BIOSMART®

DC Infrared Blanket

- Penetrating, therapeutic infrared heat
- Temperature sensing technology
- Low voltage DC current
- No electromagnetic radiation
- Safe for Infants, Pregnant women and the Elderly
- Wireless remote controlled. No controller wires to trip over
- Universal power options
- Washable
- 5 year limited warranty

User Manual

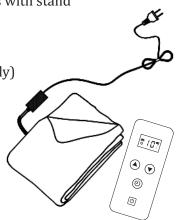
Getting Started

Please take the time to review this user manual. Become familiar with the functions of the remotes(s) and the meanings of the symbols and numbers that appear on the screen (*See "Using the Remote Control"* on page 10). You will enjoy your blanket more if you understand the functions and operation of your remote.

- Be sure to read the "Usage Precautions" guidelines (*Pages* 5-7) before use.
- Make sure you have a warranty certification/ registration ID on the back page of this manual. If not, contact your dealer.
- Save your sales receipt or order confirmation.

Packing List

- One (1) BioSmart Infrared Blanket
- One or two (1-2) remote controls with stand
 - Throw/Full 1 Remote
 - Queen/King 2 Remotes
- One (1) control box (power supply)
- This instruction manual
- Warranty registration ID



DC Infrared Blanket User Manual

Table of Contents

Getting Startedii
Overview2
Definition of Symbols5
Usage Precautions5
Hazards to Avoid5
Blanket Safety Features8
Setting-up your Blanket9
Operating your Blanket10
Remote Control Layout10
Using the Remote Control
Matching the remote12
Care and Storage13
Care Instructions13
Washing & Drying Instructions
<i>Storage</i>
Trouble Shooting Guide14
Error Codes14
Problems and Solutions14
Specifications16
Warranty and Replacement Parts17
For Warranty Returns17
For Service and Parts17
5 Year Limited Warranty 18
Remote Quick Reference20

Overview

Thank you for purchasing a BioSmart "Far Infrared Blanket" Not all warming blankets are created equal and we would like to take a minute to explain to you some of the unique advantages that this BioSmart Far Infrared blanket has to offer.

BioSmart Technology

The BioSmart electric blanket is a "Far Infrared Blanket". It generates infrared waves that may not feel warm to the touch by some users. Unlike AC electric blankets that generate random wavelengths of radiant heat (which feel hot to the touch), the BioSmart infrared blanket is designed to generate internal body heat to compensate and supplement the body's own production of far infrared energy. This promotes a deeper more restful sleep pattern.

Dozens of studies show that supplemental Far Infrared waves increase efficiency of the body's own metabolic processes, allowing the body to regenerate and repair itself.

The healthiest infrared wavelengths are those generated in the 6-12 micron range. Though the blanket may feel only mildly warm, the energy that this blanket produces is converted to heat inside the body to support its own metabolic processes. This life-sustaining energy is the same energy emitted by the sun that warms the earth and every creature on it.

This patented technology was developed to overcome the misgivings and environmental hazards associated with conventional electric blankets and mattress pads. The BioSmart infrared blanket is both safe and economical to use, saving as much as 50% in energy costs over conventional electric blankets.

So go ahead and turn your thermostat down and enjoy the best night's sleep you can get under a BioSmart Infrared Blanket.

Why you need a supplemental infrared blanket during sleep

Did you know that when the weather turns cold and the temperature in your bedroom is lower, your body has to increase its own production of far infrared waves during sleep to maintain your metabolic processes. As you drift off to sleep, though, your internal body temperature drops off, sometimes by as much as four (4) degrees (especially as you get older)! In order to maintain optimum health, medical studies show that maintaining optimum body temperature during the sleep cycle substantially enhances the quality of your sleep. That is why we recommend supplementing and enhancing your body's own natural far infrared energy with a BioSmart Far Infrared Blanket.

The beneficial effects of sleeping under a BioSmart infrared blanket are numerous and should be experienced by everyone. Far infrared waves in the 6-12 micron range are therapeutic. The Infrared wavelengths produced by the BioSmart blanket enhance the body's own metabolic processes during your sleep cycle. While the blanket may appear cooler to the touch, the infrared waves that it produces are absorbed quickly by the body thereby maintaining your metabolic processes at optimum levels during sleep. The BioSmart Infrared Blanket is perfectly safe, its compatible with your body's own metabolism, and it's the closest thing to nature for getting a good night's sleep.

Special Features

Your BioSmart blanket is equipped with the latest temperature control technology. This system monitors your blankets functions and your own body's heat production. The system provides you with information regarding the blankets complete operations on a digital "easy to read" screen that offers you complete fingertip control over your preferences with only a 1-2 key-strokes.

The BioSmart infrared blanket also features a patented remote control that eliminates the bulky electrical wires running from the blanket to the night stand. This also eliminates potential tripping hazards in the dark or in the middle of the night.

The digital remote features 10 comfort settings and a timer for precise blanket operation. The well-lit display screen allows for easy viewing and changes can be made in the dark with the push of a single button. Unlike other electric blankets, the DC wiring configuration in the BioSmart blanket is virtually undetectable. "You can't feel a thing" – which is as it should be. That makes the blanket ideal for year round comfort with or without the supplemental power supply.

Some people prefer more blanket weight for comfort and this can be accomplished by adding an additional blanket or duvet on top of your infrared blanket and then reducing the comfort setting on the infrared blanket to match the thermal properties of the infrared blanked plus the additional covers. The blanket will monitor the total temperature and adjust to maintain your comfort setting by taking into consideration the additional insulation you have placed over the top of the blanket. What is most incredible about the blanket is the fact that even in the coldest weather, you will find that you don't need to pile on extra blankets to capture the warmth generated from your BioSmart Blanket. The blanket is composed of multiple layers of proprietary patented materials that retain the far infrared waves generated by the blanket, which in turn penetrate the human body by as much as 6 inches.

Your Good Health is important.

It is a well-known fact that conventional AC current electric blankets create harmful electromagnetic waves and interfere with your body's own electrical fields. According to the FDA, the EPA, and the World Heath Organization (WHO), conventional AC electric blankets pose potential health hazards, and safety issues. On the other hand, the BioSmart infrared blanket operates on pulsed DC current which does not produce harmful electromagnetic fields while you sleep. Most importantly, the BioSmart infrared blanket does not interfere with brain wave functions during Theta or Delta sleep cycle.

Your body will only absorb infrared wavelengths in the 6-15 micron range. Conventional electric blankets feel noticeably hot to the touch and become uncomfortable very quickly. That is because shorter wavelengths of infrared are not easily absorbed by the body, therefore the body resists absorption of the heat. Infrared waves in far infrared wavelengths of 6-12 microns do not produce these uncomfortable sensations. That is why some people refuse to sleep under a conventional electric blanket.

Warmest regards,

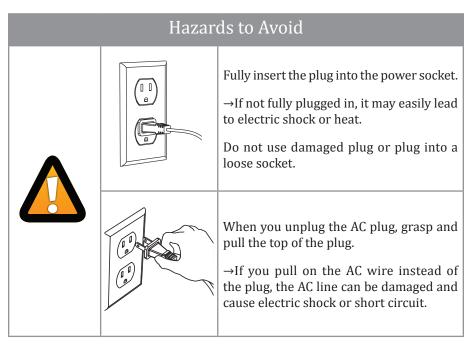
BioSmart Technologies Team

We hope you will enjoy the comfort and therapeutic advantages of using a BioSmart DC Infrared blanket. You can feel the difference. One night's sleep will convince you that your purchase of this amazing technology was a wise investment. Know that you are saving money as well while you sleep under the most comfortable therapeutic blanket that "BioSmart Technology" hast to offer.

Definition of Symbols		
Symbol	Description	
Λ	Caution	
	Failure to follow these steps may lead to fire or personal injury.	
\bigcirc	Prohibited	

Usage Precautions

For personal and property safety, please follow the precautions outlined in this section. Depending on the usage error, the respective consequences may result.



Hazards to Avoid		
		Do not use wet hands to plug or unplug the AC power plug. →This may easily induce an electric shock.
\mathbf{O}		Do use a damaged power cord or plug . For repair, contact the BioSmart service department.
		The remote control is not water proof. Avoid liquid spills as they may damage the remote or power supply.
		Do not dismantle any of the blanket components, including the remote, plugs, or control box. •For repair, contact the relevant sales personnel.
		Do not use the blanket as an ironing board. →This is because the iron is too hot and can damage the blanket's internal components.

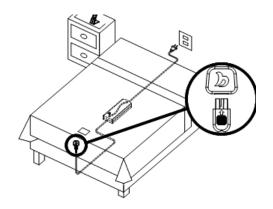
Hazards to Avoid		
		Do not use a top loading washer with a ringer type agitator. →This may damage the blanket's internal components.
		Do not put the control box in your bed. Place the control box in a well ventilated area under your bed
		Do not operate the blanket while folded.
		Do not allow toddlers to jump on top of the blanket. →This may damage the blanket's internal components.

Blanket Safety Features

- This BioSmart Infrared blanket with LCD screen utilizes a "smart-set"[™]comfort controller. It transfers soothing far-infrared heat to the body utilizing a patented pulse-control system providing low-voltage DC current to the blanket in accurate incremental levels of heat.
- The "smart-set"[™] constant temperature control provides 10 incremental levels of heat to obtain the perfect temperature desired by the user.
- The "smart-set"[™] controller allows the user to automatically shut off the blanket at any time between 1 to 16 hours. No need to worry about forgetting to turn the controller off.
- The use of the low voltage DC power supply ensures both the users safety and the health benefits to be derived from the infrared blanket without electromagnetic low frequency emissions as with ordinary 120 volt electric blankets.
- The universal AC-DC power converter allows you to use your electric blanket anywhere in the world with only an adapter plug. Take it everywhere you go.
- The blanket is composed of layers of special anti-static cotton and synthetic materials that are designed to safely transfer therapeutic infrared heat to the body.
- The special coated wiring in the blanket is virtually undetectable making it feel just like a conventional blanket.
- The blanket is washable or it can be soaked in fine fabric soap and drip dried. (See washing instructions for cleaning options).

Setting-up your Blanket

If your blanket is being purchased to place on the bed, it is recommended that you place the control box (power supply) and the power cord under the bead to avoid accidental tripping during the night. The power cord is long enough to route it to the wall outlet that your bed headboard is located against. The remote controls are placed on either night stand for convenient operation. They will not interfere with each other regardless of whether or not they are situated on the same night stand or on separate night-stands. For single remotes, use whatever side of the bed is most convenient for you. Some beds contain a head-board shelf that you can place your remote control(s) on.

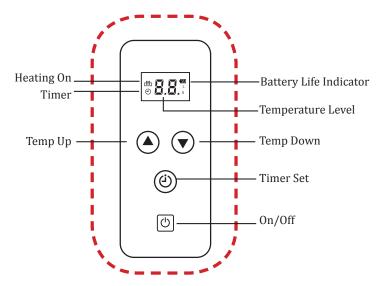


Place the infrared blanket on the bed, with the connector and its label facing up at the foot of the bed. The size of the infrared blanket is designed to make sure that the connector is hanging over the side of the bed to avoid contact with the human body.

Some people prefer more blanket weight for comfort and this can be accomplished by adding an additional blanket or duvet on top of your infrared blanket and then reducing the comfort setting on the infrared blanket to match the thermal properties of the infrared blanked plus the additional covers. The blanket will monitor the total temperature and adjust to maintain your comfort setting by taking into consideration the additional insulation you have placed over the top of the blanket.

Operating your Blanket

Remote Control Layout



Using the Remote Control

Insert the DC plug into the connector on the electric blanket. Connect the AC power plug. The LED indicator on controller box will light up.	
When the remote "On/Off" button is pressed once, the screen will indicate level 10 as default and start heating. When the controller "On/Off" button is pressed twice, the screen will show "". The default timer will be set to 16 hours. See timer instructions. The remote's screen will go into power saving mode after 15 seconds of no interaction. Press any key to display your settings again.	

Customer/Warranty Service: 800-596-9605 - 10 -

Using the Remote Control Depending on individual need, the temperature ranges from level 1-10. The LCD screen will show •05 "01" as level one, "02" as level two, and so on up to the highest level 10, along with a heat icon flash. Press "▲" once to increase heat level by one. ٨ Press " $\mathbf{\nabla}$ " once to decrease heat level by one. Each time the press is effective, the controller box \bigcirc will beep once and the indicator will flash once. Timer setting: Press timer setting button A) When press the first time, the LCD will display the initial time 16 hours. ≞ **; 2**¶ B) Then by pressing the timer setting button each time, you can decrease duration by one hour. The initial usage duration is 16 hours.0 hour means timer setting has been turned off and the time iron é will be off. During the time setting operation, the LCD will display 16-00, which means 16-0 hours, \bigcirc along with a time icon flash. Each time the press is effective, the controller box will beep once and the indicator will flash once.

When any button is pressed, the LCD screen will light up indicating the current status of the blanket. If the infrared heating symbol does not appear on the LCD screen, it means that the blanket is off. Set the new heat duration time and press the "On/Off" button to activate the blanket. The heat icon will reappear.

If heating duration is set, the electric blanket will shut off automatically after the duration has been reached. If the duration is not set, the blanket is in stand-by mode and the heat will not come on. To turn the blanket off prior to the end of the duration time, simply push the "On/Off" button.

Matching the remote

Your remote control comes pre-programed to match the control box. This matching protocol does not need to be performed. However, in the event that you lose one of your controls (and we send you a new one) or a malfunction occurs in the signal between the remote and the control box, it will be necessary to restore (re-match) the original settings. This can be done very easily by following the protocol outlined below.

Single remote control:

- 1. Turn off all other appliances and electric blankets that could interfere with the matching transmission from the remote control.
- 2. Connect the power supply to the blanket and plug the power supply into the wall outlet.
- 3. Press the Temperature "up" button and the power button at the same time and hold for 20 seconds. The power supply box will make a beeping sound (7 beeps).
- 4. Once the beeping has stopped, release the two buttons. The remote control should now be matched to the power supply .

To match dual controls:

- 5. Match the first remote. To match the 1st remote, follow steps 1-3 for single remotes.
- 6. The controller will beep only once and "ID" will appear on the 1st remote display.
- 7. Next, follow the same steps 1-3 for the 2nd remote.
- 8. ID will appear on the 2nd remote display and the power supply will beep 7 times.
- 9. Matching sequence is now completed. Both remotes should respond with the power supply by beeping each time a change in the settings is made.



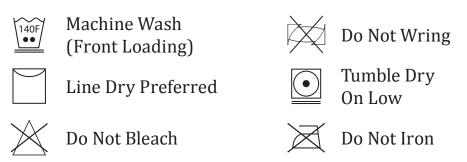


Care and Storage

Care Instructions

Your infrared blanket will require fewer washings and special handling if you place it in a duvet cover or place a day-cover or bedspread over the top of your blanket. Normally, no other covers are required at night unless the room temperature falls below 60 degrees.

Washing & Drying Instructions



Warm water only - soak for 10 minutes in mild detergent. Spin on normal speed. Rinse with cool water. Spin on normal speed.

Use a mild liquid laundry detergent such as one used for soaking synthetics and delicates.

Line dry or automatic dryer on low.

Caution: Do not use a spindle agitator to wash, only to spin dry. Do not dry clean.

Storage

When storing the blanket, fold it and place it into the large plastic bag that it came in or other protective air-tight bag in order to avoid mold and mildew. It is advisable to wash the blanket prior to storing it.

Many people use the blanket all year. So, you may prefer to just unplug the blanket and leave it on the bed year round.

Trouble Shooting Guide

Error Codes		
ξ;	 "E1" appears for several reasons: The wireless connection between the remote and control box can't be established. The plug between the control box and the blanket is loose. The plug from the control box to the AC outlet is disconnected. 	
EZ	If "E2" appears on the display screen, it means that the blanket temperature is too high. Check to see if the blanket has excessive folds and smooth out the blanket if necessary. The blanket will reset automatically.	
E3	Excessive radio frequency (RF) interference. Remote needs to be re-matched to the control box. (See "Matching the remote" on page 12).	
	The battery meter reflects the remaining life of the battery. If the battery meter starts to flash, it indicates a low battery. Replace the batteries with a new ones. Use only Alkaline batteries.	

Problems and Solutions		
Problem	Solution	
The Remote indicates that the battery is low.	Remove the battery holder at the base of the remote and replace the battery. Use only an alkaline battery replacement.	
Control box seems hot	This is normal. The outside temperature of the control box is generally very warm to the touch. It reaches its peak operating efficiency when fully warmed up at about 50 °C.	

Problems and Solutions		
Problem	Solution	
The remote 'error code" does not go away	Call customer support. You may have a component problem.	
The control box red light continues to flash.	This indicates a lack of communication between the control box and the remote. Try the re-matching procedure between the remote and the control box. If this doesn't correct the problem, call customer support. You may have a component problem.	
Control box or remote was exposed to water and is not responding	Call customer support. You may have a component problem.	
The controls seem to be working properly but the blanket does not get warm.	Check the control box to make sure that the red light is on and not flashing. If the light is not on, check the plug to the AC outlet. If the red light is flashing, try to re-match the remote. If this fails to solve the problem, call customer support. You may have a component problem.	
Excessive Lint, pet hair, etc on the blanket	Use a good lint brush or roller to remove lint, hair and dirt	
Minor spills and Stains	Unplug the blanket. Water soluble spills can be gently wiped with dish soap or other soap for delicate fabrics and allowed to dry thoroughly before using the blanket.	
Visible damage to the remote, the control box, the blanket, or the cord.	Call customer support for replacement parts.	
Lost or damaged remote or remote stand.	Call customer support for replacement parts.	

Specifications

General Information:

Size	Material	Measurements
Throw	Micro Fleece	180*130cm
Full	Micro Fleece	210*190cm
Queen	Micro Fleece	220*220cm
King	Micro Fleece	220*250cm

Power Supply - Model No: LEBS1521A - For Single Remote

- Input: 100-240 Volts AC, 50/60 Hz, 2.5 Amps
- Output: 23.8 Volts DC, 3.5 Amps
- Lic./No.: CY1525
- C-TUV-US Listed

Power Supply - Model No: LEBD2222A - For Double Remote

- Input: 100-240 Volts AC, 50/60 Hz, 2.5 Amps
- Output: 16.5 Volts DC, 6 Amps
- Lic./No.: CY1525
- C-TUV-US Listed

Blanket

- Exterior Material: Synthetic, 100% polyester, knitted, ribbed micro-fleece
- Other Materials: Synthetic polyester batting, Cotton liner for sizing double layer
- DC Wire material: Copper Core/ UL approved insulator

Digital Remote

- Input Voltage: 3 Volt DC
- Display: LCD, back-lit
- Control: Impulse Type
- Operating range: 98 to 118 degrees Fahrenheit
- Settings: 10 comfort settings, two (2) degree Fahrenheit increments
- Run time: adjustable 1-16 hours, U.S. Models only

Performance

- Temperature rise over time starting from 60 degrees Fahrenheit:
 - 3 degrees/minute to 100 degrees
 - 2 degrees/minute to 118 degrees



Warranty and Replacement Parts

For Warranty Returns

A "Return Merchandise Authorization" (RMA) is required for all merchandise and blanket returns.

To obtain an "RMA" for a BioSmart product, go to the website for further instructions and we will email your authorization number to you, or, you can call customer service at the phone number listed at the bottom of each page of this manual.

For Service and Parts

Go to "BioSmartSolutions.com" to purchase parts and accessories directly for your BioSmart Infrared Blanket. You can also email special requests or questions. We answer all emails promptly in the order received with an appropriate response by email or a call-back at a time that is convenient.

5 Year Limited Warranty

The BioSmart Infrared blanket is manufactured to the highest standards in order to insure its dependability. The blanket can be damaged, however, due to unforeseen events, accidents, and voluntarily or involuntarily abuse. Therefore, BioSmart offers its exclusive 5 year limited warranty based upon these factors.

BioSmart warrants your infrared blanket to be free of defects in material and workmanship for a period of 5 years subject to the following terms and conditions.

• The blanket must be purchased for residential use, not for resale, from an authorized BioSmart Website or an authorized BioSmart Dealer.

• BioSmart Technologies will repair or replace, free of charge, to the original purchaser, any part that is found defective in material or workmanship during the first year. The first year is defined as the time period based on the date of purchase and the specific product model number. Unless otherwise agreed to by pre-arrangement with your dealer, should a blanket fail for any reason, it may be returned, postage pre-paid by the consumer, to our service center during the first year, with proof of purchase from our Website or an authorized BioSmart Dealer. BioSmart with replace or repair the blanket at its discretion and return the blanket postage paid to the customer.

• During years 2-5, BioSmart Technologies will repair or replace the blanket, for a nominal service fee, to the original purchaser of the blanket. The blanket must be returned to the BioSmart service center, postage pre-paid by the customer. In the event that the BioSmart Service Center determines that the blanket failure was the result of abuse, neglect, or accident, BioSmart offers a one-time exchange privilege to the original consumer. The exchange fee is \$100 for Throws and Full Size blankets. Or, \$150 for Queen and King Size blankets.

• This limited warranty does not cover the replacement of expendable or consumable parts such as batteries or damage caused by neglectful acts. Note: Only high-quality Alkaline Batteries should

be used and replaced on a yearly basis or sooner if warranted to prevent damage to the remote.

• This limited warranty does not apply to any part subjected to abuse, alteration, misuse, or damage caused by an act of God or the use of voltages other than those noted in the owner's manual for this product.

• BioSmart's limited warranty is valid only if you retain your warranty certificate no. and "proof of purchase" for this product from an authorized dealer of BioSmart Technologies. If you purchased this product from any other source, your purchase is "as is", which means that BioSmart grants you no warranty. You must assume the entire risk of quality and performance of the product, including the entire cost of any repairs or servicing of defective parts.

• BioSmart's liability for damages to you for any costs whatsoever arising out of this statement of limited warranty shall be limited to the amount paid for this product at the time of the original purchase, and BioSmart shall not be liable for any direct, indirect, special, punitive, consequential, or incidental damages arising out of the use or inability to use this product.

• Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

• Implied warranties of merchantability and fitness for a particular purpose are expressly denied herein.

• This warranty gives you specific legal rights which vary from state to state.

 Any dispute, controversy, or claim related to this product shall be resolved by final and binding arbitration with a national arbitration and mediation hearing officer in Seattle, Washington. Customer waives the right to participate in a class action. This warranty does not allow for class arbitration even if the national arbitration and mediation procedures or rules would allow. Customer agrees that he or she may bring claims against BioSmart technologies in an individual capacity only and not as a plaintiff or class member in any putative class or representative proceeding.

Remote Quick Reference

The remote has 2 functions

- The comfort level setting
- The time duration setting

Activating the blanket requires that you set both the comfort level and the time duration.

To Activate your blanket:

- 1. Push the "power" button at the bottom of the remote. The screen will display the previous setting for 5 seconds.
- 2. To set the time duration, press the center button with the "clock" icon on it.
- 3. The clock on the screen will flash and the screen will display the longest time duration setting for your particular blanket. This will be 12 hours or 16 hours depending on the model.
- 4. Each time you push the center button it will reduce the time duration by one hour, until you reach "0". It then starts over again. When you reach the desired duration time stop pushing the button and wait 5 seconds. The time duration is now set.
- 5. To set the comfort level, press either of the two top buttons on your remote and the screen will display the existing comfort level setting. Pressing either button a second time will place the remote in calibration mode and the "infrared" icon on the screen will start flashing.
- To change the comfort level, press either of the two top buttons indicating "up" or "down" till you reach your desired setting. There are ten settings (1-10) Low to High.
- 7. When you reach your desired setting wait 5 seconds for the control box to process the information coming from the remote. The remote will then go dark. Your blanket is activated.
- 8. To verify your settings, press the "power" button at the bottom of the remote just once , or, you can press the "time duration" button in the center of the remote, just once. The remote will display your comfort level setting. The icons on your screen should not be flashing, indicating that your blanket is now activated.

Note: Pressing the "Power" button a second time will turn the blanket off. Pressing the "power" button a third time will turn the blanket back on, but you have to reset your time duration again or it will default to the longest duration cycle.

Error Messages

E1 – Control box is disconnected or not plugged in.

E2 – Blanket temperature too high – resets automatically when proper operating temperature is established.

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BioSmart® Far Infrared Blanket Green Technology for a Brighter Future

Warranty Registration No.

BIOSMART® TECHNOLOGIES

18324 Cook Road, Suite 1 Yelm, Washington 98597

BioSmartSolutions.com

Customer/Warranty Service: 800-595-9605

Manufactured exclusively for BioSmart Technologies LLC by LinkPower Electronics Co. LTD, China. UT 4029 (CN)

All patents, tradmarks, marketing, and distribution rights for this product are held by AcePower International Inc, 3F No. 95, ZhengDa 2nd Street, Taipei 11656, Taiwan R.O.C. Tel: 886-2-29379263.

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