

MyncbD 12K 33ohm/m Carbon Fiber Infrared Heating Cable

MyncbD 12K 33ohm/m Carbon Fiber Infrared Heating Cable User Manual

INTRODUCTION

This manual provides comprehensive instructions for the safe and efficient installation and operation of your MyncbD 12K 33ohm/m Carbon Fiber Infrared Heating Cable. Please read this manual thoroughly before attempting any installation or operation to ensure proper use and to prevent potential hazards. Keep this manual for future reference.

IMPORTANT SAFETY INSTRUCTIONS

Failure to follow these safety instructions may result in electric shock, fire, or other serious injury.

- **Professional Installation:** Installation of this heating cable system should ideally be performed by a qualified electrician or heating professional in accordance with local electrical codes and regulations.
- **Power Disconnection:** Always ensure the power supply is disconnected before installing, maintaining, or troubleshooting the heating cable.
- **Do Not Cut When Powered:** Never cut or damage the heating cable while it is connected to a power source.
- **Avoid Overlapping:** Do not allow the heating cable to overlap itself during installation, as this can lead to overheating and damage.
- **Insulation Integrity:** Ensure the insulation of the cable remains intact throughout installation. Any damage to the insulation can pose an electrical hazard.
- **Proper Connections:** All electrical connections must be secure and properly insulated to prevent short circuits and electrical leakage.
- **Temperature Limits:** Do not expose the cable to temperatures exceeding its maximum rated temperature of 200°C.
- **Intended Use:** Use this product only for its intended purpose as an infrared heating element for floor heating applications.

PRODUCT OVERVIEW

Your package should include the following components:

- 12K Carbon Fiber Heating Cable (100m length)
- 20 Copper Tubes (for connections)
- 20 Sleeves (for insulation)
- M3H-GB-H Thermostat (if purchased as a kit variant)



Image: A coil of red 12K carbon fiber heating cable, accompanied by a small pile of shiny copper tubes and black heat-shrink sleeves, representing the complete cable kit.

MINCO HEAT



M3H-GB-H No WiFi



Image: A coil of red 12K carbon fiber heating cable shown alongside the M3H-GB-H thermostat, indicating a kit that includes both components.

SPECIFICATIONS

Specification	Value
Product Name	Carbon Fiber Heating Wire
Insulating Material	Silicone Rubber
Maximum Supported Temperature	200 °C
Heating Temperature	Based on usage length
Heating Conductor	12K
Leakage Current	0.05mA/m
Maximum Power Support	25W/M

Specification	Value
Diameter	3 ± 0.1 mm
Color	Red
Infrared Wavelength	8UM-18UM
Conductor Resistance	33 ± 10% Ohm/m



Image: A coil of red heating cable with text overlay indicating its specifications: '12K 33 Ohm/m'.

SETUP AND INSTALLATION

Power Calculation

To determine the electric power (Wattage) of your heating cable setup, use the following formula:

$$\text{Power (W)} = (\text{Voltage (V)} * \text{Voltage (V)}) / \text{Resistance (Ohm)}$$

For 12K carbon fiber cable, the resistance is approximately 33 Ohm/meter.

Example 1: Using 10 meters of 12K carbon fiber cable on a 220V supply:

$$220V * 220V / (10 \text{ meters} * 33 \text{ Ohm/meter}) = 150W$$

Example 2: Using 15 meters of 12K carbon fiber cable on a 220V supply:

$$220V * 220V / (15 \text{ meters} * 33 \text{ Ohm/meter}) = 100W$$

Important Note: A longer cable length will result in lower overall power output and consequently a lower heating temperature for the entire length.

Floor Heating Installation Guidelines

Due to the inherent characteristics of carbon fiber heating cable, it is not recommended to use a single, very long continuous length for floor heating applications. This can lead to uneven heating and potential issues.

Recommendation: For optimal floor heating, we suggest dividing the cable into sections of approximately 10 meters each. Connect all these 10-meter sections in parallel to your power source. This method ensures more consistent heating and easier management.

Maintain a consistent distance of 8 to 12 cm between parallel cable runs to achieve uniform heat distribution across the floor surface.



Image: A detailed close-up of the red heating cable's end, revealing the black carbon fiber strands that serve as the heating element.



Image: A close-up shot of the red heating cable tied into a simple knot, illustrating its flexibility and durability.

OPERATING INSTRUCTIONS

If your product includes the M3H-GB-H thermostat, please refer to the separate instruction manual provided with the thermostat for detailed operating procedures, programming, and advanced features. This section provides general guidance.

- **Power On/Off:** Use the designated power button or switch on your thermostat to turn the heating system on or off.
- **Temperature Setting:** Adjust the desired room or floor temperature using the thermostat controls.
- **Programming:** Utilize the thermostat's programming features to set schedules for heating operation, optimizing energy consumption.
- **Monitoring:** Periodically check the thermostat display to ensure the system is operating as expected.

MAINTENANCE

Proper maintenance ensures the longevity and safe operation of your heating cable system.

- **Regular Inspection:** Periodically inspect visible parts of the system for any signs of damage, wear, or loose connections.
- **Keep Clear:** Ensure that the area above the heated floor is not permanently covered by items that could trap heat, such as thick rugs or furniture without adequate clearance, as this can lead to localized overheating.
- **Cleaning:** If the thermostat or any exposed components require cleaning, use a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Professional Check:** Consider having the system professionally inspected every few years to ensure continued safe and efficient operation.

TROUBLESHOOTING

Frequently Asked Questions

Q1: What does "12K" mean? What is the difference between 12K and 24K?

A1: The "K" in 12K stands for thousand. Therefore, 12K signifies that the heating conductor within the carbon fiber cable is composed of 12,000 individual carbon fiber strands. This configuration results in a resistance of approximately 33 Ohm/meter. In contrast, a 24K cable's conductor is made up of 24,000 carbon fiber strands, which typically gives it a lower resistance of around 17 Ohm/meter.

Q2: What is the difference between a rubber sheath and a Teflon sheath?

A2: Information regarding the specific differences between rubber and Teflon sheaths for this product is not detailed in this manual. Generally, different sheath materials offer varying levels of flexibility, temperature resistance, and chemical resistance. Please consult product specifications or manufacturer for more details if this information is critical for your application.

General Troubleshooting Tips

- **No Heat Output:** Check if the power supply to the thermostat and heating cable is active. Verify that the thermostat is set to a heating mode and the desired temperature is above the ambient temperature. Inspect all connections for looseness or damage.
- **Uneven Heating:** Ensure the cable spacing during installation was consistent (8-12 cm). If the issue persists, it might indicate an installation error or a fault in a specific cable section.
- **Thermostat Malfunction:** If the thermostat display is blank or unresponsive, check its power supply. Refer to the thermostat's specific manual for troubleshooting steps.
- **Electrical Issues:** If you suspect an electrical fault (e.g., tripping circuit breakers), immediately disconnect power and consult a qualified electrician. Do not attempt to repair electrical components yourself.

WARRANTY AND SUPPORT

Warranty Information

Please refer to your purchase documentation, retailer, or the manufacturer's official website for specific warranty terms and conditions applicable to your MyncbD 12K 33ohm/m Carbon Fiber Infrared Heating Cable and any accompanying accessories.

Customer Support

For technical assistance, installation queries, or any other support needs, please contact your point of purchase or the manufacturer directly. Have your product model number (HuangRuiSmile-EU) and purchase details ready when contacting support.

