





## Thermal Science for Human Health

Heated Mattress Pad for bed is an essential household appliance that has direct influence on the human body as it is in use for 4 months, or 123 days, out of a year for 8 hours a day and It is used for over 5 years at single purchase

CELLION's Heated Mattress Pad for bed is a state of the art product with the most advanced technology applied.

Warm and comfortable night made with CELLION.

- **CELL** a smallest structural unit of an organism

**CELLION premium Heated Mattress Pad brand**  
is a part of SP Care Co.

**CELLION Brand Logo is...**

A cell shaped hexagon and an alphabet C from the brand name, CELLION.

CELLION means to benefit your health with the most advanced heating technology.

means to benefit your health

- **ON(温)** meaning Warm

• • •  
**CELLION, the more you compare**

Take time and consider!

CELLION	Hot Water Mattress Pad	Electric Blanket	Other Electric DC Blanket	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is it really free from electromagnetic radiation?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is it durable? (Does it maintain same performance after a period of time?)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is it easy to care? (Washable and foldable like bed covers?)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is it safe? (sparks, fire, breaking, overheating)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is it affordable? (Electricity cost)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Can it auto control the temperature? (AI temperature control, individual temperature control)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is it usable for all seasons? (Auto control in low temperatures in early mornings)

※ Self-check for other products



## Patent in 41 countries, Electromagnetic safe heating element.

Your detailed and sensitive senses first come to concern harmful electromagnetic radiations. Hence, CELLION inserted only safe heating elements that are granted patents in 41 countries including the USA, Germany, the UK, and Japan.



## Joint research with KAIST, World's first AI temperature control

CELLION is working together with KAIST's Ultra-Precision control technology. Our joint research with KAIST on CELLION Smart Thermal System continues to develop cutting-edge heating technology for the best sleep experience.



## World's first AI controlled temperature

CELLION's AI automatically adjusts temperature of the Mattress Pad accordingly to its surrounding environment. This high-tech heating Mattress Pad tracks the location of the user and react to temperature changes throughout the night.



## High technology ARAMID core

ARAMID is a material often used in bullet-proof armor or fire-resistant fabric as it is 5 times stronger than steel and has fire resistance of up to 500°C. CELLION's heating elements made of ARAMID are semi-permanent due to its durability and fire resistance. They are capable of long hours usage and are safe from fire and wire breakage.

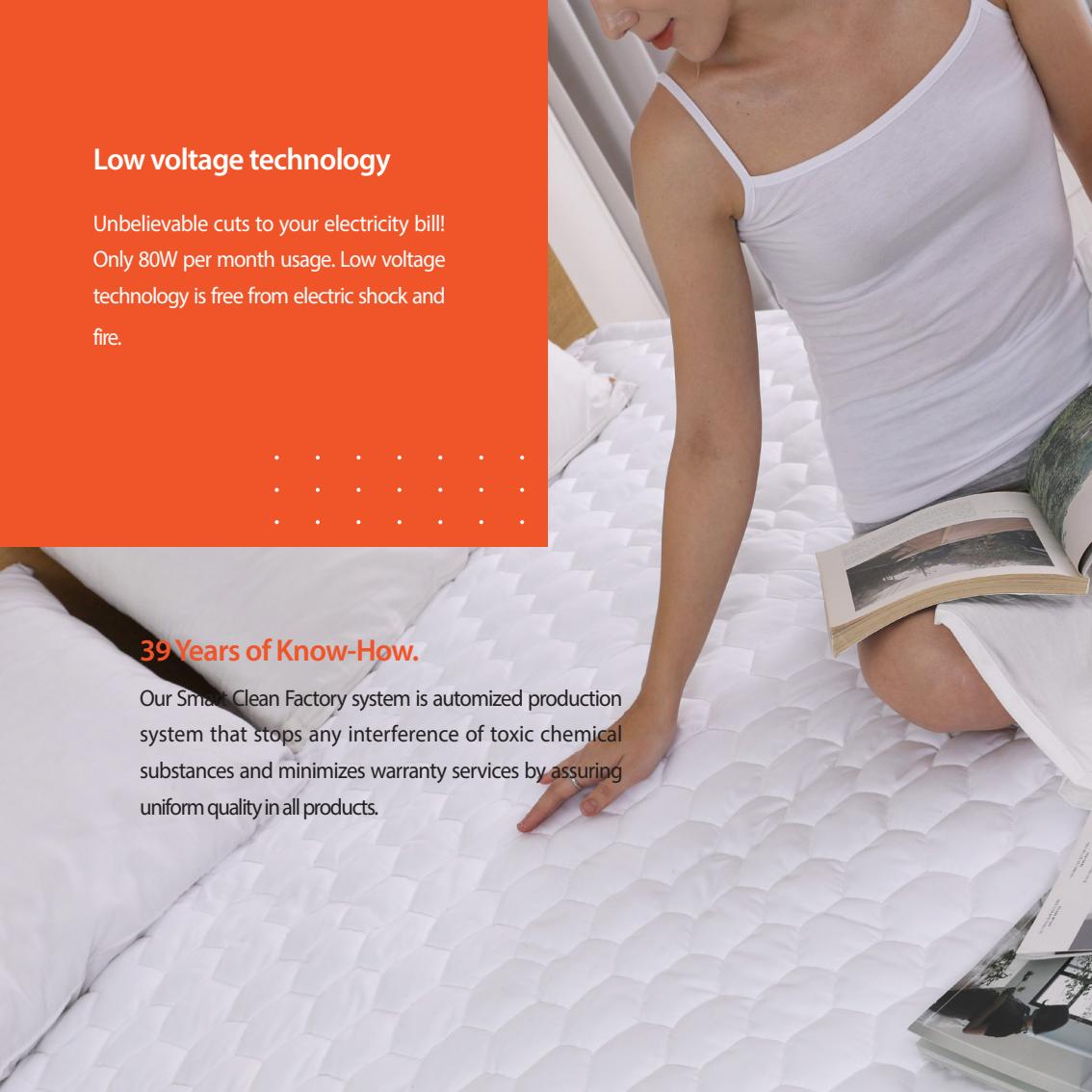
## Low voltage technology

Unbelievable cuts to your electricity bill!  
Only 80W per month usage. Low voltage technology is free from electric shock and fire.



## 39 Years of Know-How.

Our Smart Clean Factory system is automated production system that stops any interference of toxic chemical substances and minimizes warranty services by assuring uniform quality in all products.



## Anywhere in the world with Universal Voltage



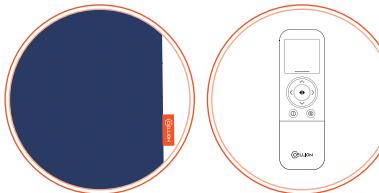
## CELLION on mobile, CELLION Smart App

Our heating Mattress Pad has got some revolutionary technological advances. Experience the new CELLION Smart app that allows you to control everything from the temperature, time, and AI.





## Package Contents : Confirm all parts before disposing of packaging.



Mattress Pad



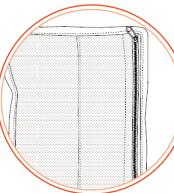
All-in-one  
Controller



Adapter box  
- adapter  
- power cord



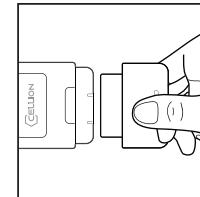
Storing cover for  
Mattress Pad



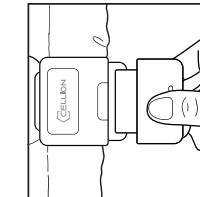
Pouch for Controller



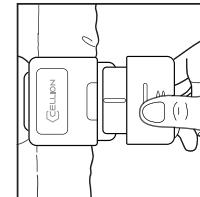
## Setting up Controller and Mattress Pad



Hold the module on  
the Mattress Pad and  
connector of the controller  
cord on each hand.



Connect the module and  
the connector completely  
with correct side up.



Forcing the connector  
on the opposite side may  
result in failure.

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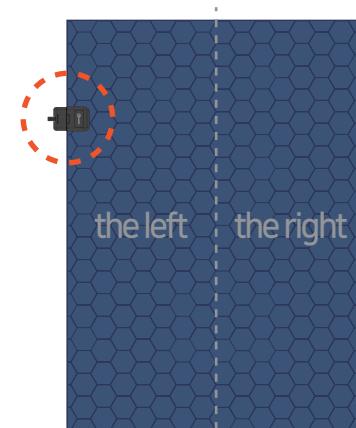
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※ Connector should be on the Left side (Queen size)



## Specifications

	Size(cm)	power consumption	Adapter input
single	100 x 200	80W	24V
Queen	150 x 200	150W	24V



## How to use All-in-One Controller

### Power On/Off

- Press ON/OFF button on the controller more than one second until red indicator light glows.

### Temperature Control

- Press Up / Down buttons to choose desired temperature.
  - △ Increase temperature, ▽ Decrease temperature  
(Level 1 – Level 7 available)

### Time control

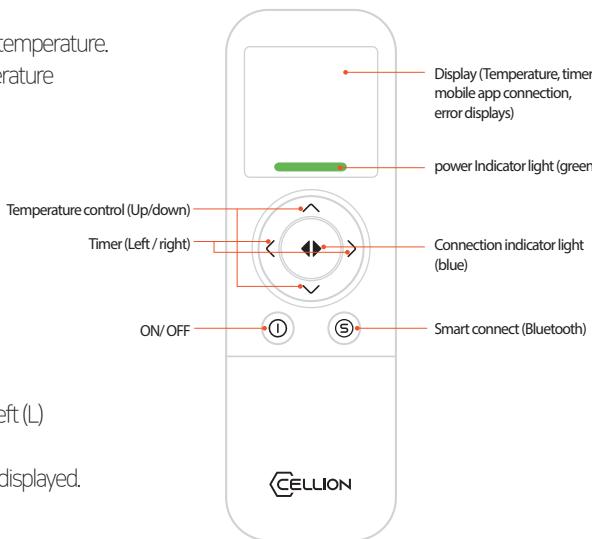
- Press Left / Right buttons to set timer.
  - ◁ Decrease time, ▷ Increase time  
(1 hour to 15 hours available)
  - ※ Remaining timer displayed.

### Left/ Right Separate control (Queen size)

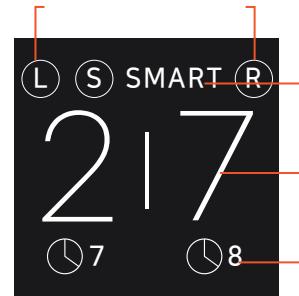
- Press circular button in the center to show Left (L) or Right (R). Numbers will flash twice.  
Control the temperature or timer of the side displayed.
- ※ Single control does not have this feature.

### Smart Connect (Bluetooth)

- Press S button to activate Bluetooth function. Connect with CELLION mobile App on your smartphone.
- ※ Turn to Page 12, 13 for more details and how to use the mobile application.



Left side Mattress Pad for control  
Right side Mattress Pad for control

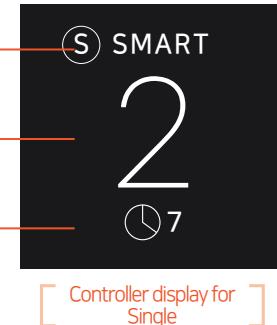


Controller display for Queen

Smart Bluetooth indicator  
Displays S when connected to mobile application.

Heating level  
Set heating level from 0 to 7

Timer  
Set Auto-off from 1 hour to 15 hours.



Controller display for Single

※ Once you set timer, the controller will display remaining time until Auto-off.

If you turn the power off and on, controller will remember and display the last timer you set.

### Turning off CELLION Controller

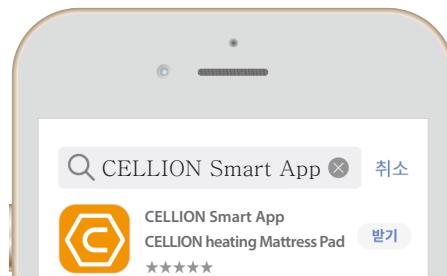
- Press power button on the controller for more than one second until red indicator light turns off.
- When timer sets off (If Queen size, both left and right timers), power will turn off.
- ※ DO NOT DISCONNECT THE POWER ADAPTER OR CONNECTOR FROM THE MODULE. IT MAY RESULT IN FAILURE.



## How to get CELLION Smart App

- For Android - Search 'CELLION Smart app' on Google play For iPhone - Search 'CELLION Smart app' on AppStore

※ Apple iOS version is ready for launching in mid-October



- Heating level tab: Choose heating levels from 0 to 7
- Timer tab : Set timer (Auto-off) from 1 hour to 15 hours
- AI control tab: Turn on AI mode ON / OFF

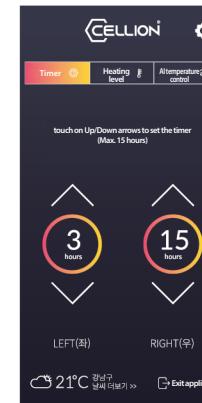
## Disconnecting CELLION Smart App

- Press 'Exit Application' on Smart app
- Disconnect Bluetooth on smartphone
- When controller or Smartphone is turned off
- When Smartphone is set to Airplane mode
- When Smartphone and CELLION heating Mattress Pad is more than 5m apart

※ When disconnected, ⓘ indicator is turned off on the controller display



Heating level tab

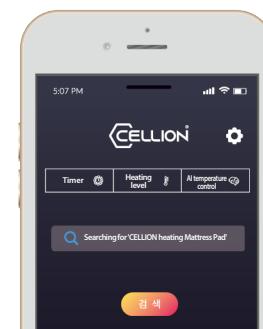


Timer tab

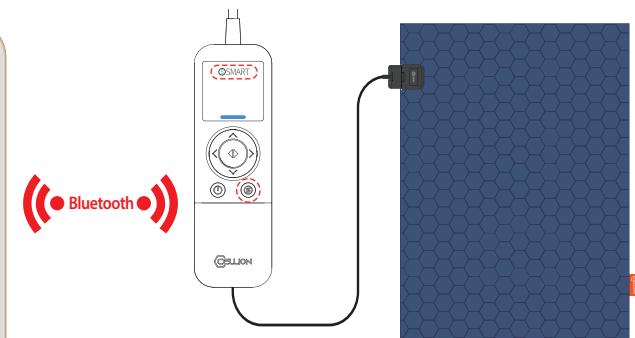


## Initial connection with CELLION Smart app and CELLION heating Mattress Pad

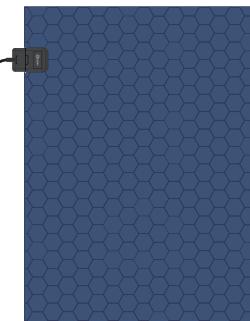
- Turn on the controller
- Turn on Bluetooth on your smartphone and run CELLION Smart app
- Press ⓘ (Smart) button on the controller once. Then, ⓘ on the controller display should be flashing and Bluetooth is ready to connect (2 minutes maximum)
- Select CELLION heating Mattress Pad on CELLION Smart app
- Connection is completed when ⓘ is displayed on the controller and blue indicator light glows.



Application



CELLION Controller



CELLION DC heating Mattress Pad

- After first connection, run the CELLION Smart app for auto-connection while controller is turned on.
- Keep Smartphone Bluetooth on to use CELLION Smart app
- Re-open CELLION Smart app if the application and the controller are disconnected
- CELLION Smart app supports one Smartphone connection per one CELLION Mattress Pad. To connect other heating Mattress Pads, first press 'disconnects' on CELLION Smart app next to already connected Mattress Pad.

※ Connection may be disconnected depending on user environment and device connection. If disconnected, follow the initial connection prompts.

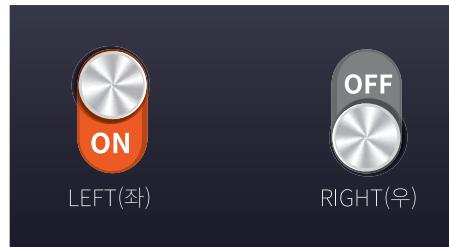


## How to use AI Control

- AI temperature control optimizes the temperature according to weather forecasts and global weather data.
- Connect CELLION Smart app and CELLION Heating mat (NOTE : Page 12,13)



1) Click on AI Control tab on CELLION Smart App



2) Turn ON the AI mode

※ Choose left or right sides on Queen size



- Zero Start is AI Self-turn on feature which is useful for sudden earl morning temperature drops
- Set heating level to '0' on CELLION Smart app
- Turn on AI mode with heating set at Level 0 to automatically adjust heating to Level 1 or 2 in the early morning when outside temperature drops.

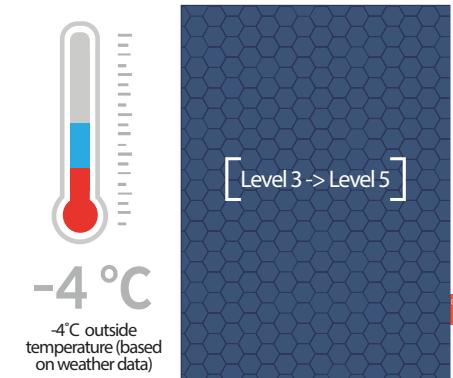
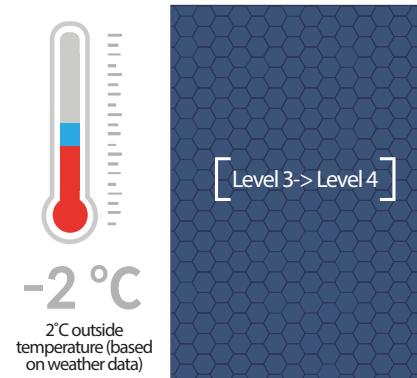
E.g.) Heating level 0 is set on controller with timer on 15 hours. During sleep at 5am, when temperature drops, controller will automatically be set to Level 1 or 2 heating.



## AI Mode

- AI will increase the heating level if outside temperature is lower than the temperature at which AI mode was turned on.
- When the outside temperature increases above the temperature at which AI increased the heating, AI will then reduce the heating.
- Heating is lowered by 1~2 levels with 2~4°C increase in outside temperature from the point AI increased heating.

※ Auto temperature drop is initiated only after AI has increased heating level beforehand.



## CAUTION

※ For safety, AI mode will only be available below heating level 5. (If controller was set at heating level 6 or 7, it will be automatically reduced to level 5 when you turn on the AI mode.)

※ When AI mode is enabled, increasing the heating above Level 5 on the controller of Smart App will turn AI mode off for safety. To use AI mode again, simply enable it on the app.



## Cleaning and Care



### Washing

- Completely remove the controller from CELLION Heating Mattress Pad
- Module attached to the Mattress Pad is washable
- Hand wash is advised (Machine washing has higher risk of damage than hand wash)
- If machine washing, MUST use drum washing machine.
- If machine washing, MUST use front loader washing machine.(Not using laundry net may cause damage)
- Machine wash in warm water, wool cycle. (Use liquid detergent)
- DO NOT use tumble dry (It may cause damage)
- Dry naturally and DO NOT connect the controller until COMPLETELY dry.



### Care and storage

- Mattress Pad can be folded and stored
- Make sure to cool the heating Mattress Pad completely before folding
- Do not place objects on the heating Mattress Pad while in storage to prevent wrinkles
- Remove Controller from the Mattress Pad module
- Store in the covers provided at purchase
- Avoid direct sunlight and store in cool and dry place.
- Store the controller in the pouch and adapter in the provided box.
- DO NOT use the Mattress Pad if damaged or torn by misuse and call the customer care center.
- Contact customer care center for lost controller, malfunction and other product failures.
- Frequently inspect the heating Mattress Pad for any damages or malfunctioning. If there has been a damage or misuse, stop using and return the product.



### Note

- This product is not for medical use.
- DO NOT use this product with any aged person who is heat sensitive or incapable to react to heat



## Important Safety Instructions

- Following safety precautions should always be followed to reduce the risk of injury and/or damage.
- Following safety precautions are identified as below categories according to the level of injury and/or damage, and the degree of urgency if failed to follow.

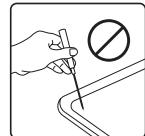
⚠ (CAUTION) risk of light personal injury and/or product damage if instructions are not followed  
🚫 (MUST NOT) risk of serious personal injury or death, if instructions are not followed



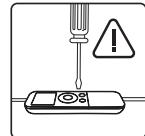
Do not use the Mattress Pad with an infant, child below age of 3, incapacitated person or anyone insensitive to heat.



Anyone with diabetes, high temperature or skin diseases should take caution when using the Mattress Pad.



Do not pinch or cut with sharp objects.



Do not arbitrarily modify, separate, or cut the product.



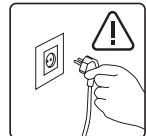
Do not cover the All-in-one controller with the Mattress Pad or bed cover. It may cause fire.



Do not touch power outlets with wet hands. Check if they are dry.



Do not use heated products with the Mattress Pad.



Turn off or unplug the Mattress Pad when not in use.



Do not place flammable material on the Mattress Pad.



Do not place the adapter on heated surface. It has risk of fire from overheating.



Do not use the Mattress Pad while folded.



Do not insert pins.

※ Adapter may feel overly heated as it quickly releases heat on the inside. However, it is safe.

※ DO NOT use the Mattress Pad in conjunction with another electrically heated products. (It has risk of product failure and/or fire from overheating)

※ Do not use the Mattress Pad on latex / memory foam mattress



Safety precautions on low-temperature burn

※ Stop using the Mattress Pad if it feels too hot.

※ To prevent low-temperature burn, low heating levels are recommended in sleep.

Low temperature burn? You may experience low temperature burn from heated material above body temperature for long period of time, which causes erythema and blister. Take caution as you may experience low temperature burn without feeling pain.



## Before getting warranty services

### Controller does not power on.

- CELLION new Heating Mattress Pad automatically turns off after 15 hours for safety.
- Please make sure power cord is securely connected to power outlet.
- Please make sure Mattress Pad module and controller are completely connected.
- Please make sure it is not power outage.

### Controller display is on, but Mattress Pad does not heat up.

- Please make sure Mattress Pad module and controller are completely connected.
- CELLION heating Mattress Pad is designed to use on bed mattresses with bed covers. It may not feel warm enough if used on cold floor or used without bed covers.
- Please make sure it is not power outage.

※ Controller and adapter are designed to increase durability by quickly releasing heat outwards and hence they may feel heated. They have been extensively tested for a number of years and passed strict KC safety certification standards.



### CELLION implemented AI self-check functionality

- Below error codes notify product failures before acquiring warranty services.
  - Error code E1 : Electric wires are broken and heating does not work
  - Error code E2: power turned off as Mattress Pad's actual temperature is higher than desired.
  - Error code E3 : power turned off as Mattress Pad shows higher electricity flow than expected
- Power will be turned off when E2 and E3 errors have been detected and Mattress Pad is functional again when errors are resolved.
  - Turn power off and remove power cord from power outlet. Wait 3 hours and try using the Mattress Pad normally.
  - CELLION heating Mattress Pad is normally functional again when E2 and E3 error codes are deactivated.
  - Please contact our customer care center immediately if E1 error code appears.
  - If E2 and E3 error codes persist, please contact our customer care center immediately.

※ CELLION is heating Mattress Pad for use in bed. For safety reasons, it does not support high temperature heating.

### [ FCC Information to User ]

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



### Customer care center

Should you require any warranty services, please dial our Customer care center(+82-70-1644-3103).

### Warranty services AS

- You can exchange or be compensated based on standard solutions for dispute of a customer of the Fair Trade Commission
- Please contact our customer care center (+82-70-1644-3103) to request warranty services.
- Warranty period is 1 year from date of purchase
- This warranty does not cover any of the following cases even during warranty period:
  - product failure and damage due to negligent use or misuse of the product, disassembling and/or alteration by anyone other than the warranty provider, damage due to natural disaster, use of top loader washing machine, not using laundry net, alteration to fabric due to negligence or excessive washing which did not follow the washing instructions attached to the product.

### Exchange and Return policy

- Exchange and Return for change of mind can be made for unopened product and must be made within 7 days of purchase. (If opened, exchange/return unavailable)
- Exchange and return cannot be made for damage resulting from customer misuse.
- ※ This Warranty is valid within the country
- ※ This product is manufactured under strict quality management and testing.

Sales: SP Care Inc.

Manufacturer: Mattress Pad - SP Care Industry Ltd. / Korea, NEWZIRO Co., Ltd / Korea

### [ Caution ]

THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

### [ IMPORTANT NOTE ]

FCC RF Radiation Exposure Statement  
This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.





## [ CELLION PRODUCT WARRANTY ]

Product Name: Bluetooth Temp Controller

Warranty period : 1 year from date of purchase

Purchase Date:

Product number : marked separately

Customer Name:

Address:

Phone number:

Customer service center +82)07-1644-3103

[www.cellion.net](http://www.cellion.net)