

# AdiStem AdiLight-2

PhotoActivation Device For Laboratory Use



## **User Manual**

www.adistem.com

The AdiLight-2 device shines one or more specific wavelengths of yellow, red and/or green LED light on cells in culture. This is research work performed in a laboratory. PhotoActivation increases cell proliferation. After PhotoActivation, treated cells are transferred to other equipment.

### About AdiLyfe

AdiLyfe Pty. Ltd. is a biotechnology company which discovers, develops and provides to doctors, PhotoActivation and related products that address orthopedic and regenerative clinical applications.

AdiLyfe Pty. Ltd. owns proprietary technologies and supplies Doctors, Clinics and Medical Distributors worldwide. Some Distributors also provide training to doctors and clinicians strictly in conformance with AdiStem protocols established under formal clinical trials and evidence based research.

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# AdiLight-2 USER MANUAL

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#### 1. INTENDED USE AND CONTENTS OF YOUR ADILIGHT-2 DEVICE



Congratulations on the purchase of your AdiLight-2 Device.

We highly recommend you read this Manual thoroughly before starting to use your AdiLight-2 unit.

Whilst this device had been designed and engineered to ensure long, trouble-free and safe use -- care and attention on the part of the user are needed to help ensure maximum life.

#### 2. PRECAUTIONS AND SAFETY

#### DO NOT:

- Immerse the AdiLight-2 device in water.
- · Wash the unit down with water.
- Use on a wet surface.
- Use a wet cloth to wipe down the unit.
- Apply any cleaning solutions or solvents to the unit.
- · Spill liquids in the light chamber.
- Attempt to move the unit whilst in use.
- Attempt to open the unit.
- Modify or attempt to modify the unit in any way. Any modification or attempt at modification will result in the warranty becoming void.
- Allow untrained or non-certified operators to use the device.
- Allow use by unauthorised persons or the public.
- Put any items, apart from the syringe and contents to be activated, in the light chamber.
- Position the unit in such a way that the vents or fan exhaust is covered.
- Attempt to reset the timer whilst the unit is operating.
- Use any other main lead or power adaptor than what is supplied.
- · Use harsh abrasives to clean the unit.

#### 3. COMPLIANCE TO INTERNATIONAL STANDARDS

- Unit is manufactured in an ISO accredited facility; and accredited to:
  - o ISO 13485:2003
  - o ISO 9001:2008
  - o ISO 14001:2004
- For Users Outside of the U.S.:
  - o ROHS compliant
  - o CE registered with EU Harmonized Standards; EN 61010-1:2010 (LVD) and EN 61326-1:2006 (EMC)
  - o TGA registered. ARTG 196875
  - o CB Certification in accordance with EN/IEC 61010-1:2010.
- For Users in the U.S.:
  - o ETL/cETL Certification in accordance with UL61010-1 and CSA C22.2 No. 61010-1.

#### 4. FEATURES AND CONTROL



Your unit has the following features and controls:

- Countdown LCD Timer
- On-Off Button
- Built-in Fan and Thermostat
- Internal Light Chamber
- Start Button
- Intermediate Buzzer sounds 3 minutes from the end of the process
- Buzzer sounds at the end of the process.
- Power saving mode: touching the Timer up/down Button returns the unit to full power mode.

#### 5. HOW TO OPERATE YOUR UNIT

- Place on a flat, dry workstation, taking care not to block any of the unit's air-vents or the exhaust fan.
- Connect the Power-Switch mode adaptor to the AdiLight-2 unit.
- Connect the mains cord to the adaptor.
- Connect the mains end of the power cord to the wall socket and turn on.
- Turn on the Power On Switch (red light around the switch will glow).
- Place the Filled Syringe into the Light Chamber.
- Set the Timer to required No. of minutes. (10mins PRP)
- Press the Start Button and wait for the procedure to be completed.
- To commence another cycle, place a new filled syringe in the Light Chamber, set the Timer and then press the Start Button.
- To completely disconnect the power input, unplug the equipment from the power outlet.

#### 6. CARE AND MAINTENANCE

- The AdiLight-2 unit contains very few user serviceable parts, so maintenance is restricted to cleaning of the unit.
- · Wipe the unit with a soft dry cloth daily after use.
- Keep the unit and its adaptor in a cold, dry and non-hostile environment.
- In the unlikely case that the unit does not turn on, check the
  connections of the unit to the adaptor and the adaptor to the wall
  socket. Check the wall socket is switched on (in applicable
  countries) and the light indicator on the adaptor is on. Make sure
  the Power Button on the AdiLight-2 unit is turned to the ON
  position.
- The wall plug contains the fuse. If this needs replacing ensure only the fuse rating stated on the base of the wall plug is fitted.
- If this does not rectify the problem, please contact your local AdiLyfe Distributor.
- The main plug of the unit should be easily accessible during intended use.
- Do not, under any circumstances, try to open the unit.
- Do not use adaptors/power supply units other than what is provided with your AdiLight-2.
- During Regular PMS, visually verify that all LEDs in the test tube holder are lit.
- If the equipment is used in a manner not specified in this manual, the protection provided by the equipment may be impaired.

#### 7. TECHNICAL SPECIFICATIONS

- Microcontroller controlled
- 0.8 inch, 4-digit 7-segment display, green color
- 3 push buttons: Increment, Decrement, Start
  - Increment and Decrement timer duration by 1 minute.
  - The Start button initiates the countdown and turns on the LEDs at the syringe holder.
  - Timer is adjustable from 1 minute to 20 minutes.
  - Temperature controlled internal Exhaust Fan.
- Turns on automatically at 33°C when not in power save mode.
- Turns off automatically at 28°C when not in power save mode.
- Turns off when power save mode activates.
  - Power save mode after 5 minutes of in-activity.
  - When the power save mode activates, the fan is turned off -- if it is on.
  - The 7-segment display is cleared but a slow blinking colon (:) is displayed to indicate that it is in Power save mode.
  - Pressing any key will cancel the power save mode.
     Display reverts back to previous duration. If the temperature reading inside the casing is 33C or more, the exhaust fan will turn on automatically.

#### Buzzer

- Beeps for 5 seconds when there is 3 minutes left on the Timer.
- Beeps continuously for 5 seconds after the Timer reaches 00:00.
- Internal Syringe holder
  - Integrated LED lights: 10 Red, 10 Yellow, 10 Green
- Regulatory Approvals
  - o TGA o RoHS
  - o CE o CB Scheme
  - o ETL/cETL
- Environmental
  - Operating Temperature: 5°C to 40°C (41°F to 104°F).
  - Storage Temperature: -25°C to 70°C (-13°F to 158°F).
  - Humidity Range: 5% to max. 80% non-condensing.
  - Pollution degree 2.
  - Use at altitude below 2000m.
  - For indoor use.

#### 8. WARRANTY

The AdiLight-2 unit is covered by a full parts and labour warranty for 24 months. This limited Warranty only covers normal use and does not cover damage caused by misuse or dropping the unit. Furthermore, the Warranty does not cover acts of God, such as fires, floods, lightning, earthquakes and other disasters. If the unit is modified or attempted to be modified, opened or serviced by anyone other than the service facilities authorised by AdiLyfe, or has the serial number removed, tampered with or altered, the Warranty is void. For more information about this Warranty, or information if you should need to make a Warranty claim, please contact your AdiLyfe Distributor. Prior to the return of any unit, please contact your AdiLyfe Distributor for a Warranty Claim and/or return number.

#### **Limitation of Liability**

- To the fullest extent permitted by law, AdiLyfe expressly excludes all conditions, warranties and liability, whether imposed or implied by statute or by rule of law or otherwise, which are not expressly set out in this Warranty and the user's sole recourse for any defect of, damage to, or performance standard of the Product will be under the express Warranties provided here.
- 2. AdiLyfe's total liability and the users' exclusive remedy for any and all claims, losses or damages arising out of any cause whatsoever in connection with the sale or supply of the product, its design, suitability for use or operation, whether based in contract, breach of warranty of merchantability, fitness for a particular purpose or otherwise, express or implied, in fact or by law, strict liability, negligence or other tort, or otherwise, is expressly limited to replacement of the non-conforming product or payment reimbursement in an amount not to exceed the purchase price of the non-conforming product, plus transportation charges. In no event shall AdiLyfe be liable for any special, indirect, incidental or consequential losses or damages, including without limitation, any liability to indemnify the purchaser in respect of any claim by a third party, lost profit, downtime, operating or maintenance costs, equipment damage or product spoilage even if AdiLyfe has been advised of the possibility of such potential loss or damage.
- 3. Any minor damages (such as scratches, spots, pressure marks) shall not entitle the user to any Warranty claim. Commercial tolerances with respect to dimensions, finish, colour, weight etc. of products and all other articles manufactured by AdiLyfe, or minor variations from the data stated in AdiLyfe's printed documents and descriptive literature shall neither entitle the user to any Warranty claim nor to a rejection of the products delivered.

For more information, go to our website: www.adistem.com