

Instruction Manual



POWER PROBE® *The Ultimate Circuit Tester*

www.powerprobe.com • 800-655-3585

The Power Probe Hook Operations Manual

Thank you for purchasing the Power Probe Hook (PPH).

You now have in your possession the most advanced and reliable Power Probe Circuit Tester in its class.

Technicians who have experienced the Power Probe advantages will find the Hook to be even better. It is a no nonsense electrical circuit tester that is designed to diagnose circuits fast without wasting time fumbling with multiple testers, jumper wires and meters. The PPH provides controlled POWER to your circuit for dynamically testing the full function of electrical components bad grounds and circuit connectivity.

The benefits that come from having the ability to supply POWER to circuits and simultaneously observe AMPS, VOLTS, and RESISTANCE are huge!

The PPH also performs passive measurements for diagnosing sensitive automotive circuits, but CAUTION must be stressed before you press the power switch to activate circuits. Just as a scalpel is designed for a professional surgeon, the PPH is designed for professional technicians.

Enjoy your new found power with the PPH. If you have any questions please go to our website www.powerprobe.com or give us a call: **800-655-3585**.

“The Ultimate Circuit Tester”

In 1991 Power Probe emerged from one simple idea: **“Make the Ultimate Circuit Tester”**

From the very first Power Probe Circuit Tester, it was evident that we had invented something unique. It didn't take long for the Power Probe to become an industry standard for diagnosing and probing DC electrical circuit.

Year after year we have made improvements to our tools. We listen to our customers and with Power Probe's desire to serve the technician, it has guided us to provide information, service and product tools that are a **MUST** for every mechanic.



POWER PROBE®

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The Serial Number can also be found on the back of the unit or box.

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I - START-UP

a) Operating Voltage Source

The PPH is designed for use in 12 to 48 VDC electrical systems and comes supplied with a 20 ft., 10-gauge coax cable and 2 heavy-duty battery hook-up clips.

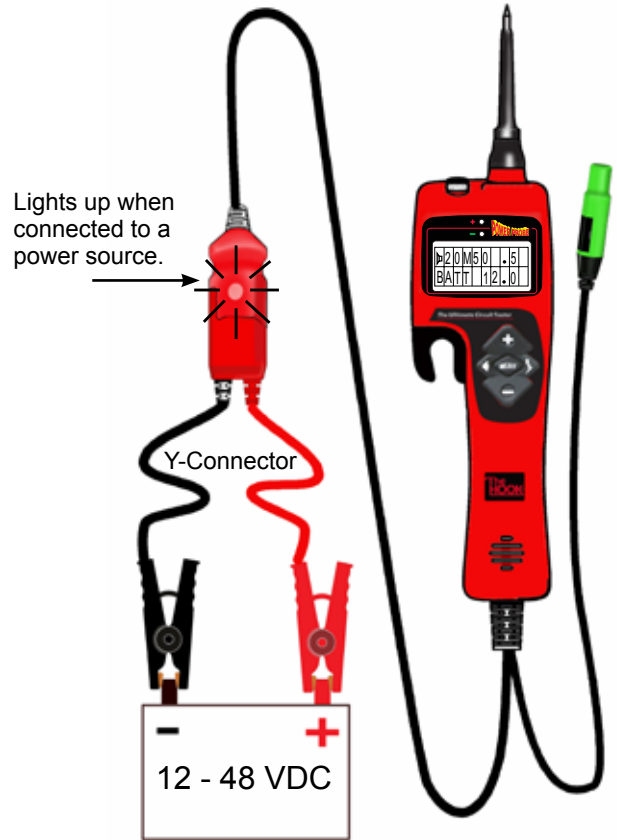
b) Connecting to the Vehicle's Battery (Voltage Source)

Connect the red clip to the positive terminal of the vehicles battery source and the black clip to negative or ground. The PPH start-up tone will sound and the indicator light on the Y-Connector with Battery Clips will illuminate. This tells you that the Hook is connected correctly and the internal fuse of the Y-battery-clip-connector is working properly.

c) Y-Connector with Battery Clips

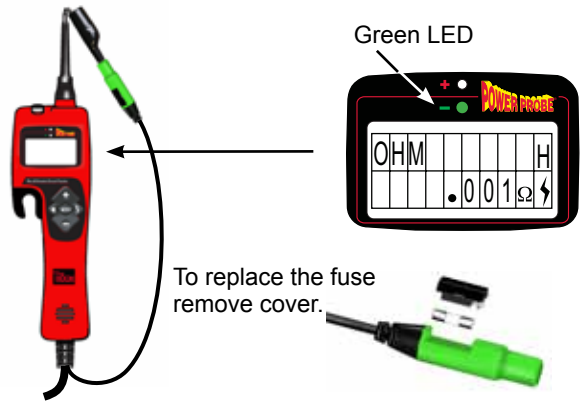
The Y-Connector with Battery Clips has a safety fuse built into it. The built-in fuse will blow in the event the 10-gauge coax power cable gets clamped or pinched in a door or hood causing a short circuit.

Note: If the Y-Connector with Battery Clips does not light when properly connected to the voltage source, you probably have a damaged 10 gauge coax power cable. It is recommended that the cable be inspected and tested before replacing a new Y-Connector with Battery Clips. Contact your distributor or Power Probe, Inc. for a replacement.



d) Auxiliary Ground Lead

The auxiliary ground lead provides ground to circuits and components that are not already connected to ground. It also serves as the negative lead for resistance testing. To test the auxiliary ground lead, contact the probe tip and the auxiliary ground lead together. The Green LED on the display should light. This shows that the auxiliary ground lead is working properly. If the green LED does not illuminate, check the replaceable 25 amp fuse in the auxiliary ground lead. The fuse is a protection in the event the lead is inadvertently contacted with battery positive.



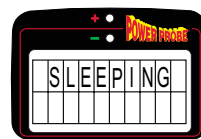
e) Flashlight

Flashlight is a standard feature on the PPH. The bright LED Flashlight is always ON making it possible to probe under dashboards and in dark areas.



f) Sleep Mode

The PPH goes to sleep after 10 minutes of inactivity and you will see SLEEPING in the display. The Flashlight and the LCD backlight will turn off. To wake it up, just press any button or contact the probe tip to a circuit.

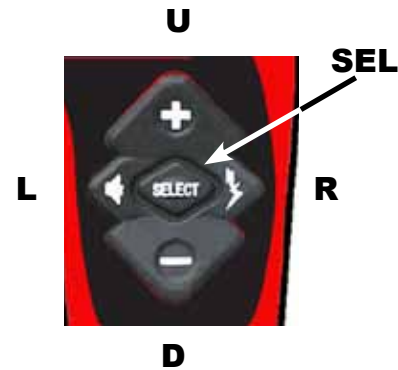


II - FIVE BUTTON OPERATIONAL TERMS

The Five Button Switch performs many different functions depending on the state of which the PPH is in at the time. To standardize our terminology when referring to the individual buttons of the Five Button Switch, we will use the following identifiers: U, D, L, R, and SEL.

See the terms and definitions below:

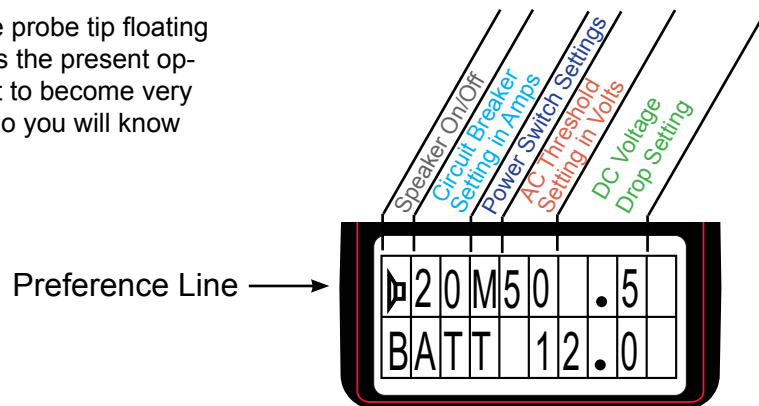
- U = (+) = UP BUTTON or TOP BUTTON
- D = (-) = DOWN BUTTON or BOTTOM BUTTON
- L = (Speaker symbol) or LEFT BUTTON
- R = (Hot Shot symbol) or RIGHT BUTTON
- SEL = SELECT BUTTON or CENTER BUTTON



III - PREFERENCES AND SETTINGS

a) Preference Line (Top Row)

In Power Probe Hook Mode (PPHM) with the probe tip floating or unloaded, the top line of the display shows the present operating parameters of the PPH. You will want to become very familiar with the preference line of the PPH so you will know exactly how it will operate at any given time.



b) Speaker ON/OFF

To toggle the speaker ON or OFF in PPHM:

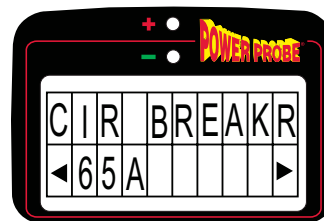
1. Press L (Speaker symbol)
2. Notice the speaker symbol in far left of the preference line when the speaker is visible in the Display. This means the Polarity Tone is ON.



c) Circuit Breaker Preferences

To adjust and set the Circuit Breaker Preferences while in PPHM:

1. Press SEL once. Display shows CIR BREAKR.
2. Press L or R to the desired trip point: 2A, 5A, 10A, 15A, 20A, 25A, 30A, 40A, 50A, or 65A.
3. Press SEL to return to PPHM.
4. Notice the new Circuit Breaker Setting in the preference line.



d) Power Switch Preferences

To adjust and set the Power Switch Preferences while in PPHM:

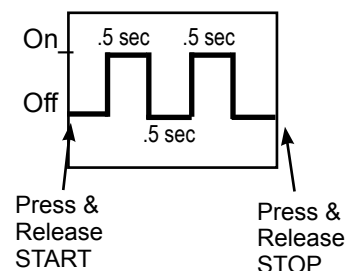
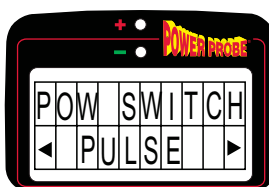
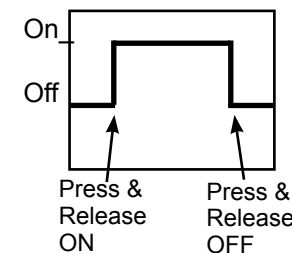
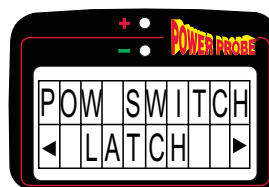
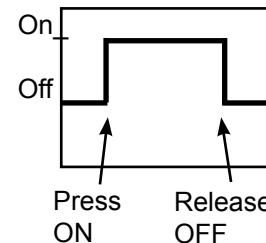
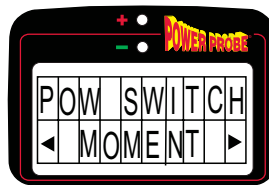
1. Press SEL once.
2. Press D once. Display shows POW SWITCH.
3. Press L or R to select the desired Power Switch preference: LATCH, PULSE or MOMENT.
4. Press SEL to return to PPHM.
5. Notice the new Power Switch Setting in the preference line.

Power Switch Behaviors when in PPHM:

M= Moment: When the Power Switch Setting is set to M, battery source power or ground is supplied to the probe tip when you press and hold U(+) or D(-).

L= Latch: When the Power Switch Settings are set to L you can hold continuous battery positive or ground to the probe tip, by pressing the U(+) or D(-). To release power, press U(+) or D(-) again.

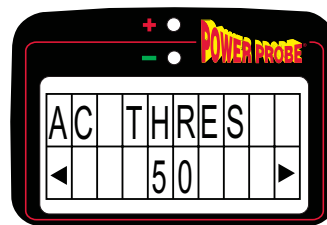
P= Pulse: When the Power Switch Setting is set to P, the PPH will cycle battery positive or ground to the probe tip by pressing U(+) or D(-). It cycles ON for .5 seconds, then OFF for .5 seconds repeatedly. To stop the power cycling, press U(+) or D(-) again.



e) AC Threshold Preferences

To adjust and set the AC Threshold Preferences while in PPHM:

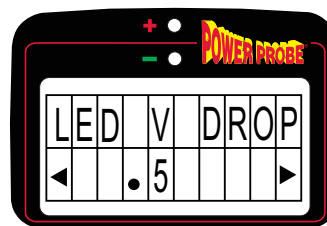
1. Press SEL, once.
2. Press D, twice. Display shows AC THRES.
3. Press L, or R, to select the desired AC Threshold preference: .1, .2, .5, 1, 2, 5, 10, 20, or 50.
4. Press SEL to return to PPHM.
5. Notice the new AC Threshold Setting in the preference line.



f) LED Voltage Drop Preferences

To adjust and set the LED Voltage Drop Preferences while in PPHM:

1. Press SEL once.
2. Press D, 3 times. Display shows LED V DROP.
3. Press R or L, to select the desired Voltage Drop preference: .2, .5, 1, 2, or 3.
4. Press SEL to return to PPHM.
5. Notice the new LED Voltage Drop Setting in the preference line.



IV - POWER PROBE HOOK MODE (PPHM)

the
Smart-Tip!
advantage!

In PPHM the “Smart Tip Advantage” gives you several new powerful tools to help you fix electrical problems faster than any other circuit tester in its class. Why?

Because it automatically selects the:

RIGHT METER and the **RIGHT FUNCTION** for the **RIGHT CIRCUIT** condition.

a) Voltage Testing in PPHM:

Voltage testing is as easy as contacting the probe tip to a circuit and reading the display. There is no need to select the voltmeter before probing because the PPH does that for you automatically. The PPH also provides both the battery source voltage and the probe tip voltage on the display screen for easy voltage comparing.

To test for voltage in PPHM:

1. Take note of the preference parameters in the display.
2. Contact the probe tip to a voltage potential.
3. Take note of the difference between VOLT and BATT on the display.

If the voltage difference is within the LED Voltage Drop Preferences, the Red LED will light and the HOT SHOT symbol will be present.

If the voltage difference is greater than the LED Voltage Drop Preferences, the LED will not light.

4. Voltage is measured from 0 to 99.9 volts.



b) Resistance Testing in PPHM:

Resistance testing is as easy as contacting the probe tip to a circuit or a component and reading the display. There is no need to select the Ohm Meter before probing because the PPH does that for you automatically. It will also auto-range the decimal point.

To test for resistance in PPHM:

1. Contact the probe tip to a circuit or component with resistance to ground.

Resistance is measured and displayed from 0 to 15 megohms.

It is necessary to connect the ground lead to a chassis or other common ground point to accurately measure 2 Ohms or less. This will eliminate voltage drops within the 20 ft cable and improve the accuracy.



c) Activating Electrical Components, Current Draw Testing and Calculated Resistance in PPHM:

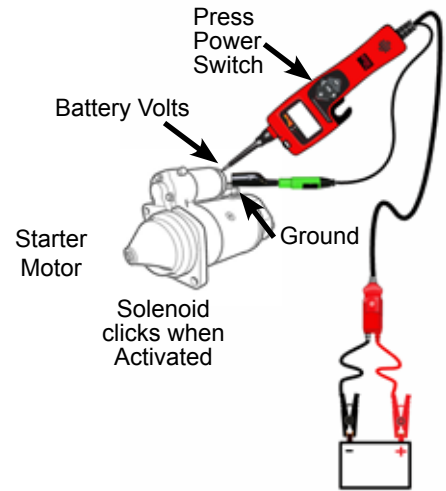
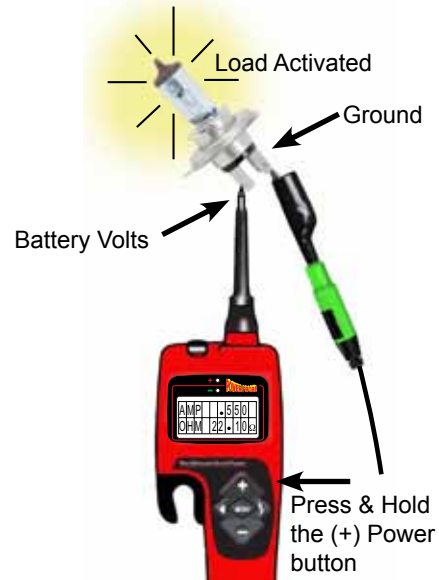
Activating Electrical Components in PPHM is one of the main features that make the PPH very useful. The Power Switch, (+) and (-), behave differently according to the Switch Preferences. Notice the Power Switch Settings on the preference line (see section III-a). Power Switch Behaviors (see section III-d).

Arc Detect is a safety feature that will help protect your circuit, your tip your accessories and YOU! Arc Detect will shut off power to the probe tip if an arc is detected. If you activate the probe tip and then connect or disconnect it, causing an arc, you will hear a short high-pitched tone to let you know it has detected and extinguished an arc. Sometimes components that produce excessive arcs can be difficult to activate in PPHM. You may need to resort to Power Plus Mode (see section VI) for these kinds of components because the Arc Detect is disabled.

Current Draw Testing and Calculated Resistance are dynamic tests that are performed by activating circuits or electrical components with the vehicle's battery power through the PPH and measuring the Amps and Ohms. Since the measurements are made while under power you are getting a true indication as to its real operating integrity.

To test the current draw and calculated resistance of an electrical component in PPHM:

1. Contact the probe tip to the positive terminal of an electric component that is properly grounded.
2. Press and hold (+). The PPH supplies power to activate it. During activation the PPH displays the AMMETER and OHM METER simultaneously.
3. Read the Current Draw displayed as AMP on the screen.
4. Read the Calculated Resistance displayed as OHM on the screen.
5. If the display shows CIR BREAKR TRIP when you attempt to activate the electrical component, you will need to increase the trip point by adjusting it in the Circuit Breaker preferences. (See section: III-c)

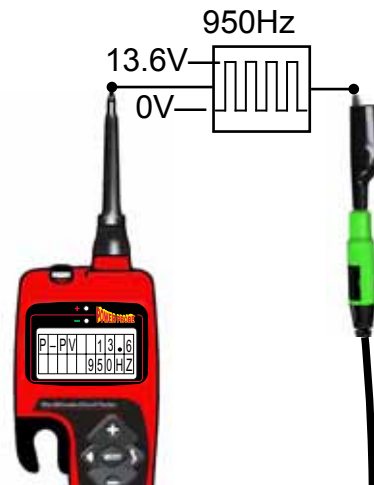


d) AC Peak to Peak/ Frequency Measuring in PPHM:

When testing circuits that generate signals or waveforms, such as primary ignition systems, distributor pick-ups, variable reluctance sensors, fuel metering solenoids, wheel speed, cam and crank sensors, etc. An oscilloscope is the ideal tool. If you don't have an oscilloscope but still need to know if these components are generating a signal, you can use the AC Peak to Peak/Frequency feature of the PPH.

To test for a signal that is being generated by and electronic sensor in PPHM:



1. Adjust your AC Threshold Setting to .1 (see section III-e).
2. Probe the output terminal of the sensor and operate it.
3. You should see the Peak – Peak and Frequency in the display, indicating a signal is being generated.

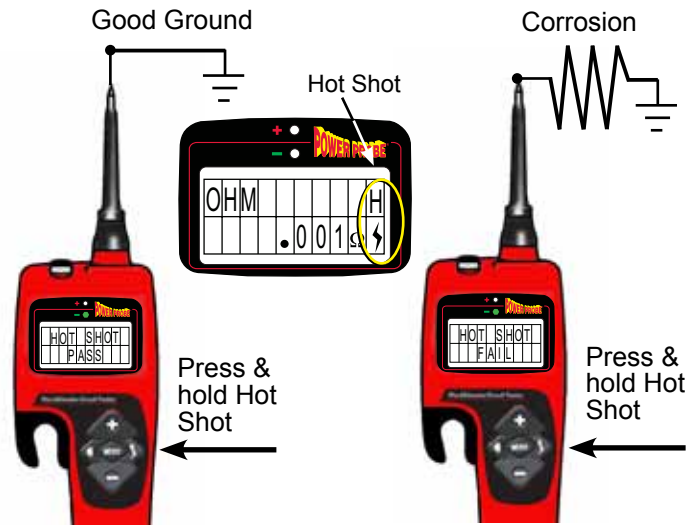


e) Hot Shot Testing in PPHM:

Hot Shot is used to test for certain corroded or resistive ground connections. Hot Shot also tests for certain corroded or resistive positive connections. Hot Shot is intended for power feeds 5 amps or greater only. It works by briefly activating a circuit for less than 7 milliseconds with battery positive or battery ground and determines if the conductivity passes or fails. In order for the circuit to qualify for Hot Shot testing, it has to be within the LED V DROP settings. When the circuit is within the LED V DROP settings the Red or Green LED will light and the Hot Shot Symbol will appear in the display.

To perform the Hot Shot Test in PPHM:

1. Contact the probe tip to an electrical circuit.
The Red or Green LED must be lit and the Hot Shot  appears on the right side of the display.
2. Press and hold R (Hot Shot ). The display will show either PASS or FAIL.

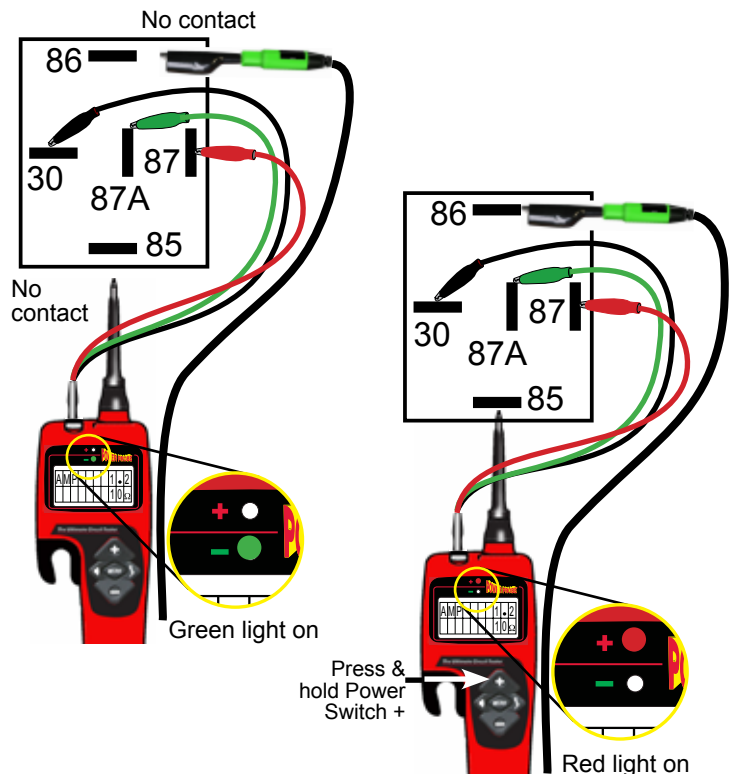
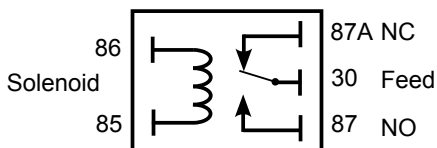


V - CONTINUITY TESTER AND RELAY TESTER

The PPH has a built in two channel Continuity Tester for testing relays and electrical switches. You will also be applying power to the relay solenoid using the auxiliary ground lead and the probe tip. When the 3 wire continuity plug is inserted into the jack, the Red/Green LED's are now dedicated to the Continuity Tester. You can still use the Hook normally to power up or read voltage, ohms or amps.

To test a 5 terminal relay in PPHM:

1. Pull the Rubber Cover from the Continuity Jack and swivel it out of the way.
2. Insert the 3 Wire Continuity Plug into the Continuity Jack.
3. Connect the Black lead to relay terminal #30.
4. Connect the Green lead to relay terminal #87a. (the Green LED should light)
5. Connect the Red lead to relay terminal #87.
6. Connect the PPH Auxiliary Ground Lead to terminal #86
7. Contact the PPH Probe Tip to terminal #85.
8. Press (+). (the Red LED should light and the Green LED should go off)
9. Release (+). (the Red LED should turn off and the Green LED should light)



VI - POWER PLUS MODE

ARC DETECT IS DISABLED! Use CAUTION

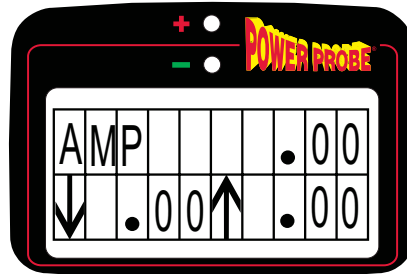
This is an active mode used for activating electrical components similar to PPHM except the Arc Detect feature is disabled. The Power Switch and Circuit Breaker Preferences apply here in Power Plus Mode as they do in PPHM. Power Plus Mode will measure and display the Min/Max Current draw so you capture in rush and stabilized current. High current can be an indication of a sticking or dragging motor or pump.

To access Power Plus Mode from PPHM:

1. Press SEL once.
2. Press U once
3. Press SEL.
4. You should see AMP in the display.

To activate an electrical component in Power Plus Mode:

1. If the electrical component is already grounded in the vehicle, you can skip step 2.
2. Connect the auxiliary ground lead to the ground of the electrical component.
3. Contact the probe tip to the positive terminal of the component.
4. Press (+). The component should activate.
5. Read the display for the average current draw along with the Min/Max measurements.
6. To reset the Min/Max Press R

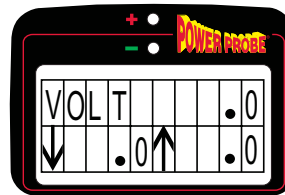


VII - VOLT METER MODE

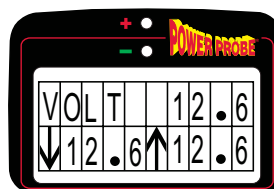
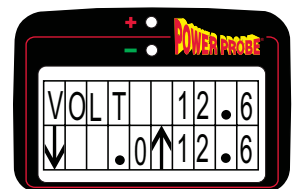
The Volt Meter Mode is a passive mode. The (+) Power and (-) Power buttons are not active so dynamic circuit testing cannot be performed. This means, no Power will be activated to the probe tip even when you press the Power buttons. Volt Meter Mode monitors the probe tip and displays 3 voltage measurements, Average, Min. and Max. Min/Max can be reset by pressing the R button.

To access Volt Meter Mode from PPHM:

1. Press SEL once.
2. Press D, 4 times.
3. Press SEL once.
4. Connect the probe tip to the circuit you want to monitor and test.
5. Press R to reset the Min/Max



When you touch the tip to the positive battery post the average reading and the max will read the same. The Min will remain 0 since it recorded the previous low.



Now reset by pressing the RIGHT ARROW button. Min is now the same as Max.

VIII - OHM METER MODE

Ohm Meter Mode monitors the probe tip and displays 3 resistance measurements, Active, Min. and Max. The Ohm Meter Mode is a passive mode. This means no Power will be activated to the probe tip even when you press the Power buttons.

To access Ohm Meter Mode from PPHM:

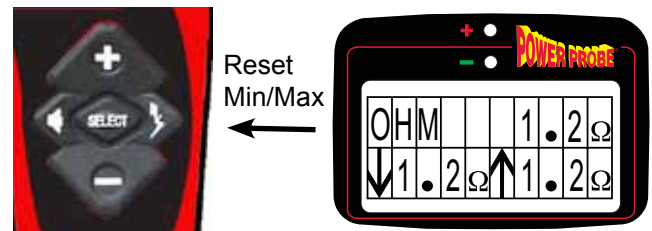
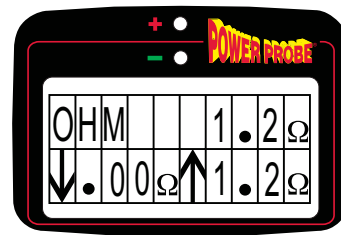
1. Press SEL once.
2. Press D, 5 times.
3. Press SEL once.
4. Connect the probe tip to the circuit you want to monitor and test.
5. Press R to reset the Min/Max.

This mode can only display ohms. In order for Ohm Meter Mode to operate there must be no voltage on the circuit. If the probe tip comes in contact with voltage the Over Voltage alert will sound.

It is necessary to connect the ground lead to a chassis or other common ground point to accurately measure 2 Ohms or less. This will eliminate voltage drops within the 20 ft cable and improve the accuracy.

APPLICATION: If you have a wire bundle and suspect the wiring may have a short or open, you can connect the tip to the circuit and check that the resistance is within the expected limits. If it is, reset the Min/Max by pressing the R button, then move or wiggle the wire bundle. If a wire has an intermittent open, you will see a sudden change in the Max reading. Its exact reading may not be of value as much as the change in reading. If there is a sudden short in the wire, it will be captured on the Min reading. Again, it is the sudden change more than the actual reading that tells you there is a problem with that wire.

Once you have captured Min/Max data, the data will remain on the display until a new Min/Max either overrides it or until you press the R button, which will reset the Min/Max to Average. Ohms Min/Max is a feature of the Ohm Meter Mode only. It is not available in PPHM. To return to PPHM, press SEL button once or press the L button to return to the menu. To return back to Ohm Meter Mode, follow steps described previously.



IX - COUNTER MODE

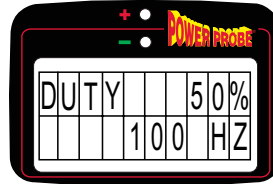
Counter Mode is a passive mode. The (+) Power and (-) Power buttons are not active so dynamic circuit testing cannot be performed. This means, no Power will be activated to the probe tip even when you press the Power buttons. Frequency Counter is a feature of Counter Mode. In Counter Mode you can check Pulse Count, Duty Cycle and both Positive and Negative Pulse Widths. These extra features are useful for measuring signals that are used for sensors, injectors and other signal related components. Each feature will display the selected meter on the top of the display and frequency on the bottom except in Pulse Count.

a) Duty Cycle/Frequency

Duty Cycle is used for checking Cruise Controls, Idle Air Control Motors and Fuel Metering Solenoids.

To access Duty Cycle/Frequency from PPHM:

1. Press SEL once.
2. Press D, 6 times or U, 5 times. It displays COUNT MODE DUTY CYC
3. Press SEL once.

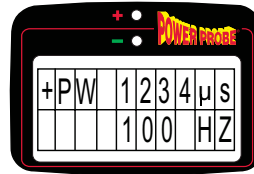


b) Positive Pulse Width/Frequency

Use Positive Pulse Width to check the time a fuel injector is ON, which is the time the ECM/ECU transistor is being pulled to ground. On time. In seconds.

To access Pulse Width/Frequency from PPHM:

1. Press SEL once.
2. Press D, 6 times.
3. Press R, once.
4. Press SEL once.

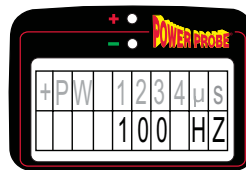


c) Negative Pulse Width/Frequency

Use Negative Pulse Width to check the time a fuel injector is OFF. Off time. In seconds

To access Negative Pulse Width/Frequency from PPHM:

1. Press SEL once.
2. Press D, 6 times.
3. Press R, twice
4. Press SEL once.

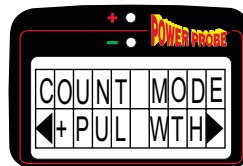


d) Pulse Counter

Counter can be used to check Knock Sensors, Wheel Speed Sensors, Cam Sensors, Crank Sensors and other similar devices where number of counts may be valuable. The maximum pulse rate for the pulse counter is 5 kHz.

To access Pulse Counter from PPHM:

1. Press SEL once.
2. Press D, 6 times or U, 5 times.
3. Press R, three times. It displays COUNTER.
4. Press SEL once.



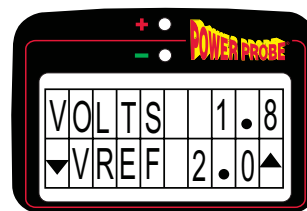
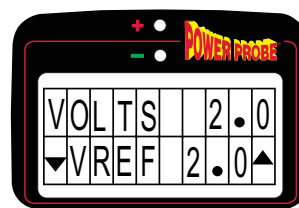
X - VOLTAGE REFERENCE SUPPLY MODE:

Voltage Reference Supply Mode is an active mode but it does not function the same as the normal PPHM activation. It has selectable voltage output to the probe tip that is limited to 20 mA.

To access Voltage Reference Supply Mode from PPHM:

1. Press SEL once.
2. Press D, 7 times or U, 4 times. The display shows VOLTAGE REFERENCE.
3. Press SEL once.
4. Press U repeatedly to increase the voltage on the probe tip and press D repeatedly to decrease voltage on the probe tip.
5. Press R once to turn off reference voltage at the probe tip. The reference voltage peaks at 5 volts max.

APPLICATION: This can be useful when checking the wiring to an ECM/ECU. After you have checked out your sensor using the voltmeter and or ohmmeter, if there is still a problem, you can simulate the voltages put out by sensors in order to verify the wiring going to the ECM/ECU. Using an OBD scanner you can verify the results out of the ECM/ECU. You can select voltages from 0 to 5 VDC in .5-volt increments (Default is 0 volts). The actual voltage on the tip will be displayed on the top of the screen and the set point voltage displayed on the bottom. There is a Set Point Voltage Alarm in case the circuit connected to the probe tip forces the voltage above or below the set point voltage by .1 volts. This is separate from the Over Voltage Alarm that trips at >99.9 Volts. The Set Point Voltage alarm will emit a short tone and you will notice the difference from the actual voltage at the tip from the set point value.



Set Point voltage alarm sounds. Remove and check circuit for shorts or other malfunction.

Output volts

{.2v volts from Set point volts}

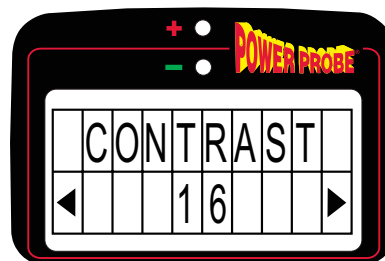
Set point volts not the same as output voltage the Set Point voltage alarm will sound.

XI - CONTRAST:

If the contrast between the characters and the display need adjusting you can do this in CONTRAST.

To access Contrast from PPHM:

1. Press SEL once.
2. Press U, 3 times. The display shows CONTRAST.
3. Press R or L to the desired Contrast.
4. Press SEL once.



XII - SAVE PREFERENCES & DEFAULT SETTINGS:

Save Preferences: If you have certain preferences you would like to save because you use them often. You can select SAVE PREF. All preferences will default to these saved preferences on Start-Up.

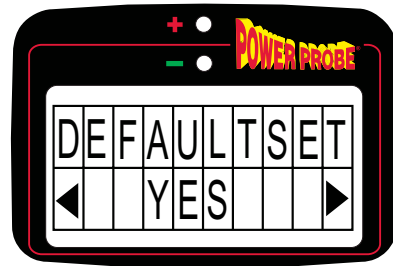
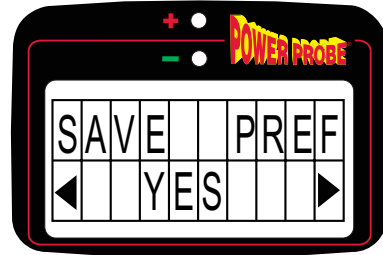
To access Save Preferences from PPHM:

1. Press SEL once.
2. Press U, 2 times.
3. Press R, once.
4. Press SEL.

Default Reset: If you want to reset the Default to factory presets. You can use DEFAULTSET.

To access Default Reset from PPHM:

1. Press SEL once.
2. Press U, 2 times.
3. Press R, 3 times.
4. Press SEL.



Safety Information: ALWAYS USE SAFETY GLASSES, OR EYE PROTECTION.

There are a number of safety features built in to the Power Probe Hook to protect the tool, the test circuit and you! Below is a list and brief description of all the safety features.

1. Circuit Breaker:

Shuts off current to the tip if set value is exceeded. Plays tone specific to Circuit Breaker trip. In momentary and pulsed mode, you must re-energize the Power Up buttons, in Latch Mode power re-energizes automatically. Only available in Power Probe Hook Mode (PPHM) and Power Plus Mode.

2. Arc Detect:

Momentarily shuts off current to the tip if an arc occurs in the circuit when powered. Plays tone specific to Arc Detect. Has smart function to turn off arc detect to provide full power in the presence of motor specific arcs.

3. Thermal Overload Trip feature

Powering up loads generates heat within a circuit depending upon the load and the duration. The Power Probe Hook has built in calculated thermal protection. This means the higher the load and longer the duration, the higher the Power Probe Hook will assume its internal temperature. The Power Probe Hook can drive a 25 amp load continuously but can only drive a 65 amp load for about 8 seconds. If the thermal overload is tripped, the power will be terminated and the thermal overload warning, "OVER TEMP" will appear on the display with a count down bar that will countdown for 10 seconds. You will hear a tone specific to Thermal Overload. If the load is immediately repowered again after the Thermal Overload, the run time will continue to shorten before Thermal Overload triggers again.

4. Overvoltage Alarm

If the voltage on the tip exceeds 99.9 Volts AC or DC the display will read Overvoltage and you will hear a specific tone. The Hook has been rated for + or - 500VDC maximum to protect the tool. Available in all modes.

5. Sleep Mode

Sleep Mode is designed to preserve the life of your Display Back Light. Sleep Mode only works in Power Probe Hook Mode (PPHM) when not being used. If you leave your meter in any other mode the Hook will stay active. The Backlight is guaranteed for 10,000 hours life. Leaving the Hook Powered Up in any mode other than Power Probe Hook Mode (PPHM) will subtract from the overall life and is not recommended. If you have powered up the Hook and it is sitting in Power Probe Hook Mode (PPHM) with no action being taken for 10 minutes, your Hook will enter into Sleep Mode. At this time the Flashlight and Backlight will be turned off and SLEEPING will appear on the display. If the tip senses a change or any button is pressed, the Hook will wake up. It is ok to press any button when in sleep mode to wake it up. If a button is pressed when asleep no action will be taken for that button press at that time only. The next press will be active. Available only in Power Probe Hook Mode (PPHM).

6. Set Point Voltage Alarm

In Voltage Reference Mode only, if the voltage on the tip is different from the set voltage, a tone will sound.

7. Reverse Polarity Hook Up

The Hook has built in protection against reversing the polarity of the Hook Up Clips.

8. Fuse protection

The Power Probe Hook Up Clip set has built in fuse protection. Never try to connect your Power Probe Hook to a battery without the proper supplied connector. Fire can occur! If the Hook Up Clip set is in proper working order, a light can be seen glowing within the side of the connector body. If your Power Probe Hook is not powering up, check to see that the light is lit. If not and the polarity is correct, you need to replace your Hook Up Clip set and you should have your Power Probe Hook inspected for possible damage before using again.

The Ground Cable also has fuse protection in the event of the Ground Cable end coming in contact with a positive battery source or exceeding 25 amps continuous using the Ground Cable as ground source. It has a replaceable 20mm x 5.5 mm automotive fuse. To replace fuse, pry out fuse cover from Ground Cable connector body, remove old fuse and insert new. Press back into Ground Cable connector body.

Facts & Tips

- Don't forget to warranty your product by going to the Power Probe website or fill out & send in the warranty card.
- Power Probe Hook Mode (PPHM) is Auto Selecting and Auto Ranging. This means you don't have to figure out which button to press to get Volts or Ohms and Amps will display when you press the power button.
- Take the time to get very familiar with the preference line of the PPH. (See section III-a)
The symbols at the top of the display after boot up are the default preference values. If you change the preference values, the values at the top will change accordingly. This way you always know what your preferences are set to.
- Battery voltage will always be displayed in Power Probe Hook Mode when the tip is unloaded. The first thing you must do after power up is look at the battery voltage and decide if it is within operational voltage of the Hook, 9-48 VDC. If the Hook doesn't power up, check your battery first, then make sure your battery clips are on the correct polarity and the LED in the battery clips is lit.
- Before testing any components that are 5 amps or greater, you should use the Hot Shot feature to verify the power feeds to the component to avoid misdiagnosis due to poor connection or faulty contacts. Do not use Hot Shot on circuits less than 5 amps. It could cause damage.
- In Power Probe Hook Mode (PPHM), regardless of what is on the tip, you can enter into the menu system by pressing the SELECT Button. You can get back into Power Probe Hook Mode (PPHM) by pressing the SELECT Button again.
- The menu system is like a corridor. When you first power up, you will be put into the room Power Probe Hook Mode (PPHM). You can enter into to the corridor by pressing the SELECT button. You can move up and down the corridor using the UP or DOWN ARROW buttons to reach different doors. You can enter any room along the way by using the RIGHT ARROW button. You can exit these other rooms by pressing SELECT or the LEFT ARROW button.
- All preferences will return to default on the next power up unless you use the Save Preferences function. If you like where you have set your preferences and want to save them, use the Save Preferences Option. (see section XII)
- If you don't like your saved settings, use Default reset to restore factory settings. (see section XII)
- Min/ Max are NOT found in Power Probe Hook Mode (PPHM). It is only found in Volt Meter, Ohm Meter and Power Plus Modes.
- There is an Arc Detect function that is designed to preserve your tip and circuit. It is active in Power Probe Hook Mode (PPHM) but is not in Power Plus Mode.
- Components that depend on arcs such as horns and motors can be affected by the Arc Detect circuit. Most horns and motors should not be affected but depending on the component and its age, there may be interference caused by Arc Detect. If you intend to power up something like a motor or horn you can go directly to Power Plus Mode and apply full power. Caution must be used on high current devices. Always use the Power Probe Hook safely as described in the manual.
- The larger the current draw the less run time before Thermal Overload Protection is activated. It is not a sign of component failure. The Hook is protecting itself. The longer the cool down time the longer the subsequent run time and vice versa. Thermal overload will shut down power for 10 seconds if triggered. The Hook can run 25 amps continuously.
- There are 4 types of meters in Counter Mode including a simple pulse counter, positive and negative pulse widths and duty cycle. All but pulse counter display frequency with the selected meter.
- There can be AC signals in DC systems. If you want to measure them, lower your AC threshold setting to the lowest setting to display a peak to peak voltage when an AC voltage greater than that setting becomes present on the tip. Increase the sensitivity to only detect higher levels of AC voltage when present. AC Peak to Peak will override Volt Meter when in Power Probe Hook Mode (PPHM). Set the AC Threshold preference to the highest setting if you find that unimportant AC signals are interfering with your DC voltage readings.
- This device is NOT intended for AC voltage measurements other than those in DC systems.
- To measure frequency in Power Probe Hook Mode (PPHM) you must also adjust your AC Threshold preference down from 50 to .1.

AC Peak to Peak and Frequency are the same function.

- The speaker can only be turned on and off in Power Probe Hook Mode (PPHM).
- The Red and Green LED's will not detect Voltage Drop unless in Power Probe Hook Mode (PPHM).
- You may have to adjust your Voltage Drop preferences to get the Red/ Green LED's to work as a Voltage Drop Meter.
- When the 3 wire continuity plug is inserted into the jack, the Red/Green LED's are now dedicated to the Continuity Tester. They will respond to either the red or green wire respectively when touched to the black. You can still use the Hook normally to power up or read voltage, ohms or amps.
- The auxiliary ground has a replaceable 25 amp fuse. Always touch it to the tip for continuity before using it to make sure the fuse is not blown.

Specs...

Product Specifications

| | | | |
|--------------------------------|-----------------|----------------------------|-------------------------|
| Min Operating Voltage | 12 VDC | Ohms Measurement | .001 Ohms – 15 Meg Ohms |
| Max Operating Voltage | 48 VDC | Amps Measurement | .001 Amps – 99.9 Amps |
| Max Operating Temperature..... | 50 C | Max Continuous Load..... | 25 Amps |
| Max Storage Temperature | 70 C | Max Intermittent Load..... | 65 Amps for 8 Sec. |
| Voltage Measurement..... | 0-99.9 VDC/ VAC | Hook Up Cables | 10 Gauge |

Warranty

Your Power Probe Hook is warrantied against any defects and workmanship when used normally in accordance with Power Probe's published guidelines for a period of 1 year from the date of warranty activation. You have 30 days after purchasing your Power Probe Hook to activate your warranty. The product is automatically warrantied for the first 30 days. You can activate your warranty by filling out the warranty card and mailing it in to us. You may also go to our website: powerprobe.com/warranty/ or scan the QR Code with your mobile device and fill in the required information. You may also register your warranty by calling us at: (800) 655-3585. Please have your serial number ready and your sales receipt for date of purchase.

The warranty does not cover damage due to moisture or physical abuse. If you fail to activate your warranty within the 30 days, the warranty may be void. If repair is necessary you may be charged a calculated fee to repair it.

When you warranty your product within the 30 days, you will have the option to purchase an extended warranty of 1 year in addition to your 1 year activated warranty for \$79.95.

Removing the back cover VOIDS any warranty

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