![CableMatic logo]
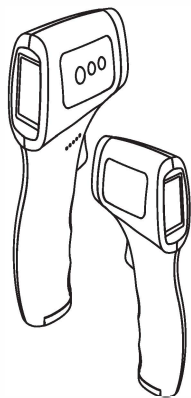
Non-contact infrared thermometer

Product Manual

1. Product Overview

Product name: infrared thermometer
General name: Forehead thermometer
Model No: KV-11 infrared thermometer
Usage scale: Display the body temperature by absorbing the heat emitted from the forehead Contraindications: None

2. Product Performance

Measurement Range: body temperature mode: 32℃-42.5° (89.6°F~108.5°F)
Test time: About 2 seconds
Resolution: 0.1℃
Accuracy: ±0.2℃/±0.4°F within a range of 35.0℃~42.0℃
  ±03℃/±0.5°F out of range of 35.0℃~42.0℃
Display: LCD liquid crystal display
Physical Dimension: 77*43*149mm
Weight: About 126g
Auto shut off and self-test function
Current consumption: static OFF420MA, dynamic ONW20MA
Voltage: DC3.0V ("AAA'Alkaline Battery 2 pcs)

3. Operation Condition

1. Environment temperature: 10℃/-40℃/
2. Relative humidity: 15%~85%
3. Atmospheric pressure: 70KPA-106KPA
4. Within the relative error of 5%, -10% from internal DC power 3V("AAA'Alkaline Battery 2 pcs)

4. Technical Feature:

1. About 2s measure temperature
2. Auto shut off: 30s
3. T/X switch with flash function
4. Backlight: Green
5. Memory read function
6. IR forehead thermometer measurement range: 32℃-42.5℃ (89.6°F~108.5°F)
7. Service life: Morethan 100,000 times of normal use

5. Operation

1. Two temperature measurement modes: Forehead temperature measurement and physical measurement.
2. Choose forehead temperature mode before measurement
Step 1: Place the measuring probe close to the forehead. Make sure the probe plane is parallel to the forehead surface (Measuring distance: 3-5cm)
Step 2: Press the on/menu key once to turn on the machine. The display measured temperature value last time. Press again to start measuring the forehead temperature. When you hear a beep, the LCD displays the current test value.
(When the screen is bright, only need to press the measurement key once then display the value.
(You can refer to the data in the table below as following)

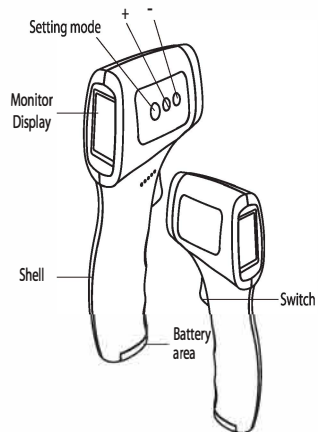Reference values of different measurement part

Observed part	Normal temperature
Anal	36.8-38.0 °C
Oral	35.7-37.5 °C
Axillary	34.7-37.3 °C
Ear	35.8-38.0 °C

Reference values at different ages

Age	Normal temperature
0-2 years old	36.4-38.0 °C
3-10 years old	36.1-37.8 °C
11-65 years old	35.9-37.6 °C
> 65 years old	35.8-37.5 °C

6. Structure Function
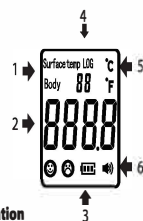
1. Main structure

An infrared thermometer is made of ABS plastic shell, temperature probe, buttons, LCD screen display, and battery

![CableMatic logo]

2. Display Screen Instruction

Icon definition	Icon	Status description	
Measurement mode	1	Measurement mode display	
Displayvalue	2	Measured temperature value	
Lowbattery compliance	3	Display	Low battery status
		Not displayed	Full power
Memory location	4	Number of memory locations	
Number of memory locations	5	Celsius	
		Fahrenheit	
Buzzer meets	6	Display	The buzzer is on, there is a beep
		Not displayed	The buzzer is turned off, No beep

Setting operation

This product provides functions such as temperature unit, alarm tone, temperature alarm point, temperature offset, and measurement mode.
The measurement mode setting is set by the mode switch key, and other settings are set in the setup menu.
The setting menu comparison table is as follows

Menu	Function	"−"key	"+"key	Initial value	Remark
F1	Temperature unit	C °	F°	C °	
F2	Temperature alarmpoint	Decrease 0.1℃	Increase 0.1 °	38 ℃	
F3	Temperature deviation 0.1℃	Downward 0.1℃	upward 0.1℃	0.0	Within-3℃ ~ + 3℃
F4	Beep switch	Off	On	On	

Measurement mode setting

When the screen is on, the screen displays the current measurement mode (Figure 8.1). Press the "Set" key shortly to switch the mode to body temperature.

Figure 8.1

Temperature unit setting F1 Figure 8.1

Long-press the "Set" key for 2 seconds, the screen displays F1, and the Celsius temperature icon flashes (Figure 8.2), press "-" to select (Fahrenheit) temperature unit (Figure 8.3), press "+" to select (Photo) Temperature (Figures 8.4).
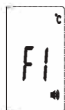

Figure 8.2   Figure 8.3   Figure 8.4

Temperature alarm point setting-F2

. Long-press the "Set" button for 2 seconds, the screen displays F1
. Then press once to enter F2, and then press the "+" button to increase the temperature value by 0.1℃ (0.1°F)
. Press the "-" button to decrease the temperature value 0.1℃ (0.1°F)
Note: The default alarm value is 38℃ (100.4 °F).

Temperature offset setting-F3

.Long-press the "Set" button for 2 seconds, the screen displays F1
.Then press the "Set" button twice to enter F3
Press the "+" key increases the difference by 0.1 ° C (0.1°F), and the "-" key decreases the difference by 0.1℃ (0.1°F). Check and debug the thermometer when the season or the environment change.

Beep on/off setting-F4

.Long-press the "Set" key for 2 seconds, the screen displays F1, press the "Set" key 3 times to enter F4
.Press the "+" key to turn on the beep (the OFF appears on the screen) or turn off the beep (the OFF appears on the screen (Symbol)
.After entering the setting menu operation, if you need to modify a certain setting, you can press the menu key continuously to select.
.Save the new settings after setting in sequence shut down and exit halfway, the new settings will not be saved.
After entering the setting menu, pressing the measurement key is invalid, the thermometer will not measure.

Tips

1. Body temperature mode is used to measure body temperature, which is obtained by dynamic compensation from the ambient temperature and the surface temperature of the forehead. Depending on factors such as ambient temperature, measurement distance, and individual skin differences, the temperature offset value can pass the target the differences between the measured value and the true value, the measured value is corrected, the correction range is 3.0 ° C ~ + 3.0 ° C, the factory setting is 0.0 ° C
For example, if the temperature measurement of the forehead is 36.2 ° C, and the actual forehead temperature of the deleted target is 37.0 ° C, enter F3 and adjust the deviation upward by 0.8 ° C. Aftercompleting the setting, the measured and actual temperature results will be the same.

Measurement methods

Confirm body temperature mode at the screen display
Align the thermometer probe in the middle of the forehead and keep it vertical, about 3-5 cm away (Figure 9.1). Measuring key, approx. A beep sounds after 1 second, the measured value (Figure 9.2) is displayed.
If the measured value exceeds the temperature alarm point (The default value is 38 ° C), then five "di" alarm sounds.

Body temperature mode:

34.0℃ ~ 37.3℃ Show green；
37.4℃ ~ 38.0℃ Show orange；
38.1℃ ~ 40.0℃ Show red

(Figure9.1)   (Figure9.2)   (Figure9.3)

When the environmental temperature changes greatly and affects the forehead temperature, please measure after pointing at the earlobe (Figure 9.3)

prompt:
.Before and after use, please keep the sensor and probe cavity clean.
.Please usethe thermometer in a stable temperature environment. When the ambient temperature fluctuates greatly (such as from indoor to outdoor), leave it for about ten minutes to measure.
.Do not start measuring the forehead temperature immediately after measuring the temperature of an object with extremely high or low temperature. Please leave it for ten minutes for measurement.
.When the measurement object comes from a place with a large temperature difference from the measurement environment, it should stay in thetest environment for at least five minutes.
.Try not to measure while your forehead is blown, drenched, sweating, applying cosmetics, etc. Do not measure forehead temperature within 30 minutes after exercise, bathing, and meals.
Replacement battery
When the LCD shows –, it means that the battery is in a low batterystate.
operating:

Measurement methods

1.Open the battery compartment cover and replace the battery. Do not install the wrong positive and negative batteries electrodes in.
Use only specified batteries. Non-rechargeable batteries cannot be charged. Removethe dry batterywhen not in use for a long time (more than 2 months).
Do not mix new and old batteries and batteries of different types. Please replace the old batteries according to local regulations.

7. Attention

Infrared forehead thermometer is a precision electronic product, please use it with caution
1. The infrared forehead thermometer must be used under the working conditions required in this manual.
2. Do not remove the forehead thermometer from the measurement area before the sound is over
3. Always keep the forehead thermometer in the same position cause different positions may cause deviations in the forehead temperature value.
4. The measured temperature will vary depending on the person's skin color and thickness.
5. When measuring forehead body temperature, make sure the forehead is clean and without sweat, hair or Hat blocking, otherwise the measured temperature will be low.
6.Do not drop it or distort the body
7. The temperature sensor can be wiped and disinfected with alcohol cloth before reaching the display.Do not put it in water or sterilize after boiling in hot water.
Note: As following situations, three times measurements are recommended, and the highest reading is taken as
Final Results:
1. For children under three years of age with impaired immune system and people whose fever has a great impact.
2. When the user first learns how to use the measurement, the measurement is repeated until he or she is familiarwith it and can read stable data.
3. If the measurement result is extremely low.
In short, the temperaturevalue at different measurement points should not be compared as the measured values will vary depending on the measurement time. During the day, a person's forehead temperature is highest in the evening and lowest in the hour before waking up in the morning.

8. Error and Solutions

The screen displays HI, three "dididi" beeps
Possible cause: When the measurement result is> 43 ° C
Solution: Read the manual in detail or re-measure
The screen displays LOW, and three "dididi" beeps
Possible cause: When the measurement result is < 36° C
Solution: Read the manual in detail or re-measure

9. Error and Solutions

Battery installation
Please follow the steps to install:
Step 1: Push the battery cover down in the direction indicated by thearrow.
Step 2: Remove the battery cover.
Step 3: Place the battery in the battery slot, and pay attention to the positive and negative polarities of the battery.
Step 4: Close the battery cover
Battery replacement:
When the LCD shows ▭, the battery is already in a low battery state and must be replaced as soon as possible to ensurethe most accurate measurement.