

SYSTEM TESTER
FG-470
Instruction Manual

Thank you for purchasing the System Tester FG-470.
This product is a wrist strap tester that can judge whether
the wrist strap connection is good or bad.

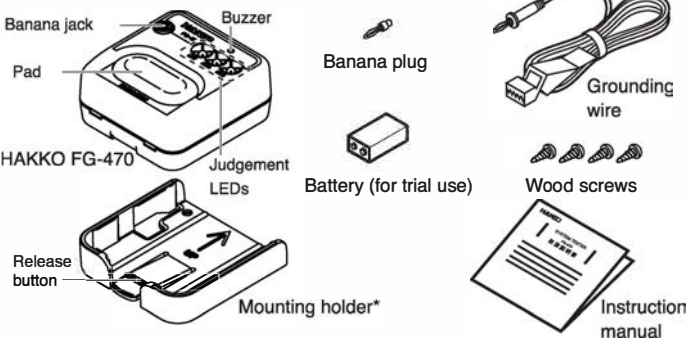
Please read this manual before operating the FG-470.

After reading, please store this manual carefully where it can be viewed at any time.

1. Packing list and part names

Please check to make sure that all items listed below are included in the package.

HAKKO FG-470	1	Banana plug	1
Mounting holder	1	Wood screws	4
006P 9V battery (for trial use)	1	Instruction manual	1
Grounding wire	1		



* Shipped with HAKKO FG-470 mounted in it.

2. SPECIFICATIONS

External dimensions	85 (W) × 44 (H) × 90 (D) mm
	92 (W) × 48 (H) × 97 (D) mm When mounted in mounting holder
Weight	120 g (Excluding battery)
	160 g (When mounted in mounting holder; excluding battery)
Power supply (battery)	006P 9V battery (Alkaline battery recommended)
Grounding wire	1 m

Indication	Calibration resistance	Audible signal
Red "LOW" LED	$R < 800k\Omega$	OFF
Green "PASS" LED	$800k\Omega \leq R \leq 9M\Omega$	ON
Red "HIGH" LED	$R > 9M\Omega$	OFF
Judgment level accuracy	800k Ω	+10%/-0%
	9M Ω	+0%/-10%

Operating environment 0 to 40°C, 20 to 90% RH with no condensation

*Specifications are subject to change without notice in order to make improvements.

3. WARNINGS, CAUTIONS AND NOTES

⚠ WARNING

- Do not allow this product to be used by persons who have not been approved by an administrator or who have no experience or knowledge (including children).
- Do not allow children to play with this product.
- Do not allow children to do cleaning or user-performed maintenance without supervision.

For safety, please obey the following caution items.

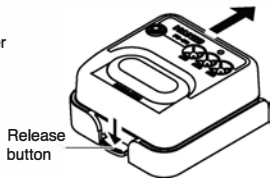
⚠ CAUTION

- Do not let this product get wet. Also, do not take measurements with wet hands.
- Do not subject this product to strong impact. Do not strike the pad or press down hard on it.
- For replacement parts, use only genuine parts.
- Do not modify this product.
- For the power supply, do not use batteries other than a 006P 9V battery.
- When the product will not be used for a long period of time, remove the battery and store it.
- Do not perform any other actions which may be considered dangerous.

4. ASSEMBLY

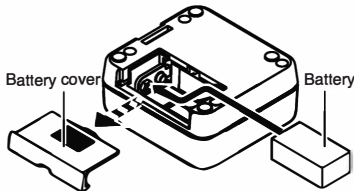
•Installing battery

1. Remove the HAKKO FG-470 from the mounting holder. Press and hold the release button of the mounting holder and slide the main body in the direction indicated by the arrow in the figure.



2. Open the battery cover.
3. Install the battery in the correct orientation.

⚠ CAUTION
Do not install the battery while pressing on the pad.



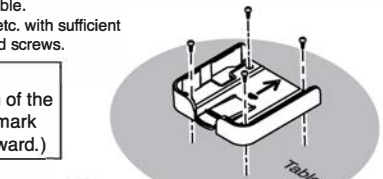
•When mounting the FG-470 in the mounting holder

⚠ WARNING

Keep safety in mind when installing the mounting holder. When the mounting holder will be installed on a wall, etc., take the wall thickness, strength, etc. into consideration and prepare anchors, screws, etc. if necessary.

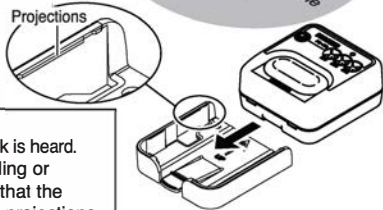
1. Install the mounting holder on a wall or table. When the installation location is a table, etc. with sufficient strength, install using the included 4 wood screws.

⚠ CAUTION
Be careful regarding the orientation of the holder when installing. (The arrow mark should point toward the back or upward.)



2. With the pad end of the HAKKO FG-470 toward the mounting holder, align the grooves on the sides of the HAKKO FG-470 with the projections of the mounting holder and slide the main body into the holder.

⚠ CAUTION
• Slide the main body in fully until a click is heard.
• To prevent the main body from falling or coming out of the holder, be sure that the grooves of the main body and the projections of the holder are correctly aligned when sliding the main body in.

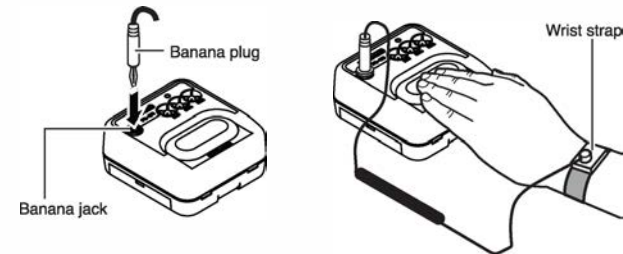


•When replacing the battery

If the Hako FG-470 is mounted in the holder, slide the main body out of the holder while pressing the release button and replace the battery.

5. OPERATION

1. Wrap the wrist strap firmly around your wrist.
2. Insert the wrist strap's banana plug into the banana jack of the main body.
3. Gently touch the pad with 3 fingers of your hand.



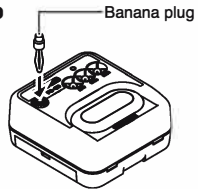
- a) If the green "PASS" LED lights and the audible signal sounds, it indicates that the wrist strap condition is normal.
- b) If the red "LOW" LED lights, it indicates that the resistance of the wrist strap is below 800K Ω , which could have adverse effects on the human body. Check the resistance of the wrist strap.
- c) If the red "HIGH" LED is lit, check that the wrist strap is firmly wrapped around the wrist and test it again. Also, in some cases the cause is a broken wrist strap wire, so check the resistance of the wrist strap.

NOTE :

After about 50000 uses, the green "PASS" LED may be dark or may not light even when the audible signal sounds.
In such case, replace the battery (006P 9V).

•When the wrist strap terminal is an alligator clip

If the wrist strap terminal is an alligator clip, plug the included banana plug into the main body's banana jack, and make the connection by clipping the wrist strap's alligator clip onto the banana plug.



Or if necessary, use the grounding wire to connect the wrist strap.

⚠ CAUTION
When plugging in the included banana plug, it may be hard at first but be sure to insert the plug fully.

