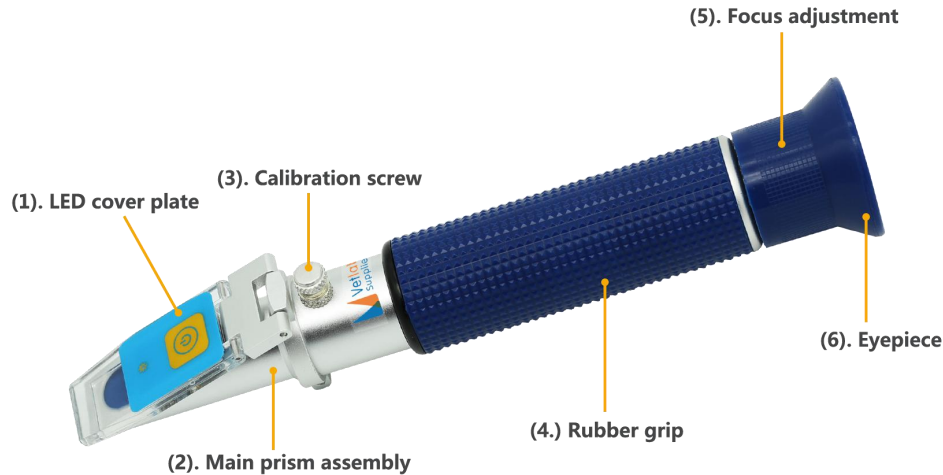


# USER GUIDE

## For Hand Held LED Veterinary Refractometer



### **Features**

1. Scales for Urine Specific Gravity for Dog (large animals) and Cat, and Serum Protein.
2. LED light source provides maximum light in any environment making readings much easier to view and results more accurately.
3. Easy to use. Simply press LED cover plate once to turn on light. Press once again to turn off. Auto-off function after 5 mins.
4. LED battery easily replaced.
5. With Automatic Temperature Compensation function (ATC Compensation Range: 10°C~30°C (50°F~86°F)).
6. Durable and built to last.

### **Calibration Procedure**

1. Begin the calibration of your refractometer by lifting up the LED cover plate and placing 2-3 drops of distilled water on top of the prism assembly. Close the LED cover plate so the water spreads across the entire surface of the prism without any air bubbles or dry spots.
2. Turn on the LED light source (1) by pressing the LED cover plate once and look into the eyepiece. You will see a circular field with graduations down the centre. You may have to focus the eyepiece (5/6) to clearly see the graduations.
3. Turn the adjustment calibration screw(3) by hand to adjust the line between blue (top) and white (bottom) until the dividing line is in line with the zero line at the bottom of the scale.



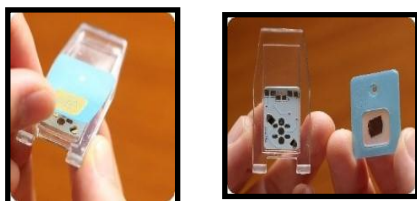
## Reading A Sample

1. Calibrate the refractometer (see above).
2. Open LED cover plate, clean the instrument using a soft, damp cloth.
3. Place 2-3 drops of sample on the main prism
4. Turn on LED (press cover plate once) and turn the eyepiece to focus if necessary.
5. Take reading on appropriate scale.
6. Turn LED off if necessary.

## Replacing the LED Battery

### Step 1.

Remove the button sticker by carefully lifting the overlapping front edge



### Step 2.

Take out the chip using a pin



### Step 3.

Remove the old battery



### Step 4.

Install the new battery



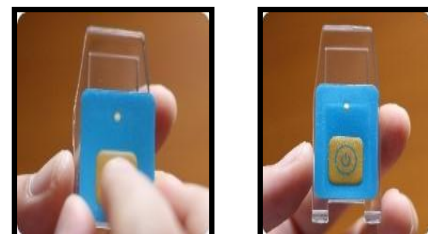
### Step 5.

Put back the chip to the plate



### Step 6.

Re-paste the sticker to finish



## Warnings & Maintenance

1. Accurate measurement depends on careful calibration. The prism and sample must be at the same temperature for accurate results.
2. Do not measure abrasive or corrosive chemicals with this instrument.
3. **Clean the instrument between each measurement using a soft, damp cloth and ensure the prism is stored completely dry.** Failure to clean the prism on a regular basis will lead to inaccurate results and damage to the prism's coating.
4. This is an optical instrument. It requires careful handling and storage. Failure to do so can result in damage to the optical components and its basic structure and invalidate the warranty