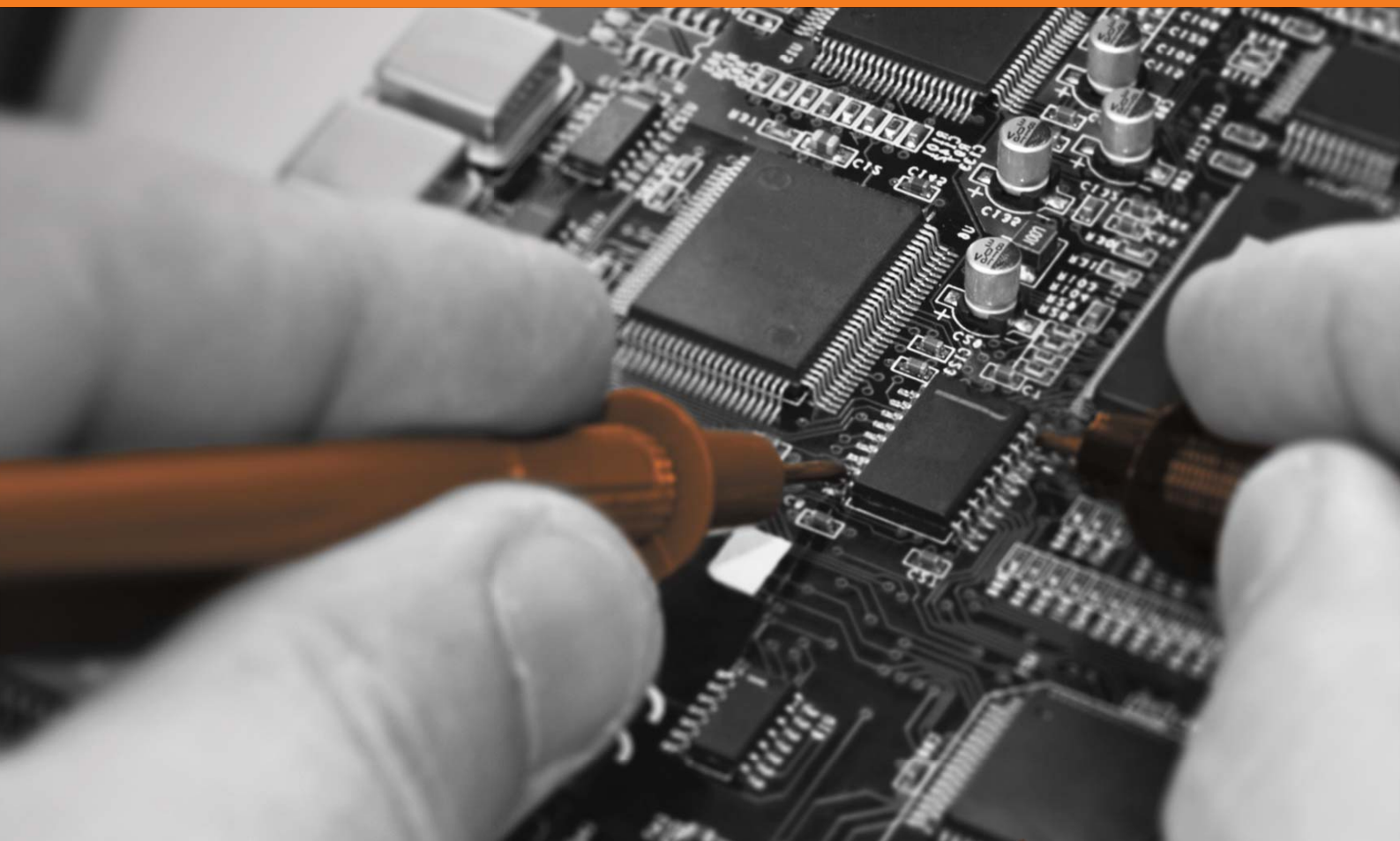


No matter what you want to measure, we have the right Test Probes & Leads for you.



With more than 1,800 test leads and probes available, designed for a wide range of test and design applications, you can find high quality and reliable products from leading manufacturers, in stock, for quick delivery.

With our on-line parametric search you can select test leads and probes by manufacturer, function, bandwidth, attenuation, product range, voltage rating, current rating and other

criteria to help fine tune your search and match your specific testing requirements.

## Current/Clamp Test Probes

Broad range of AC/DC and AC-only current probes, with measurement accuracy from 50µA to 6000 A.

See full range at:

[newark.com/current-clamp-test-probes](http://newark.com/current-clamp-test-probes)



## Environmental Test Probes

Wide choice of Temperature, Humidity, Velocity, Pressure, Vibration or Multifunction probes available.

See full range at:

[newark.com/environmental-test-probes](http://newark.com/environmental-test-probes)



## Logic Analyzer Probes

Reliable connection between your logic analyzer and the system under test, with a variety of connectivity options.

See our product: [newark.com/logic-analyzer-probes](http://newark.com/logic-analyzer-probes)



## Oscilloscopes Test Probes – Voltage/Frequency

A wide selection of Active, Passive and Differential Probes available in stock.

See full range at: [newark.com/oscilloscope-test-probes-voltage-frequency](http://newark.com/oscilloscope-test-probes-voltage-frequency)



## Test Leads / Probe Kits

All you need in one kit: probes, clips, tips, adapters and test accessories.

See full range at: [newark.com/test-lead-probe-kits](http://newark.com/test-lead-probe-kits)



## Test Leads

Broad range of products including BNC, up to 4mm test leads, coaxial test leads and more.

See full range at: [newark.com/test-leads](http://newark.com/test-leads)



## Test Lead Sets

Leads, Clips, Cables, Wires, Plug-in Accessories and more, all in one pack.

See full range at: [newark.com/test-lead-sets](http://newark.com/test-lead-sets)



## Test Probes – Lead End Connectors

Test Plugs and Sockets, Test Clips, Terminals, Accessories and more.

See full range at:

[newark.com/test-probes-lead-end-connectors](http://newark.com/test-probes-lead-end-connectors)



# About Test Leads and Probes

## What are Test Leads and Probes?

**Probes** provide a physical and electrical connection between test equipment and the test point. Mostly used for oscilloscopes, there are different probes to meet the physical connection requirements for different applications. Correct probe selection leads to enhanced measurement capabilities and results.

**Test Leads** are devices that connect electronic testing equipment to an electrical device being tested. Most digital multi-meters (DMMs) are supplied with a set of test leads that are quite useful for a wide variety of testing situations, for applications ranging from engineering research to test labs to field service and plant maintenance.

## Types of Probes

### SIGNAL TYPE

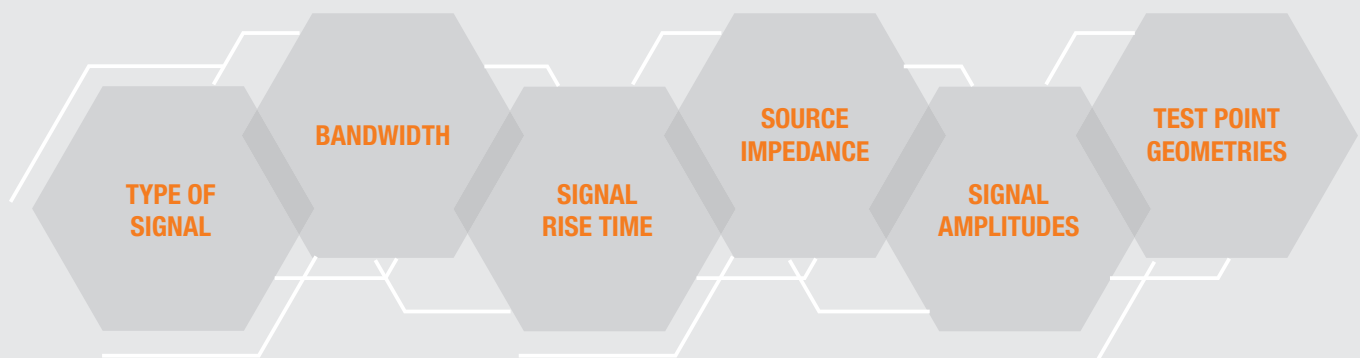
CURRENT		VOLTAGE		LOGIC	OTHER	
CURRENT PROBES		VOLTAGE PROBES		LOGIC PROBES	TRANSDUCERS	
ACTIVE	PASSIVE	ACTIVE	PASSIVE	ACTIVE	ACTIVE	PASSIVE
AC	DC	AC	Differential High Sensitivity High Impedance	Voltage Divider High Impedance High Voltage Differential	Logic Trigger Word Recognizer Logic Analysis	Optical  Temperature Vibration Acoustic, etc.

## Types of Leads

CONNECTOR TYPE	VOLTAGE RATING	CURRENT RATING	COLOUR	LENGTH OF LEAD
<ul style="list-style-type: none"> <li>Mono or double 2mm or 4mm banana plugs or sockets - shrouded, straight or right angled, stackable or not.</li> <li>BNC plug and jacks Crocodile clips.</li> </ul>	A wide range of voltage rating from 15V to 40kV	Current rating starting from 40µA to 45A	Large panel of insulator colors: the standard black and red colors but also blue, brown, green, green/yellow, grey, orange, violet, white and yellow.	From 56mm to 12m

## Key Things to Consider when Selecting a Probe

Define your signal measurement requirements. By selecting a probe that is appropriate to your signal type, you can get direct measurement results faster.



Take into account the type of circuitry that you'll be probing and any adaptors or accessories. This may require special selection considerations about probe head size and probe tip adaptors to allow easy and convenient circuit attachment. That will make probing quicker and easier.

Look for manufacturers specifications. Probes and oscilloscopes are now designed as complete systems. The best probe-to-oscilloscope match is always obtained by using the standard probe specified by the oscilloscope manufacturer.

## Probing Tips

### Compensate Your Probes

Most probes are designed to match the inputs of specific oscilloscope models. There are slight variations from oscilloscope to oscilloscope and between input channels in the same oscilloscope. To deal with this, many probes have built-in compensation networks.

### Use Appropriate Probe Tip Adapters Whenever Possible

A probe tip adapter that's appropriate for the circuit being measured makes probe connection quick, convenient, and electrically repeatable and stable.

### Keep Ground Leads as Short and as Direct as Possible

An extended ground lead allows you to attach the ground once and freely move the probe around the system while you look at various test points. However, the added inductance of an extended ground lead can cause ringing to appear on fast-transition waveforms.

## Key Things To Consider When Selecting A Test Lead



## Frequently Asked Questions

### Q: Which products need test leads and probes? Is it only oscilloscopes?

A: No, test leads and probes can be matched to oscilloscopes, as well as handheld and bench digital multimeters.

### Q: Do they come in a complete kit? Can you buy more than one "type"?

A: Yes, you can buy more than 1 type according to the application and what is being measured (active or passive probes, high or low voltage, etc.). They can be sold individually or as a set.

### Q: Are probes only useable for the products they come with or could they work with others products?

A: Some probes can work with other products, as long as they are the correct specification and have suitable adapters. Always check manufacturer specifications before purchasing.

Take safety precautions to avoid injury and to prevent damage to your test equipment or any product that it is connected to. To avoid potential hazards, use your test equipment only as specified by the manufacturer.

### Q: How can you get an adapter to fit with other brands? Do you have those?

A: Yes, they are available online and sold separately.

### Q: How long will my test leads and probes last?

A: When running probes in a testing environment there are many factors that will reduce the life cycle expectations of a probe such as: contaminants on the DUT (Device Under Test) and in the environment, damage to the probe's tip, plating, etc. It is virtually impossible to determine how long a probe will last in a specific test environment. The best method to determine probe life is to monitor probes in the test environment and to develop a maintenance program for your specific application.