Infrared Thermometer

Model：KC-180A

Operation Manual

Infrared Thermometer

Model：KC-180A

Overview

KC-180A Infrared thermometer is a non-contact temperature measuring instrument using infrared technology and laser pointer.The instrument features a low consumption design. It has a LCD with backlight, a laser pointer for accurate aiming and capable of auto holding the readings. It has the advantages of rapid measuring, easy operation and portability.You could use this product to measure the surface temperature, which is not suitable for traditional measuring (such as moving objects, charged objects, toxic objects or hard-to-reach objects).

KC-180A Infrared thermometer is Class II laser product and in compliance with EN60825-1.

Safety Instructions

Failure to follow the instructions listed below may cause personal injury.

- Read and understand all instructions prior to any operation.
- Do not remove any labels from the tool.
- Do not operate the tool with the presence of flammable/explosive gases.
- Do not operate the laser tool around the children or allow children to operate the laser tool, failure to do so will injure eyes of children.
- Do not stare into the laser beam.
- Do not project the laser beam directly into the eyes of others.
- Do not set up the tool at eye level or operate the tool on or near a reflective surface, as the laser beam could be projected into your eyes or the eyes of others.
- Do not observe the laser beam by using optical tools such as binoculars and magnifying glass.
- To avoid burning danger, remember that the reflected objects make the measuring temperature lower than the real one.
- Warning

DANGER
Class II Laser Product
Maximum Power Output< 1mW
Wavelength: 630-660nm
Do not stare into beam!
Avoid direct eye exposure!
This tool emits a laser radiation!

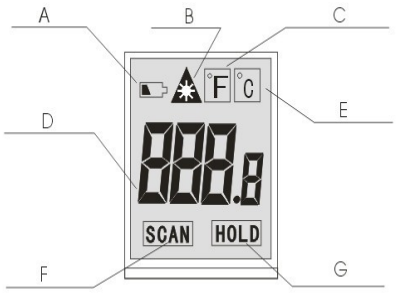
Battery Safety Instructions

●Please remove the batteries when clean the product.
●Remove the batteries before long term storage
●Please install the batteries properly as the instructions of the positive and negative charges
●Please dispose the batteries properly. High temperature will cause explosions and do not burn the batteries. Strap insulated tape around the battery charges to avoid unsafe contacts with other objects.Many countries have regulations regarding battery disposal.Please follow the local regulations of battery disposing.

TOOL COMPONENTS

A．Laser pointer
B．Infrared sensor
C．Trigger ——ON / Measuring key
D．Battery compartment
E．LCD screen with backlight——Show reading data and information
F．Right key ——Laser ON or OFF
G．Left key ——Measurement unit switch

Illustration of display screen



A：Low battery
B：Laser ON
C：℉
D：Readings
E：℃
F：Measuring scan
G：Data hold

Operation Instructions

1. Open the battery compartment, insert one 9V battery (6F22/6LR61), close the lid.

2. Point the product to target objects, hold the trigger to read the data.

3. Field of view: Be sure the target area is larger than the unit's spot size. The smaller the target get, the closer the measured distance. For precise measuring, make sure the target is at least twice as large as the spot size.

Operation Notes

1、No glass、plastic or water vapor .etc should between the product and target object.

2、Keep the product away from the following places, which will damage the devices:

a、Environment has vapor and dust;

b、EMF places（Electro-magnetic fields: such as arc welders、induction heaters）;

c、Static environment;

d、Heat shock (by abrupt temperature changes, allow 30 minutes for unit to stabilize before use.);

e、High temperature objects;

3、The product can't be used for medical evaluation, it measure the body temperature for your reference only.

● Maintenance

1、Cleaning the lens: Abrupt temperature changes will cause vapor, please clean after the vapor disappears. Blow off loose particles using clean compressed air. Gently brush remaining debris away with a camel's hair brush. Carefully wipe the surface with a moist cotton swab.

2、Keep clean; Avoid drop and wet; The housing could be cleaned with wet sponge.

3、Don't immerse the tool into water to avoid damage.

C a u t i o n s

- Don't drop and use the tool by force.
- Don't disassemble the tool, (avoid to cause trouble).
- Keep the tool dry and clean.
- Don't place the tool with corrosive gas or objects.
- Avoid dust and water, which may stain the lens.
- Don't clean the lens by any solvent.
- Don't immerse the tool into water to avoid damage.
- In case of damage of tool by deterioration of battery.
- Remove the battery when not in use for an extended period of time.

Technical Specifications

Name	Infrared Thermometer
Model	KC-180A
Measuring range	-20℃～320℃(-4℉～608℉)
Response wavelength	5～14μm
Measuring precision	±2℃(±3.6℉) or ±2% of reading（when T>0℃）
	±3℃(±5.4℉) or ±2% of reading, whichever is greater（when T≤0℃）
Repetition	1% of reading or 1℃
Response time	500mSec，95% response
Optical ratio（D：S）	8：1
Emissivity	0.95
Display resolution	±0.1℃
Laser wavelength	630～660nm
Power of laser	<1mW
Laser class	Class II
Backlight shut off	No action in 7s
Auto turn off for tool	No action in 7s
Power supply	One 9V battery (6F22/6LR61)
Continuous working time	>16 hours
Max. power	<30mA
Operating temperature	0℃～40℃(32℉～104℉)
Operating humidity	RH 0～75% non-condensing
Storage temperature	-20℃～60℃，≤85%（w/o battery）
Product dimension	152mm x 118mm x 32mm
Product weight	About 125g (without battery)

WARRANTY

The product is warranted to be free from defects in materials and workmanship for a period of one year from the date of purchase on the basis of providing relevant card.

Notice:

The warranty does not apply to the following conditions

- Disassembling the laser tool will void the warranty.
- Any damage resulting from, but not limited to wear, water, being dropped or repairs attempted by others.

Tips:Most parts of the product could be recycled, please refer to your local regulations for disposing of them instead of throwing into the dustbin.