

[Click to go back](#)



## DRAMINSKI Dog Ovulation Detector



DRAMINSKI  
Owocowa 17, 10-860 Olsztyn, Poland  
Tel. +48 89 527 11 30, fax. +48 89 527 84 44  
Or  
Sandy Hook, CT 06482, USA  
Phone: (203) 545-6885  
**e-mail: [info@draminski.com](mailto:info@draminski.com)**

### OPERATION MANUAL

[www.draminski-us.com](http://www.draminski-us.com)

[www.draminski.com](http://www.draminski.com)

## CONTENTS

|     |                                   |    |
|-----|-----------------------------------|----|
| 1.  | Introduction.....                 | 2  |
| 2.  | Description.....                  | 3  |
| 3.  | Operation.....                    | 3  |
| 4.  | Familiarisation.....              | 4  |
| 5.  | Measurements.....                 | 4  |
| 6.  | Disinfecting.....                 | 8  |
| 7.  | Interpretation of results.....    | 9  |
| 8.  | Final comments.....               | 10 |
| 9.  | Battery replacement.....          | 10 |
| 10. | Technical data.....               | 11 |
| 11. | Typical readings during heat..... | 11 |

## INTRODUCTION

One of the most essential elements in organising animal breeding is detecting the moment of ovulation. This is of utmost importance to the efficiency with which the female is served; effective mating being so closely dependant on it being done at the right moment. Therefore, in the search for a sure and simple-to-use-method of detecting ovulation, scientists and animal breeders, determined a direct interdependence between changes in the electrical resistance of vaginal mucus and the occurrence of ovulation.

In the course of research on the properties of vaginal mucus, scientists determined that the closer to ovulation, the more the change in its electrical resistance. Knowledge to date on animal physiology, in particular about changes occurring in sexual organs during the oestrus cycle, have enabled science to understand the correlation of changes occurring in the ovaries and changes in electrical resistance of mucus in the bitch's vaginal vestibule.

All of the above mentioned phenomena and interdependence of electrical resistance on ovulation have been used to advantage by DRAMIŃSKI in constructing the ELECTRONIC OVULATION DETECTOR for dogs.

## DESCRIPTION

The electronic detector consists of a measuring probe, a digital display block where readings are taken and the handle with the ON/OFF switch. A common 9V battery is located within the handle.

Two parallel rings (electrodes) are to be found at the end of the probe. They are responsible for measuring the electrical resistance of mucus found in the vaginal vestibule.

The magnitude of electric current flowing through these electrodes, as well as the electrical field created by this mini-current, is absolutely harmless to animals and people.

The bodywork of the detector is made of polypropylene, which is resistant to atmospheric agents and most chemicals. The instrument is moisture proof, which thus enables the unit to be easily kept in a clean and hygienic condition.

## OPERATION

While testing the apparatus in the open air i.e. with open electrodes check the following:

1. Press the ON/OFF switch. After pressing the button two dashes are displayed indicating the device readiness to work.

--

2. Press the switch three times - the digits 1, 2, 3 will be displayed (a-c).

3. Press the switch last time to see the digits "1 0" (d) indicating that the battery is connected and the instrument operating, but no measurement is being taken.

a)

b)

c)

d)

An additional function of the LCD display is to indicate battery failure. When LO BAT blinks on the display you will soon need a fresh battery. The battery is dead when the signal is constant.

The lowest scale is 10 units, while the range of measurement is from 0 to 1990 units. When this scale is exceeded the digits "1 0" appear on the LCD display, signaling overflow (as in the case of the electrodes being tested while in contact with the atmosphere). The range of measurements of the detector is several times that of the vaginal mucus electrical resistance to be tested, and in practice this scale is never exceeded.

## FAMILIARISATION

**Before commencing measurements it is recommended that the first time user:**

1. Do some measurements on some animals which are evidently in heat.
2. Do some measurements on some animals not in heat or pregnant.

The functioning of the instrument can be checked in the following way:

- Immerse the probe in a vessel of clean water and take a reading. It should be "1 0" indicating that the measurement scale has been exceeded as resistance of clean water is great. In practice we will never exceed the scale because max. vaginal mucus resistance is many times less than the max. scale.

- Next, put a little pinch of salt into the water, mix well, then immerse the probe again. After addition of salt the result is clearly lower than before. Salt lowers the resistance of the solution (less resistance-lower result). Addition of some more salt lowers the result even further.

This experiment shows well how the instrument works. It also serves to demonstrate how the presence of urine (which contains salt) on the electrodes causes an abnormal lowering of results.

## MEASUREMENTS

**Before taking a reading follow these steps:**

1. Check the electrical function of the detector in the open air to make sure the battery is at proper power. (The LCD should display the numbers "1 0")
2. Prepare a disinfectant to sterilise the probe as indicated in DISINFECTING.
3. If the vulva area is dirty, wash and wipe clean.

### Taking a reading:

To make the procedure easier (especially with smaller dogs) it is often convenient to place the bitch on a table or convenient raised surface.

1. Check the electronic functioning of the DRAMIŃSKI ESTROUS DETECTOR in contact with the atmosphere, making sure there is no need to change the battery.

2. Prepare a disinfectant fluid and disinfect the probe in accordance with the steps given in the chapter on disinfection.

3. If vaginal labia or the surroundings are dirty, wash and clean before inserting the probe.

4. Spread apart the vulva and delicately insert the probe so that its end reaches the lower depression which ought to be reached at a length of 3/4 of the probe. When this depth is reached some resistance is felt. Then carefully rotate the entire unit through 360 degrees (i.e. a full rotation) keeping the probe in the same position every time without moving the probe by either withdrawing or inserting it further so that the electrodes come into full contact with the vaginal mucus.

5. Press the ON/OFF switch. After pressing the button two dashes are displayed indicating the device readiness to work.

--

6. Press the switch once again - the digit "1" will be displayed. It means that first reading was memorized (a). Next, press the switch two more times to memorized readings 2 (b) and 3 (c).

Press the switch last time to see the final result (d) which is the lowest one out of three readings memorized.

a)

b)

- c)
- d)

7. Remove the probe gently.

8. Disinfect as instructed in the section "DISINFECTING" and replace in storage box.

**How to insert the probe:**

- Spread the vulva gently to facilitate easy entry of the probe and insert approximately 3 to 4 inches (8 to 10 cm) taking into account your specific breed type and size, until a resistance is felt at the neck of the cervix. It is not uncommon for some bitches to be fully dilated and as such the resistance may not be so apparent.

It is this area, just prior to the neck of the cervix that has the highest concentration of mucus, which the detector needs to reach, to obtain a measurement.

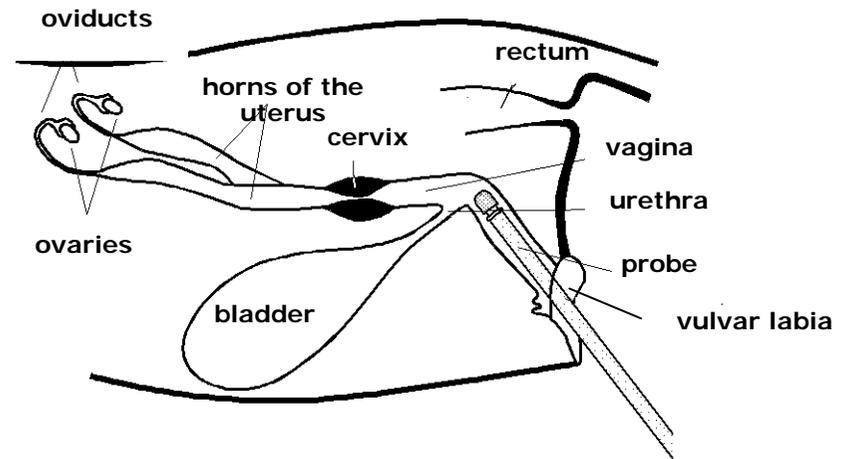
**Please note: On larger breeds, it may be necessary to insert the probe a little further to reach the vaginal mucus in order to obtain accurate and consistent readings.**

- It is **IMPERATIVE** to insert the probe at the correct angle of the vaginal vestibule (*see diagram*) which varies for each bitch, but is usually at approximately 11 o'clock direction if imagining looking at the face of a clock. (*Imagine the dog entering the bitch coming up to her from underneath at an angle*).

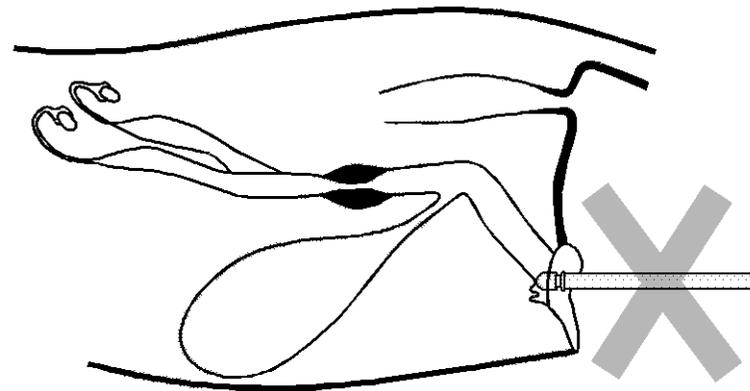
**This angle varies on breed type, size and individual bitches and it is not uncommon for the angle to be much steeper, with the probe being inserted almost vertical.**

**Using the correct angle of insertion will facilitate extremely simple, safe and easy entry, causing no discomfort to your bitch whatsoever.**

**CORRECT**



**INCORRECT**



- With the probe inserted to the required depth, rotate the entire unit through 360 degrees (i.e. a full rotation) so that the electrodes come into full contact with the vaginal mucus.
- Measurements are best taken in a single '*central*' position after inserting the probe to a sufficient depth to just before the neck of the cervix when a slight resistance is felt.

- Allow approximately 30 seconds for the probe to achieve the body temperature of the bitch, to ensure accurate and consistent readings and then without withdrawing the probe, take a few readings and average the results.

It is IMPERATIVE that before each reading is taken, the unit is rotated through 360 degrees to obtain '*fresh*' mucus on the probe. In this way accurate and consistent readings are obtained and any excessively high or low '*rogue*' readings, where mucus has not been '*picked up*' for example, can be discarded.

**Note!**

Once adopted, a consistent method should be used for all the measurements, i.e. the same length of the probe should be inserted and the measurements have to be taken in the same part of the vagina. Failing to do so can result in variable and inconsistent readings.

It is not uncommon for some bitches to provide '*different*' sets of readings when measurements are taken in the morning and the evening for example. However, it can be seen that the profile trace for the progression of readings will be the same, for both morning and evening, regardless of the actual value of the readings.

**DISINFECTING**

Before and after each measurement, the detector must be disinfected.

Careful and thorough cleaning and disinfection of the instrument is one of the most important conditions for proper usage.

We recommend wiping the probe with gauze, cotton linen or even tissue paper to clean it of mucus, faeces, urine or hair, especially around the electrodes.

Next, it is best to wash it under running water and finally immerse it in a disinfecting solution.

Always use disinfectants at concentrations given by the producer, as if not used properly they may cause irritation of the vaginal lining, wiping the probe clean before use will prevent this from happening. Hibiscrub is recommended for

disinfecting, however if you use Savlon or Dettol, then the solution strength of no more than 1% should be used. The disinfecting solution should be freshly prepared before the detector is used again.

**Note!**

DRAMINIŃSKI would like to emphasise the importance of maintaining your detector in a hygienic condition. Carelessness about sterility or improper usage may lead to infection of the uterus. After each usage, wash, disinfect and dry your detector.

**INTERPRETATION OF RESULTS**

A typical graph indicating the fluctuations in vaginal mucus resistance is presented. The optimal mating period is indicated.

**Often in practice, there are variations to this normal curve and the maximum peak reading between animals. Thus, this optimal graph may be adjusted to each breeder's own experience and that of the individual bitch.**

**Some bitches may peak at 400 units where others peak at 600, 750 or over a 1000, but it is important to remember that it is the profile trace that is important and NOT the actual value of the readings.**

We recommend the following interpretation of readings:

-If the reading is between 100-200 units, there is no need to take daily measurements.

-When readings rise above 200, daily measurements should be taken. Sometimes readings at this level may last a few days and then show a dynamic increase.

-When readings begin to rise, it is advisable to take readings more frequently (such as 2, 3 or 4 times a day) to accurately determine the precise point of ovulation. Thus readings for example could be taken at breakfast, lunch, tea and supertime. This is especially important in the case of a bitch that ovulates early, or only stands for a limited time to accept the dog.

**As shown on the graph, it is most important to record the maximum readings of resistance that are reached and shown on the LCD and the subsequent decrease in**

resistance values. Day one (and at the latest day two) **AFTER** the peak reading is the ideal time for mating.

We encourage breeders to note the common "false peak" which occurs before the real one. It is easy to identify as it occurs at much lower resistance levels and is seen during the proestrous period at around days 3 to 5.

## FINAL COMMENTS

- We recommend you do not lend fellow breeders your electronic detector in order to reduce the risk of contagious diseases being transmitted.
- Follow disinfecting procedures closely.
- Store the detector in dry conditions at room temperature.
- Wash the detector in warm water - do not use hot or boiling water.
- Dirt, or skin-oil on the electrodes will result in false readings (too high) whereas urine on the electrodes or solutions containing salt will cause lower readings.
- Measurements should always be carried out in the same fashion and at the same position in the vagina, as this will give utterly reliable results.
- We recommend readings be taken at the cervix.
- We at DRAMIŃSKI kindly ask all breeders to send us your comments and results gained from using our detector.

## BATTERY REPLACEMENT

Low battery power is indicated by the words "LO BAT" flashing on the LCD.

A new battery is required when this indicator appears.

To change the battery:

1. Unscrew both screws which fix the small cover on the end of the handle.
2. Remove the battery from the compartment and release from clasps.
3. Adjust clasps to new battery and insert into compartment.
4. Replace battery cover, ensure the rubber gasket is in place and tighten the screws.

## TECHNICAL DATA

|                      |                           |
|----------------------|---------------------------|
| Net weight           | approx. 0.3 kg            |
| Power source         | one 9V battery, type 6F22 |
| Power utilisation    | approx. 12mA              |
| Display              | LCD 3.5 digits            |
| Smallest unit        | 10 units                  |
| Range of measurement | 0-1990 units              |
| Working temperature  | 0-50° C                   |
| Max. humidity        | 85%                       |

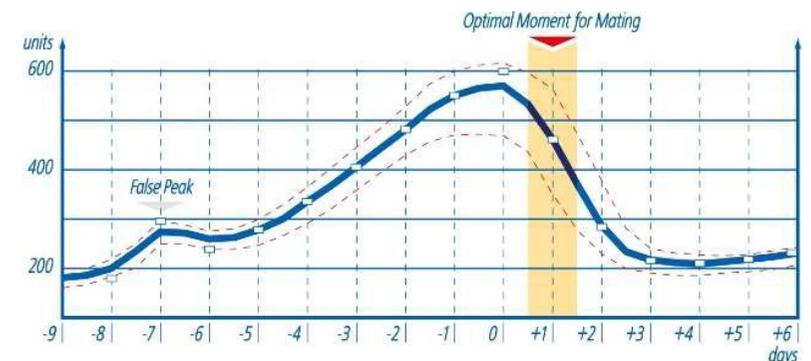
## TYPICAL READINGS DURING HEAT

In practice, the variations to the above curve may occur between breeds and individual bitches.

**The top figure may significantly exceed or be lower than 600 units (examples shown below).**

**Therefore, each bitch should be treated individually. It is the 'profile trace' that needs to be determined as opposed to the unit value of the readings obtained.**

It is most important therefore to measure and record the resistance peak and the moment when readings begin to fall.



### Examples of non-typical readings

