ACCESSORY POLARIZING FILTER

The optional Rite-Lite PRO Polarizing Filter is attached to the face of the unit with three magnets and is removable.

WARNING: Never allow the strong neodymium magnets near a person with a pace maker or similar medical device.

The filter is a delicate component and should be handled with care. DO NOT touch the filter face with your fingers.

The Rite-Lite PRO Polarizing filter eliminates reflection and allows the user enhanced observation of the teeth for color, depth and transparencies. It also enhances the visualization of internal details and characteristics. It is best used by alternating the observation of teeth with and without the polarizing filter to further enhance the shade matching process.

CLEANING: Clean the Polarizing Filter by wiping with a soft anti-static cloth. If necessary it can also be cleaned with soapy water and dried with a soft clean cloth.

PRODUCT SPECIFICATIONS

Rite-Lite PRO Dimensions	Length: 7.25 inches (184.2 mm) Width of head: 2.5 inches (63.5 mm) Handle diameter: 0.827 inches (21.0 mm) Weight: 2.86 oz (81 Grams)
AC Supply Connection	100-240 Volts AC ± 10%, 50/60 Hz
USB Power Supply Rated Output	5V DC, 2A (10 VA nominal)
Charging Circuit Performance	Fully discharged battery pack charges to 100% in approximately 2.5 hours
Battery Pack Specifications	Output: 3.7 V nominal @ 850 mAh Type: Lithium-ion Performance: Approximately 60 one minute examinations starting with 100 % charge. Battery Pack life: 500 full recharge cycles, approximately 5 years with of use. Safety: Battery is protected from over charging, over discharging and short circuiting by means of a built-in safety circuit.
Output Light emitting diodes:	24
CRI (Color rendition Index):	Over 90 CRI
Output LED Color	Daylight: Approximately 5500ºK Room Light: Approximately 3200ºK Ambient Light: Approximately 3900ºK Black Light: Approximately 395 nm
Light Intensity:	1500 LUX Min. (140 foot candles)

WARRANTY

AdDent, Inc. warranties that for a period of one year from the date of purchase, this instrument (excluding batteries) shall be free from defects in material and workmanship and will perform satisfactorily under normal use.

ACCESSORIES AND REPLACEMENT PARTS

P/N 140001 - Rite-Lite PRO without Polarizing Filter
P/N 140002 - Rite-Lite PRO with Polarizing Filter
P/N 140100 - Polarizing Filter
P/N 640015 - Neutral Color Pad (Pk. of 25)
P/N 130002 - Medical grade power supply

REFERENCE

See our website – www.addent.com

PATENTS: 9,427,162

Patents Insured By: IPISC

MANUFACTURER

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P/N 663000 REV. A 07/2020

Rite-lite PRO™

MULTISPECTRAL/HI CRI SHADE LIGHT

RITE-LITE PRO INSTRUCTIONS FOR USE

MADE IN THE USA

Contents of package: (1) Rite-Lite PRO, (1) Plug-in Battery Charger, Pink Neutral Color Pad, Instructions for use and various marketing materials.

Warranty registration at www.addent.com

PRECAUTIONS

Not Sterile – Refer to cleaning & disinfecting section.

The Rite-Lite PRO produces high intensity light output. Do not look directly at the light emitted from this unit or point the light directly at the operator, assistant, or any person in the room.

Do not attempt to use the Rite-Lite PRO when the unit is charging. The output LEDs cannot be activated while the battery charger is connected to the unit.

Battery Disposal: The battery pack contains rechargeable Lithium-ion batteries (Li-ion). Recycle or dispose of battery pack according to national, state, and local regulations.

INTENDED USE

The Rite-Lite PRO shade matching light incorporates L.E.D. technology to simulate various lighting conditions that aid in the shade matching of teeth and all types of dental restorations. AdDent, Inc. developed the Rite-Lite Pro in conjunction with cosmetic dental ceramists and dental professionals.

PRODUCT DESCRIPTION

The scientific principal of “metamerism” dictates that if a shade can match in multiple wavelength spectra, the final shade match will be more accurate.

Rite-Lite PRO is a four-in-one shade matching instrument featuring three choices of high CRI (Color Rendering Index) visible light to simulate varying lighting conditions typically found in indoor and outdoor environments. The daylight mode is used to initially establish the shade of the tooth or dental restoration, while the room light and ambient light modes are used to verify the shade as it would appear in other common lighting conditions. In addition, it has a black light mode to visualize fluorescence in teeth and restorations.

Rite-Lite PRO features:

- Three modes of visible light for shade taking to simulate varying lighting conditions found in indoor and outdoor environments.
- Visible light spectra produced with high CRI LED’s.
- Three selectable light output levels for visible spectra modes.
- Black Light mode for examining restoration fluorescence.
- Accessory cross polarizing filter attachment to permit observation of tooth characterization without surface reflection.
- Regulated Output: Rite-Lite PRO features a voltage regulator that will ensure consistent light output over the useful battery life of the unit.
- Rechargeable Li-Ion battery.
- Five minute auto shutoff feature conserves battery power.
- USB power supply for charging unit.
- LED Battery charge and battery status indicator.

RITE-LITE PRO OPERATION AND FIRST TIME USE

Note: The Rite-Lite PRO unit should be fully charged prior to first time use. Refer to section CHARGING THE UNIT in this manual.

Rite-Lite PRO provides for three visible light choices and one black light spectrum:

a. Daylight: An industry standard color temperature of approximately is 5500º Kelvin to simulate the daylight that naturally occurs in outdoor environments.
b. Room light: A replication of the warm, incandescent light of approximately 3200º Kelvin that is found in many indoor environments.
c. Ambient light: A combination of room light and daylight of approximately 3900º Kelvin to simulate the mixed lighting conditions that are common in many indoor environments.
d. Black Light: For examining the ability of a restoration to fluoresce in a manner similar to the way teeth naturally fluoresce at wavelengths below 400 NM.

1. To activate the Rite-Lite PRO unit, press the gray on/off button. The six LED’s providing daylight mode (5500º Kelvin) will turn on.
2. Pressing the gray button a second time will activate the six LEDs providing room light (incandescent) mode (3200º Kelvin).
3. Pressing the gray button a third time will activate all 12 LEDs providing ambient mode (3900º Kelvin).
4. Pressing the gray button a fourth time will turn off all LEDs.
5. To change the light output level in any visible mode, first select the desired mode using the gray button and then sequentially press the purple button to scroll through the three light levels.
6. To activate the Black Light mode, start with the unit off and press the purple button once. Pressing the purple button a second time turns the Black Light mode off.

EXAMINATION GUIDE

1. With the patient in a slightly reclined position, place the Rite-Lite PRO approximately 2” from the patient’s teeth. Place the enclosed pink neutral color tab in back of the teeth being selected. This will neutralize the oral cavity color interference.
2. Always position the Rite-Lite PRO over the teeth to be viewed before turning the unit on to avoid excessive bright light shining in the patient’s eyes.
3. Hold the Rite-Lite PRO at a slight angle to perpendicular to the tooth/teeth to be viewed. This will help to reduce glare.
4. Depress the gray on/off button to illuminate the teeth. Always view the working area through the lighted ring at right angles to the facial surface of the tooth.
5. Each time the gray button is depressed, the color temperature of the light will change. In any color temperature, the intensity can be reduced by depressing the purple button.
6. Place the incisal edge of the shade guide next to the incisal edge of the tooth, so the shade guide and the tooth are edge to edge in order to obtain optimum comparisons for shade taking.
7. The purple button is used to turn on the Black Light feature of the Rite-Lite PRO. Depressing the purple button produces an ultraviolet wavelength light of approximately 395 nm. This wavelength allows the examination of the fluorescent characteristics for natural teeth and restorative materials. Ideally, for a perfect shade match, they should be the same.

CHARGING THE UNIT

A wall plug-in USB power supply is provided to charge the unit. Connect the USB cord to the power supply and plug the power supply into a wall outlet. Plug the opposite end of the USB cord into the connector located above the purple button on the side of the Rite-Lite PRO.

A fully discharged battery pack charges to 100% in approximately 2.5 hours Do not attempt to use the Rite-Lite PRO while it is charging. The output LEDs will not operate when the unit is connected to the USB power supply.

BATTERY CHARGE INDICATOR

Charging the Rite-lite PRO: While charging the unit, the LED charge indicator will illuminate solid blue. When the unit is fully charged, the blue LED indicator will turn off.

Operating the Rite-Lite Pro: A multicolor LED battery charge indicator operates as follows:

Green - Battery charged, normal operation.

Orange - Battery has approximately 10 minutes charge remaining.

Red - Battery discharged, output LEDs will blink twice and turn off and battery requires recharging.

CLEANING & DISINFECTING

Do not autoclave unit. Doing so will damage the unit and invalidate the warranty.

Do not allow liquid to enter the internal portion of the Rite-Lite Pro. Liquids will damage the internal electronics. Do not allow L.E.D.s (Light Emitting Diodes) to come in contact with any liquid.

The Rite-Lite PRO housing may be wiped down with Cavicide or similar disinfection product:

- Wipe, do not spray, solution onto housings. Prevent liquids from entering openings on unit. Do not immerse unit in solution.