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Warnings & Cautions (continued)

Reichert Technologies (Reichert) is not responsible for the safety and reliability of this instrument when:

• Assembly, disassembly, repair, or modification is made by unauthorized dealers or persons.
• Instrument is not used in accordance with this User’s Guide.

⚠️ WARNING: AN INSTRUCTION THAT DRAWS ATTENTION TO RISK OF INJURY OR DEATH.

WARNING: UNITED STATES FEDERAL LAW REQUIRES THAT THIS DEVICE BE PURCHASED ONLY BY A PHYSICIAN OR A PERSON ACTING ON BEHALF OF A PHYSICIAN.

WARNING: THIS INSTRUMENT SHOULD BE USED IN STRICT ACCORDANCE WITH THE INSTRUCTIONS OUTLINED IN THIS USER’S GUIDE. THE SAFETY OF THE OPERATOR AND THE PERFORMANCE OF THE INSTRUMENT CANNOT BE GUARANTEED IF USED IN A MANNER NOT SPECIFIED BY REICHERT TECHNOLOGIES.

WARNING: DO NOT REPAIR OR SERVICE THIS INSTRUMENT WITHOUT AUTHORIZATION FROM THE MANUFACTURER. ANY REPAIR OR SERVICE TO THIS INSTRUMENT MUST BE PERFORMED BY EXPERIENCED PERSONNEL OR DEALERS WHO ARE TRAINED BY REICHERT OR SERIOUS INJURY TO THE OPERATOR OR PATIENT MAY OCCUR.

WARNING: MODIFICATIONS TO THIS INSTRUMENT IS NOT ALLOWED. ANY MODIFICATION TO THIS UNIT MUST BE AUTHORIZED BY REICHERT OR SERIOUS INJURY TO THE OPERATOR OR PATIENT MAY OCCUR.

WARNING: IF THIS INSTRUMENT IS MODIFIED, APPROPRIATE INSPECTION AND TESTING MUST BE CONDUCTED TO ENSURE CONTINUED SAFE USE OF THIS INSTRUMENT.

WARNING: ENSURE THAT THE VOLTAGE APPLIED TO THE BATTERY CHARGER IS THE SAME AS THE VOLTAGE THAT IS INDICATED ON THE DATA PLATE OR DAMAGE TO THE UNIT MAY OCCUR.

WARNING: THIS INSTRUMENT CONTAINS A LITHIUM-ION BATTERY. THE BATTERY SHOULD ONLY BE REPLACED WITH THE BATTERY SPECIFIED IN THE SUPPLIED BATTERY CHARGING MANUAL. USE OF ANOTHER BATTERY MAY CAUSE FIRE OR AN EXPLOSION.

WARNING: THE CHARGER SHOULD BE PLACED IN AN AREA AWAY FROM THE PATIENT’S TREATMENT VICINITY TO AVOID THE POSSIBLE RISK OF INJURY TO THE PATIENT.
Warnings & Cautions (continued)

**WARNING:** DO NOT PLACE A SHORTING DEVICE BETWEEN THE BATTERY TERMINALS, OR ALLOW THE BATTERY TO BECOME WET. MISUSE OR IMPROPER DISPOSAL OF THIS BATTERY MAY CAUSE IT TO BECOME VERY HOT, IGNITE OR EXPLODE. DAMAGE TO THIS UNIT AND/OR SERIOUS PERSONAL INJURY MAY RESULT.

**WARNING:** DO NOT USE THE INSTRUMENT IF THERE IS EVIDENCE OF FLUID LEAKING FROM THE BATTERY. BATTERIES AND OTHER ELECTRONIC DEVICES MAY CONTAIN FLUIDS THAT ARE HAZARDOUS TO YOUR HEALTH. DIRECT CONTACT WITH SUCH FLUIDS MAY CAUSE BURNS, BLINDNESS OR DEATH.

**WARNING:** DO NOT EXPOSE THE BATTERIES TO A TEMPERATURE ABOVE 55°C (131°F), DISASSEMBLE THE BATTERIES, OR DAMAGE TO THIS UNIT AND/OR SERIOUS PERSONAL INJURY MAY RESULT.

**WARNING:** NEVER ALLOW LIQUID LEAKING FROM THE BATTERY TO GET IN YOUR EYES OR MOUTH AS THIS LIQUID COULD CAUSE SERIOUS PERSONAL INJURY. IF IT COMES IN CONTACT WITH YOUR EYES OR MOUTH, FLUSH THEM IMMEDIATELY WITH PLENTY OF WATER AND CONSULT A PHYSICIAN.

**WARNING:** TO AVOID RISK OF ELECTRIC SHOCK, THIS EQUIPMENT MUST ONLY BE CONNECTED TO A SUPPLY MAINS WITH PROTECTIVE EARTH OR DAMAGE TO THIS INSTRUMENT AND/OR INJURY TO THE OPERATOR OR PATIENT MAY OCCUR.

**WARNING:** THE INSTRUMENT MUST BE PLUGGED INTO AN OUTLET WITH AN EARTH GROUND. DO NOT REMOVE OR DEFEAT THE EARTH GROUND CONNECTION ON POWER INPUT CONNECTOR OR THE UNIT’S POWER CORD OF THIS INSTRUMENT OR DAMAGE TO IT AND/OR INJURY TO THE OPERATOR OR PATIENT MAY OCCUR.

**WARNING:** THIS DEVICE USES A HIGH BRIGHTNESS, CLASS I WHITE LED AS ITS LIGHT SOURCE. DO NOT IRRADIATE A PATIENT’S PUPIL FOR A LONG TIME USING THIS LED LIGHT SOURCE BECAUSE YOU MAY DAMAGE THE PATIENT’S EYESIGHT.

**WARNING:** THE RETINAL EXPOSURE DOSE FOR A PHOTOCHEMICAL HAZARD IS A PRODUCT OF THE RADIANCE AND THE EXPOSURE TIME. IF THE VALUE OF RADIANCE WERE REDUCED IN HALF, TWICE THE TIME WOULD BE NEEDED TO REACH THE MAXIMUM EXPOSURE LIMIT.

**WARNING:** THIS INSTRUMENT IS NOT SUITABLE FOR USE IN THE PRESENCE OF FLAMMABLE ANESTHETIC MIXTURES, SUCH AS OXYGEN OR NITROUS OXIDE.

**WARNING:** ALWAYS KEEP BATTERIES OUT OF THE REACH OF INFANTS AND YOUNG CHILDREN TO PREVENT THEM FROM BEING SWALLOWED. IF SWALLOWED, CONSULT A PHYSICIAN IMMEDIATELY.
Warnings & Cautions (continued)

**WARNING:** APPROPRIATE CLINICAL PERSONNEL ONLY SHOULD USE THIS DEVICE IN ORDER TO AVOID THE RISK OF DAMAGING A PATIENT’S EYESIGHT.

**WARNING:** BECAUSE PROLONGED INTENSE LIGHT EXPOSURE CAN DAMAGE THE RETINA, THE USE OF THE DEVICE FOR OCULAR EXAMINATION SHOULD NOT BE UNNECESSARILY PROLONGED, AND THE BRIGHTNESS SETTING SHOULD NOT EXCEED WHAT IS NEEDED TO PROVIDE CLEAR VISUALIZATION OF THE TARGET STRUCTURES. THIS DEVICE SHOULD BE USED WITH FILTERS THAT ELIMINATE UV RADIATION (<400 NM) AND, WHENEVER POSSIBLE, FILTERS THAT ELIMINATE SHORT-WAVELENGTH BLUE LIGHT (<420 NM).

**WARNING:** WHILE NO ACUTE OPTICAL RADIATION HAZARDS HAVE BEEN IDENTIFIED FOR SLIT LAMPS, IT IS RECOMMENDED THAT THE INTENSITY OF LIGHT DIRECTED INTO THE PATIENT’S EYE BE LIMITED TO THE MINIMUM LEVEL WHICH IS NECESSARY FOR DIAGNOSIS. INFANTS, APHAKE AND PERSONS WITH DISEASED EYES WILL BE AT GREATER RISK. THE RISK MAY ALSO BE INCREASED IF THE PERSON BEING EXAMINED HAS HAD ANY EXPOSURE WITH THE SAME INSTRUMENT OR ANY OTHER OPHTHALMIC INSTRUMENT USING A VISIBLE LIGHT SOURCE DURING THE PREVIOUS 24 HOURS. THIS WILL APPLY PARTICULARLY IF THE EYE HAS BEEN EXPOSED TO RETINAL PHOTOGRAPHY.

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⚠️ **CAUTION:** AN INSTRUCTION THAT DRAWS ATTENTION TO THE RISK OF DAMAGE TO THE PRODUCT.

**CAUTION:** REMOVE THE PLASTIC WRAPPING FROM THE LITHIUM-ION BATTERY PRIOR TO INSTALLING INTO THE DEVICE.

**CAUTION:** DO NOT USE ANY SOLVENTS OR STRONG CLEANING SOLUTIONS ON ANY PART OF THIS INSTRUMENT OR DAMAGE TO THE UNIT MAY OCCUR.

**CAUTION:** IF SMOKE OR A BURNING ODOR IS DETECTED WHILE USING THE DEVICE, IMMEDIATELY DISCONTINUE USING THE DEVICE AND NOTIFY REICHERT TECHNOLOGIES.

**CAUTION:** IF SMOKE OR A BURNING ODOR IS DETECTED WHILE THE LITHIUM-ION BATTERY IS CHARGING, PLEASE REMOVE THE POWER SUPPLY CORD FROM THE ELECTRICAL SOCKET AND NOTIFY REICHERT TECHNOLOGIES.

**CAUTION:** DO NOT AUTOCLAVE OR DISINFECT USING HIGH TEMPERATURES EXCEEDING THE RECOMMENDED TEMPERATURES INDICATED IN THE SPECIFICATIONS SECTION OF THIS MANUAL OR DAMAGE TO THE UNIT MAY OCCUR.
Warnings & Cautions (continued)

CAUTION: ELECTROMAGNETIC INTERFERENCE FROM OTHER DEVICES MAY AFFECT THIS INSTRUMENT. IF INTERFERENCE IS PRESENT, TURN OFF OTHER ELECTRONIC DEVICES, OR REMOVE THEM FROM THE IMMEDIATE AREA WHILE OPERATING THIS INSTRUMENT.

CAUTION: AVOID TOUCHING THE OPTICAL COMPONENTS OF THE DEVICE TO PREVENT REDUCED PERFORMANCE BY LEAVING BEHIND FINGERPRINTS OR OILS ON THE LENSES.

CAUTION: OVERCHARGING THE LITHIUM-ION BATTERY CAN RESULT IN THE BATTERY PREMATURELY FAILING.

CAUTION: THE BATTERY IS NOT FULLY CHARGED AT THE FACTORY. CHARGE THE BATTERY BEFORE USE.

CAUTION: WHEN RECHARGING THE BATTERY, THE AMBIENT TEMPERATURE SHOULD BE BETWEEN 5-35° C (41-95° F) OR THE BATTERY MAY NOT FULLY CHARGE OR MAY NOT FUNCTION PROPERLY.

CAUTION: THE INTERNAL TEMPERATURE OF THE BATTERY MAY RISE WHILE THE BATTERY IS IN USE. IF YOU ATTEMPT TO RECHARGE THE BATTERY WHILE THE INTERNAL TEMPERATURE IS ELEVATED, THE BATTERY WILL NOT CHARGE OR WILL CHARGE ONLY PARTIALLY. THE BATTERY MAY ALSO NOT FUNCTION PROPERLY. WAIT FOR THE BATTERY TO COOL BEFORE CHARGING.

CAUTION: THIS INSTRUMENT IS NOT TO BE USED NEAR HIGH-FREQUENCY EMITTING SURGICAL EQUIPMENT.

CAUTION: PORTABLE AND MOBILE RF COMMUNICATIONS EQUIPMENT CAN EFFECT MEDICAL ELECTRICAL EQUIPMENT.
Symbol Information

The following symbols appear on the instrument:

- **CAUTION** - Consult accompanying documents.
- **Date of Manufacture**
  - YYYY-MM-DD
- **Manufacturer**
- **Type B Product Classification.**
  - Class 1 Equipment, Continuous Operation.
- **Waste of Electrical and Electronic Equipment**
- **Catalog Number.**
  - REF
- **Serial Number.**
  - SN
- **Consult Instructions for Use symbol indicating important operating and maintenance instructions that are included in this User’s Guide**
- **Authorized Representative in European Community.**
- **Fragile Contents in Shipping Container - handle with care.**
- **Keep Dry - Package shall be kept away from rain.**
- **This Way Up - Indicates the correct upright position of package.**
Introduction

Congratulations on the purchase of your new Reichert® PSL Portable Slit Lamp.

This User’s Guide is designed as a training and reference manual for operation, maintenance, and troubleshooting. We recommend that you read it carefully prior to use and follow the instructions in the guide to ensure optimum performance of your new instrument. Properly trained eye care professionals such as ophthalmologists, optometrists, opticians and eye care technicians should operate this instrument. This unit should only be used by personnel knowledgeable of its operation and use.

Please retain this guide for future reference and to share with other users. For additional copies of this manual or questions related to the PSL, contact your local authorized Reichert Technologies® dealer or contact our Customer Service department directly at:

Tel: 716-686-4500
Fax: 716-686-4555
E-mail: reichert.information@ametek.com

Indications for Use

A slit lamp biomicroscope is intended for use in eye examination of the anterior eye segment, from the cornea epithelium to the posterior capsule. It is used to aid in the diagnosis of diseases or trauma which affect the structural properties of the anterior eye segment.

Contraindications

None.
Instrument Setup

Great care has been taken to deliver your new PSL to you safely. The container and packaging was specially designed to transport this unit. Please retain the packaging if future transportation is required.

Unpacking Instructions

The instrument is packaged to protect the instrument from damage during shipment. Please read the User’s Guide before operating the unit.

1. Remove the piece of top foam from the box.
2. Remove the following parts from the box (Refer to Figure IS-01):
   • PSL Portable Slit Lamp (PN 15090)

   Accessories:
   • Carrying Case (PN 15090-009)
   • 2 Rechargeable Batteries (PN 15090-401* or 15090-403**)
   • Battery Charger* (PN 15090-402* or 15090-404**)
   • Diopter Adjustment Bar (PN 15090-010)
   • Forehead Support (PN 15090-011)
   • 16X Eyepieces (Pair) (PN 15090-004)
   • User’s Guide (PN 15090-101)

3. Place the packing material in a safe place so that if transportation is required in the future, it will be available.
4. Read the User’s Guide before operating this instrument.

* For units up to SN 01200-0211
** For units starting with SN 01201-0711
Figure IS-01, PSL and Accessories

1. **Carrying Case** - This is a custom case designed to protect your PSL during transportation.
2. **Batter Charger** - Used to charge the rechargeable batteries that come with the PSL.
3. **Rechargeable Batteries** - PSL comes with 2 rechargeable batteries so that one can always be charging while the other is in use.
4. **Dioptr Adjustment Bar** - This is used to ensure your PSL is functioning properly.
5. **Forehead Support** - This is used to hold the PSL steady against the patient’s head during an examination.
6. **PSL** - The main body used for examinations.
7. **16X Eyepieces** - This pair of eyepieces can be used instead of the 10X eyepieces that come installed on the PSL.
Instrument Setup (continued)

Parts Identification (continued)

- Focusing Bar/Forehead Support Screw Hole
- Left/Right Oculars
- Microscope Objective
- Illumination ON/OFF Switch
- Main Body
- Illumination Column
- Hand Grip
- Left/Right Eyepieces
- Battery Indicator LED
- Illumination Intensity Dial
- Slit Width Control Ring
- Filter Dial
- Battery Slot
Battery Installation

Before using your PSL Portable Slit Lamp, it is important to fully charge each battery. Consult your Battery Charger Manual for instructions on how to charge your batteries.

**CAUTION: DO NOT OVERCHARGE YOUR BATTERIES.**

Place a charged battery into the battery slot at the bottom of the PSL. Refer to Figure IS-02.

*Note:* If the battery is not seated firmly into the battery slot, the PSL may not illuminate or the battery will not function properly.

To make sure the PSL is receiving power, squeeze the illumination ON/OFF switch located on the hand grip. When you squeeze the illumination switch, the green battery indicator LED will light-up.

*Note:* Remove the battery from the PSL when not using the PSL for a long period of time.

**Eyepiece Check**

Before using your PSL Portable Slit Lamp, it is important to check that each eyepiece is fully threaded into place. Turn each eyepiece clockwise to make sure it is not loose.

*Note:* Do not try to overtighten the eyepieces.

Check each eyepiece to make sure there is no dirt, dust, or fingerprints on the glass of the eyepiece. If you find anything on the eyepiece, please follow the cleaning instructions in the Maintenance section of this manual.
Operating Instructions

Focusing and Adjusting Interpupillar Distance (IPD)

To focus the PSL and adjust the interpupillary distance the Focusing Bar will need to be attached.

1. Attach the Focusing Bar to the PSL by screwing it into the Focusing Bar Screw Hole located on top of the Microscope Objective. Refer to Figure OI-01.
2. Squeeze and hold the Illumination ON/OFF Switch to shine light onto the flat surface of the Focusing Bar. Refer to Figure OI-02.

**Note:** When the projected light is thin, focusing is easier. Adjust the Slit Width Control Ring to change the width of the projected light. Refer to Figure OI-02.

3. Adjust the IPD by moving the left and right Oculars until the image on the Focusing Bar is one image seen with both eyes. Refer to Figure OI-03.
4. Adjust the left and right Eyepieces until the image on the Focusing Bar comes into sharp focus. Refer to Figure OI-03.

**Note:** Make a note of the diopter value shown by the marks on the Eyepieces for future reference.

5. Remove the Focusing Bar by unscrewing it from the top of the Microscope Objective and return it to the carrying case.

**Note:** You will need to repeat the above steps when you change to eyepieces of a different magnification.
Operating Instructions (continued)

Illumination Control

The Illumination ON/OFF Switch is located on the hand grip of the PSL and works like a trigger. Refer to Figure OI-04.

Squeezing the switch will turn the PSL illumination on. To maintain illumination, keep squeezing the switch. Release the switch to shut illumination off.

Note: The green battery indicator LED will light up when the PSL illumination is on. Refer to Figure OI-05.

Note: The green Battery indicator LED will blink when the battery is running out of charge. Refer to Figure OI-05.

The Illumination Intensity Dial is located on the main body of the PSL directly under the Oculars. Rotating the Illumination Intensity Dial to the right will increase the PSL illumination, and rotating to the left will decrease the PSL illumination. Refer to Figure OI-05.

The illumination angle can be adjusted ± 30° by sliding the Illumination Column left and right. Refer to Figure OI-06.

Note: Slide the Illumination Column using the Rubber Grip found under the Slit Width Control Ring. Refer to Figure OI-06.
Operating Instructions (continued)

Slit Width

The slit width can be adjusted by rotating the Slit Width Control Ring. Rotate the ring clockwise to expand the slit width and rotate the ring counterclockwise to decrease the slit width. Refer to Figure OI-07.

Selecting A Filter

The PSL filter is selected by rotating the Filter Dial either clockwise or counterclockwise until the detent is felt stopping the filter in place. Refer to Figure OI-08. The four filter options are:

- No-Filter
- Green
- Cobalt Blue
- Color Temperature Conversion

Forehead Support

To use the Forehead Support, attach the Forehead Support to the PSL by screwing it into the Forehead Support Screw Hole located on top of the Microscope Objective. Refer to Figure OI-09.

Loosen the clamp screw on the Forehead Support to unlock the internal spring. The Forehead Support will move in and out when pressed against the patient’s forehead.
Operating Instructions (continued)

Magnification Change

To change the magnification of the PSL, you must change the Eyepieces. The PSL comes with 10X and 16X Eyepieces. The 10X Eyepieces are pre-installed. Turn each Eyepiece counterclockwise to remove it from the PSL and carefully put them away in the Carrying Case. Screw the replacement Eyepieces into the open socket in each Ocular until the Eyepiece is no longer loose.

Figure OI-09, Eyepiece

Figure OI-10, Install Eyepieces
Cleaning & Maintenance

Cleaning

Use only lens paper or a lint-free, soft cloth to clean the lens cover glass, mirror, and eyepieces. To remove fingerprints, mist 90% Isopropyl Alcohol onto a lens paper or lint-free soft cloth and wipe-off carefully.

Gently clean any dirt or contaminants off the housing using a lint-free cotton cloth lightly dampened with a mild cleaning solution that is safe for plastic. Be sure to wipe off any residual solution using a lint-free cotton cloth moistened with clean water.

For hygienic reasons, wipe the forehead rest with an alcohol wipe after each patient. The rubber around the eyepiece’s should be wiped using a mild soap and water to remove oils and residue.

Storage

Store the PSL in the provided carrying case when not in use.
Troubleshooting
Chart of Common Errors

The following chart provides details of common problems and solutions for the PSL.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light not shining when Illumination Switch is pressed.</td>
<td>Battery is dead.</td>
<td>Charge the battery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Replace the battery.</td>
</tr>
<tr>
<td></td>
<td>Slit width fully closed.</td>
<td>Adjust the Slit Width Control Ring so that the slit width is open.</td>
</tr>
<tr>
<td>Image blurry when looking through eyepieces.</td>
<td>Eyepieces dirty.</td>
<td>Clean the eyepieces. Refer to the Cleaning &amp; Maintenance section.</td>
</tr>
<tr>
<td></td>
<td>Microscope Objective dirty.</td>
<td>Clean the Microscope Objective. Refer to the Cleaning &amp; Maintenance section.</td>
</tr>
<tr>
<td></td>
<td>Not focused properly.</td>
<td>Install the Focusing Bar and focus the eyepieces on the projected slit.</td>
</tr>
<tr>
<td></td>
<td>Too far/close from the patient.</td>
<td>Install the Forehead Support so a proper distance from the patient is maintained.</td>
</tr>
</tbody>
</table>
# Specifications

**Catalog Number**: 15090

<table>
<thead>
<tr>
<th><strong>Physical Dimensions</strong> (With Display Mounted)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td></td>
</tr>
<tr>
<td>Height:</td>
<td>9.06 in. (23.0 cm)</td>
</tr>
<tr>
<td>Width:</td>
<td>7.68 in. (19.5 cm)</td>
</tr>
<tr>
<td>Depth:</td>
<td>4.13 in. (10.5 cm)</td>
</tr>
<tr>
<td><strong>Weight, unpacked</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.5 lbs. (0.68 Kg)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Magnification</strong></th>
<th>10X &amp; 16X eyepieces included</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diopter Adjustment</strong></td>
<td>± 7D</td>
</tr>
<tr>
<td><strong>Visual Field</strong></td>
<td>Dia. 0.39 in. (10 mm)</td>
</tr>
<tr>
<td><strong>PD Adjustment Range</strong></td>
<td></td>
</tr>
<tr>
<td>10X eyepiece:</td>
<td>1.97 - 2.76 in. (50 - 70mm)</td>
</tr>
<tr>
<td>16X eyepiece:</td>
<td>2.17 - 2.76 in. (55 - 70mm)</td>
</tr>
<tr>
<td><strong>Working Distance</strong></td>
<td>3.15 in. (80 mm)</td>
</tr>
<tr>
<td><strong>Slit Width</strong></td>
<td>0 - 0.43 in. (0 - 11mm)</td>
</tr>
<tr>
<td><strong>Slit Length</strong></td>
<td>0.43 in. (11mm)</td>
</tr>
<tr>
<td><strong>Filters</strong></td>
<td>Cobalt Blue, Green, Color Temperature Conversion</td>
</tr>
<tr>
<td><strong>Slit Rotation</strong></td>
<td>± 30°</td>
</tr>
<tr>
<td><strong>Light Source</strong></td>
<td>High Luminance White LED</td>
</tr>
</tbody>
</table>

## Battery

| **PN 15090-401*** | Li-ion battery 7.4V 680mAh (2 hrs. operation at max. illumination) |
| **PN 15090-403**** | Li-ion battery 7.4V 900mAh (2 hrs. operation at max. illumination) |

## Charger

| **PN 15090-402***: | Input: AC 100-240V 60-50Hz | Output: DC 8.4V 600mAh |
| **PN 15090-404****: | Input: AC 100-240V 60-50Hz | Output: DC 8.4V 550mAh |
| **PN 15090-406**: | Input: 100-240VAC 60-50Hz | Output: 8.4VDC (European Connection) |

* For units up to SN 01200-0211
** For units starting with SN 01201-0711
### Specifications (continued)

#### Operational Conditions

| Environmental: |  
| The environmental conditions are as follows: |  
| Operating: |  
| Temperature: 10° to 35 °C (50° to 95 °F) |  
| Relative Air Humidity: 30% to 90% |  
| Atmospheric Pressure: |  
| 80 kPa (23.6 in. Hg) to 106 kPa (31.3 in. Hg) |  
| Transportation & Storage: |  
| Temperature: -10° to 55 °C (14° to 131 °F) |  
| Relative Air Humidity: 10% to 95% |  
| Atmospheric Pressure: |  
| 70 kPa (20.7 in. Hg) to 106 kPa (31.3 in. Hg) |  

#### Disposal

This product and the lithium-ion battery inside it do not generate any environmentally hazardous residues. At the end of its product life, follow your local laws and ordinances regarding the proper disposal of this equipment.

#### Classifications

**Electrical Shock Protection Method**
- Internal Battery Type, Type B

**Medical Instrument Class**
- US FDA: Class II 21 CFR 886.1850
- CAN CMDR: Class 1, Rule 7, Clause 1
Warranty

This product is warranted by Reichert Technologies (herein after referred to as Reichert) against defective material and workmanship under normal use for a period of one year from the date of invoice to the original purchaser. (An authorized dealer shall not be considered an original purchaser.) Under this warranty, Reichert’s sole obligation is to repair or replace the defective part or product at Reichert’s discretion.

This warranty applies to new products and does not apply to a product that has been tampered with, altered in any way, misused, damaged by accident or negligence, or which has had the serial number removed, altered or effaced. Nor shall this warranty be extended to a product installed or operated in a manner not in accordance with the applicable Reichert instruction manual, nor to a product which has been sold, serviced, installed or repaired other than by a Reichert factory, Technical Service Center, or authorized Reichert Dealer.

Lamps, bulbs, charts, cards and other expendable items are not covered by this warranty. All claims under this warranty must be in writing and directed to the Reichert factory, Technical Service Center, or authorized instrument dealer making the original sale and must be accompanied by a copy of the purchaser’s invoice.

This warranty is in lieu of all other warranties implied or expressed. All implied warranties of merchantability or fitness for a particular use are hereby disclaimed. No representative or other person is authorized to make any other obligations for Reichert. Reichert shall not be liable for any special, incidental, or consequent damages for any negligence, breach of warranty, strict liability or any other damages resulting from or relating to design, manufacture, sale, use or handling of the product.

PATENT WARRANTY

If notified promptly in writing of any action brought against the purchaser based on a claim that the instrument infringes a U.S. Patent, Reichert will defend such action at its expense and will pay costs and damages awarded in any such action, provided that Reichert shall have sole control of the defense of any such action with information and assistance (at Reichert's expense) for such defense, and of all negotiation for the settlement and compromise thereof.

PRODUCT CHANGES

Reichert reserves the right to make changes in design or to make additions to or improvements in its products without obligation to add such to products previously manufactured.

CLAIMS FOR SHORTAGES

We use extreme care in selection, checking, rechecking and packing to eliminate the possibility of error. If any shipping errors are discovered:

1. Carefully go through the packing materials to be sure nothing was inadvertently overlooked when the unit was unpacked.
2. Call the dealer you purchased the product from and report the shortage. The materials are packed at the factory and none should be missing if the box has never been opened.
3. Claims must be filed within 30 days of purchase.

CLAIMS FOR DAMAGES IN TRANSIT

Our shipping responsibility ceases with the safe delivery in good condition to the transportation company. Claims for loss or damage in transit should be made promptly and directly to the transportation company. If, upon delivery, the outside of the packing case shows evidence of rough handling or damage, the transportation company’s agent should be requested to make a "Received in Bad Order" notation on the delivery receipt. If within 48 hours of delivery, concealed damage is noted upon unpacking the shipment and no exterior evidence of rough handling is apparent, the transportation company should be requested to make out a “Bad Order” report. This procedure is necessary in order for the dealer to maintain the right of recovery from the carrier.