

DentLight

Setting New Standards through Innovation



NANO

INSTRUCTIONS FOR USE

Nano Loupe Light (Rev 2S & 2C)

Powered by Patent-pending Focused Beam Technology

Product Information

Description and Indications for Use

Nano LED Loupe Light is engineered to meet the demand for the smallest and toughest professional portable light requiring a small homogenous and well-defined spot in the dental office, physician's office, hospital, or emergency environment for any procedures. These operating instructions provide recommendations and guidelines for the intended use of the light. Please read them carefully.

System Components

Nano 2S/2C Loupe Light consists of Nano Headlamp with Teflon wire, Loupe Mounting Adapter, Rechargeable Battery Pack, Composite Filter, Power Adapter, Extension Cord and a user's choice of light Mounting Adapter.

No.	Quantity	Description
1	1	Nano Headlamp
2	1	Clip-on Composite Filter
3	1	Composite Filter Flip Paddle
4	1	Wire Wrap
5	1	Wire Clip
6	1	Articulating Arm
7	1	L-Adapter *
8	1	Universal Clip *
9	1	Battery Pouch/Clip
10	1	Battery Pack **
11	1	Power Adapter
12	1	Mounting Plate *
13	1	U-Adapter*
14	1	V-Adapter*
15	1	Extension Cord
16	1	Instructions for Use





* One compatible mounting adapter per kit.

** 2S or 2C battery

Product Safety Warnings and Cautions











Prior to installation and activation of the light, please read these instructions carefully and follow safety procedures as well as the specific safety comments and recommendations presented throughout the instructions for use. The manufacturer accepts no liability for any damage resulting from the improper use of this unit and/or for any purpose other than those covered by these instructions.

1.  CAUTION! Heatsink (metal ring) end of LED Headlamp can be hot when in use for extended period of time at Level III. Do not touch with bare skin.
2.  CAUTION! Do not look directly at light emitted from the device. Eye injury may result.
3. Do not touch and open any electronics parts and circuit boards. Warranty void if seal broken.
4. Do not immerse headlamp in waters or solutions. Warranty void in case of liquid damage.
5. Do not use at distances closer than 10in for extended periods of time.
6. Charge batteries while not in use to extend the lifetime of the rechargeable battery.
 - a. Do not short circuit battery.
 - b. Do not store above 60 C (140 F).
 - c. Dispose of unserviceable batteries according to the national rules and regulations. Batteries must not be incinerated.

Glossary of Symbols

A number of symbols are used on the device, accessories and throughout this manual, it is important that the user/operator of Nano understands the meaning of each symbol to avoid possible injury to the operator or/and patient.

	Please read before using this device. Symbol is used to alert you to potential personal injuries and hazard.
	Type BF Applied Medical Equipment
	Waste Electrical and Electronics Equipment (WEEE)
	Manufacturer
	European Authorized Representative
	Date of Manufacturing
	Keep Dry
	For Licensed Dental Professional Use Only!
SN	Serial Number
REF	Product Number

Start Up

Upon receiving your Nano, remove all components from the package and examine them. If damage is apparent, please contact your authorized DentLight distributor from whom your light was purchased.

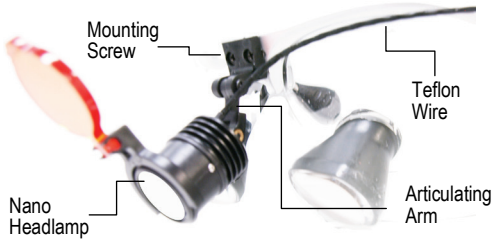
Mounting

Take out custom brand logo plate/custom fixture in the center of the frame. Cross reference loupes/glass frame. Assemble light using the ordered mounting adapter at the frame center for line-of-sight illumination:

a) L-Adapter

Place L-adapter at the center of the frame. Screw on

the two Mounting Screws directly or with the provided Mounting Plate/Nuts using a Philips screw driver. Tighten the two mounting screws. Adjust the Articulating Arm to line-of-sight illumination and the most comfortable position. Make sure the headlamp is positioned away from your nose. Route the Teflon Wire by bending at any angles conforming to the frame for your most comfort:



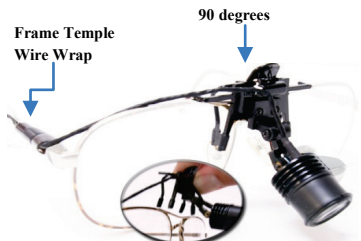
- 1) Orascope Rudy
- 2) Zeiss EyeMag Pro
- 3) Orascope Titanium
(with back mounting plate)
- 4) Surgitel Titanium (with hex nut).

Adapter	Brand	Model	Frame	Mounting
L	Orascope	Rydon, RaveX, Revolution, Standard	Rudy Project Titanium	2 screws direct
	Zeiss	EyeMag Pro		2 screws direct
	PeriOptix	Ultralight		2 screws direct
	Surgittel	Ergo, Aero	Titanium	1 screw/nut
	Heine	HR-C		1 screw direct

b) Universal Clip-on Adapter

Press thumb and index finger against the front and back flanges on the top to open the spring-loaded Clip-on. Slide into frame center then release for secure

Adapter	Brandname	Model	Frame
UNIVERSAL	Prescription or Safety		Glasses
	DFV	Designer	Titanium
	Sandy Grend	TTL	Titanium
	Any brands		Flat frames

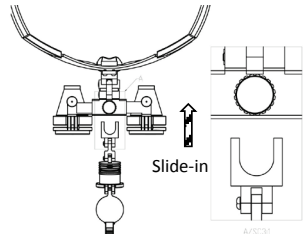


grip on the frame. Route wire by bending the Teflon at both the center of the frame and temple/frame junction. Use Wire Wrap to secure wire on the Frame Temple.

c) U-Adapter

Slide-in U-Adapter to the middle of the flip-up bar.

Adapter	Brand	Model	Frame
U	Orascoptic	Any frame	LEGACY
	Surgittel	FLM	Anyframe
	PeriOptix	Any frame	LEGACY, PANORAMIC, Prismatic
	Rose Micro	Any frame	Flipup
	Sheervision	FLIP-UP	Any frame
	Keeler		Flipup



d) Y-Adapter

Y adapter mounts to curved frame with center thickness from 4 to 10 mm with variable gap at the center of the adapter. It comes with the corresponding number of Articulating Arms to fit onto your custom loupes. OPEN THE ADAPTER AT THE CENTER wide enough to slide into the frame center bridge from the direction as shown in the illustration below. Tighten adjustment screw to fix it.

Adapter	Brandname	Model	Frame	# of Arms
Y	DFV	Yoeman	Aluminum	0
	DFV	Skylon, Skyview, Sports	Nike	2
	Surgittel	Half Jacket, Radar	Oakley	
	DFV	Pounce, Revolve,	Nike	0
	Zeiss	Smart		
	Heine	HR 2.5 and HRP		
	PeriOptix	Adivista	Adidas	
	Sheervision	Under Armour	Plastic	2
	Orascoptic	Suby	Rudy Prigent	
Sheervision	Del Rey	Plastic		

DFV Yoeman

Surgitel Oakley

DFV Nike

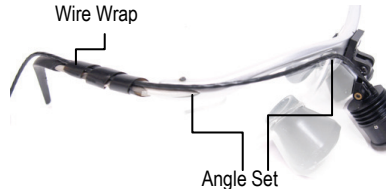


RUN: Turn on Nano 2C by pressing the raised ON/OFF button. Adjust power levels by PRESSING AND HOLDING ON/OFF button for 3 seconds. Turn off anytime by pressing the ON/OFF button again. Light will remember the last power setting when turning on the next time. Battery Indicator shows the status of the battery when the light turns on or off. In case no lamp is connected, the battery beeps and turns off automatically after a few seconds.

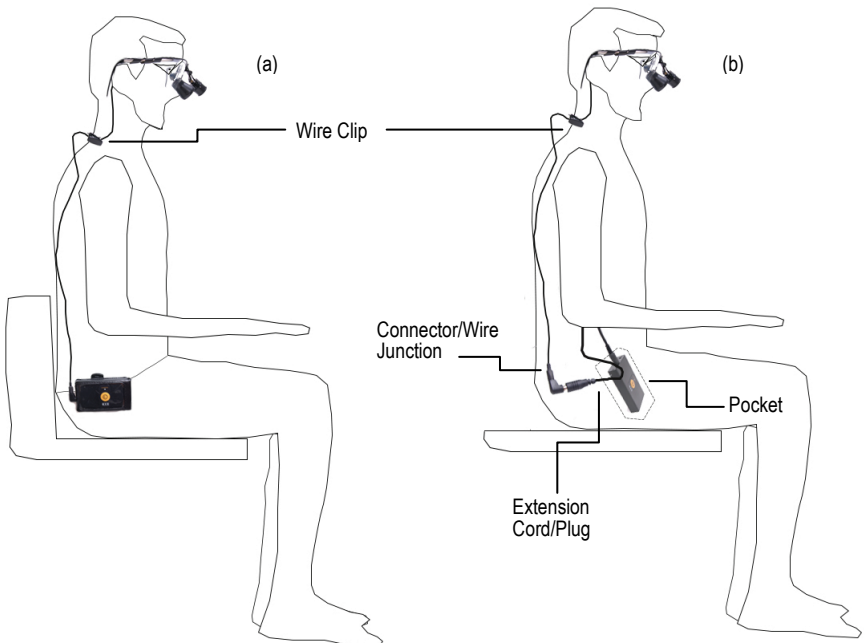
At low battery, an audible beep alarms 1 minute before the light goes off. To recharge, simply plug in Power Adapter (5V) cord to the male DC connector. The battery charge indicator turns on while charging and turns off automatically when it is fully charged.

WIRING:

Angle set the wire coming out of the LED lamp to comply with the contour of your loupe frame. Use spiral Wire Wrap to attach lamp Teflon cord to frame temple/leg. Use Wire Clip to fix the cord on the scrub collar on the back of your neck. Place battery in one of the following configurations:



- (a) Position Battery Pack with the Battery Pouch/Clip on the waist or belt of your scrub. Plug in the wire connector directly into the Battery Pack and route the wire straight up from your back. Route cord with minimum tension or stress at the Connector/Wire Junction to extend cord lifetime. Avoid bending 90 degrees at the junction. **This placement option enables hands free elbow activation technique, which prevents cross contamination.**
- (b) Use Extension Cord to plug in the Battery Pack. Place Battery Pack directly in your scrub pocket. Route cord with minimum tension or stress at the Connector/Wire Junction to extend cord lifetime. Avoid bending 90 degrees at the Connector/Wire Junction.



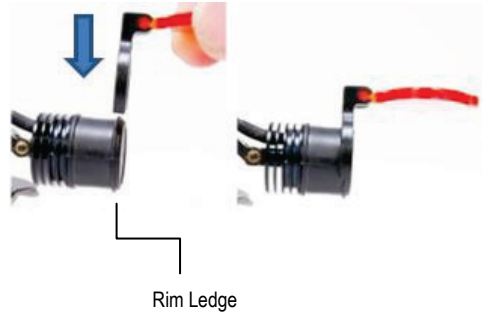
COMPOSITE FILTER:

Hold the composite filter clip above the rim ledge close to the front of the headlamp housing. Align the notch and snap the clip onto the rim ledge for a secure fit.

TIPS

Wire routing –Route lamp cord to minimize stress. **DO NOT ROUTE OR BEND WIRE 90 DEGREES AT THE BATTERY TO WIRE CONNECTOR JUNCTION!**

Battery – Charge Battery Pack while not in use to extend battery life.




Cleaning and Disinfecting

- Clean and disinfect Headlamp and Battery Pack with a soft cloth or tissue dampened with cleaning solution including: Cavicide, Lysol, Isopropyl or Ethyl alcohol and equivalent. ⚠ Do not spray, soak, or autoclave.
- Use Q-tips to clean lens and electrical contacts by slightly dampening the tip (do not soak) with Isopropyl alcohol.

Product Specification

Type of information		Specifications	
Color Temperature (K)		5000- 6500	
Light Intensity (±15% lux)*	Level I	12000	
	Level II	20000	
	Level III	30000	
Power Adapter		Input: 100-240V - 50/60Hz; Output: 5V DC 2A	
Beam Size (inch)		2.5 @ 14 inch distance	
Battery performance (hours)		Model 2S	Model 2C
	Level I	24	10
	Level II	14	6
	Level III	10	4.5
Battery		Lithium Ion (2S) and Lithium Polymer (2C). Recharging time 3 hrs. LED indicator on during charging and off when fully charged.	
Overcurrent Protection		Auto	
Lamp Dimension (mm)		18 (diameter)	
Battery Dimensions (mm)		45x76x15 (2C); 46x74x21mm (2S)	
Weight (grams):		Lamp: 6; Battery: 85 (2C), 140 (2S)	

Protection from Electric shock	Type BF	
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* Measured at 14 inch.

Limited One-Year WARRANTY

Register your Nano light at www.dentlight.com. DentLight Inc. extends a one-year warranty against defects in material and workmanship to the original purchaser of this product. This warranty is valid providing factory inspection indicates that any such defect was developed during normal and proper use. DentLight shall under no circumstances be liable for incidental, special, consequential damages and damage from misuse including the following expressed or implied:

- Improper operation, accident or neglect, misuse or abuse, such as physical damage (dents, scratches, etc.);
- Liquid, water, rain, extreme humidity, ultrasonic, autoclaving;
- Tampering, improper repairs or modifications that have not been carried out by a certified Service Center;
- Use of other spare parts and accessories other than from the manufacturer such as incorrect power adapter;
- Other acts which are not the faults of DentLight.

For service, call 1-800-763-6901 (in US) to obtain RMA number. Fill out RMA form online and return as instructed. In case of a warranty claim, the complete apparatus must be returned. Alternatively, contact your dealer for service return.

Troubleshooting Guide

Problem	Error Indication	Possible Solutions
Light will not turn on	1. No Battery Bar or no battery power indicating beep; 2. Lamp cord broken.	1) Charge Battery Pack overnight; 2) Replace lamp or return to manufacturer for service.
Battery will not charge	1. Broken pins in battery DC plug; 2. Battery out of capacity.	Replace battery pack or return to manufacturer for service.

Reorder and Optional Item Codes

REF	Description	REF	Description
8600113	Nano 2S	8600230	Nano 2S Battery Pack
8600112	Nano 2C	8500024	L-adapter
8600020	Nano Headlamp	8500040Y*	Power Adapter
8600130	Nano 2C Battery Pack	8600022	Composite Filter

* Y: US, EU, AU (Australia)

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