INTELLIGENT STUD SCANNER KC-098-Y

Introduction:

KC-098-YB Intelligent stud Scanner can detect joist, AC live wires or metals behind walls though electronic signals. The tool can display the results on the tow row LCD with back light. It mainly applies for wires and pipelines distribution on upholstery, installation of electrical equipment's (air conditioners and oil smoke extractor) and detection for frame of wood furniture, etc.
It can be automatically calibrated with sensitive induction after starting up. Select mode for joist, AC live wires or metal detection through the function selection switcher. Once the edges of joist, AC live wires or metals are detected, the scanner will send out sound indication and you can easily mark the central position of the target on the measures surface though the marker slot on top of the tool with pencil.
KC-098-Y Intelligent stud Scanner has the function of alarm for AC live wires, when it detect a wire with electricity it shows by light in the left up part of tool will illuminate, meanwhile this will not affect detection for joist or metals, disregard that the function switcher is set in the mode of joists or metals.

Battery safe prompting

- Please remove the battery when clean the product.
- Remove the battery when not in use for an extended period of time.
- Please install the batteries properly as the instructions of the positive and negative charges.
- Please dispose the batteries properly. High temperatures Will cause explosions and do not burn the batteries. Strap insulated tape around battery charges to avoid unsafe contacts with other objects. Please follow the local regulations of battery disposing.
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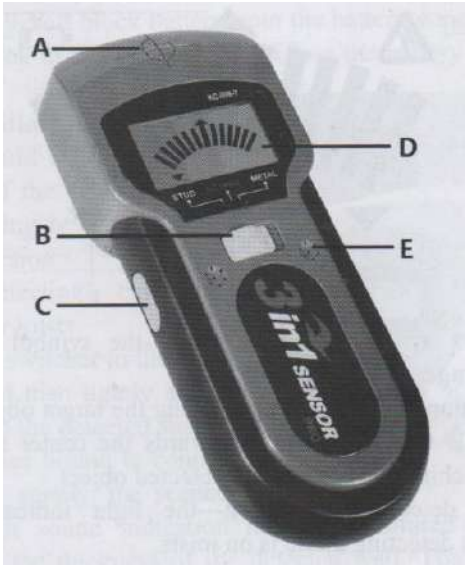
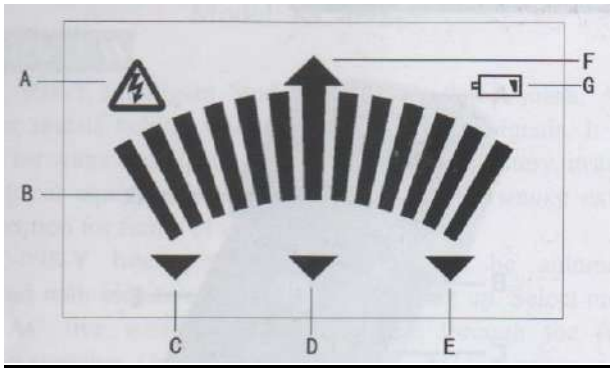
Tools Components



A- Marker slot – indicates the edge of detected object
B- Mode switcher – set the mode for joist, AC live wires or metal objects.
C- Power button – the scanner connects to power supply when pressing this button.
D- LCD – indicates detecting mode and detecting result
E- Beeps aperture – the beeps will ring when calibrating or detecting the target object

Illustration of display screen

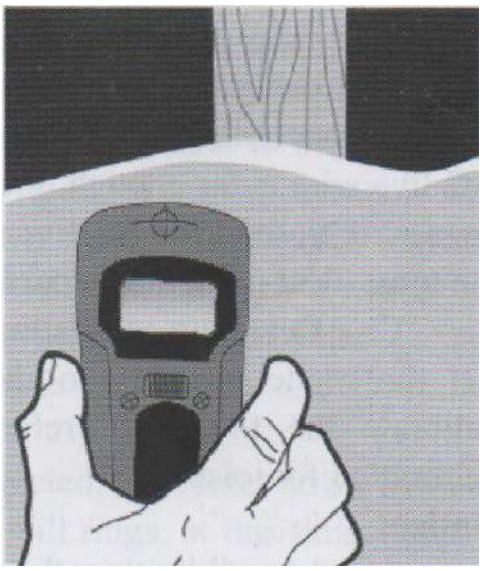


A- Caution symbol for live wires --- the symbol is on when detecting electric live wires.
B- Indication symbol for approaching the target object --- the two symbols will light in turn towards the center symbol when approaching the edge of detected object.
C- Joists detecting indication – the light indicates that the current detecting mode is on joists.
D- AC detecting indication – the light indicates that the current detecting mode is on AC live wire.
E- Metal detecting indication --- the light indicates that the current detecting mode is on metal object.
F- Symbol for central arrow – the light i son when detecting Edge of the detected object.
G- Indication symbol for low battery – the light i son when the battery is low, please replace with new battery according to instructions.

Operation instrtiction

- Battery

Open the battery compartment door on the back of the scanner and plug one 9 Volt block battery onto the battery connector and put the battery back to the compartment. Close the battery compartment door.



- Calibration

The tool should be calibrated on the Surface of the detected object before detecting or after function switch's diversion.

  - Detecting calibration for joists

Set the mode switcher to the mode for joists, and then lightly adhere the scanner to the detected surface, press the power button to connect to the power supply, the scanner will send out sound indication and be calibrated automatically according to the thickness of the detected wall. The calibration is finished when the sound stops. You can process joists detection now and please always press the power button during the detecting course.

Notice:

1. When calibrating the scanner cannot be directly put on the materials with high density (e.g. metals, joists) , or wet, new-painted and unsuitable places. Restart calibration by changing another place..
2. When approaching or detecting the AC live during calibration, the caution symbol for live wires will indicate after calibration.

- Detecting calibration for AC live wires

Set the mode switcher to the mode for AC live wire, and then calibrate the tool with reference to the method of “detecting calibration for joistd”.

When calibrating, the tool will automatically set the degree of induction according to the distance to the live wire. If distance to the AC live wire is far enough, the induction will be set to strong degree; if close the AC live wire, the tool will automatically set to the most ideal induction according to the distance.

- Detecting calibration for metals objects

Set the mode switcher to the mode for metal object, and then calibrate the tool with reference to the method of “detecting calibration for joists”

Notice:

1. When calibrating, the tool Will automatically set the degree of induction according to the existence of the metal object. If not metal object exists, the induction will be set to the strongest degree; if metal object exists, the tool will automatically set to the most ideal induction according to the type and size of the metal object.
2. When approaching or detecting the AC live wire during calibration, the caution symbol for live wires will indicate after calibration.

- Operation
  - Joists detection

According to the calibration requirements for joists detection, calibrate the tool to the ideal induction degree and process as per the following steps:

1. Move the tool across the Surface of the object in straight line horizontally and slowly and hold the tool firmly against the surface.
2. When the tool moves horizontally and is close to the detected object, the outer side of arrow symbol will illumine and then slow down the moving speed, and the arrow lights of both sides will light in turn towards the center lights (if the arrow symbols of the both sides go out when moving, reset automatic calibration and detection from another place).
3. If the Edge of joists are detected, the center arrow symbol Will illumine and the beeps will rings, at this time, make a mark on edge of detected object though the marker slot by pencil. Then continue to move the unit slowly in the same way until the arrow symbol goes out and the beeps stop.
4. Repeat the steps above from opposite direction to detect the other edge of the target object and make a mark the center of the two markers is just the center of the detected object. Repeat de operations for several items to get the relatively precise result.
5. If the power button released incautiously, you must restart the calibration and repeat the steps above to detect.

- AC live wire detection – detecting the AC live wire though walls

According to the calibration requirements for AC live wire detection, calibrate the tool to the ideal induction degree and process as per the following steps:

1. Move the tool across the Surface of the object in straight line horizontally and slowly and hold the tool firmly against the surface.
2. When the tool moves horizontally and is close to the detected object, the outer side of arrow symbol will illumine and then slow down the moving speed, and the arrow lights of both sides will light in turn towards the center lights (if the arrow symbols of the both sides go out when moving, reset automatic calibration and detection from another place).
3. If the Edge of AC live wires are detected, the center arrow symbol Will illumine and the beeps will rings, at this time, make a mark on edge of detected object though the marker slot by pencil. Then continue to move the unit slowly in the same way until the arrow symbol goes out and the beeps stop.
4. Repeat the steps above from opposite direction to detect the other edge of the target object and make a mark the center of the two markers is just the center of the detected object. Repeat de operations for several items to get the relatively precise result.
5. If the power button released incautiously, you must restart the calibration and repeat the steps above to detect.

Notice: AC live wires in metal pipes or metal covered wire, as well as metal walls or walls of high density can’t be detected

- Metal object detection

According to the calibration requirements for Metal object detection, calibrate the tool to the ideal induction degree and process as per the following steps:

1. Move the tool across the Surface of the object in straight line horizontally and slowly and hold the tool firmly against the surface.
2. When the tool moves horizontally and is close to the detected object, the outer side of arrow symbol will illumine and then slow down the moving speed, and the arrow lights of both sides will light in turn towards the center lights (if the arrow symbols of the both sides go out when moving, reset automatic calibration and detection from another place).
3. If the Edge of metal object are detected, the center arrow symbol Will illumine and the beeps will rings, at this time, make a mark on edge of detected object though the marker slot by pencil. Then continue to move the unit slowly in the same way until the arrow symbol goes out and the beeps stop.
4. Repeat the steps above from opposite direction to detect the other edge of the target object and make a mark the center of the two markers is just the center of the detected object. Repeat de operations for several items to get the relatively precise result.
5. If the power button released incautiously, you must restart the calibration and repeat the steps above to detect.

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TIPS ON OPERATION

- Use new battery, check the battery operation, when the battery is low and its symbol blinks continuously on the screen after calibration. Replace with new battery according the instructions.
- In order to make sure the scanner i son the best state during detection, hold the tail of the tool when operation and keep the other hand at least 6 inches away from the tool during detection.
- The tool can accurately detect the center of the target object, but the width of target object can only be detected in a range.
- Please do not use the tool near strong electric wave or high frequency interference.
- Please do not use the scanner in high temperature and wet place.
- When tacking, cutting or drilling on the wall, ceiling or floor, please take care to the wires and pipes on the back of them.
- The covered wires, useless wire, telephone lines, CATV wires and circuitries without electricity could not be detected as live wires.
- When the thickness of detected wall is over ¾ inches or the joists are close to each other, joists detection is not suitable, generally, the space between joists is 16 or 24 inches, and the width of the joists is 1 ½ inches.
- The detection Is not suitable for metal wall or the metal materials in the wall distribute too thick.

CAUTIONS

- **Operate with care and do not let the tool drop down.**
- **Do not disassemble the tool in case of damage.**
- **Do not place the tool with the corrosive gas or other corrosive materials.**
- **Avoid rain and water.**
- **Do not expose the tool to vibration and high or low temperature enviroment.**
- **Storage the tool indoor**
- **Do not putt he tool in the water, avoid to damage the tool**
- **Remove the battery when not in use for an extended period of time in case of damage of tool by deterioration of battery**

Technical specifications

Name	Intelligent Stud Scanner
Type	KC-098-YB
Objecto f detections	Wood joists, AC live wires and Metals
Joists detection capability	Thickness of wall is 19mm
AC live wires detection capability	50 mm Deep away from the wall
Metals detection capability	38 mm Deep away from the wall
Power supply	A 9 Volt block battery
Operation current	<40mA
Operation temperature	+5ºC~+40ºC
Operation humidity	30%~70%
Storage enviroment	-20ºC~60ºC <85% HR
Dimensions	180mm x 75mm x 30mm
Wight	About 170 g (battry not included)

Warranty

Within one year from the date of purchase, if any quality problem or non-artificial damage.
Notice: The warranty does not apply to the following conditions:

- Disassembling the tool Will void the warranty.
- Any damage resulting from, but no limited to wear,wáter, being dropped or repairs attempted by others.

Tips: Most part of the product can be recycled, if you need to deal with this product, please according to local laws and regulations to deal with it, instead of throw it into the dustbin.