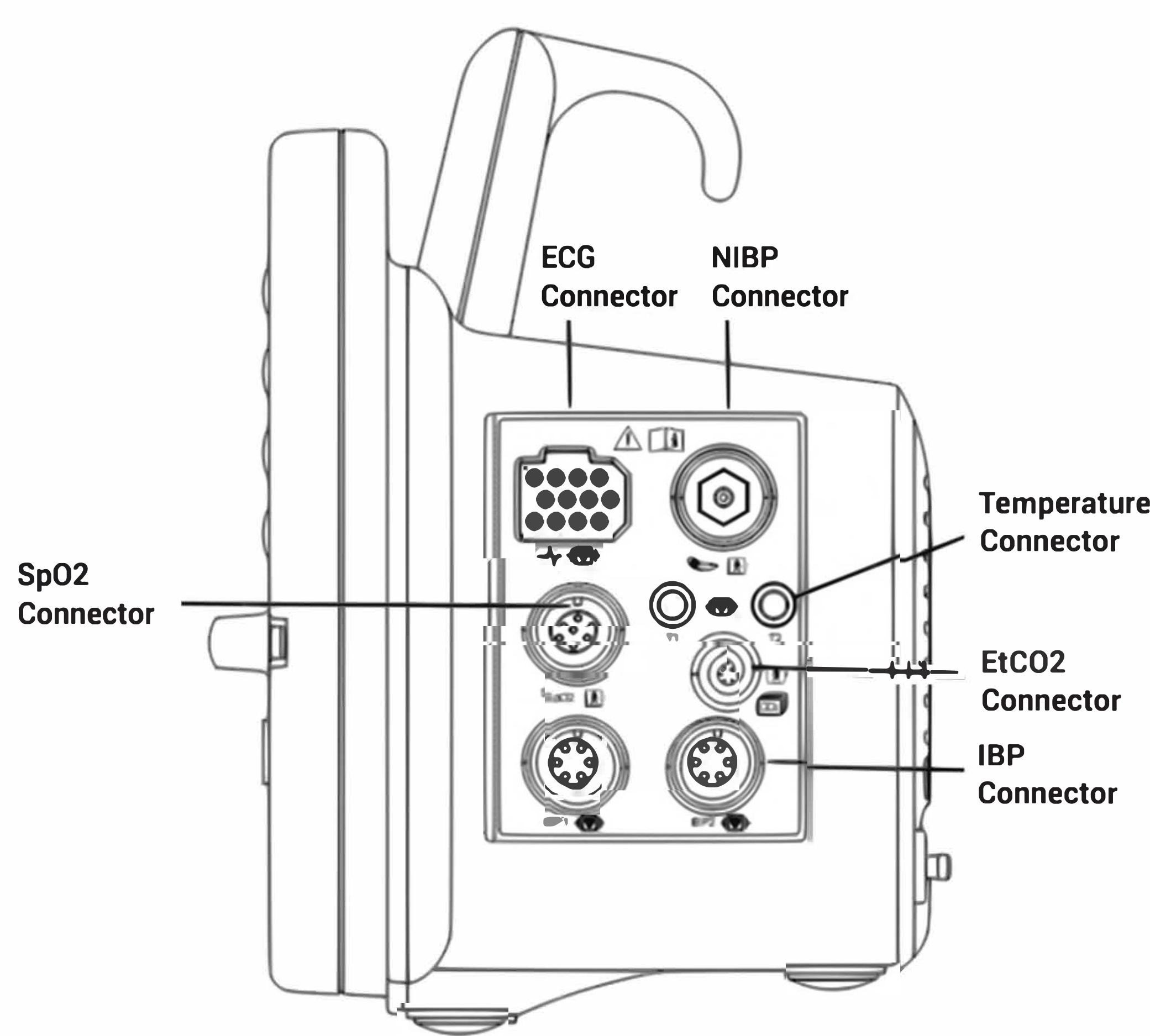
## 1. Unpacking

Unpack your monitor and plug in all sensors and cables. 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.

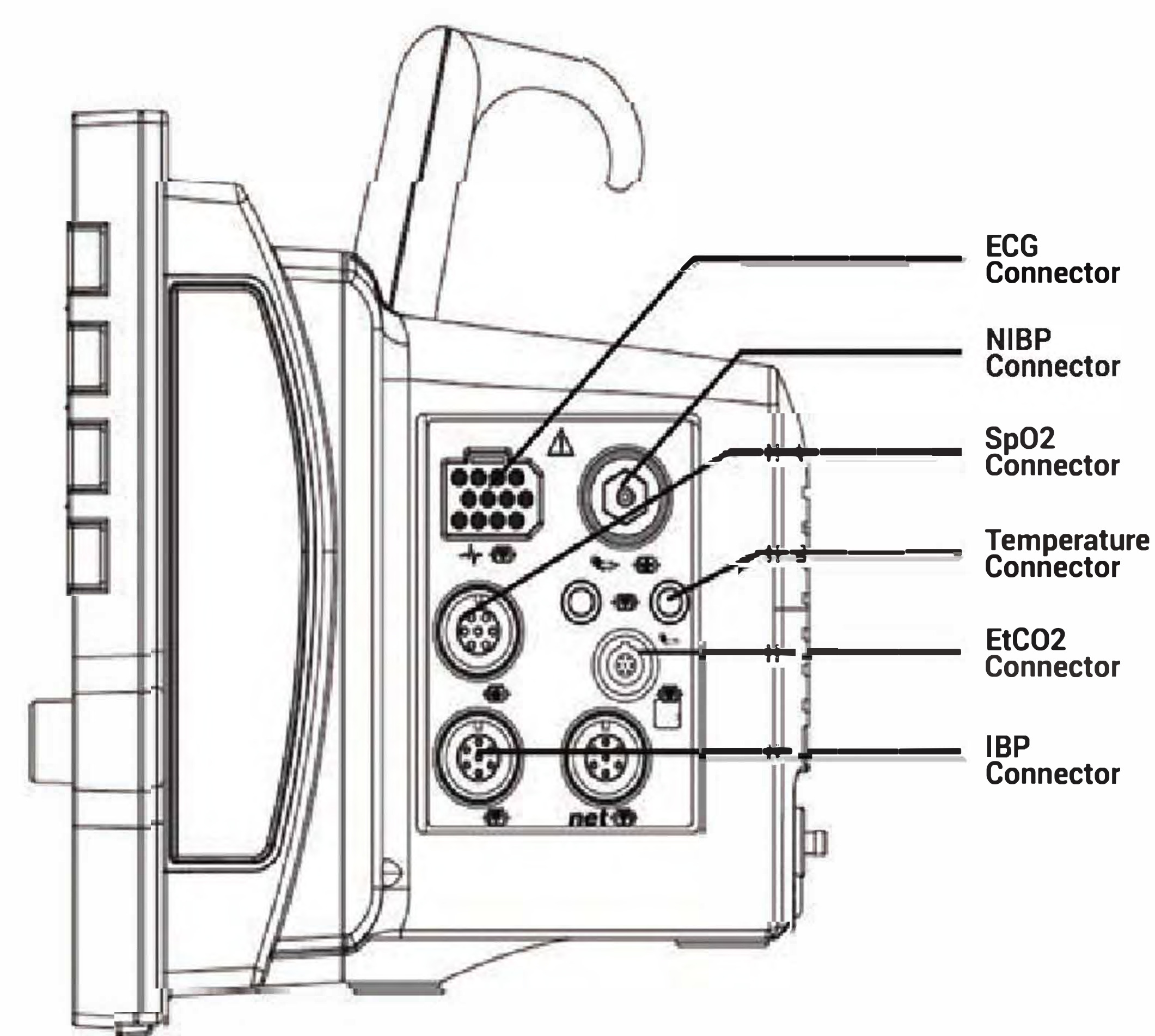
### Connector position for BM3Vet Pro



### Connector position for BM5Vet Pro



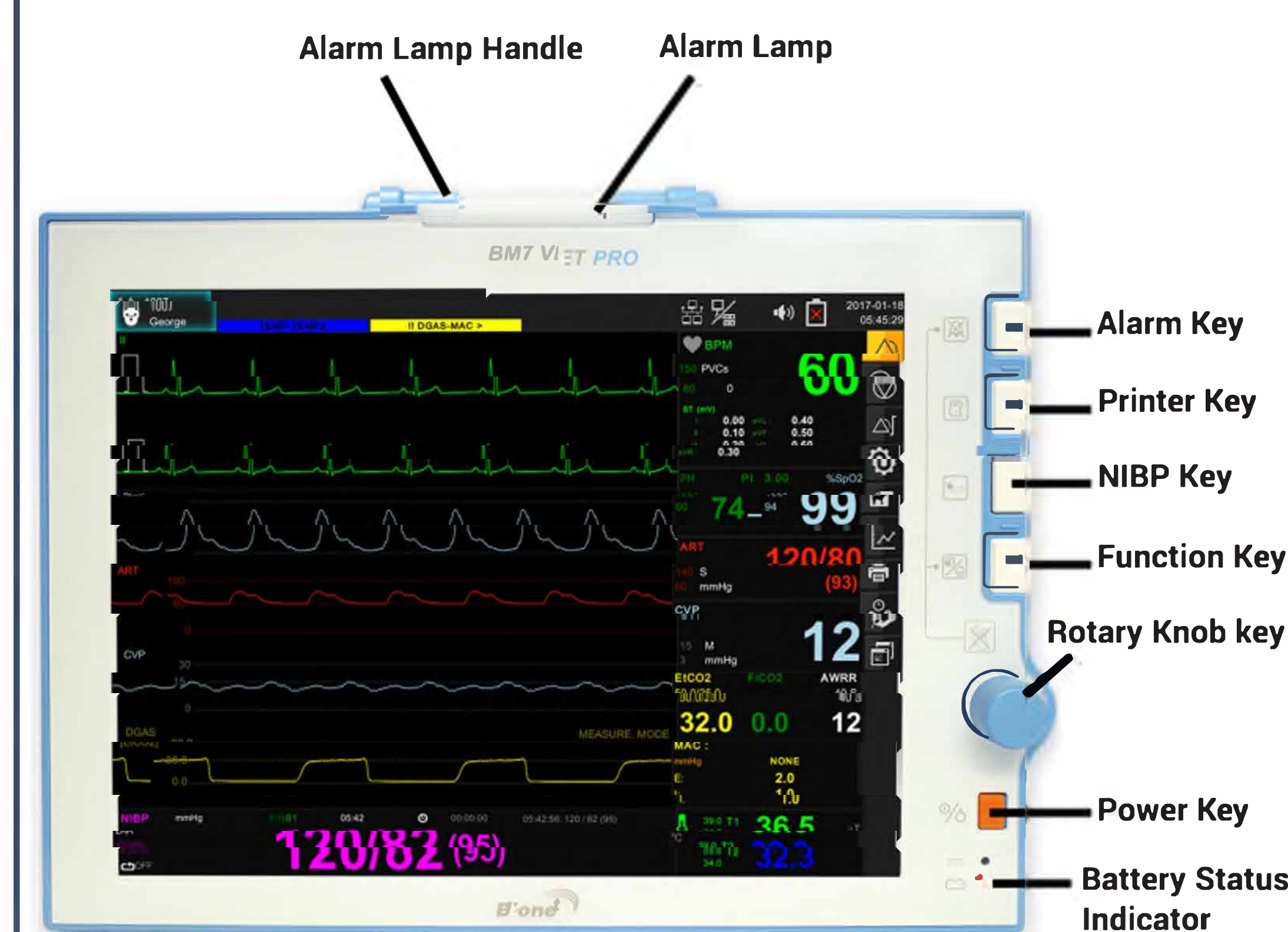
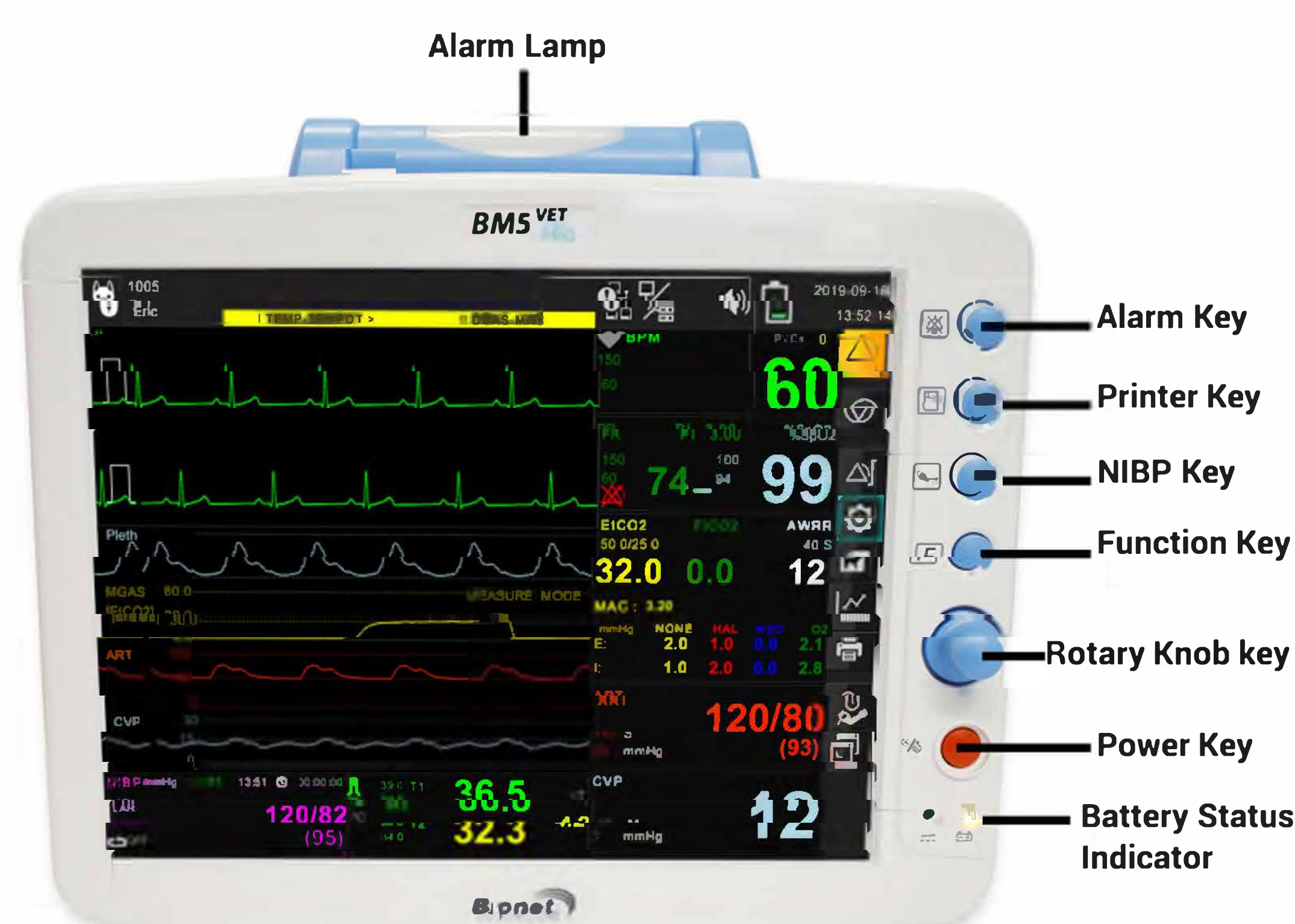
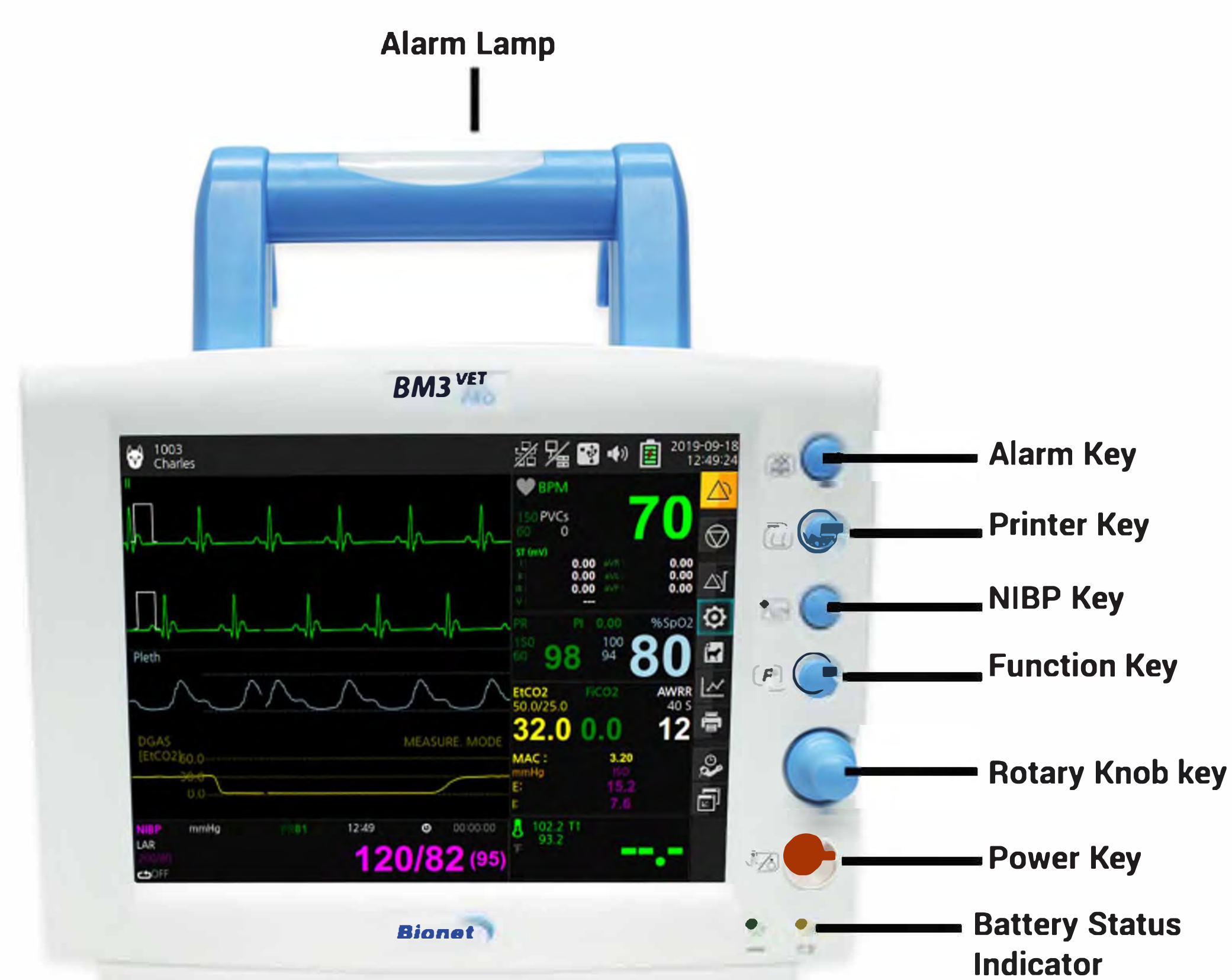
### Connector position for BM7Vet Pro



This guide will cover the basics for the BM Pro Series. (BM3Vet Pro / BM5Vet Pro / BM7Vet Pro)

## 2. Menu Selection

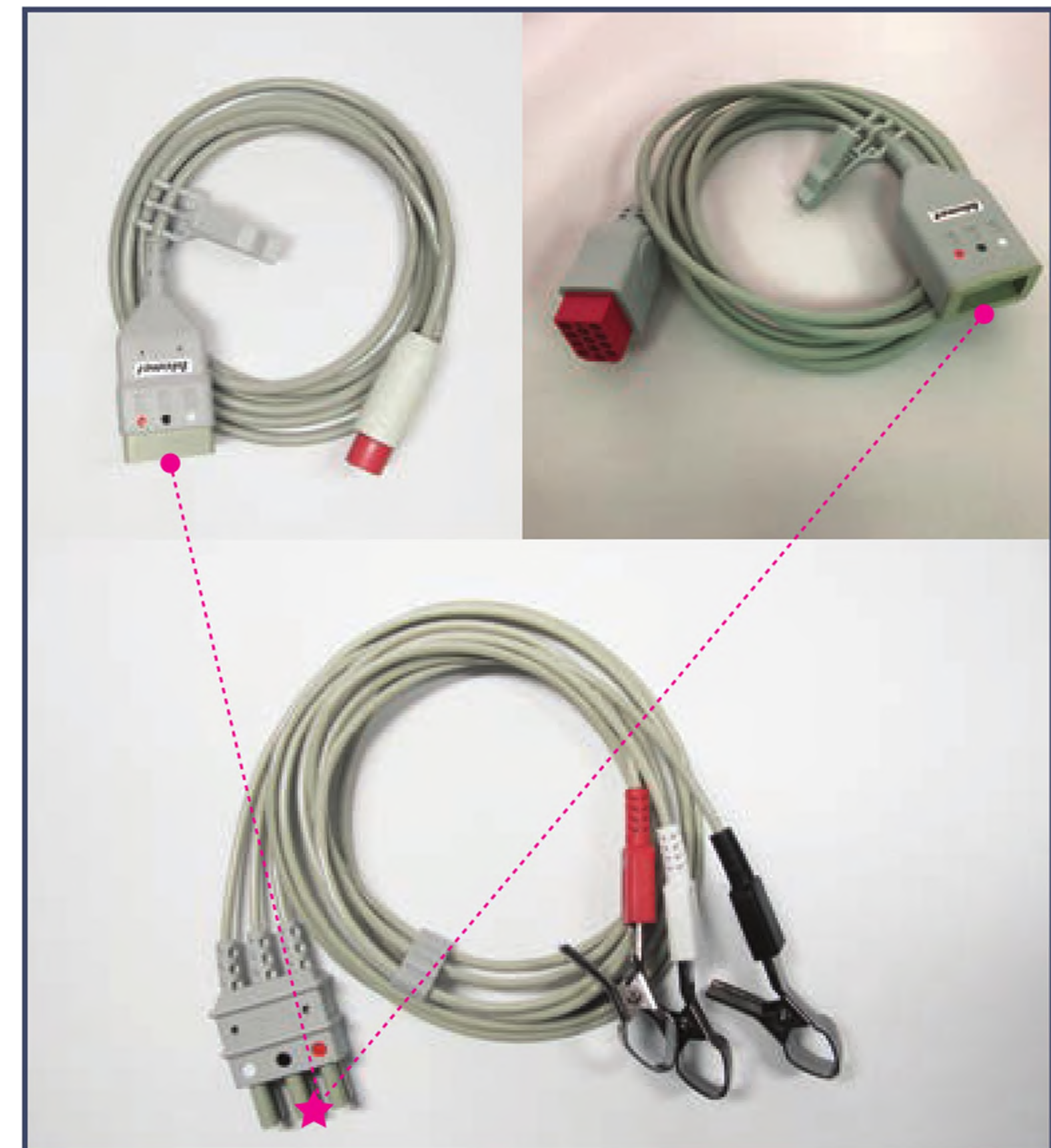
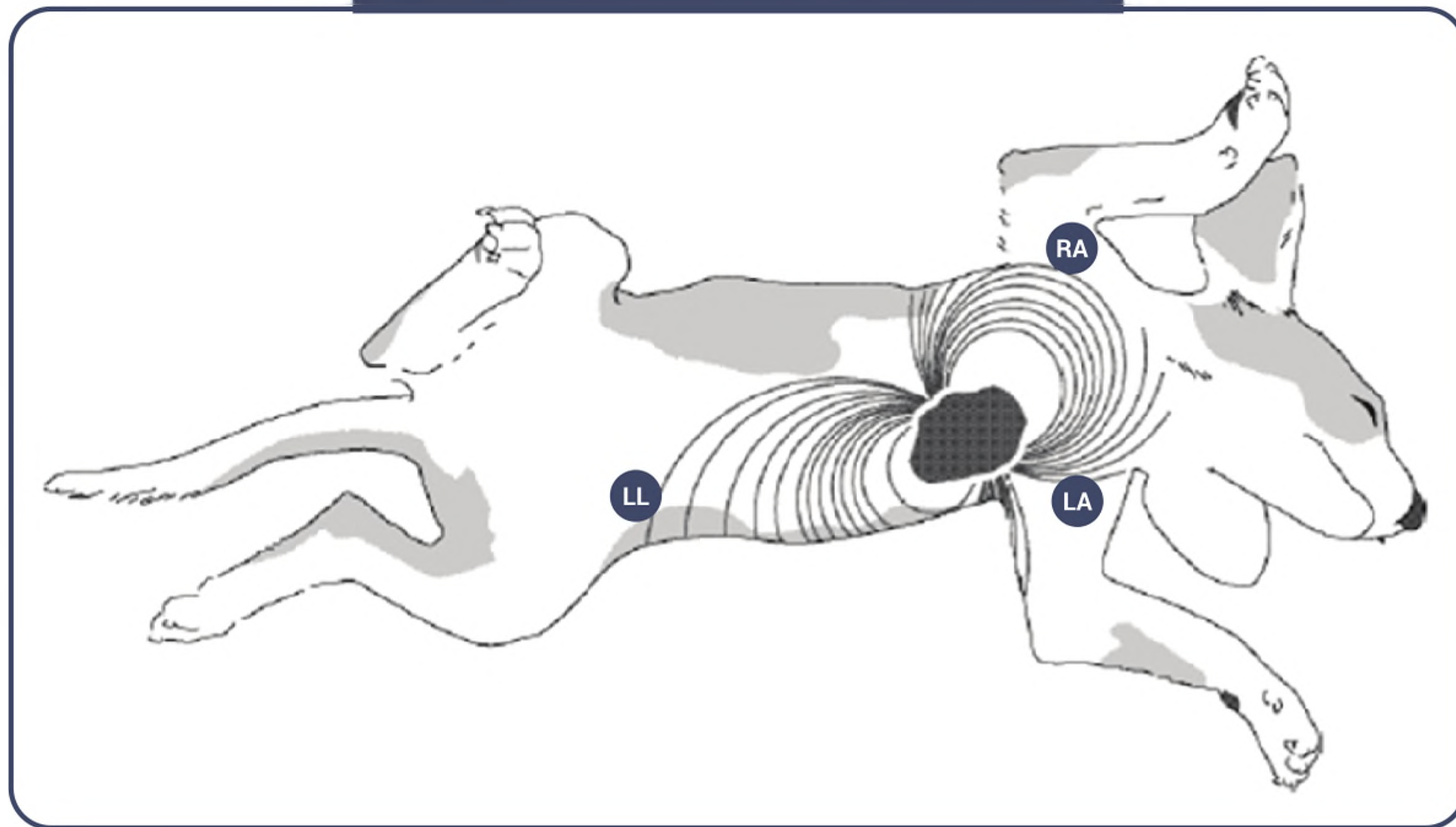
Turn your monitor on. Touch the screen or turn the rotary knob to move the cursor around the screen and press the center of it to select the highlighted item.



### 3. ECG

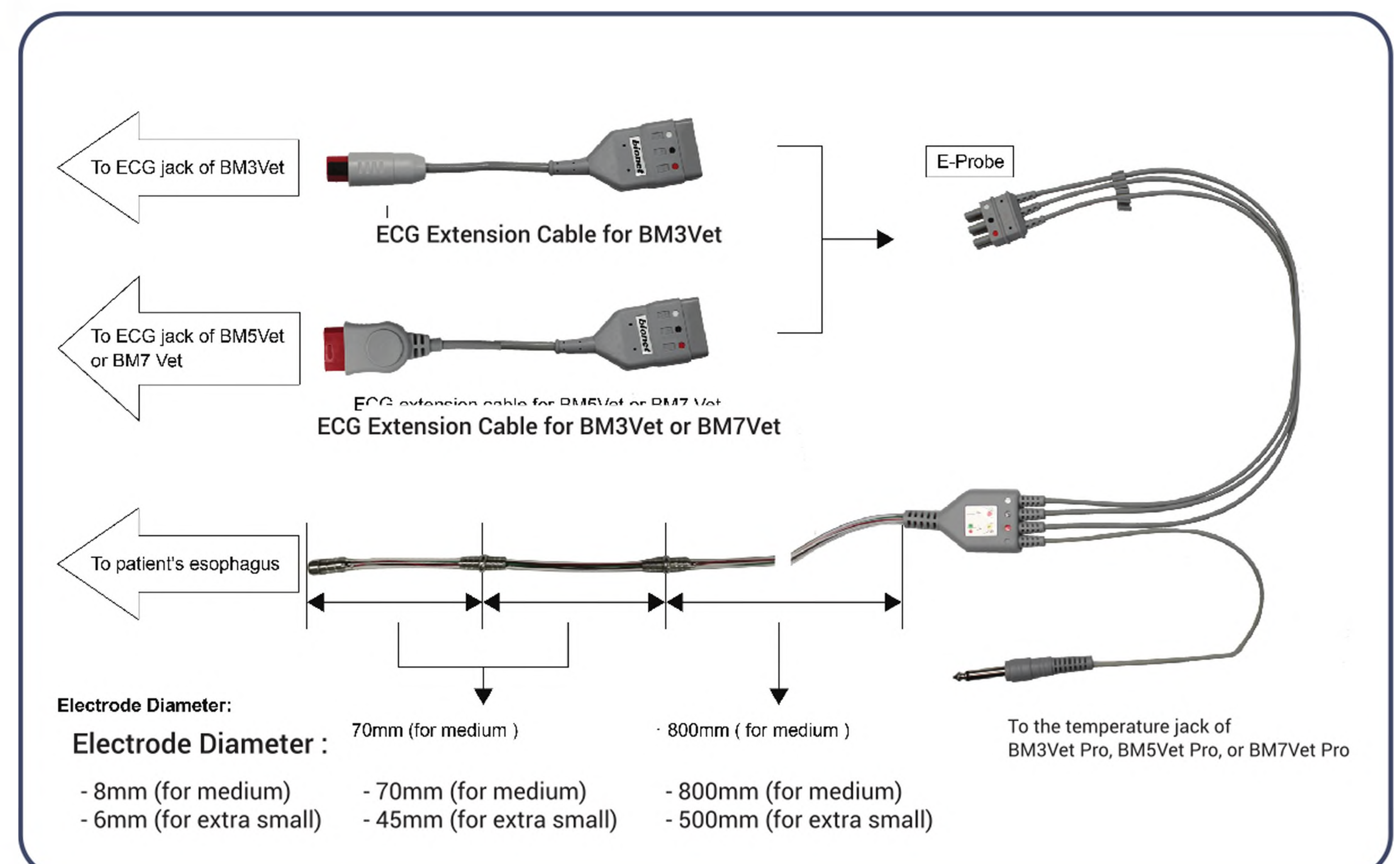
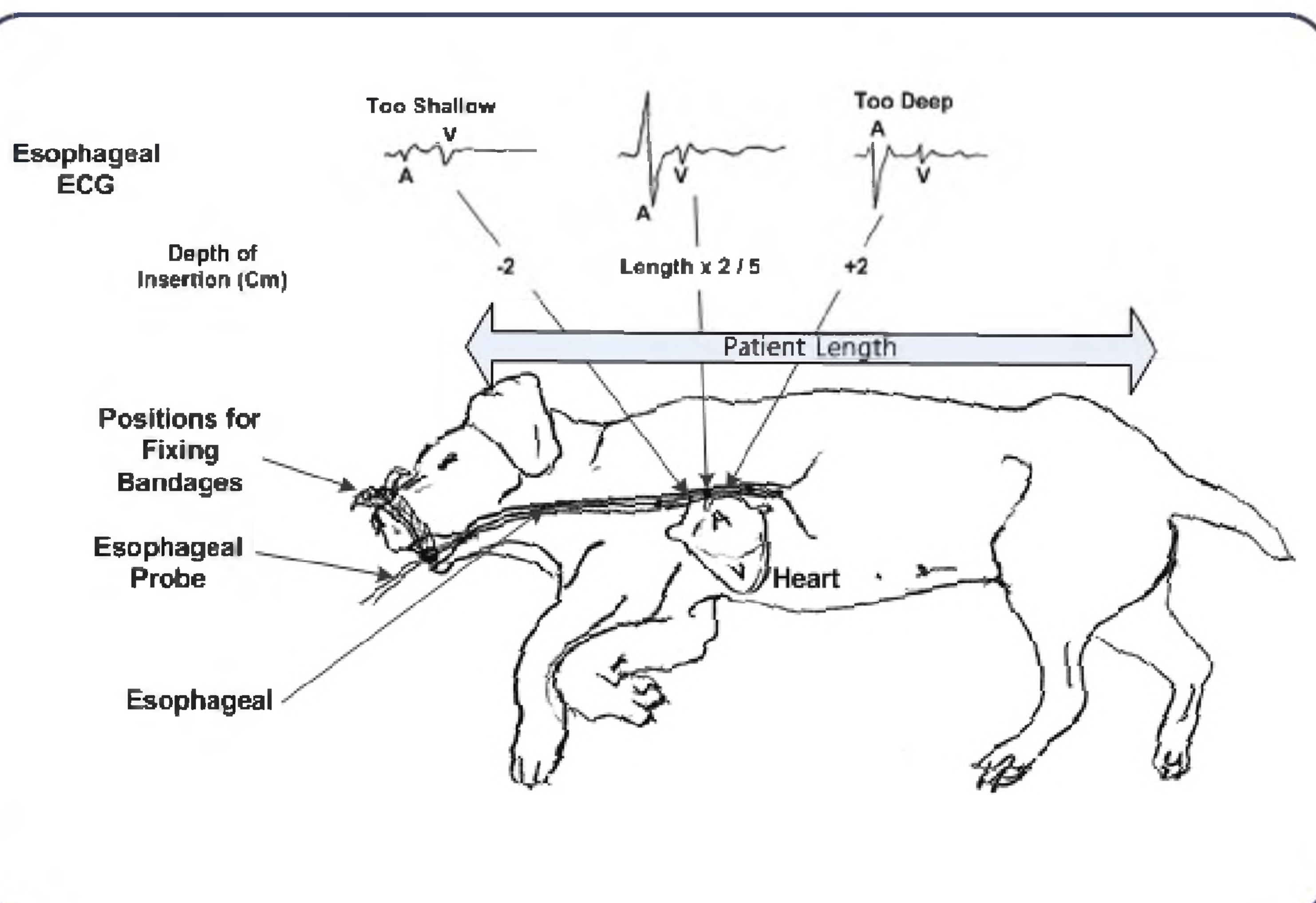
You will have both a 3 lead alligator clip and an esophageal ECG/Temperature probe. Either one will plug into your ECG extension cable.

#### Position of 3-Lead Wire Electrodes



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.



The other is a transreflectance 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 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.



**\*\*\*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

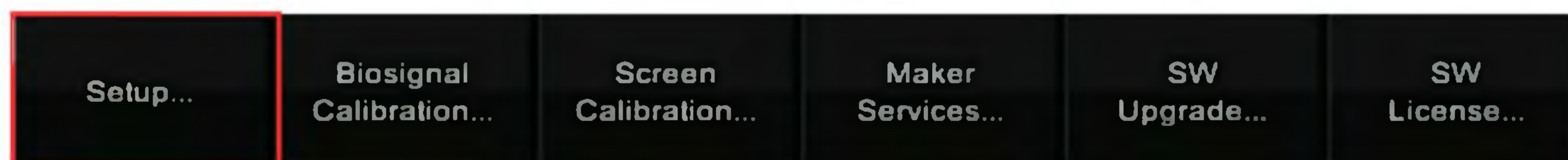
This document will focus on the main stream Capnostat 5 sensor. If you purchased the side stream LoFlo sensor please contact technical support with any questions.

### 6.1 EtCO2 Parameter On

A. Select the GEAR icon on the left side of the screen

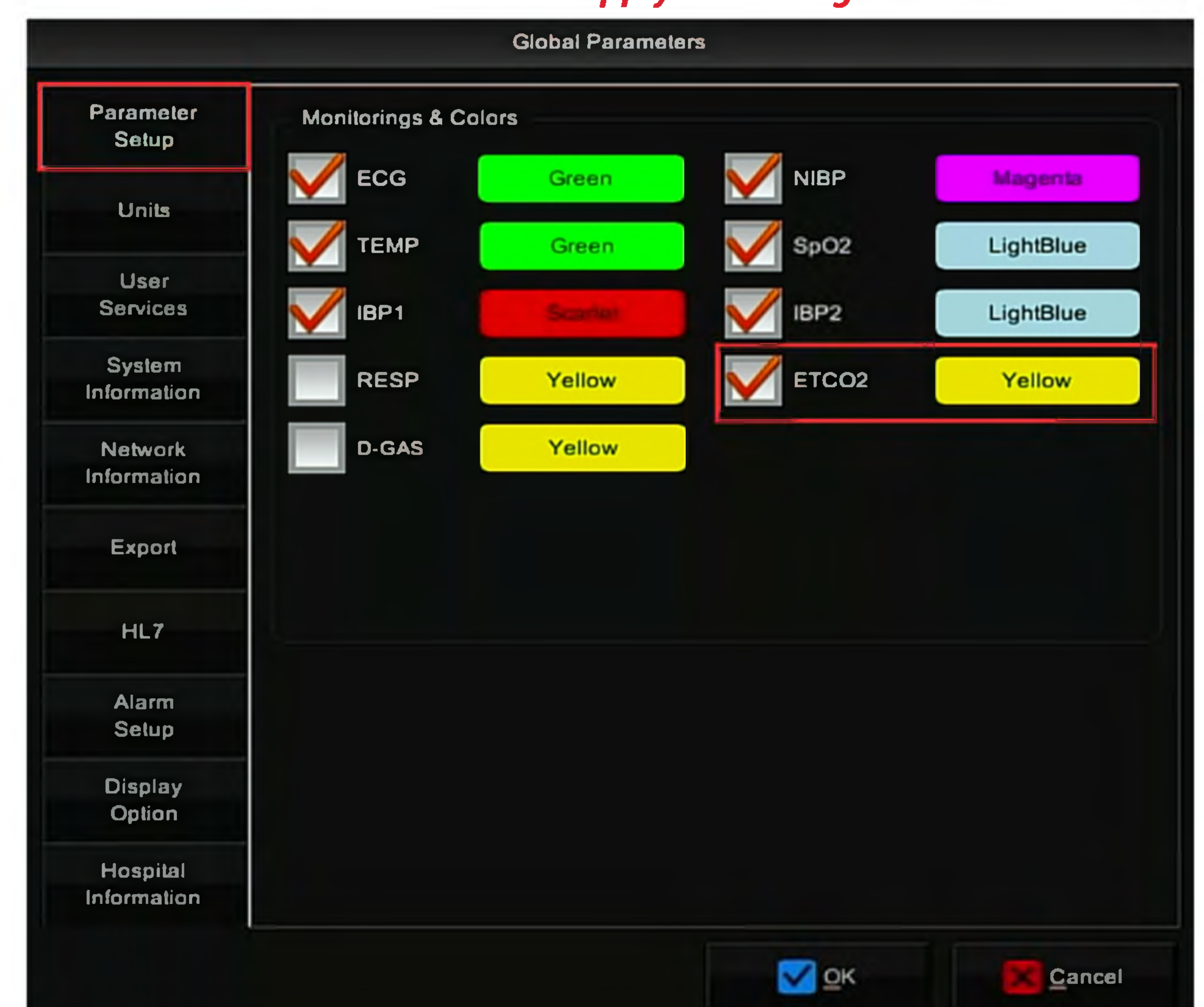


B. Select SETUP



C. Select ETCO2 checkbox. Back out of menus.

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



### 6.2 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.



### 6.3 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 endotracheal tubes that are larger than 4mm



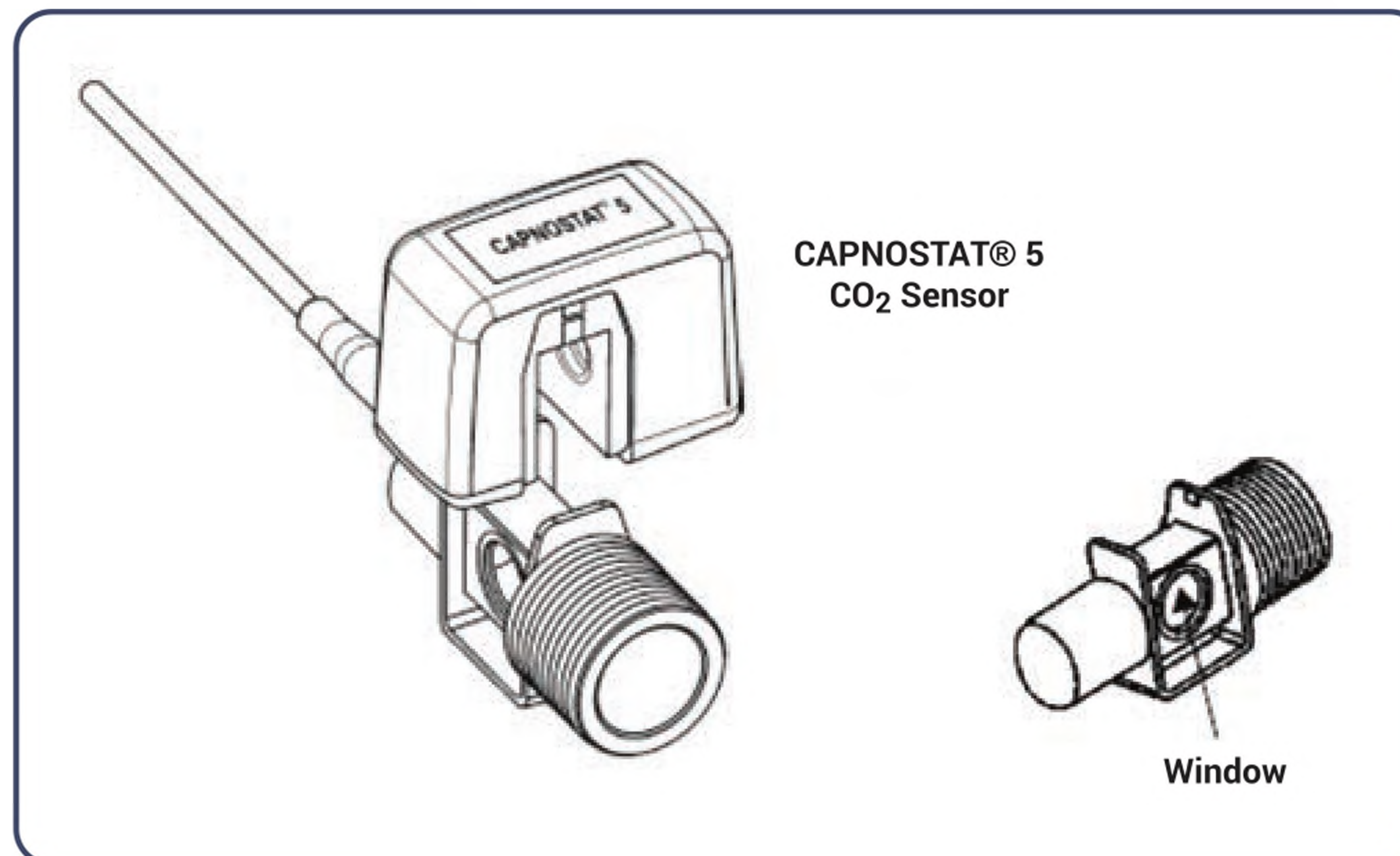
6312-00  
Single-Animal Use Airway Adapter  
For endotracheal tubes that are 4mm and smaller

**\*\*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.**

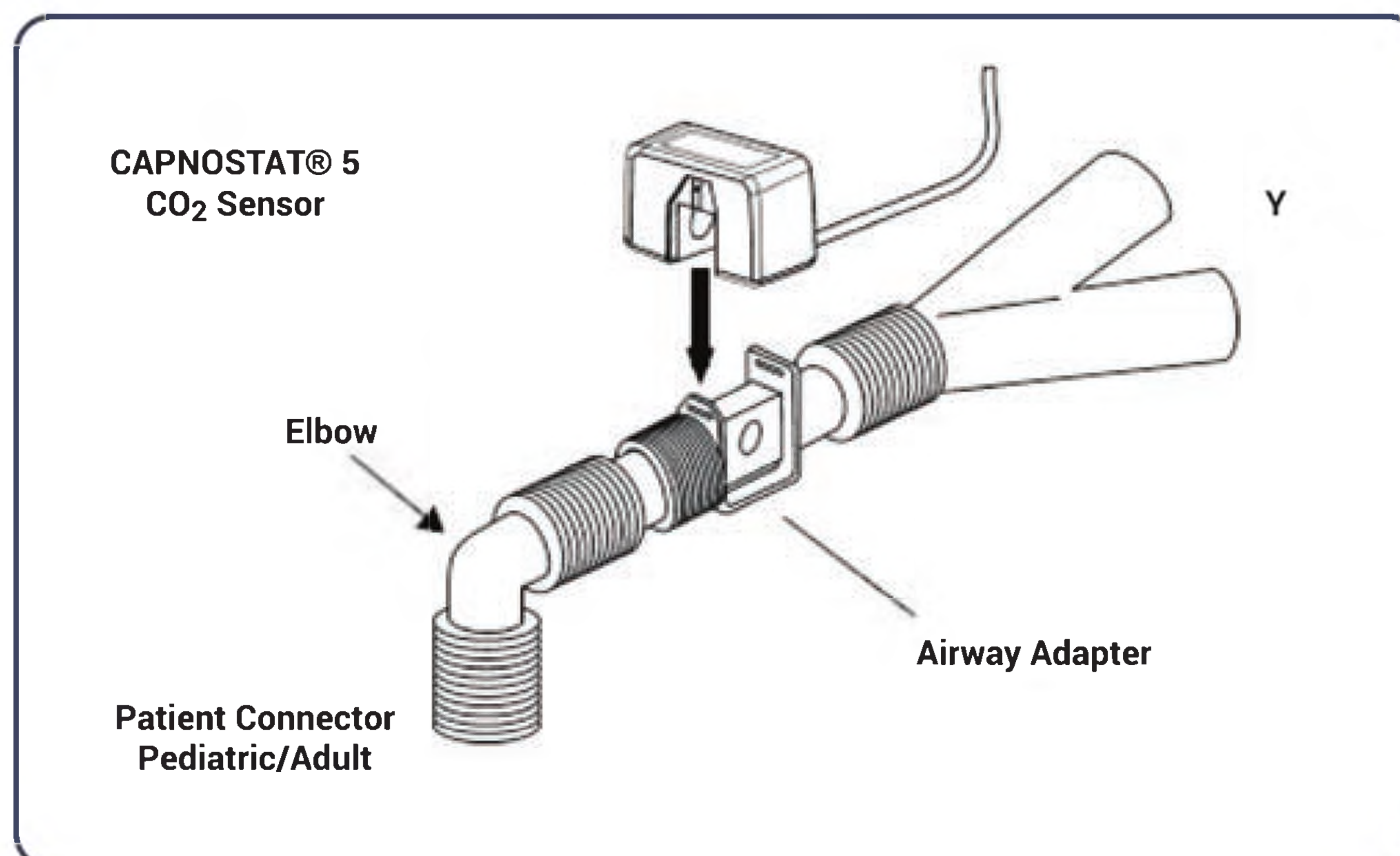


Shown below is the CAPNOSTAT 5 CO2 Sensor connection to a Respironics Novamatrix CO2 adapter.

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



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



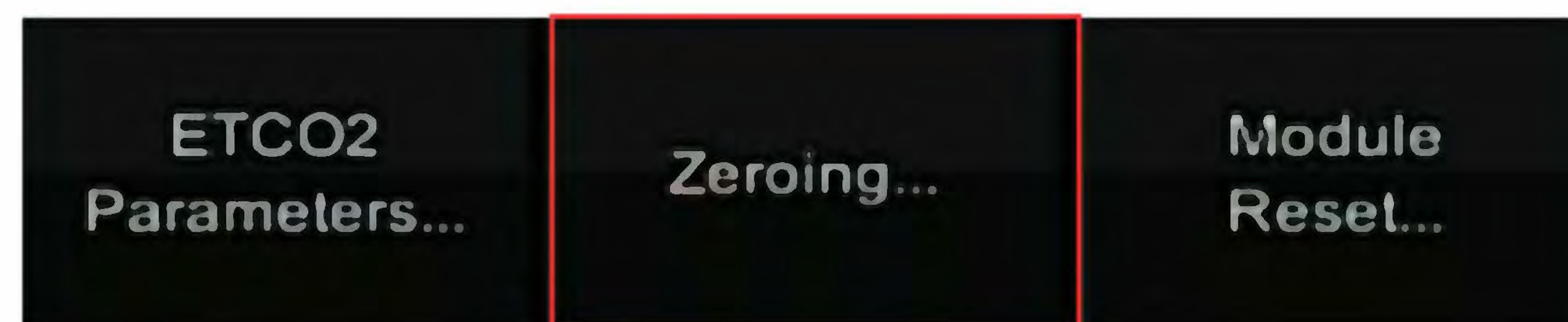
## 6.4 Zeroing

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 EtCO<sub>2</sub> window then select ZEROING. You will see a ZEROING message appear that will last 15 seconds. Once this clears, you are ready to connect to your patient.

(a) Select EtCO<sub>2</sub> parameter by rotary knob or touch.



(b) Select ZEROING by rotary knob or touch. Then zeroing will progress.



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

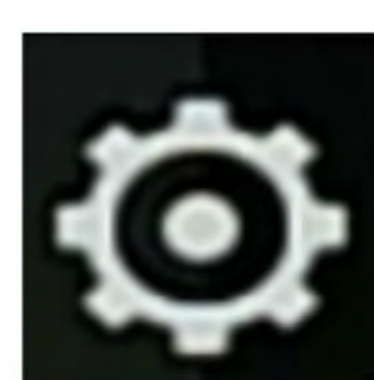
**\*\*\*For best result, connect the CAPNOSTAT 5 CO2 Sensor to an adapter and wait 2 minutes before performing the Adapter Zero procedure.**

## 7. Dual Gas Module

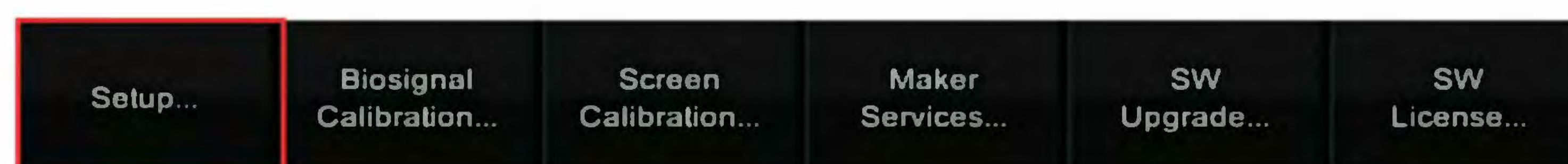
Dual Gas sidestream module is intended for monitoring of intubated and ventilated or non-ventilated small and large patients under anesthesia. The Dual Gas module is a multi-gas analyzer measuring carbon dioxide (CO<sub>2</sub>) and one of five anesthetic agents with manual selection of the specific agent type. This is intended for use only with the BM3Vet Touch, BM7Vet, and BM Pro Series (BM3Vet Pro / BM5Vet Pro / BM7Vet Pro).

### 7.1 Dual Gas Parameter On

A. Select the GEAR icon on the left side of the screen

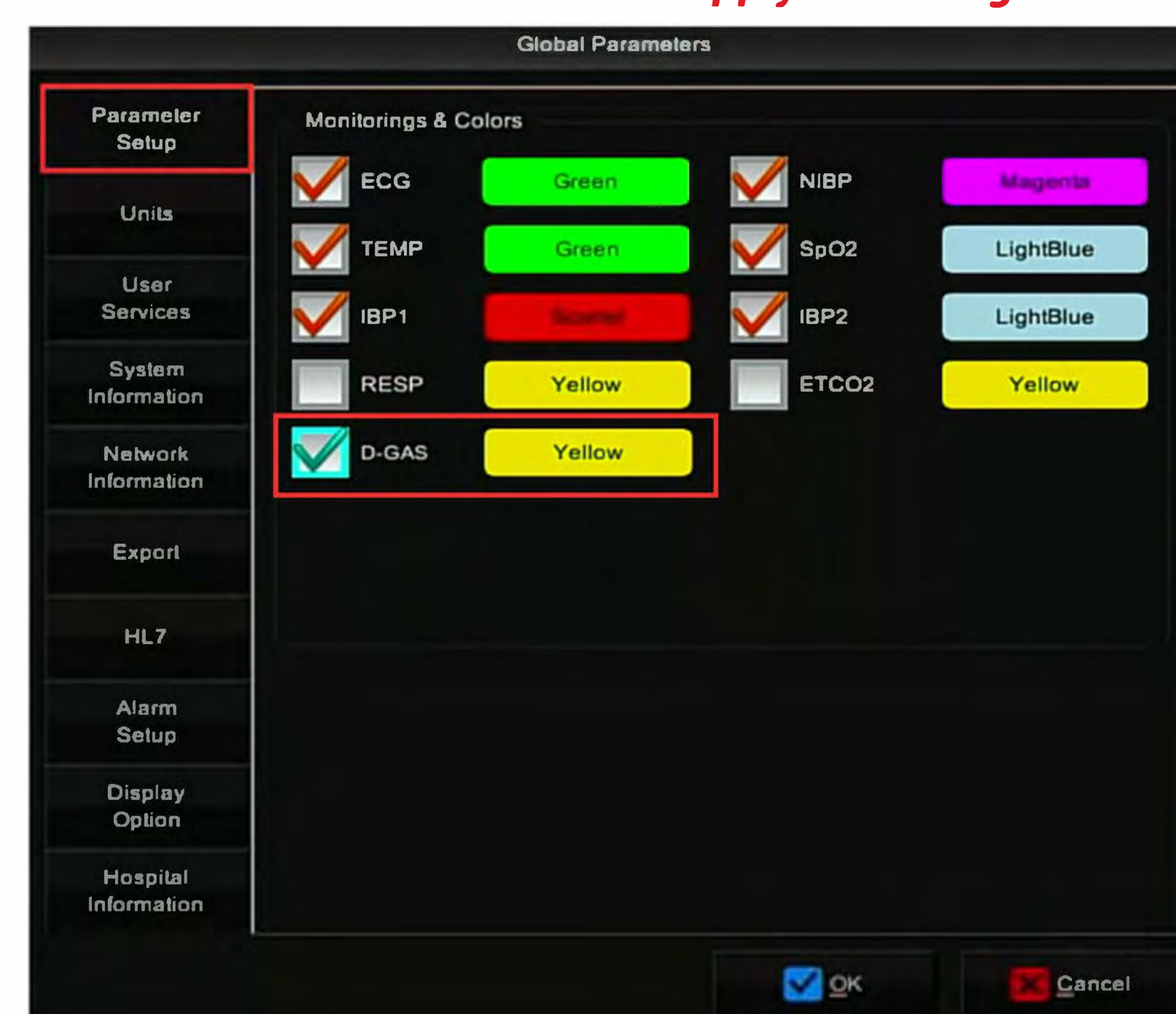


B. Select SETUP



C. Select D-GAS checkbox. Back out of menus.

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



### 7.2 Quick Guide for Dual Gas Module

## 8. BT-Link Pro

8.1 **BT-Link Pro:** An automated veterinary monitor software program that enables you to interface Bionet veterinary monitors directly to a Windows-based computer.

8.2 **BT-Link Pro Mobile:** A smartphone application that enables you to monitor one of the multiple Bionet veterinary monitors connected directly to a smartphone or tablet.

# 7. Accessories

## \* Optional items



3-Lead Vet ECG Cable  
Item Code: B-WIRE-N



3-Lead ECG Extension Cable  
Item Code: B-CBL-EP



5-Lead Vet ECG Cable  
Item Code: B-AECG5



5-Lead ECG Extension Cable (For BM3Vet Pro only)  
Item Code: B-CBL5-N



Esophageal Probe with 3-Lead ECG and Temperature(XS/S/M)  
Item Code: B-EPRB-XS/S/M



Temperature Probe (Rectal/Esophageal)  
Item Code: TEM-PRV-R



Print Paper  
Item Code: BM-PP



USB WiFi Dongle (2.4GHz)  
Item Code: USB-WIFI24



NIBP Extension Tube (3m)  
Item Code: B-NBPCBL



Reusable NIBP Infant Cuff  
Cuff Size Range: 9 to 14.8cm  
Item Code: B-ICUFF



Disposable NIBP Neonate Cuff (Size #1- #5)  
Item Code: B-NCUFF1~5



Reusable NIBP Pediatric Cuff  
Cuff Size Range: 13.8 to 21.5cm  
Item Code: B-PCUFF



Reusable NIBP Child Cuff  
Cuff Size Range: 20.5 to 28.5cm  
Item Code: B-CCUFF



Multisite SpO2 Probe  
Item Code: B-SPO2-V



Transflectance SpO2 Probe  
Item Code: B-SPO2-R



SpO2 Extension Cable  
Item Code: B-SPCBL-N

### EtCO2 Mainstream



\*CAPNOSTAT5 Mainstream CO2 Sensor  
Item Code: B-RMCO2



\*Mainstream Disposable Adult Airway Adapter : ET Tube > 4mm  
Item Code: 6063-00



\*Mainstream Disposable Neonatal Airway Adapter: ET Tube < 4mm  
Item Code: 6312-00

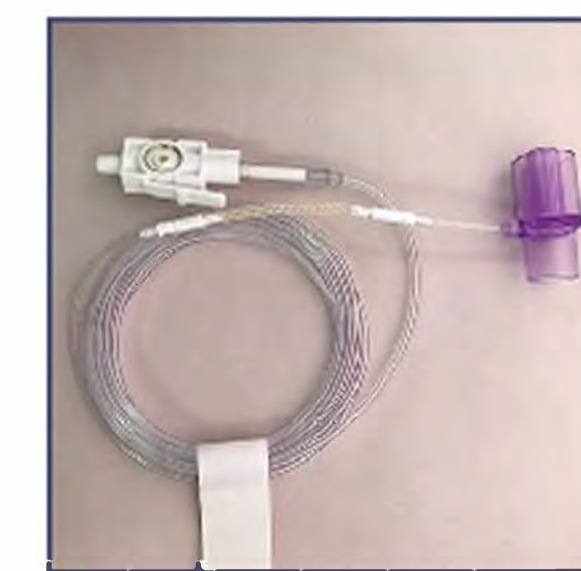
### EtCO2 Sidestream



\*LOFLO Sidestream CO2 Sensor  
Item Code: B-RSCO2-V



\*Sidestream Airway Adapter Kit with Sampling Line - Adult/Pediatric  
Item Code: 3473ADU-00



\*Sidestream Airway Adapter Kit with Sampling Line - Infant/Neonate  
Item Code: 3473INF-00

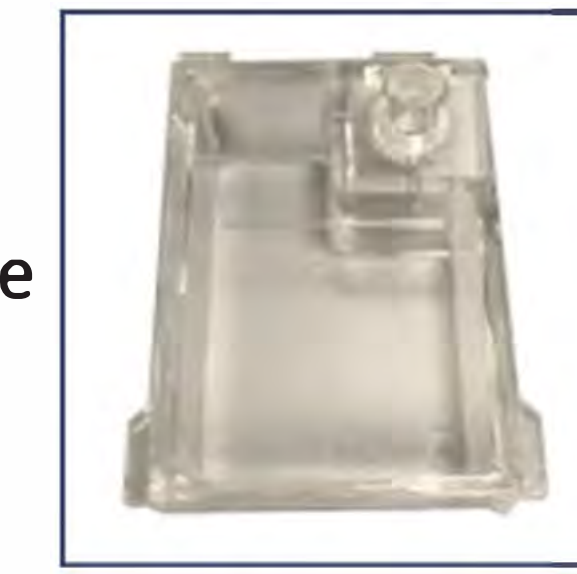


\*Sidestream Sampling Line with Male Luer Adapter  
Item Code: 3475-00

### Dual Gas Module



\*Dual Gas Module  
Item Code: DG-SENSOR



\*Water Trap  
Item Code: DGA-WT



\*Sample Line with Luer Lock (8')  
Item Code: DGA-SL



\*Airway Adapter (Straight)  
Item Code: DGA-AAS



\*Airway Adapter (L type)  
Item Code: DGA-AAL

### Multi Gas Module



\*IRMA AX + Multi-Gas Module  
Item Code: IRMA-AX+



\*IRMA Airway Adapter (Adult/Pediatric/Infant)  
Item Code: 106220-ADU (Adult/Pediatric) 106260-INF (Infant)



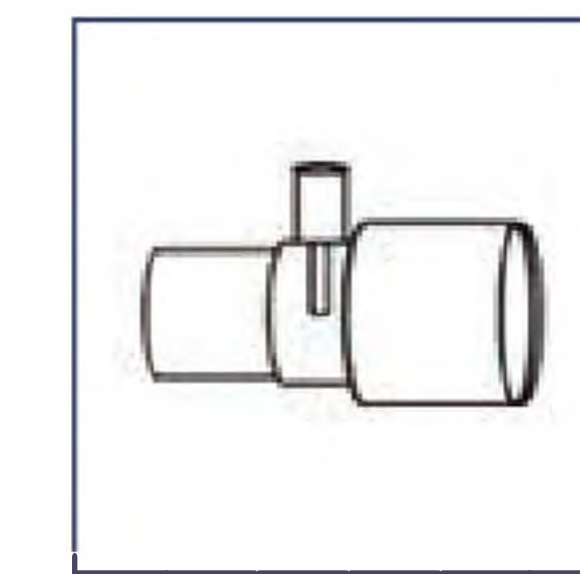
\*ISA OR + Multi-Gas Module  
Item Code: ISA-OR+



\*ISA AX + Multi-Gas Module  
Item Code: ISA-AX+



\*Nomoline Adapter  
Item Code: 108220-FL



\*Nomo Extension  
Item Code: 108240-EXT



\*T-Adapter  
Item Code: 108250-ADU

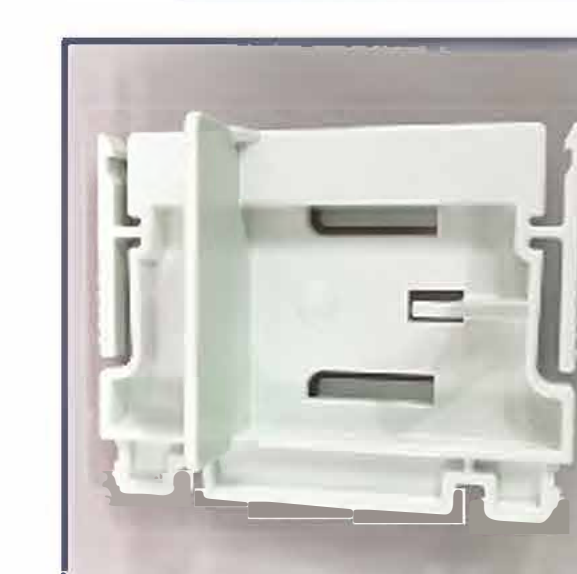
### IBP (For BM5Vet Pro / BM7Vet Pro only)



\*TranStar® Reusable Single Channel Cable  
Item Code: MX95114



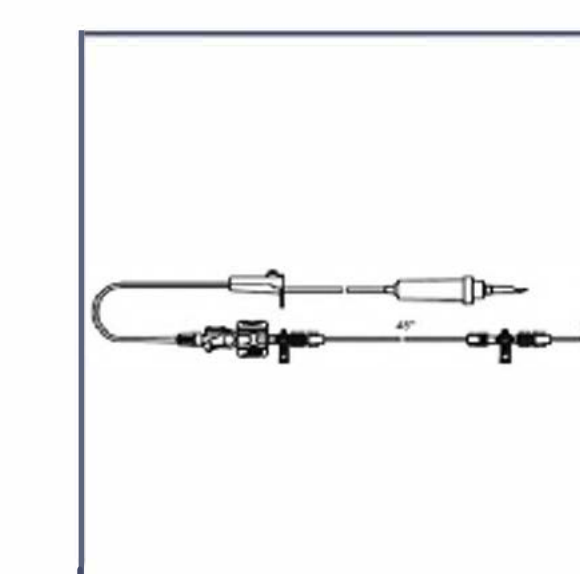
\*Modular Transducer Mounting Plate (1 each)  
Item Code: MX800



\*Pole Clamp for Mounting a Transducer plate (fits 3/4" to 1-1/2" I.V. pole)  
Item Code: MX240



\*C-Fusor® 1000ml Pressure Infusor  
Item Code: MX4810



\*TranStar® 60" Single Line Monitoring Kit  
Item Code: MX9504T

Алматы (7273)495-231  
Ангарск (3955)60-70-56  
Архангельск (8182)63-90-72  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Благовещенск (4162)22-76-07  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Владикавказ (8672)28-90-48  
Владимир (4922)49-43-18  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89  
Иваново (4932)77-34-06  
Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Казань (843)206-01-48

Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Коломна (4966)23-41-49  
Кострома (4942)77-07-48  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Курган (3522)50-90-47  
Липецк (4742)52-20-81  
Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Ноябрьск (3496)41-32-12  
Новосибирск (383)227-86-73

Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Петрозаводск (8142)55-98-37  
Пеков (8112)59-10-37  
Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Саранск (8342)22-96-24  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Сургут (3462)77-98-35

Сыктывкар (8212)25-95-17  
Тамбов (4752)50-40-97  
Тверь (4822)63-31-35  
Тольятти (8482)63-91-07  
Томск (3822)98-41-53  
Тула (4872)33-79-87  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Улан-Удэ (3012)59-97-51  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Чебоксары (8352)28-53-07  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Чита (3022)38-34-83  
Якутск (4112)23-90-97  
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47