

# ISEA

## Ceiling Type Radiant Heating Panel Instructions for use ( Basic Type, Display Type )

### ISEA Normal Model

BCIR15-435H / 578H / 735H / 866H / 1000H  
BCIR15-450H / 600H / 750H / 900H / 1050H  
BCIR15-450HN / 600HN / 750HN / 900HN / 1050HN  
BCIR15-435HR / 578HR / 735HR / 866HR / 1000HR  
BCIR15-450HR / 600HR / 750HR / 900HR / 1050HR  
BCIR15-450HRN / 600HRN / 750HRN / 900HRN / 1050HRN  
BCIR-450H / 600H / 750H  
BCIR-450HN / 600HN / 750HN  
BCIR-450HR / 600HR / 750HR  
BCIR-450HRN / 600HRN / 750HRN

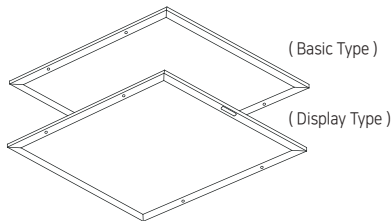
### ISEA Power Model

ENIRM-200 / 500 / 750 / 1000  
ENIRM-200N / 500N / 750N / 1000N  
ENIRM-200R / 500R / 750R / 1000R  
ENIRM-200RN / 500RN / 750RN / 1000RN  
ENIR-200 / 500 / 750 / 1000 / 1250 / 1500  
ENIR-200N / 500N / 750N / 1000N / 1250N / 1500N  
ENIR-200R / 500R / 750R / 1000R / 1250R / 1500R  
ENIR-200RN / 500RN / 750RN / 1000RN / 1250RN / 1500RN

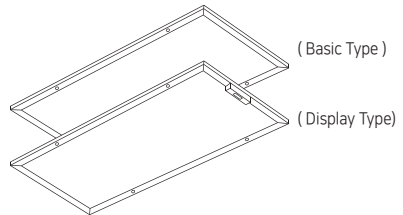


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ISEA Normal Model



ISEA Power Model

The product data and exterior design may be altered without prior notice to the user for enhanced quality.

# Safety Precautions

Do not remodel or tear the product apart.

By doing so, the product may be damaged, which may lead to damage of property.

Do not place flammable and combustible substances near the product.

Burns due to fire accident and damage of property may occur.

Please pay attention that person (including children) with lacking physical, sensory, mental ability or experience and knowledge do not use this product without supervision or direction.

Please avoid especially children from playing with or touching this product.

If power cable is damaged, to avoid dangers, only manufacturer, authorized agent or qualified person must change the switch.

For additional protection to the bathroom electric circuit, it is good to install a residual current device (RCT) which does not exceed the rated residual current of 30mA.

When using a conduit, use of strong conduit (KS certified) or high strength flexible tube after zinc plating is recommended.

Must use certified (KC or KS) verifiable temperature controller.

When using several electricity boards, the maximum power consumption for 1 temperature controller is 3kW.

When connecting power, must connect to power source with earth leakage breaker installed and please connect ground wire. Danger of damage, electric shock, fire.

Please use where not in direct contact with water.

Do not poke or hit the heating panel with a stick or pole, etc.

Please adhere to the installation directions. Do not use on floor as product is ceiling type.

When cleaning product, do not spray water or detergents.

It may lead to discoloration and stains.

When not in use, please unplug the power switch.

Do not touch the heating panel as it is very hot. Danger of burns ( Surface temperature Normal type BCIR15-450H etc. : about 120~130°C / power type ENIRM-200 etc. : about 240~260°C )

This product must be installed by manufacturer, sales agent, or licensed professional.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance.

Cleaning and user maintenance shall not be made by children without supervision.

Children of less than 3 years should be kept away unless continuously supervised.

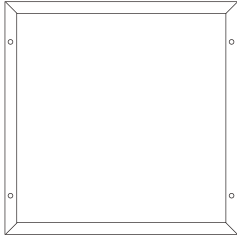
Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.

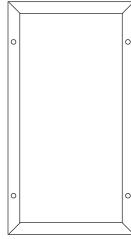
CAUTION — Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.

# Product Configuration ( Basic Type )

- Basic Type ( Normal, Power )



( Normal Basic Type )



( Power Basic Type )



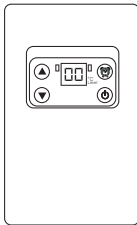
( Tightening Screws )



( Finishing Cap )

- Sold Separately

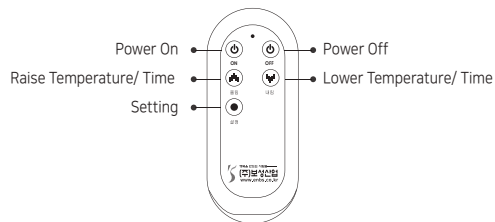
– Temperature Controller + Remote Control



( Temperature Controller )

Power Requirements	AC 220V, 60Hz
Maximum Burden	AC 220V, 18A 4KW
Sensor Data	NTC thermistor(at 25(°C), 5KΩ)
Temperature Setting Range	0~99(°C)
Exterior material	Flame Retardant ABS
Exterior Size (mm)	70(W)*120(H)*28(D)

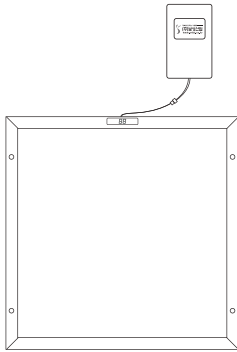
( Temperature Controller Data )



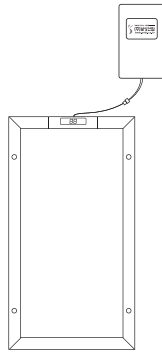
( Remote Controller )

# Product Configuration ( Display Type )

- Digital Display Type ( Normal, Power )



( Normal Display Type )



( Power Display Type )



( Tightening Screws )

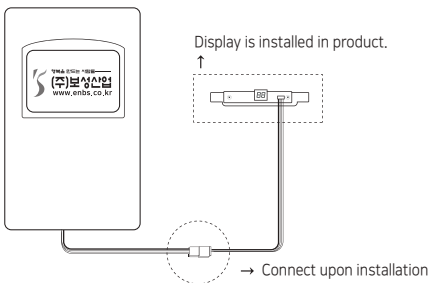


( Finishing Cap )

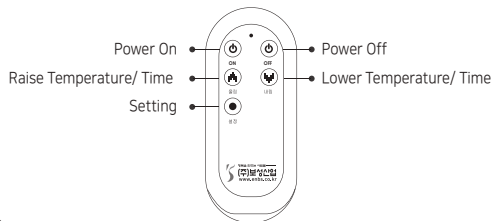
– Temperature Controller + Remote Control

( Display type has temperature controller and remote controller separately packaged.

The product's display signal connector and controller connector must be connected upon installation. )



( Temperature Controller )

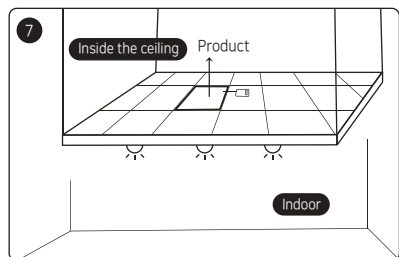
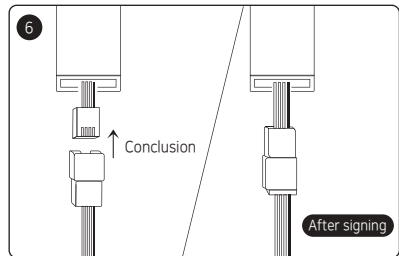
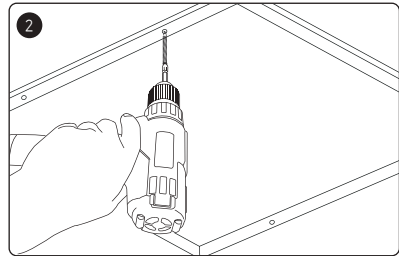
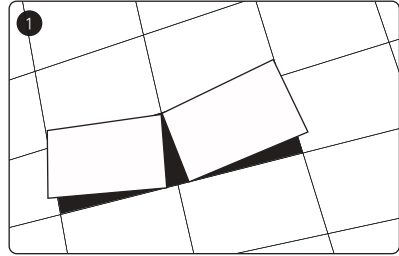


( Remote Controller )

# Installation Procedure

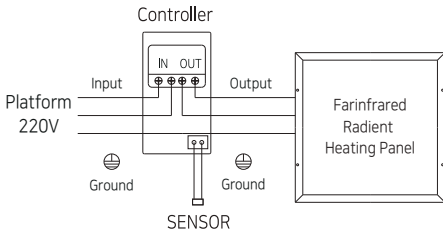
## ● Installation Procedure

- ① Remove 1~2 more ceiling finishing materials than the size heater on position of installation.
- ② Using the screws included, fix onto the M bar or square lumber through the heater's edge frame holes, and apply the finishing caps.
- ③ After confirming that it is stably fixed, install the temperature controller where comfortable and connect the heater and connectors. (Must perform after blocking power)
- ④ Connect the 1st power "IN" to the controller, and the panel side lines "OUT" to the controller. (refer to the temperature controller user method)
- ⑤ After wiring, wire the temperature sensor cable (red line with black ends) included with the temperature controller's "SEN" part and install more than 50cm away from heater. (refer to temperature controller user method)
- ⑥ In case of display type, connect the power cables like basic type and connect the display signal cable.
- ⑦ In case of display type, after connecting the power cable and signal connector cable, place it on the ceiling finishing material next to the product and not on top.
- ⑧ The grounding of the power and product must be connected.
- ⑨ If the ceiling is not appropriate for fixing by screws (plaster board, etc.), reinforce the products edges with silicon

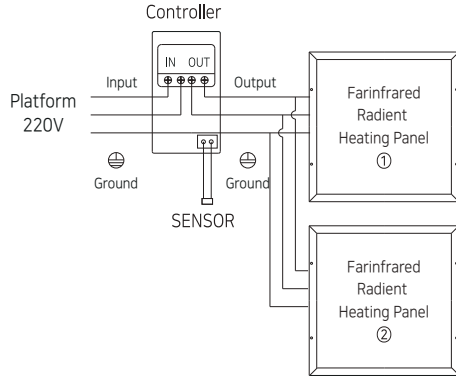


# Circuit Diagram

- Basic Type Circuit Diagram

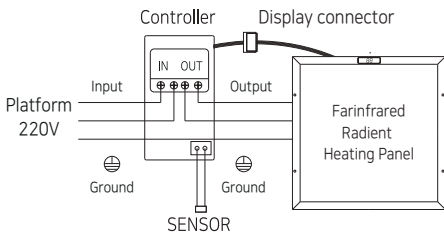


( Installation of 1 product )



( Installation of 2 product )

- Display Type Circuit Diagram



## Method of Use

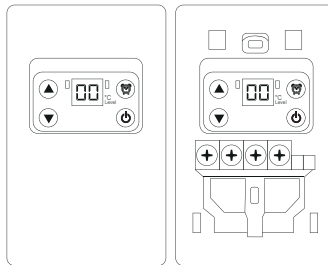
### ● Using the Temperature Controller

1. Display will show the current temperature when power switch is "ON".
2. Set the designated temperature with Raise / Lower buttons.
3. If electricity flows on load Output (red lamp) will display.
4. After achieving the set temperature Output (red lamp) will turn off and automatically maintain the set temperature.
5. Sensor cable may be used by cutting or extending as necessary.
6. The current Temperature Controller is an electric heating dedicated controller with maximum load of 4.0kw/220V.  
( Recommended use within 3.0kw )
7. Temperature setting range is 0°C ~ 60°C.
8. For safety reasons, please install a residual leakage breaker prior to the temperature controller.
9. **Where sensor is not installed or cable is cut or shorted during usage, will automatically divert to internal Timer, operation will be as the Timer periodic chart.**

### ● Timer Periodic Chart ● Detailed drawing of Temperature Controller

Time level	ON time	OFF time
1	18s	162s
2	36s	154s
3	54s	136s
4	72s	108s
5	90s	90s
6	108s	72s
7	136s	54s
8	154s	36s
9	162s	18s
10	180s	6s

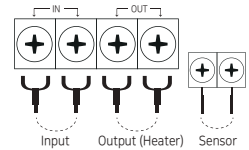
10 level (3 minute cycle)



( Controller Front side ) ( If Controller cover removed )

※ Unscrew the bottom screw and push the cover down to detach the cover

#### Power / Output / Sensor Wiring Method



- INPUT : 110VAC or 220VAC, 18A
- OUTPUT : 110VAC - Max, 2kw  
220VAC - Max, 4kw

### ● Precautions when using the Temperature Controller

- When using the product, keep the appropriate load.
- When wiring the In/Output, use the appropriate terminal.
- The current product is an electric heater dedicated temperature controller device, and negligence may cause fire or accident. Please use with care.
- Manufacturer will not take responsibility for defects or fire caused by negligence use.
- Place the cables connected to the temperature controller and load into the cable protector tube.
- When connecting the temperature controller power cable and output cable, tie them tight.  
( ※ Do not use electric screw driver when tightening. Must use manual screw driver )
- Choose place of usage where rain/ wind/ dust/ humidity is not found, and vibration/ shock-free.  
( ※ Never cover the temperature controller with curtain, blind, blankets, etc. Please use with care as fire may occur if thick blanket, latex, mattress, etc. is used on top of load for long periods. )
- When user is not present, please OFF (disconnect) the circuit breaker ( power cable ).
- If product malfunctions, please inquire installation company for checkup. Please get safety diagnosis from a professional 1 time a year.



# Product Data

- ISEA Normal Type

( 220V Platform ), 60Hz

Product Type	Model Name	Power Consumption (W)	Product Width (mm)	Product Thickness (mm)	Product Height (mm)	Weight (kg)
Basic Type I	BCIR15-450H	450	15	598	598	1.7
	BCIR15-600H	600	15	598	898	2.5
	BCIR15-750H	750	15	598	1198	3.3
	BCIR15-900H	900	15	598	1498	4.1
	BCIR15-1050H	1050	15	598	1798	4.9
Basic Type II	BCIR15-435H	435	15	598	598	1.7
	BCIR15-578H	578	15	598	898	2.5
	BCIR15-735H	735	15	598	1198	3.3
	BCIR15-866H	866	15	598	1498	4.1
	BCIR15-1050H	1050	15	598	1798	4.9
Basic Type III	BCIR-450H	450	15	598	598	1.7
	BCIR-600H	600	15	598	898	2.5
	BCIR-750H	750	15	598	1198	3.3
Display Type I	BCIR15-450HR	450	15	598	598	1.8
	BCIR15-600HR	600	15	598	898	2.6
	BCIR15-750HR	750	15	598	1198	3.4
	BCIR15-900HR	900	15	598	1498	4.2
	BCIR15-1050HR	1050	15	598	1798	5.0
Display Type II	BCIR15-435HR	435	15	598	598	1.8
	BCIR15-578HR	578	15	598	898	2.6
	BCIR15-735HR	735	15	598	1198	3.4
	BCIR15-866HR	866	15	598	1498	4.2
	BCIR15-1050HR	1050	15	598	1798	5.0
Display Type III	BCIR-450HR	450	15	598	598	1.8
	BCIR-600HR	600	15	598	898	2.6
	BCIR-750HR	750	15	598	1198	3.4

# Product Data

## ● ISEA Power Type

( 220V Platform ), 60Hz

Product Type	Model Name	Power Consumption ( W )	Product Width ( mm )	Product Thickness ( mm )	Product Height ( mm )	Weight ( kg )
Basic Type I	ENIRM-200	200	30	298	598	5,1
	ENIRM-500	500	30	298	598	5,1
	ENIRM-750	750	30	298	898	7,6
	ENIRM-1000	1000	30	298	1198	10,1
Basic Type II	ENIR-200	200	30	298	598	5,1
	ENIR-500	500	30	298	598	5,1
	ENIR-750	750	30	298	898	7,6
	ENIR-1000	1000	30	298	1198	10,1
	ENIR-1250	1250	30	298	1498	11,6
	ENIR-1500	1500	30	298	1798	13,1
Display Type I	ENIRM-200R	200	30	298	598	5,1
	ENIRM-500R	500	30	298	598	5,1
	ENIRM-750R	750	30	298	898	7,6
	ENIRM-1000R	1000	30	298	1198	10,1
Display Type II	ENIR-200R	200	30	298	598	5,1
	ENIR-500R	500	30	298	598	5,1
	ENIR-750R	750	30	298	898	7,6
	ENIR-1000R	1000	30	298	1198	10,1
	ENIR-1250R	1250	30	298	1498	11,6
	ENIR-1500R	1500	30	298	1798	13,1

# Maintenance

- ⚠ The product does not require special maintenance.  
( When removing dust, use a soft cloth to wipe. )
- ⚠ When cleaning the product, please cut off the power.
- ⚠ In case of stain, use a wet cloth to wipe.
- ⚠ Do not use abrasive or metallic polish as it may damage the surface painting.
- ⚠ Periodically check whether moisture is in contact or found on product.  
( Danger of electric shock. )
- ⚠ Drenched dust may lead to overheating or malfunction in safety system.
- ⚠ Install product where out of water's reach.
- ⚠ If power cable is damaged, must use after replaced by a qualified technician.
- ⚠ Do not take the product apart.
- ⚠ If there is malfunction, please inquire to the manufacturer's service center.
- ⓘ The product is an assistance heater and maybe used for freeze protection, however please install an additional reserve heating system taking into consideration abnormal conditions such as power failure, malfunction of product, etc.

# ISEA

## Warranty

The warranty for this product is limited to defect in production or naturally occurred breakdown. You can receive a replacement or repair for free if you bring the product warranty issued at the time of purchase and contact the authorized agent or head office.

Warranty period: 12 months after purchase or 18 months after production date

### (1) Quality Assurance Regulations

Damage Type	Compensation
Major repair required due to defect that occurred under normal usage within 10 days of purchase Product replacement or refund	Product replacement after payment
Major repair required due to defect that occurred under normal usage within 1 month of purchase	Customer's negligence within warranty period
Product replacement or free repair Defect that occurred under normal usage within warranty period Free repair Recurrence (4th) of identical defect repaired up to 3 times Product replacement or refund Recurrence (5th) of defects of various parts repaired up to 4 times Product replacement or refund Defect on replacement product requiring major repair within 1 month of exchange Refund	After warranty period
Damaged resulted due to not having repair part within parts retention period Product replacement or refund Defect during normal usage within warranty period	Refund after including 10% of depreciation amount

### (2) The following cases will require payment even if within warranty period.

- Payment will be required if repair agent has made visit due to customer's request but no defect found.
- Defects occurred due to not following the precautions of this user's manual
- Defects (upside down installation, using electricity other than 220V, etc.) occurred during negligence usage
- Damage or defect caused by natural disaster
- Damage or defect from repair or remodeling by someone other than company's designated repair agent or authorized agent.

This warranty is only valid in the Republic of Korea, and is not reissued.

Product name		Date of Purchase	
Model Name		A/S Period	
Place of Purchase		Contact Information	