

## H HOLDPEAK HP-605A

# HOLDPEAK HP-605A AC/DC Current Clamp Probe Tester 600A Instruction Manual

Model: HP-605A

## 1. INTRODUCTION

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The HOLDPEAK HP-605A is an AC/DC current clamp adapter designed to extend the current measurement capabilities of a standard digital multimeter. This device allows for non-contact measurement of AC and DC currents up to 600A, making it suitable for various electrical testing applications without interrupting the circuit. It is an essential tool for circuit maintenance, automotive diagnostics, home appliance repair, and industrial testing.

## 2. SAFETY INFORMATION

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Please read and understand all safety instructions before using this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Always connect the clamp adapter to a multimeter set to the appropriate voltage range (typically mV) before clamping onto a conductor.
- Ensure the multimeter's input impedance is suitable for current clamp adapters.
- Do not attempt to measure currents exceeding the specified 600A limit.
- Never touch the conductor being measured with bare hands or conductive materials.
- Verify that the clamp jaws are fully closed around a single conductor for accurate readings.
- Keep the device dry and clean. Do not operate in wet or damp conditions.
- Replace the battery promptly when the low battery indicator appears to ensure accurate measurements.

## 3. PACKAGE CONTENTS

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Upon opening the package, please verify that all items listed below are present and undamaged:

- HOLDPEAK HP-605A AC/DC Current Clamp Adapter
- Test Leads (Red and Black)
- Instruction Manual

- 9V Battery (may be included separately or pre-installed)



Image: The package contents, including the HP-605A clamp adapter, test leads, instruction manual, and a 9V battery.

## 4. PRODUCT OVERVIEW

The HP-605A features an open jaw design for easy clamping around conductors. Key components include:

- **Clamp Jaws:** For non-contact current measurement. Maximum jaw opening is 45mm.
- **Power Button:** To turn the device on and off.

- **AC/DC Switch:** Selects between Alternating Current (AC) and Direct Current (DC) measurement modes.
- **Power LED:** Indicates the device is powered on.
- **Output Cable with Banana Plugs:** Connects to a multimeter.



Image: A detailed view of the HP-605A clamp adapter, showing the jaws, power button, AC/DC switch, and output cable.



Image: A diagram highlighting the key features of the clamp adapter, including AC/DC current measurement, signal output, DC/AC switch, power indicator, and jaw caliber.



Image: This image displays the physical dimensions of the HP-605A clamp adapter and indicates its compatibility with most standard multimeters, showing a jaw opening of 45mm.

## 5. SETUP

To prepare the HP-605A for use, follow these steps:

1. **Install Battery:** Open the battery compartment and insert a fresh 9V battery, observing polarity. Close the compartment securely.
2. **Connect to Multimeter:** Connect the black banana plug of the HP-605A's output cable to the 'COM' (common) socket on your multimeter. Connect the red banana plug to the 'mV' (millivolt) input socket on your multimeter.
3. **Set Multimeter:** Set your multimeter's selector switch to the appropriate mV range for current measurement. For many multimeters, 1mV will correspond to 1A when using this clamp adapter. Refer to your multimeter's manual for specific mV ranges and current conversion factors.



## 6. OPERATION

Follow these steps to measure AC or DC current using the HP-605A clamp adapter:

1. **Power On:** Press the 'POWER' button on the clamp adapter. The 'POWER LED' should illuminate.
2. **Select Current Type:** Use the 'AC/DC' switch on the clamp adapter to select either AC or DC measurement mode, corresponding to the type of current you intend to measure.
3. **Zeroing (DC Measurement Only):** When performing DC current measurement, always press the 'REL' (Relative) button on your multimeter until it reads zero. This compensates for any offset.
4. **Clamp onto Conductor:** Open the clamp jaws and position them around a **single** conductor of the circuit to be measured. Ensure the conductor is centered within the jaws for optimal accuracy.
5. **Read Measurement:** Read the current value from your multimeter's LCD panel. Remember that 1mV on the multimeter typically equals 1A of current. For DC measurements, an arrow on the clamp jaw may indicate the direction of positive current flow.

# AC/DC Current Clamp

DC and AC 600A Current Measurement	
1.	Set the selector switch of multimeter to desired "600A" position.
2.	Connect the black banana plug of the AC/DC Special Current Clamp Adapter to "COM" socket and the red banana plug to the "µA mA" socket.
3.	Press "SELECT" button on the multimeter and push AC/DC button on the Clamp Adapter to choose "DC" or "AC" measurement.
4.	When perform DC current measurement, always push "REL" key until the multimeter reads zero.
5.	Clamp the Jaws around the one conductor to be measured. Center the conductor within the Jaw using the Centering Marks as guides.
6.	Read the result from the multimeter LCD panel. The arrow in the Jaw indicates the DC current direction of positive current flow (positive to negative).
7.	Accuracy: ±(2.5% of rdg + 5digits)



Image: A visual guide detailing the seven steps for performing DC and AC 600A current measurements using the HP-605A clamp adapter and a multimeter.



Image: The HP-605A clamp adapter is shown actively measuring current on a wire, with the reading displayed on a connected multimeter and a waveform visible on an oscilloscope, demonstrating its versatility.

# OUTPUT



Measure current with multimeter



Display current waveform with oscilloscope

**OUT PUT**

HP-605A  
AC/DC CLAMP



Image: This graphic illustrates how the HP-605A's output can be used to measure current with a multimeter or display current waveforms on an oscilloscope.

## 7. MAINTENANCE

- **Cleaning:** Wipe the device with a dry, soft cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the clamp adapter in a cool, dry place away from direct sunlight and extreme temperatures. If storing for an extended period, remove the 9V battery to prevent leakage.
- **Battery Replacement:** When the low battery indicator appears, replace the 9V battery immediately to maintain measurement accuracy.

## 8. TROUBLESHOOTING

If you encounter issues with your HP-605A, consider the following:

- **No Power:** Check if the 9V battery is correctly installed and has sufficient charge. Replace if necessary.

- **Inaccurate Readings:**

- Ensure the multimeter is set to the correct mV range.
- Verify the clamp jaws are fully closed around a single conductor and the conductor is centered.
- For DC measurements, ensure the multimeter has been zeroed using the 'REL' function.
- Check for external magnetic fields that might interfere with readings.

- **No Reading on Multimeter:** Confirm the banana plugs are securely connected to the correct input jacks on the multimeter (COM and mV). Ensure the clamp adapter is powered on.

## 9. SPECIFICATIONS

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Feature	Specification
Brand	H HOLDPEAK
Model Number	HP-605A
Measurement Type	AC/DC Current (Ammeter, Multimeter Adapter)
Current Range	0-600A
Jaw Opening	45mm
Power Source	9V Battery (Adapter)
Minimum Operating Voltage	9 Volts
Material	ABS
Item Dimensions (L x W x H)	7.05 x 3.54 x 1.42 inches (17.9 x 9 x 3.6 cm)
Item Weight	12.3 ounces
Measurement Accuracy	±(2.5% of reading + 5 digits) (as per image)

## 10. WARRANTY AND SUPPORT

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The HOLDPEAK HP-605A AC/DC Current Clamp Probe Tester comes with a **1-year warranty** from the date of purchase. For any questions, technical assistance, or warranty claims, please contact HOLDPEAK customer service. We are committed to providing quality service and will respond to inquiries within 24-48 hours.