

## V. Warranty Information

This limited warranty covers the replacement of parts, repairs and associated labor. Except as otherwise set forth herein, Enova shall not be liable or responsible for any other actions or damages (special, consequential or incidental) related to the products set forth herein. The purchaser is responsible for the return of the product to Enova or to an authorized distributor and bears the costs of shipping and insurance. All Enova products carry a 30 day money-back policy.

NOTE: As noted in the product sections of this manual, please carefully check contents of package to ensure that your order is complete. Enova does not accept responsibility for items claimed to be missing or damaged more than five business days after receipt of product.

NOTE: Warranty only valid with proof of purchase from Enova Illumination or an authorized Enova Product Dealer.

NOTE: All warranties are conditioned upon use of the products under normal conditions and when used solely for the intended purpose (i.e. medical/clinical use in a medical/clinical setting). We reserve the right to determine cause of breakage or failure of all items.

### LOUPE AND MAGNELITE WARRANTY TERMS

PP1.5 powerpack, charger, and accessories: 1-year limited warranty

MagneLite: 2-year limited warranty on LED and housing; 1-year on cable

Enova Loupes: Limited lifetime warranty on manufacturer's defects. All Enova Loupes are warranted to be free of original defects in material and workmanship and to perform in accordance with stated specifications.

### Warranty Limitations (Conditions not covered):

- Loupe deterioration or failure due to improperly following instructions or use outside of the intended setting.
- Scratches, dents, or nicks that occur after delivery of product.
- Product manufactured to incorrect specifications as supplied by purchaser of product (e.g. incorrect or missing Rx).
- Attempts to repair product with persons/organizations other than Enova or authorized dealers.
- Normal wear and tear.
- Use of non-recommended cleaning products will void the warranty.

Direct all questions or concerns about Enova's Warranty, Products, or Service to the number and addresses listed below. Enova's normal hours of operation are M-F from 8am-5pm.

**Enova Illumination**  
1717 Broadway St. NE  
Minneapolis, MN 55413  
info@goenova.com  
651-236-8857

# Enova Loupe and MagneLite™

## INSTRUCTION MANUAL



**ENOVA ILLUMINATION**  
Innovation in Sight

## I. TTL and Flip-up Loupe Systems – Safety and Care Instructions

Please read the instruction manual carefully before using your Enova Loupes. Damages due to disregard of the instructions within this manual are not covered under the warranty policy of Enova Illumination.

### 1.1 Notes on Safety

- Improper use of oculars may result in damage or failure of glue, resulting in loose or unattached ocular.
- Do NOT look directly into the sun or other intense light while wearing loupes to avoid eye damage.
- Avoid vibration or shaking of loupes. This may result in loose or unattached pieces.
- Proper use of the Loupe and Light systems requires parts from Enova or licensed suppliers only.

### 1.2 Proper Usage

- Enova Loupes are designed for use in medical, dental, or veterinary settings only. Enova Loupes are intended only to enlarge your field of view during clinical or other medical procedures.

### 1.3 Notes on Care

Proper care and usage of the products ensure their lifespan. Misuse, disregard for instructions, or improper care may result in breakage or deterioration of your Enova products.

- Handle loupes with care, and store in dust-free environment.
- Loupes are water and dust proof but avoid prolonged contact with water or submersion. Store in a dry place when not in use.
- Clean oculars and lenses with soap and water or Enova approved cleaning products **only** and wipe with dry microfiber cloth.
- Before adjusting nose pads or earpiece, warm up with warm water from tap (no hotter than 120 degrees F) to avoid damages or fractures from bending.
- Note: Use moistened cloth. Do not spray disinfectant directly onto lenses or oculars to avoid over-spray.
- **Note: Never clean loupes with alcohol or other aggressive cleaners as they will damage the lenses.**

### 4.8 Functional Overview of PP1.5 Powerpack and Charger



1. PP1.5 Powerpack
2. Power button and LED strip
3. Single charger power output
4. Powerpack single charger
5. Powerpack base station

### 4.9 Using the PP1.5 Powerpack

The Powerpack may not be fully charged when it arrives. We highly recommend charging your PP1.5 Powerpack fully before first use.

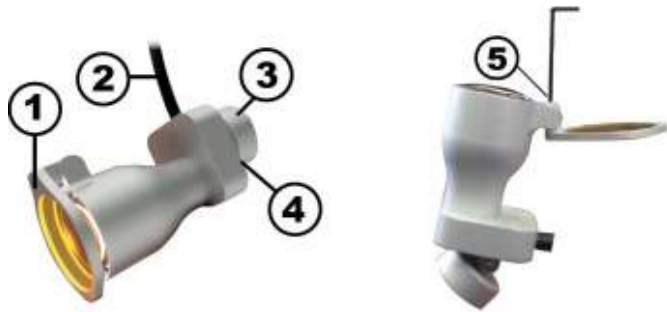
- **For single charger:** plug power cord into single charger and plug cord into wall outlet. Then, take the power output (3) and plug into PP1.5 (at side of PP1.5 near the bottom).
- **For base station:** plug power cord into back of base station and plug cord into wall outlet. Then, place PP1.5 right-side-up in one of two charging ports. A beep and illumination of LEDs will indicate powerpack is charging.

LED Indicators show status of charge, as well as brightness level.

- Center LED will be illuminated green when battery is fully charged.
- As battery life decreases, 5 LEDs will go through the following sequence: Full charge (while in use) – all five LEDs green, then four LEDs green, then three, then two, then one. When battery life is very low, one LED will show red, and then two will be red, and then three, then four, and with approximately one minute of life left, all five LEDs will be blinking RED.

If the plus or minus buttons are pressed, the LEDs will switch to show the brightness level. There are twelve levels of brightness, but as you press plus or minus, the LED indicators will go from FIVE green to ONE green to represent full brightness and lowest brightness, respectively.

#### 4.5 Functional Overview of MagneLite



1. Flip-Up orange Filter
2. Cable for PP1.5 Powerpack
3. Magnetic adapter for loupe attachment
4. Hinge for angle-adjustment
5. Tightening filter (see below)

#### 4.6 Technical Data

Lamp Type:	high-performance LED
Color Temperature:	5100 Kelvin
Lux:	30,000 (at 12"/30cm)
Weight:	0.25 ounces/7 grams

#### 4.7 Mounting your MagneLite

Below are instructions for how to mount your MagneLite on Enova TTL or Flip-Up loupes. For instructions on how to mount your MagneLite on other loupe models, please contact an Enova representative.

- Ensure that Loupe has magnetic adapter fitted to glasses brim, with notches of magnet pointing in cardinal directions (up, down, left, and right).
- Take MagneLite with cable at the top, and gently secure the magnetic adapter (3) to magnet on brim of glasses.
- Adjust angle of MagneLite such that it is co-axial with eyes and illuminates the entire field of view through the loupe telescopes.
- Secure the cable to the fasteners on the temple are of the glasses.
- Tighten hinge of filter (5) using provided hex-key. Be gentle as the components are very small. Tighten as you would a normal screw, until filter moves up and down at your desired resistance.

**WARNING: Do not Over-loosen filter, as small internal components may be lost**

## II. Through-the-Lens (TTL) Loupes

### 2.1 Ensure Proper delivery of TTL system

- Check packing slip to ensure all components of your Enova Loupe through-the-lens system were properly packaged and delivered.

### 2.2 Functional Overview of TTL Loupes



1. Flexible temple-arm
2. Magnetic adapter for MagneLite
3. VDC ocular
4. Anti-fog protective glasses

### 2.3 Technical Data

Magnification:	2.5-3.8 x depending on model
Weight:	Approximately 65 grams/2.3 ounces

### 2.4 Check Optics

Enova Loupes are custom designed for your eyes based on the specifications and prescription (if applicable) you provided. There are no adjustments that need to be made, as the product has been fit to your eye data already. Put on loupes and view an object at your working distance to make sure the image is sharp. There should be no issues, but if something doesn't seem right, please call Enova's helpline to speak with us.

## III. Flip-Up Loupes (XGF 2.8)

### 3.1 Ensure Proper delivery of Flip-Up system

- Check packing slip to ensure all components of your Flip-Up loupe system were properly packaged and delivered.

### 3.2 Functional Overview of Flip-Up Loupes



- |                           |                                  |
|---------------------------|----------------------------------|
| 1. Adapter for MagneLite™ | 5. VDC oculars                   |
| 2. Flip-Up hinge          | 6. Pupillary distance adjustment |
| 3. Height adjustment      | 7. Anti-Fog glasses              |
| 4. Flexible temple-arm    |                                  |

### 3.4 Technical Data

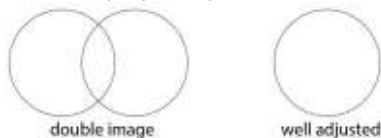
Magnification:	2.8 x
Weight:	75 grams/2.6 ounces
Width of Field:	110 mm/4.33 inches

### 3.5 Adjusting the Flip-Up Loupes

You must adjust the Loupes to get a clear and proper image.

- Loosen pupillary distance adjustment (6).
- Wear loupes and look at well illuminated object at your working distance.
- Loosen height adjustment (3) and adjust to correct height, tighten again afterwards.
- Close your left eye and move right ocular to center of view.
- Close your right eye and move left ocular to center of view.
- Open both eyes and check adjustment, ensuring proper alignment.
- Tighten the pupillary distance adjustment screw.

Result of proper adjustment is circular view area with no shadows.



## IV. MagneLite™ LED Light system

**Please read the instruction manual carefully before using your Enova Loupes. Information on product use and care are stated here within. Damages due to disregard of the instructions within this manual are not covered under the warranty policy of Enova Illumination.**

### 4.1 Notes on Safety

- Do not look directly into beam of LED light. There is the possibility of eye injury.
- Use only Enova PP1.5 Battery Pack with MagneLite.
- LED MagneLite may get warm during use but will not get hot enough to scald or injure.

### 4.2 Proper Usage

- MagneLite is designed for use in medical, dental, or veterinary settings only. MagneLite is intended for use in combination with Enova Loupes, or other loupes using verified Enova adapters.

### 4.3 Notes on Care

Proper care and usage of the products ensure their lifespan. Misuse, disregard for instructions, or improper care may result in breakage or over-wear of your Enova products.

- Handle LED system with care, and store in dust-free environment
- Clean LED system with disinfecting cloth, and wipe with dry microfiber cloth.
- Note: Before cleaning, make sure LED system is entirely off and unplugged from sources of power.
- Note: Use moistened cloth. Do not spray disinfectant directly onto lenses or oculars.
- Note: Do not clean MagneLite with alcohol or other aggressive cleaners.

### 4.4 Ensure proper delivery

- Check packing slip to ensure all components of your MagneLite system were properly packaged. This includes the attachable light as well as the power pack and charger.