LUXEBIRD

Temperature Controller

LB-1SC

USER MANUAL

01 USAGE PRECAUTIONS

- KEEP CHILDREN AWAY
- TO REDUCE THE RISK OF ELECTRIC SHOCK, USE ONLY INDOORS
- DO NOT PLUG INTO ANOTHER RELOCATABLE POWER TAP OR AN EXTENSION CORD
- USE ONLY IN DRY LOCATION

02 MAIN FEATURES

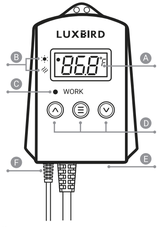
- Plug-n-Play, easy to use
- Supports both Celsius and Fahrenheit units
- LED Displays the testing temperature and the heating or cooling state
- Supports the temperature calibration
- Supports the high/low-temperature limit alarm
- Supports the probe abnormal alarm

03 TECHNICAL SPECIFICATION

- Power Input: 120Vac 60Hz
- Power Output: 120Vac 60Hz, 10A, 1200W Max
- Probe Type: R25℃=10KΩ±1% R0℃=26.74~27.83KΩ,B25/85℃=3435K±1%
- Temperature Control Range: 32.0~113 ℉/0.0~45.0℃
- Temperature Display Range: 23.0~122 ℉/-5.0~50.0℃
- Measurement Accuracy: ±1.0℃ /±2.0℉
- Operating Temperature: Room Temperature
- Storage Environment: Temperature: 32℉~140℉/0℃~60℃

Humidity: 20~80%RH（Unfrozen or condensation）
- Product Warranty Period: 2 years for the controller, 1 year for the probe

04 PRODUCT DIAGRAM



Ⓐ Functions on screen
In normal mode, the measured temperature is displayed. In setting mode, the menu code and setting value are displayed.

Ⓑ HEATING or COOLING Status

Ⓒ Indicator LED:
- Red LED is on: Heating output is on.
- Green LED is on: Cooling output is on.

- Green LED is blinking: Performing the function of compressor delay

Ⓓ Functional Buttons
- S - SET Button
- ^ - UP Button
- v - DOWN Button

Ⓔ Output

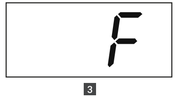
Ⓕ Temperature probe

05 OPERATION INSTRUCTIONS

▸How to set the temperature unit to ℉?

Step1: Press and hold the S button for 2 seconds to enter the settings menu, then press the ^ or v button to display the character CF.

Step2: Short press the S button to enter the temperature unit setting, and the relevant parameter will flash. Then press the ^ or v button to select F.



Step3: Short press the S button to confirm your selection and return to the settings menu. Press and hold the S button for 2 seconds or no operation for 60 seconds to quit and save the set parameters.

▸How to select the COOLING mode?

Step1: Press and hold the S button for 2 seconds to enter the settings menu, then press the ^ or v button to display the character HC.

Step2: Short press the S button to enter the working mode setting, and the relevant parameter will flash. (Character H indicates the heating mode, and character C indicates the cooling mode.) Press the ^ or v button to select C.

Step3: Short press the S button to confirm your selection and return to the settings menu. Press and hold the S button for 2 seconds or no operation for 60 seconds to quit and save the set parameters.

▸How to set the target temperature to 68.0 ℉?

Step1: Press and hold the S button for 2 seconds to enter the settings menu, then press the ^ or v button to display the character TS.

Step2: Short press the S button to set the target temperature value, and the relevant parameter will flash. Press the ^ or v button to adjust the parameter to 68.0℉.

Step3: Short press the S button to confirm your selection and return to the settings menu. Press and hold the S button for 2 seconds or no operation for 60 seconds to quit and save the set parameters.

▸How to set the heating/cooling difference value to 0.5℉?

Step1: Press and hold the S button for 2 seconds to enter the settings menu, then press the ^ or v button to display the character dS.

Step2: Short press the S button to set the difference value, and the relevant parameter will flash. Press the ^ or v button to adjust the parameter to 0.5℉.

Step3: Short press the S button to confirm your selection and return to the settings menu. Press and hold the S button for 2 seconds or no operation for 60 seconds to quit and save the set parameters.

▸How to set the high-temperature alarm value to 80.0℉?

Step1: Press and hold the S button for 2 seconds to enter the settings menu, then press the ^ or v button to display the character AH.

Step2: Short press the S button to enter the high-temperature alarm setting, and the relevant parameter will flash. Press the ^ or v button to adjust the parameter to 80.0℉.

Step3: Short press the S button to confirm your selection and return to the settings menu. Press and hold the S button for 2 seconds or no operation for 60 seconds to quit and save the set parameters.

▸How to set the low-temperature alarm value to 50.0℉?

Step1: Press and hold the S button for 2 seconds to enter the settings menu, then press the ^ or v button to display the character AL.

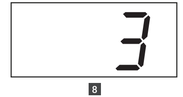
Step2: Short press the S button to enter the low-temperature alarm setting, and the relevant parameter will flash. Press the ^ or v button to adjust the parameter to 50.0℉.

Step3: Short press the S button to confirm your selection and return to the settings menu. Press and hold the S button for 2 seconds or no operation for 60 seconds to quit and save the set parameters.

▸How to set the cooling compressor delay time to 3 minutes? (only in cooling mode)

Step1: Press and hold the S button for 2 seconds to enter the settings menu, then press the ^ or v button to display the character Pt.

Step2: Short press the S button to enter the cooling compressor delay time setting, and the relevant parameter will flash. Press the ^ or v button to adjust the parameter to 3.



Step3: Short press the S button to confirm your selection and return to the settings menu. Press and hold the S button for 2 seconds or no operation for 60 seconds to quit and save the set parameters.

▸How to set the temperature calibration value to 0.5℉?

Step1: Press and hold the S button for 2 seconds to enter the settings menu, then press the ^ or v button to display the character CA.

Step2: Short press the S button to enter the temperature calibration setting, and the relevant parameter will flash. Press the ^ or v button to adjust the parameter to 0.5℉.

Step3: Short press the S button to confirm your selection and return to the settings menu. Press and hold the S button for 2 seconds or no operation for 60 seconds to quit and save the set parameters.

▸How to quickly check the target temperature and the difference value?

- In the normal working state, short press the ^ button, and the LED screen will display the target temperature value for 2 seconds. Press any other button to exit.

- In the normal working state, short press the v button, and the LED screen will display the temperature difference value for 2 seconds. Press any other button to exit.

▸How to quickly set the target temperature value to 77.0℉?

Step1: Short press the S button, and the target temperature value will flash.

Step2: Press the ^ or v button to adjust the parameter to 77.0℉.

Step3: Short press the S button or no operation for 30 seconds to exit and save the set parameter.

06 HOW DOES IT WORK?

▸Heating Function

In the heating mode, the heating indicator is on, when the current temperature is lower than or equal to the result that the target temperature (TS) subtracts the difference value (DS), the device will automatically start heating; when the current temperature is greater than or equal to the target temperature, it will stop heating.

• Current Temperature ≤ TS − DS → start heating
• Current Temperature ≥ TS → stop heating

For example, TS=68.0℉, DS=0.5℉, if current temperature ≤ 68.0℉-0.5℉, the device will start heating; if current temperature ≥ 68.0℉, the device will stop heating.

▸Cooling Function

In the cooling mode, the cooling indicator is on, when the current temperature is greater than or equal to the result that the target temperature (TS) adds the difference value (DS), the device will automatically start cooling; when the current temperature is lower than or equal to the target temperature, it will stop cooling.

• Current Temperature ≥ TS + DS → start cooling
• Current Temperature ≤ TS → stop cooling

For example, TS=68.0℉, DS=0.5℉, if current temperature ≥ 68.0℉+0.5℉, the device will start cooling; if current temperature ≤ 68.5℉, the device will stop cooling.

▸High-Temperature Alarm Function

If the current temperature is greater than or equal to the preset high-temperature alarm value, the screen will alternately display the character AH and the current temperature, and the device will beep to remind you. You can press any button to cancel the buzzer. After the current temperature drops to the high-temperature alarm value, the device will automatically return to normal working mode.

▸Low-Temperature Alarm Function

If the current temperature is lower than or equal to the preset low-temperature alarm value, the screen will alternately display the character AL and the current temperature, and the device will beep to remind you. You can press any button to cancel the buzzer. After the current temperature rises to the low-temperature alarm value, the device will automatically return to normal working mode.

▸Probe Abnormal Alarm Function

When the temperature probe is detected to be abnormal, the screen will display the character ER, and the device will beep to remind you. You can press any button to cancel the buzzer.

07 FCC REQUIREMENT

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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.

Note: 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 or more 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

08 SCREEN MENU DESCRIPTION

Menu Icon	Display character	Menu Function	Setting Range	Factory Set
CF	CF	Temperatuer unit setting	C&F	F
HC	HC	Heating/cooling mode setting	H&C	H
TS	tS	Target temperature value	32.0~113℉	77.0℉
			0.0~45.0℃	25.0℃
DS	dS	Heating/cooling temperature difference value	0.5~18℉	2.0℉
			0.3~10℃	1.0℃
AH	AH	High-temperature alarm value	23.0~122℉	122℉
			-5.0~50.0℃	50.0℃
AL	AL	Low-temperature alarm value	23.0~122℉	23.0℉
			-5.0~50.0℃	-5.0℃
PT	Pt	Cooling compressor delay time	0~10 minutes	0 minute
CA	CA	Temperature calibration value	-9.9~9.9℉	0.0℉
			-4.9~4.9℃	0.0℃

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