

Operator Manual

VS Tabletop Tonometer Model Number: IOP 100W



82.1802-000002.A

Rev. A

2022-12

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VS Tabletop Tonometer Operator Manual

Before use

Prior to operating the VS Tabletop Tonometer (Model Number: IOP 100W), carefully read this Operator Manual. As with all medical devices, the proper function and safety operation of this device depends on the Operator complying with all safety instructions described in this document.

If you have problems using the Intraocular Pressure Tonometer, please contact the Distributor.

Caution: Federal law restricts this device to sale by or on the order of a physician.

Indications for Use

VS Tabletop Tonometer is a digital tonometer intended to measure intraocular pressure of the human eye.

Contraindications



The VS Tabletop Tonometer is contraindicated for use in the following patients:

- Patients with active ocular infection such as conjunctivitis
- Patients with eye injuries or trauma.



Warnings

1. Always use the VS Tabletop Tonometer and accessories in accordance with the directions contained in this document.
2. The VS Tabletop Tonometer is intended for use in adults only. Do not use the device on children (<20 years old), animals, or objects.
3. Do not use the VS Tabletop Tonometer in the presence of

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flammable anesthetic mixtures such as oxygen or nitrous oxide.

4. Do not attempt to sterilized the VS Tabletop Tonometer. The VS Tabletop Tonometer must be disinfected in between uses per the instructions in this document. The eyepiece, touchscreen, and focus buttons should be disinfected after each patient.
5. Never immerse the VS Tabletop Tonometer in liquid. Do not spray, pour, or spill liquid on the VS Tabletop Tonometer, its buttons, or Enclosure.
6. The VS Tabletop Tonometer contains no user serviceable parts. The VS Tabletop Tonometer must not be opened, repaired or re-assembled by any person other than a representative of the manufacturer or its distributor. If the VS Tabletop Tonometer is broken, do not use it. The performance would be subject to any modification and modification may cause hazardous exposure.
7. **RF exposure statements**
 - This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
 - This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body or nearby persons.
8. Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.



Precautions

1. Ensure that the Eyepiece is free from any foreign material before use.
2. Avoid exerting excessive force on the touchscreen. Do not operate the touchscreen with a wet hand or any other objects besides your fingers as this might cause damage.

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3. The VS Tabletop Tonometer and the included power adaptor may become warm when in use (especially when used for long periods of time). This is normal. During this time, refrain from touching the power adaptor for longer than 1 minute to avoid potential discomfort.
4. Do not use the VS Tabletop Tonometer near radio transmitters as the devices may interfere with each other.
5. The VS Tabletop Tonometer should be stored at the temperature and relative humidity specified in the Environmental Descriptions section. Excessively low or high temperature or high humidity may cause damage to the VS Tabletop Tonometer (including the power adaptor). Do not expose the product to direct sunlight.
6. The time required for charging varies depending on the conditions of battery usage. Charging takes longer at high or low temperatures and when the battery has not been used for some time.
7. Avoid using the VS Tabletop Tonometer in environments with excessive debris, dust or lint.
8. Do not drop the VS Tabletop Tonometer. Avoid situations where the VS Tabletop Tonometer may be exposed to excessive vibration, force or pressure. Unplug the device and store upright when not in use.
9. Use only cables or accessories that are provided with the VS Tabletop Tonometer. Use of other cables could damage the device.
10. The SD card slot and Headphones port are covered and non-functional. Do not remove covers. Do not attempt to connect any cords or plugs to those openings.
11. Provide assistance to the patient, when necessary.

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Product Description

The VS Tabletop Tonometer is a digital tonometer used to measure intraocular pressure of the eye. The VS Tabletop Tonometer is designed to be used in clinic settings under professional guidance.

The intended purpose of the device as an adjunct is to support routine monitoring of eye pressure in the clinic to better understand the eye condition. This device should not be solely or primarily relied upon to prevent, diagnose, or treat ocular conditions.

The VS Tabletop Tonometer features an alignment system that positions itself before taking an IOP measurement. Once properly aligned, the device automatically makes an IOP measurement. Measurements are made using an air puff, without any physical object contacting the eye. The VS Tabletop Tonometer is powered by a rechargeable Li-ion battery.

Component List

Product Name	Model Number	Components
VS Tabletop Tonometer	IOP 100W	1. VS Tabletop Tonometer 2. Operator Manual 3. Power adapter

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Figure 1: VS Tabletop Tonometer (Front)

*Note: The SD card slot and Headphones port are covered and non-functional.

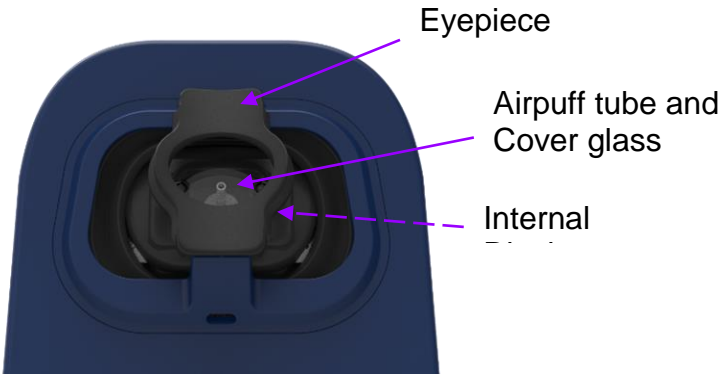


Figure 2: Eyepiece, Airpuff tube and Cover glass

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Figure 3: VS Tabletop Tonometer (Back)

Instructions

1. Assembly and Set Up

1.1. Unpacking the VS Tabletop Tonometer

Carefully unpack the device. Inspect the device to ensure that the VS Tabletop Tonometer does not appear to be damaged or broken. If there are breaks on the enclosure or other visual defects, DO NOT USE. Please contact the Distributor.

1.2. Set Up

Set up the VS Tabletop Tonometer on a flat location, near a power outlet, with a chair facing the Eyepiece and Touchscreen.

1.3. Plug the device in.



Note: The VS Tabletop Tonometer is also powered by a rechargeable

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battery.

To charge the battery:

- Connect the Power Adapter to the port located on the back of the VS Tabletop Tonometer. Plug the Power Adaptor into a power outlet.
- The Charging Light will turn amber (when charging) or green (when fully charged).
- Charge the battery for at least five hours before first use.

Charging Light While Charging or Turned On	Charge Status
 Green	Ready for use (The battery is fully charged)
 Amber	Charging

The battery level is indicated by a fuel gauge on the upper right corner of the Touchscreen. The fuel gauge will appear full when battery charge is at 100%. The fuel gauge icon will change to represent the percentage of battery that is available. The icons below, from left to right, represent the battery from full to low. On a full charge the VS Tabletop Tonometer can perform approximately 24 full measurement sessions.



Figure 4. Fuel Gauge located on the Touchscreen

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2. Turning Device On

- 2.1. Press the Power Button to turn on the VS Tabletop Tonometer. The Touchscreen will turn on to the "Home Screen" in a couple seconds.

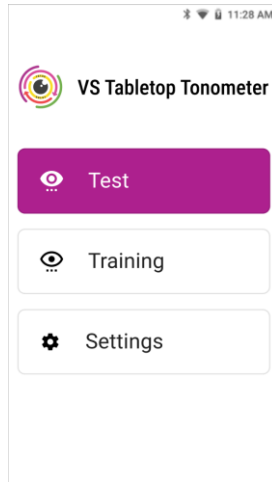


Figure 5: Home Screen

- 2.2. When the VS Tabletop Tonometer powers on, an airpuff will activate through the Eyepiece to remove any potential dust/particles that may have been present in the Airpuff tube. Do not have the patient look into the Eyepiece before the device is turned on.

3. Looking into the Eyepiece

- 3.1. During use, instruct the patient to look into the Eyepiece while pressing their brow bone and cheek bone against the Eyepiece as demonstrated in the figure below. The patient should look directly ahead while keeping their eyes wide open. There is an internal display that the patient will view within the Eyepiece.

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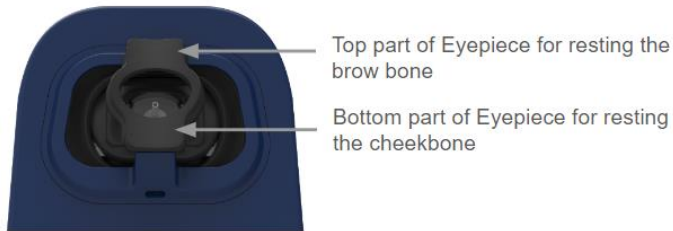


Figure 6: Eyepiece Placement

4. Training Mode

- 4.1. This is an optional step prior to taking measurements.
- 4.2. The purpose of the training is to have the patient practice using the VS Tabletop Tonometer prior to taking measurements. **In this step, no airpuff will be applied.**
- 4.3. The patient must be sitting in front of the VS Tabletop Tonometer before starting training.
- 4.4. Press the “Training” on the Touchscreen.

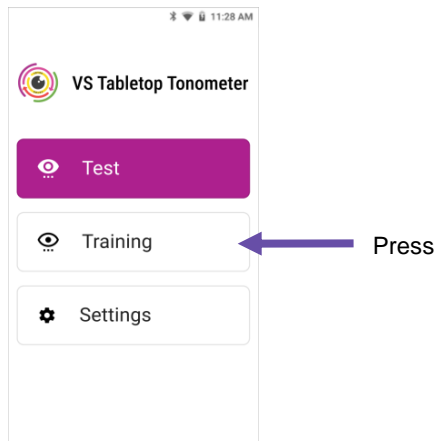


Figure 7: Training Button on Home Screen

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- 4.5. Instructions on how to perform the training will be displayed on the Touchscreen. Instruct the patient to follow instructions on Touchscreen.
- 4.6. Ensure the patient has removed any glasses or contact lenses as instructed on the Touchscreen. It is important to have the patient remove glasses and contact lenses when performing a test. Not doing so will result in no measurement or an inaccurate measurement.

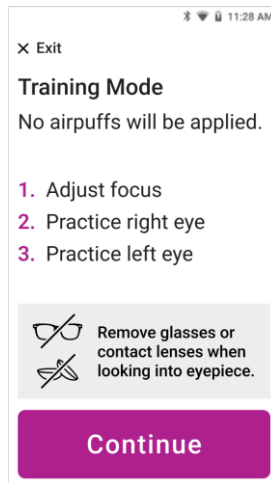


Figure 8: Training Mode Screen

- 4.7. "Training complete!" will appear on the screen when the patient has successfully completed training mode.

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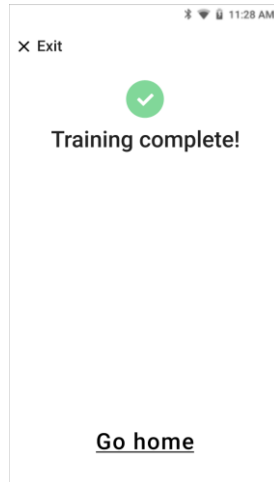
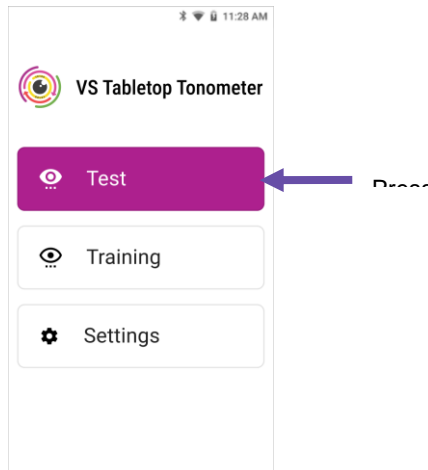


Figure 9: Training Complete Screen

5. Taking Measurements

- 5.1. The recommended frequency of measurements is 3-4 daily with a maximum of 6 measurements per day. Press "Test" on the Touchscreen and instruct the patient to sit in front of the VS Tabletop Tonometer.



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Figure 10: Home Screen - Select “Test”

- 5.2. Instruct the patient to remove his/her eyeglasses or contact lenses and press “Continue”. It is important to have the patient remove glasses and contact lenses when performing a test. Not doing so will result in no measurement or an inaccurate measurement.

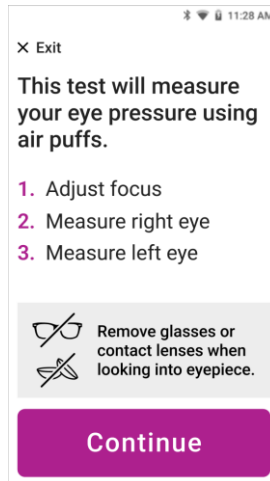


Figure 11: Test Introduction Screen

- 5.3. Diopter Adjustment to Bring Internal Display into Focus
- 5.3.1. After selecting “Continue” the Adjust Focus Screen will display.

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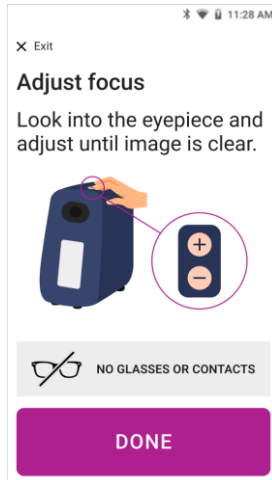


Figure 12. Adjust Focus Screen

- 5.3.2. Prior to taking measurements, the patient must adjust the diopter to bring the Internal Display into focus. Ask the patient to look into the Eyepiece.



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Figure 13: Patient looking into the Eyepiece

- 5.3.3. Ask the patient to press and hold either of the two Focus Buttons until the image in the Internal Display is in focus. Figure 14 is the image that the patient sees in the Internal Display.

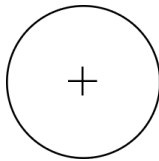
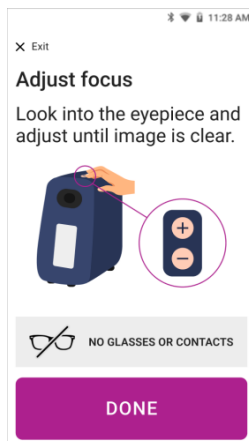


Figure 14. Image Shown in the Internal Display

- 5.4. The patient should press the “DONE” button on the Touchscreen when they have finished the diopter adjustment .



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Figure 15. Adjust Focus Screen - Select “DONE”

- 5.5. After pressing ‘DONE’, the Test screen will display on the Touchscreen. Instruct the patient to press the “START TEST” button

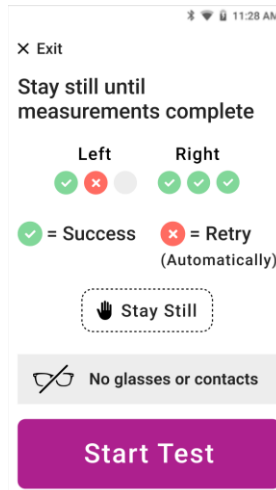


Figure 16. Test Screen - Select “Start Test”

- 5.6. Instruct the patient to position themselves so their right eye is looking into the Eyepiece.

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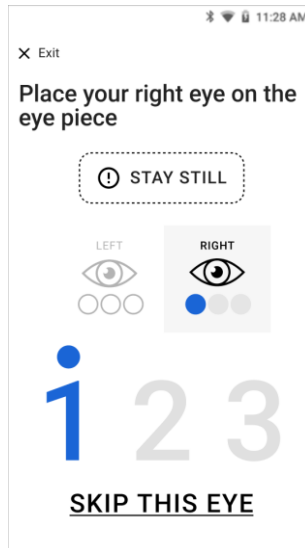


Figure 17. Test Screen - Measuring Right Eye

- 5.7. The VS Tabletop Tonometer will automatically align to the proper position to take the measurement. The air puff module does not activate until it is aligned with the designated location.
- 5.8. Once VS Tabletop Tonometer is properly aligned with the patient's eye, a measurement is taken. The VS Tabletop Tonometer will take one measurement (which consists of a maximum of 3 air puffs). Example screens during successful measurements:

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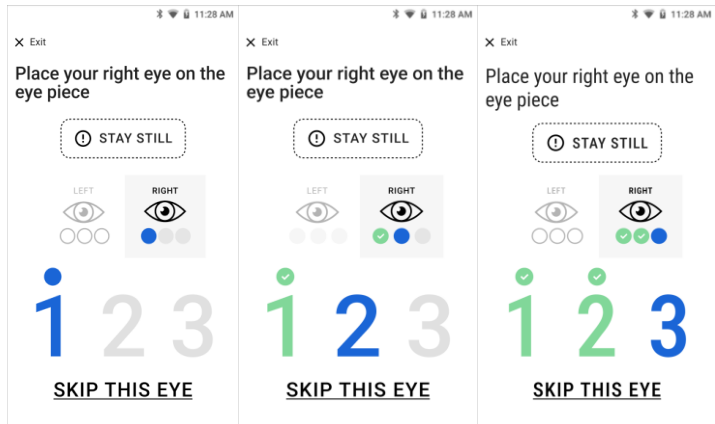


Figure 18. Touchscreen Display During Measurement of Right Eye

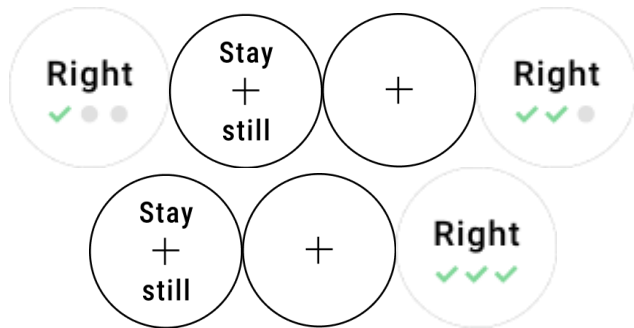


Figure 19. Internal Display During Measurement of Right Eye

- 5.9. If the measurement is unsuccessful, the VS Tabletop Tonometer will instruct the patient to try again until a measurement is taken. The device automatically reattempts the measurement. If problems persist, refer to the Troubleshooting section.

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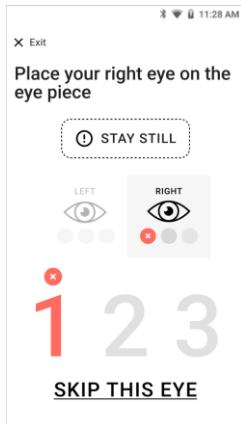


Figure 20. Touchscreen Display During an Unsuccessful Measurement



Figure 21. Internal Display During an Unsuccessful Measurement

- 5.10. Once the VS Tabletop Tonometer has successfully measured the right eye, instruct the patient to switch position to their left eye.

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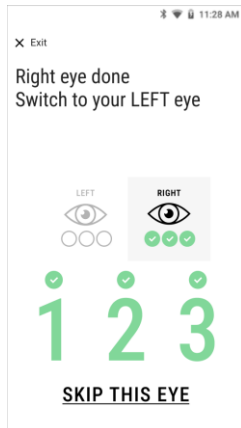


Figure 22. Touchscreen Display During an Successful Right Eye Measurement



Figure 23. Touchscreen Display During an Successful Right Eye Measurement

- 5.11. Measurement process is repeated in the left eye
- 5.12. The results are displayed on the Touchscreen at the end of a successful measurement. Record the measurements as required. Measurement will not be saved after completion.
- 5.13. At any point during the measurement, pressing the “Exit” button will return the user to the Home Screen.

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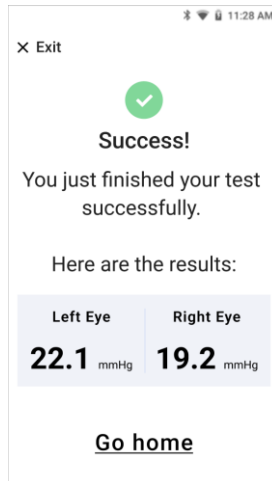


Figure 24. Touchscreen Displaying the Measurement Results

6. Skipping an Eye

- 6.1. At any point during measurement you can skip measuring an eye by pressing "SKIP THIS EYE".



Figure 25. Touchscreen Display - Select "Skip This Eye"

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- 6.2. A notification will appear to confirm if you want to skip the eye. Press “SKIP” to skip the eye. The testing will continue to the next step.

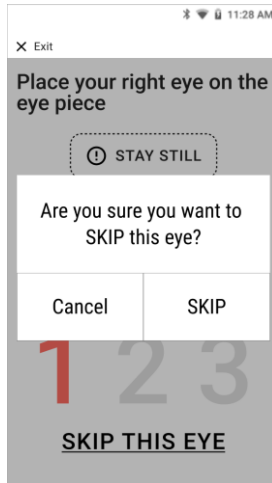


Figure 26. Touchscreen Display - Confirm “Skip This Eye”

7. Turning off VS Tabletop Tonometer

- 7.1. Turn off the VS Tabletop Tonometer by pressing and holding the Power Button for approximately one second.

8. Stand-By Mode

- 8.1. Stand-by mode turns the Touchscreen off and allows the product to be ready for measurements with a quick press of the Power Button. When the VS Tabletop Tonometer is in Stand-By mode the Touchscreen is off and the power button shines blue.
- 8.2. The VS Tabletop Tonometer will automatically go into Stand-by mode when inactive for a long period of time with the exception of the Home Screen. When on the main menu screen, the device will remain on.
- 8.3. To place the device in Stand-By mode quickly press the Power button.
- 8.4. To turn the device back on quickly press the Power button once again. When the VS Tabletop Tonometer powers on, an airpuff will activate through the Eyepiece to remove any potential dust/particles that may have been present in the Airpuff Tube. Do not have the patient look

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into the Eyepiece before the device is turned on.

Cleaning and Disinfection



The device is a medical device that should be handled with specific care.

The device is not intended to be sterilized. Disinfect the VS Tabletop Tonometer with Super Sani-Cloth after each patient.

Clean the device as follows:

- Turn off the device before cleaning it.
- Disinfect the Eyepiece, Touchscreen, Focus Buttons with Super Sani-Cloth. Wait at least 3 minutes before turning the power on.
- Do not clean the Coverglass or Airpuff Tube. When powered on, an airpuff will activate to blow out any potential dust or particles that may have been present in the Airpuff Tube.
- It is recommended to clean the device with a Super Sani-Cloth. that is a commercial product manufactured by PDI Inc. (<https://wearepdi.com/>).
- Clean the Eyepiece before each use.

Calibration and Maintenance


The VS Tabletop Tonometer Tonometer requires annual calibration. If the device is not calibrated the measurements may not be accurate. Calibration must be performed by an authorized representative or distributor. Do not modify this device without authorization of the manufacturer. There are no user serviceable parts in this medical device.



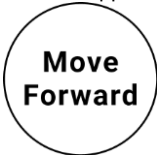
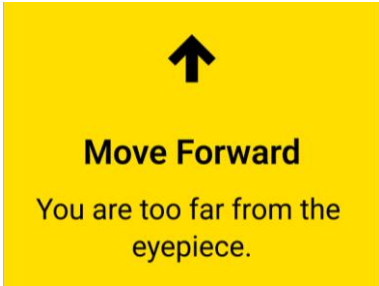

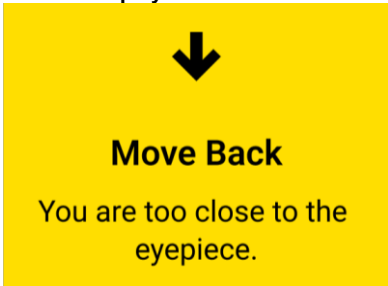
Do not attempt to repair the VS Tabletop Tonometer. The VS Tabletop Tonometer must not be repaired or re-assembled by anyone other than the manufacturer or its authorized service center. If the VS Tabletop Tonometer is not functioning or the case is cracked or broken, do not use it.

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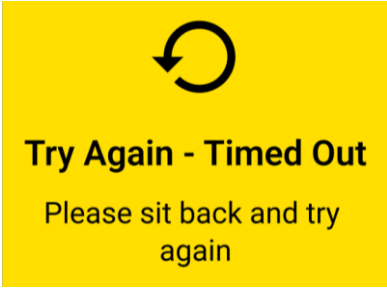
Troubleshooting

Scenario	Action
<p>The VS Tabletop Tonometer does not turn on.</p>	<p>Ensure that the VS Tabletop Tonometer is plugged in, and has charged for at least one hour.</p> <p>If the charging light still does not turn on when plugged in, contact the distributor.</p>
<p>The VS Tabletop Tonometer does not administer an airpuff and the text directions appear.</p> <div><div>Move Down</div><div>Move Up</div><div>Move Right</div><div>Move Left</div></div> <p>Internal Display</p> <div><p>Alignment Error</p><p>Please try again</p></div> <p>External Display</p>	<p>The patient needs to reposition their eye as noted in the Internal Display.</p> <p>Instruct the patient to move away from the Eyepiece.</p> <p>Wait a few seconds for the device to move into its default position.</p> <p>Instruct the patient to reposition their to the Eyepiece and try again.</p>

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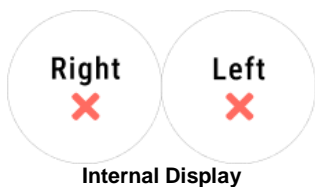
<p>When taking a measurement, the text "MORE FORWARD" appears.</p> <div><p>Move Forward</p><p>Internal Display</p></div> <div><p>Move Forward</p><p>You are too far from the eyepiece.</p><p>External Display</p></div>	<p>The VS Tabletop Tonometer is not able to move close enough to take a measurement. Ensure that the patient is making contact with both the top and bottom of the Eyepiece.</p>
<p>When taking a measurement, the text "MOVE BACK" appears.</p> <div><p>Move Back</p><p>Internal Display</p></div> <div><p>Move Back</p><p>You are too close to the eyepiece.</p><p>External Display</p></div>	<p>Patient's eye is too close to the device and a measurement will not be taken. Ask the patient to apply less pressure to the Eyepiece.</p>
<p>When taking a measurement, the device</p>	<p>The VS Tabletop Tonometer has timed</p>

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<p>displays "TRY AGAIN".</p>  <p>Try Again</p> <p>Internal Display</p>  <p>Try Again - Timed Out</p> <p>Please sit back and try again</p> <p>External Display</p>	<p>out and is not able to align correctly within an expected amount of time (30 seconds).</p> <p>Ask the patient to move away from the Eyepiece and retry.</p>
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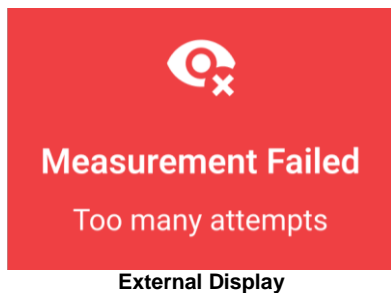
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When taking a measurement, the error (red "X") and either "Right" or "Left" appears.



The VS Tabletop Tonometer stopped the measurement to avoid excessive airpuffs to the eye. The VS Tabletop Tonometer will ask you to proceed with the next step of the test.

If this error persists after several attempts, please contact the distributor.



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Technical Description

Weight	4 kg (Approx.)
Dimension (Length x Width x Height)	319 x 166 x 260 mm
Measure Range	7-55 mmHg (tolerance ± 4 mmHg)
LCD Display	5" Capacitive LCD touch panel
Power Source	Rechargeable Li-ion battery (6400mAh)
Device rating	12Vdc, 3A
External Power	Source: 100~240 VAC, 50/60 Hz
Power Adapter	Input: 100~240 VAC, 50/60 Hz, 1.0-0.5A Output: 12V DC, 3.0A (Medical Grade)
Warranty	1 year
Expected Service Life	5 years

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Environmental Restrictions

Operating Environment

- Ambient temperature: 10° C (50° F) to 35° C (95° F)
- Relative humidity: 30% to 90%
- Atmospheric pressure: 800hPa to 1013 hPa
- Shock (without packing): 10 G, duration 6 ms

Storage Environment

- Ambient temperature: -10°C (14° F) to +55°C (131° F)
- Relative humidity range: 10% to 95%
- Atmospheric pressure: 700 hPa to 1013 hPa

Transportation Environment

- Ambient temperature: -40°C (-40°F) to +70°C (158° F)
- Relative humidity range: 10% to 95%
- Atmospheric pressure: 500 hPa to 1013 hPa
- Vibration, sinusoidal: 10 Hz to 500 Hz: 0.5G
- Shock: 30 G, duration 6 ms
- Bump: 10 G, duration 6 ms

Liability

Manufacturer considers itself responsible for the effects on safety, reliability, and performance of the device only if

- Assembly operations, extensions, readjustments, modifications or repairs are carried out by persons authorized.
- The equipment is used in accordance with these instructions for use.

Disposal

Follow the local governing ordinances and recycling plans regarding disposal or recycling of device components, especially when disposing the lithium ion battery, circuit board, and plastic parts that contain brominated flame retardant, LCD, or

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
power cord.

Inappropriate disposal may contaminate the environment.










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Symbols and standards



Symbols

	Caution must be taken.
	Follow instructions for use-This symbol indicates that the Owner's Manual must be read before use.
	Type BF - Indicates the device is classified as a device with a Type BF applied part. (Eyepiece)
	Manufacturer
	Date of Manufacture
	Class II equipment- Indicates equipment meeting the safety requirements specified for Class II equipment.
	Catalog Number-This symbol indicates the manufacturer's product number so that the device can be identified.
	Serial Number-This symbol indicates the manufacturer's serial number so that a specific device can be identified.
	GS1 Data Matrix– machine readable UDI
	Prescription only- Requires prescription in the United States.
	Direct current

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	Keep dry
	This side up
	Fragile, handle carefully
	Lithium-ion battery handling
	Non-ionizing electromagnetic radiation
IP21	Protected from touch by fingers and objects greater than 12 millimeters. Protected from condensation.
	Do not use if package damaged
	Minimum and maximum humidity range
	Minimum and maximum pressure range
	High and low temperature
FC	The identification number assigned by the Federal Communication Commission FCC ID: 2AFB3-IOP100W

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	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
	Non-ionizing electromagnetic radiation
	Bluetooth

Standards

Electrical safety	IEC 60601-1:2005+A1:2012+A2:2020 (EN 60601-1:2006+A1:2013+A2:2021)
EMC and regulatory compliance	IEC 60601-1-2: 2014 +A1:2020 (EN 60601-1-2: 2015+A1:2021)
Ophthalmic instruments- Fundamental requirements and test methods Part 2: Light hazard protection	ISO 15004-2:2007
Ophthalmic instruments - Fundamental requirements and test methods - Part 1: General requirements applicable to all ophthalmic instruments	ISO 15004-1:2020
Ophthalmic Instruments - Tonometers	ISO 8612:2009

Equipment connected to the analog or digital interfaces must be certified according to the representative appropriate national standards (such as EN 60601-1 and IEC 60601-1). Furthermore, all configurations shall comply with the system standard IEC 60601-1. Anyone who connects additional equipment to the signal input part or signal output part configures a medical system and is therefore responsible for the system complying with the requirements of the system standard IEC 60601-1. If in

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doubt, consult the technical service department of your local representative.

EMC (Electromagnetic Compatibility)

The device complies with the International Electrotechnical Commission standards (IEC 60601-1-2: 2014 +A1:2020) for electromagnetic compatibility as listed in the tables below. Follow the guidance in the tables for use of the device in an electromagnetic environment.

EMC (IEC 60601-1-2: 2014 +A1:2020)

Guidance and manufacturer's declaration electromagnetic emissions		
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment guidance
RF emissions CISPR 11	Group 1	The device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	Class A *1	
Voltage fluctuations/ Flicker emissions IEC 61000-3-3	*2	The device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes.

*1 For the regions where the rated voltage is 220 V or greater, this device complies with class A. For the regions where the rated voltage is 127 V or less, this standard is not applicable.

*2 For the regions where the rated voltage is 220 V or greater, this device complies with this standard. For the regions where the rated voltage is 127 V or less, this standard is not applicable.


Guidance and manufacturer's declaration electromagnetic immunity

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The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance	Electromagnetic environment guidance
Electrostatic Discharge (ESD) IEC 61000-4-2	±8 kV contact ± 2, 4, 8, 15 kV air	±8 kV contact ± 2, 4, 8, 15 kV air	Floor should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/ output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±0.5, 1 kV line(s) to line(s); ±0.5, 1, 2kV Line to ground	±0.5, 1 kV line(s) to line(s); ±0.5, 1, 2kV Line to ground	Mains power quality should be that of a typical commercial or hospital environment.
Voltage, dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT for 0.5 cycle (1 phase) 0% UT for 1 cycle 70% UT for 25/30 cycles (50/60 Hz) 0% UT for 250/300 cycles (50/60 Hz)	0% UT for 0.5 cycle (1 phase) 0% UT for 1 cycle 70% UT for 25/30 cycles (50/60 Hz) 0% UT for 250/300 cycles (50/60 Hz)	Mains power quality should be that of a typical commercial or hospital environment. If the user of the device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m (50 or 60 Hz)	30 A/m at 50 Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment
NOTE: UT is the a.c. mains voltage prior to application of the test level.			

Guidance and manufacturer's declaration electromagnetic emissions

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The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment guidance
Conducted RF IEC 61000-4-6	3Vrms at 0.15 – 80 MHz & 6V at ISM Frequency	3Vrms (V1=3) at 0.15 – 80 MHz & 6V at ISM Frequency	Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.7 GHz 80% AM at 1 kHz	3 V/m (E1=3) 80 MHz to 2.7 GHz 80% AM at 1 kHz	$d=(3.5/V1)\sqrt{P}=1.2\sqrt{P} \text{ (150 kHz to 80 MHz)}$ $d=(3.5/E1)\sqrt{P}=1.2\sqrt{P} \text{ (80 MHz to 800 MHz)}$ $d=(7/E1)\sqrt{P}=2.3\sqrt{P} \text{ (800 MHz to 2.7 GHz)}$ <p>Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range. b. Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
<p>NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.</p> <p>NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</p>			
<p>a. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above 3 V/m., the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the device.</p> <p>b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.</p>			

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Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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