nlight™
THERAPY

6/PORT CONTROLLER & 2/PORT CONTROLLER

OWNER INSTRUCTION MANUAL

PLEASE READ BEFORE USING DEVICE

TABLE OF CONTENTS

WELCOME

FDA CLEARED

ILT products are FDA cleared to:

Increase Circulation

Reduce pain

Relieve stiffness & muscle spasms

Thank you for choosing In Light Therapy (ILT). ILT products are engineered for safe, non-invasive, and effective use in clinical and home environments. Thousands of families are currently enjoying the benefits of light therapy.

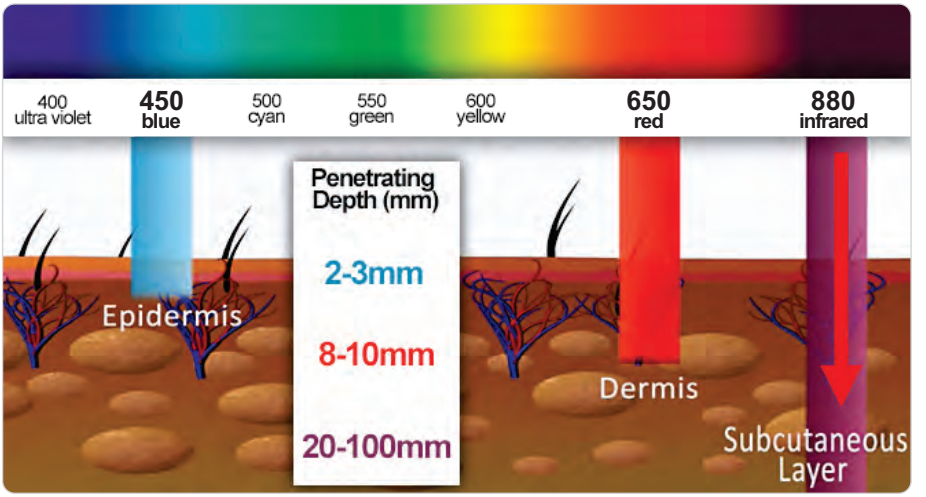
Medical health providers use light therapy in clinical settings to increase circulation, reduce pain and, as research evidence demonstrates, to promote wound healing. ILT products produce a gentle heat and do not require constant monitoring making it safe for patient home use.

POLYCHROMATIC LIGHT THERAPY

ILT products contain visible 450nm blue diodes, 650nm red diodes, and infrared light diodes that range from 850nm to 930nm, averaging 880nm, thereby penetrating at various depths and stimulating increased circulation through a broad range of tissue types.

Def.

Polychromatic light therapy (plt) The use of two or more LED light wavelengths (colors) to affect biologic changes.

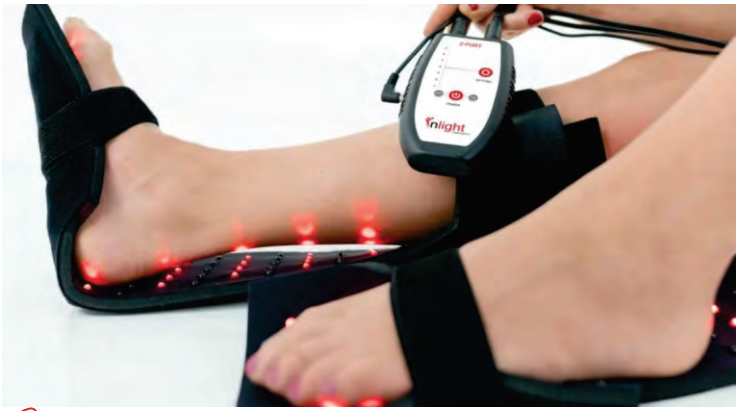


inlight™ THERAPY

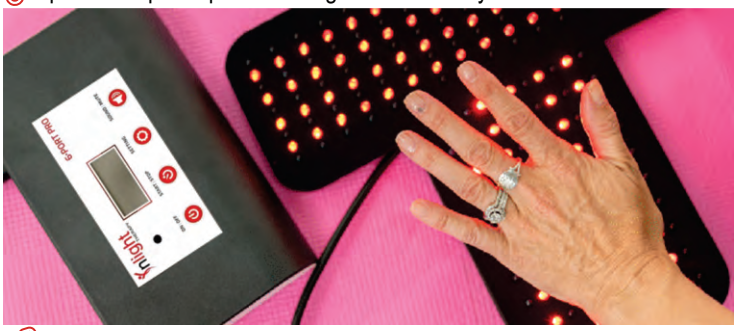
PAD SYSTEMS

ILT products are fortified with super luminous diodes designed specifically and exclusively for our products. The circuitry architecture embedded in the neoprene allows for pliability and comfortable application of the pads to any body location.

This pad flexibility increases the skin absorption of the therapeutic light and enhances the benefits of each treatment session. The entire range of ILT pads can be used interchangeably with any of our controller devices.



NOTE: Controllers like the 2/PORT shown above feature multiple input ports for up to 2 pads working simultaneously.



NOTE: Controllers like the 6/PORT PRO shown above feature multiple input ports for up to 6 pads working simultaneously.

Def.

Mitochondria
Specialized structures in each cell responsible for creating ATP, the energy molecule that fuels all cellular activity, and much more. [Source: UMDF.org]

Def.

Polychromatic Light Therapy (PLT):
The use of two or more LED light wavelengths (colors) to affect biologic changes.

Def.

Adenosine Triphosphate (ATP)
A chemical molecule produced by the mitochondria that supplies the energy currency of all life.

Def.

Low-level laser therapy (LLLT)
Light delivered by both lasers and light emitting diodes (LEDs) at low densities. Also known as "cold laser".

Def.

Durable Medical Equipment (DME)
Medical devices that act by physical, mechanical or thermal means and are for long term use, rather than single usage.

< 6/PORT
controller includes
3 automatic and
7 manual settings
CONTROLLER UNITS

and/or

2/PORT >
controller includes
1 automatic and
7 manual settings

1 A/C POWER SUPPLY

1 QUICK START GUIDE

1 OR MORE SECURING STRAP(S)
(configuration dependent)

1 OR MORE PAD
(configuration dependent)

PARTS CHECKLIST

1-2 Control unit(s)
1-6 Therapy pads (system dependent)
1-6 Securing straps (system dependent)
1 A/C power supply
1 Carrying case
1 Operator's Manual, no special skills or training are required for operation.

CARING FOR YOUR ACCESSORIES

- DO NOT operate under water.
- DO NOT expose to moisture for a long period of time.
- DO NOT expose to heat and sub freezing temperatures.
- DO NOT crease or excessively bend cords.
- DO NOT wrap cords around therapy pads.
- When cleaning therapy pads and/or control unit, apply cleaning solution such as a hospital grade disinfectant (1:10 bleach ratio) to a damp cloth and clean.

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INDICATIONS FOR USE

1) To provide LED (light-emitting diode) light-associated gentle warmth (limited temperature elevation) therapy to temporarily relieve minor pain, stiffness and muscle spasms; and
2) To temporarily increase the local blood circulation of body parts.

CONTRAINDICATIONS

- Do not use this device directly over the abdominal area while pregnant.
- Do not use this device directly over an area of known cancer.

PRECAUTIONS

- Avoid use over topical creams/gels.
- Consult medical professional should skin irritation occur.

ELECTRICAL CONSIDERATIONS

- Use only with a building code approved grounded outlet.
- Do not use with an electric generator. Only use power supply and cord sent by ILT with any In Light Therapy product.
- Do not use pins or metallic materials to hold pads in place.
- Do not use in water or while wet.
- When powering unit down, depress the “off” push button so that power is no longer being applied to the LEDs. If disconnecting the power cables, ensure the previous steps have been followed. When disconnecting the power connections, always gently pull plug from the connection rather than pulling the wires.

OTHER CONSIDERATIONS

- Do not apply therapy pads to skin with excessive pressure. Light arrays should be in light contact with clean skin surface.
- Do not apply treatment to an area for more than 20 minutes in a 5-hour period. Do not exceed 60 minutes of treatment to an area in a 24-hour period.

Def.

Frequency
The rate at which photon energy (information) is delivered. (e.g. duty cycle, pulsed rate). Cellular and DNA communication can be measured in frequencies.

Def.

Joules (j)
A measurement of energy transfer

Def.

Laser Therapy
High-density light devices used for ablation, cutting and thermal coagulation of tissue

DEVICE SET-UP & OPERATION
THE 2/PORT CONTROLLER

- Insert the power cable into 110-volt power outlet.
- Insert power supply jack into the ILT controller power jack (see picture below).

CONTROLLER POWER JACK

- Connect the pad(s) to the controller at the top of the unit using any or all DIN sockets.
- Place the pad(s) with the LED side of light array on the treatment area.
- Press the ⏻ button to initiate treatment.

OPERATION MODES

The 2/PORT Controller has 2 user buttons:

⏻ **ON|OFF** switches power on/off

⚙ **SETTING** scrolls through settings
AUTO, 1-7

nlight™ THERAPY

DEVICE SET-UP & OPERATION
THE 6/PORT CONTROLLER

- Insert the power cable into 110-volt power outlet.
- Insert power supply jack into the ILT controller power jack.

CONTROLLER POWER JACK

- Connect the pad(s) to the controller at the top of the unit using any or all DIN sockets.
- Place the pad(s) with the LED side of light array on the treatment area.
- Press the button to initiate treatment.

OPERATION MODES

The 6/PORT Controller has 4 user buttons:

ON|OFF
switches power on|off

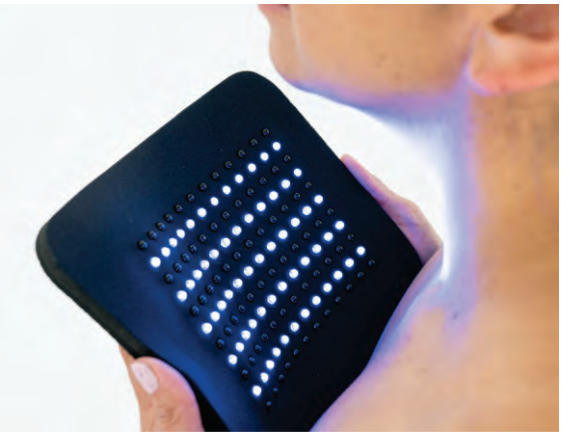
START|STOP
starts|stops program

SETTING
scrolls through settings
AUTO A, AUTO B, AUTO C, 1-7

SOUND|MUTE
enables|disables sound

NOTE:
Please note every other row of LEDs are infrared and cannot be seen with the human eye. If the red LEDs are illuminated, the infrared LEDs will also be powered but you will not be able to see them.

NOTE:
Be aware lying directly on the pad(s) results in the lack of airflow and may result in elevated warmth in the area.



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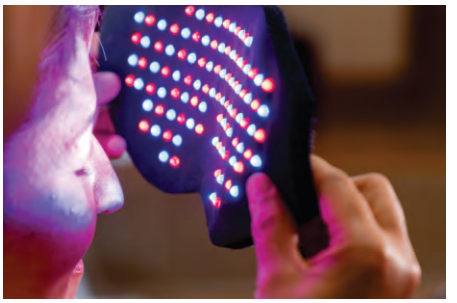
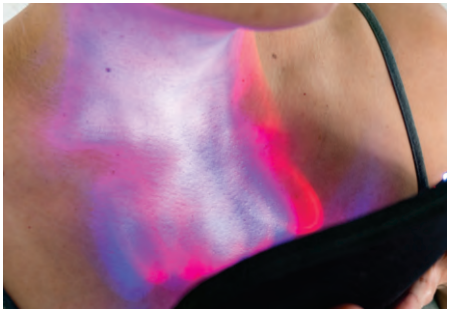
CHOOSE A SETTING

To use a different automatic or manual mode, press the SET button until the desired LED indicator is illuminated. The unit will operate on that setting until it powers off. The unit will switch off automatically after 20 minutes in any mode.





SUGGESTED APPLICATION GUIDELINES

The standard treatment protocol for application is twice a day for 20 minutes per session as follows:

- Apply the neoprene pad directly to the skin near or on the affected area.
- Place the pad in a clear plastic bag if bodily fluids are present. *(see 'Caring For Your Accessories')*
- Turn the device ON and allow the unit to commence in the automated mode for 20 minutes.
- Do not apply treatment to an area for more than 20-minutes in a 5-hour period.
- Do not exceed 60 minutes of treatment to an area in a 24-hour period.

Remember, increasing circulation triggers physiologic responses that can last for hours or days. As such, some conditions may be adequately treated with 20-minute sessions three (3) times per week. In all cases, follow the direction of your healthcare provider.

Def.

Near infrared light (NIR)
Refers to the use of infrared light applied directly to living tissue

Def.

Nitric Oxide (NO)
A chemical molecule released from smooth muscle when triggered by the body's parasympathetic response and/or polychromatic light therapy

Def.

Wavelength
The length in nanometers of each color on the visible and invisible light spectrum

EXPECTED SERVICE LIFE:
1 Year Under Warranty, Repairs Available for the Lifetime of the Device. Manufacturing Date Documented On Each Pad And Controller.

IMPORTANT NOTICE

If any part of the In Light Therapy product fails or unit is not working you should contact your Authorized Representative (AR), or email at repairs@inlighttherapyco.com for a return and repair authorization form.

Do not attempt to fix the unit, in case of any failure as this will void your warranty.

Opening the control unit may cause an electrical shock if certain components are touched.

Opening the control unit or pads will void the warranty.

Only use ILT approved and provided accessories with all In Light Therapy equipment. Failure to do so may result in damage to equipment, and cause health, fire, and/or safety problems.

In Light Therapy (ILT) warrants each new device to be free from defects in materials and workmanship for a period of one (1) year. The obligation of ILT under this warranty is expressly, solely and exclusively limited to the repair or replacement for the unit(s) or any parts thereof, which to the satisfaction of ILT, shall have become defective during the warranty period. This warranty does not extend to any liability to medical expenses or for any other direct, indirect or consequential damages caused by failure, defect or malfunction of any ILT product, except as herein provided.

This warranty shall not apply to any In Light Therapy product that has been repaired, tampered with or altered by someone other than a duly authorized ILT representative, or that has not been used in accordance with the enclosed instructions or stated purpose. All accessories used with a ILT product must be provided by ILT or authorized representative including, but not limited to, the power supply and securing straps. If items of this nature not provided by ILT or an authorized representative, are used with an ILT system, this warranty will be voided. Additionally, ILT will not be held liable for any mishaps relating to the ILT product. This warranty is guaranteed by ILT and is deemed to be the only warranty honored by ILT in lieu of any and all warranties expressed or provided by any and all other merchants, distributors, companies or persons.

No person or entity has any authority to bind any In Light Therapy product to any warranty or guarantee except as specifically set forth herein.

Defective ILT equipment must be returned to ILT.

In Light Therapy disclaims all other warranties, either express or implied, including but not limited to implied warranties relating to the use of the product and/or result from the use of the product and any warranties which may be implied as a result of the purpose for which the product was manufactured. Not every person may obtain desired results from the use of any In Light Therapy product. In no event will In Light Therapy be held responsible or liable for any failure to produce claimed results arising out of the use or non-use of any In Light Therapy product.

Photon
A wave or a particle representing light having no mass. Photons transmit information measured in frequencies within and between cells.

Def.

Coherent light
Emitted by laser devices in a single, columnar form

Def.

Non-coherent light
Delivered by light emitting diodes (LED) via hands off devices safe for home use.

Def.

Lumen
A measure of the total amount of visible light emitted by a source

RECOMMENDATIONS FOR TRAINING

None required to operate this device.

CARING FOR YOUR SYSTEM

Disinfect the non-porous pads regularly with hospital grade disinfectant solution (1:10 bleach solution). Spray onto a cloth and lightly wipe clean with cloth. Do not soak or saturate. Do not autoclave (use water, pressure, and heat to create superheated steam)

Keep pads clean by always covering treatment area or pads with a clear plastic barrier such as plastic wrap or clear bags for the foot and/or open wounds. inLight suggests using 10 x 30" 1 Mil Poly Bags available through www.uline.com - model# S-10890.

STORAGE INSTRUCTIONS

Store in a cool, dry place, within the temperature ranges of 32-110°F

A 35-YEAR HISTORY WITH LIGHT

Recognizing need is a catalyst for inspiration. Following inspiration through to invention requires commitment, focus and passion. Each advance implemented is a result of identifying one solution born of a multitude of ideas. This is the process of innovation; And innovation takes time.

At In Light Therapy innovation has taken us on a 35-year journey. We have committed our careers, our family and our lives to creating the finest LED light therapy technology in any marketplace. We've committed ourselves to innovation.

OUR MISSION

Design, manufacture, and deliver the finest LED Light Energy systems in any marketplace while supporting our distribution network and serving our customers with consistency, integrity, and respect.

SYMBOL KEY


Read usage instructions


Caution, consult documents

Serial number


Manufacturer


Manufacturing date


Type B Applied Part


Protection from rain


Temperature limitation

On


Off


On/Off (push-push)

TECHNICAL DESCRIPTION

Model Type:
6/Port Controller System
2/Port Controller System

Device/System Parts Include:
ILT 6/Port Controller / 2/Port Controller System and ILT Power Supply (OUTPUT: 12.0V-5.0A), The power supply can be considered as the disconnection from the MAINS.

Applied Parts Include:
Flexible Light Therapy Pads
The following pads are interchangeable for use - BODY/264, LOCAL/132, FACEMASK/104, SPINAL/112, BOOT/122, SMALL/50, PAINBUSTER/90, PAINBUSTER II/180, SPORTS/180.

Accessories Include:
Protective Eyewear

This device does not require professional installation by service personnel. Manufacturer will provide circuit diagrams, component part lists, descriptions and instructions to assist Service Personnel in all requested parts repairs. This system, subject to mechanical wear, electrical, environmental degradation or aging is eligible for inspection, replacement and maintenance.

WARNING: Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

WARNING: Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment should be observed to verify that all parts are operating normally.

WARNING: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30cm (12 inches) to any part of the InLight device , including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

Medical Electrical Equipment needs special precautions regarding EMC and needs to be installed and put in service according to the EMC information in the Electromagnetic Capability of this manual.

Guidance and manufacturer's declaration – electromagnetic emissions		
The In Light Therapy (ILT) Systems are intended for use in the electronic environment specified below. The customer or the user of the ILT System should assure that it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic environment - guidance**
RF emissions CISPR 11	Group 1	The 2/Port and 6/Port use RF energy only for their internal function. Therefore, their RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class A	The 2/Port and 6/Port are suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions	Complies	

Guidance and manufacturer's declaration – electromagnetic immunity			
The In Light Therapy (ILT) Systems are intended for use in the electronic environment specified below. The customer or the user of the ILT System should assure that it is used in such an environment.			
IMMUNITY test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment - guidance**
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors 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	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	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	<5 % U_T (>95 % dip in U_T) for 0,5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70% U_T (30 % dip in U_T) for 25 cycles <5 % U_T (>95 % dip in U_T) for 5 s	<5 % U_T (>95 % dip in U_T) for 0,5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70% U_T (30 % dip in U_T) for 25 cycles <5 % U_T (>95 % dip in U_T) for 5 s	Mains power quality should be that of a typical 2/Port commercial or hospital environment. If the user of the 2/Port or 6/Port requires continued operation during power mains interruptions, it is recommended that the 2/Port or 6/Port be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE: U_T is the a.c. mains voltage prior to application of the test level			

Guidance and MANUFACTURER'S declaration – electromagnetic immunity			
The In Light Therapy (ILT) Systems are intended for use in the electronic environment specified below. The customer or the user of the ILT System 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 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2,5 GHz	3 Vrms 3 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the 2/Port or 6/Port Controller, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended separation distance** $d = 1.2 \sqrt{P}$ $d = 1.2 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.3 \sqrt{P}$ 800 MHz to 2.5 GHz 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 metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] 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: 
NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
[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 2/Port or 6/Port is used exceeds the applicable RF compliance level above, the 2/Port or 6/Port should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the 2/Port or 6/Port. [b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.			

Recommended separation distances between portable and mobile RF communications equipment and the Models 2/Port and 6/Port

The models 2/Port and 6/Port are intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the 2/Port or 6/Port can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the 2/Port or 6/Port as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d = 1.17\sqrt{P}$	80 MHz to 800 MHz $d = 1.17\sqrt{P}$	800 MHz to 2.5 GHz $d = 2.33\sqrt{P}$
0,01	0,12	0,12	0,23
0,1	0,37	0,37	0,74
1	1,17	1,17	2,33
10	3,69	3,69	7,37
100	11,67	11,67	23,33

For transmitters rated at a maximum output power not listed above, the recommended separation distance *d* in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

DEVICE DESCRIPTION

Power: Output Power Increments - 12v DC, Output Port 5 Pin Din Jack, Power/Energy Range 100-240 VAC
Increments of Power: 10.4-12VDC
Energy of Power: .5-5Amps
Beam Diameter/Spot Size: 5mm
Delivery System: Light Emitting Diodes (LEDs)
Wave Length: 430nm – 880nm
Controls: Push button
Patient Contacting Materials: Neoprene, plastic diode casing
Temperature at user skin surface: 100-124°F
Storage Temperature: 32-110°F
Recommended distance from patient: Contact skin
Timer Modes: 20 minutes
Weight: Varies per pad and controller
Dimensions: Varies per pad and controller

Intended Operator Language:
English (US)

Manual Version Identifier:
IL6/PORT2/PORTRXv721

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HAVE QUESTIONS?
WE ARE HERE TO HELP INLIGHTEN YOU!

inlighttherapyinc.com
inlighttherapyinc.com/faqs
support@inlighttherapyinc.com

Legally marketed as a Class II Medical Device under FDA indications for use to temporarily relieve minor pain, stiffness and muscle spasms; and to temporarily increase local blood circulation.