

UT-M26 Logic Probe User Manual

General Safety Instructions

- Connect and disconnect probes properly.
- Observe all terminal ratings.
- Do not touch exposed wires or components when power is applied.
- Do not operate the product if a malfunction is suspected.
- Never operate the product with the cover removed.
- Do not use the product in flammable or explosive atmospheres.
- Do not operate in high-humidity environments.
- Keep the product surface dry.
- Handle the product carefully to ensure safety.

Product Overview

The UT-M26 is a high-performance logic probe designed to connect digital buses and signals from the system under test to MSO1000HD series high-resolution oscilloscopes. It provides 16 signal channels (D0 - D15) and 16 ground channels, all clearly labeled on the probe with distinct colors and numbers for easy identification.

The UT-M26 is supplied with 16 front-end signal leads and 16 ground leads for each channel group, enabling flexible connection to the test signals and reference grounds while maintaining high signal integrity.



Connecting the Probe to the Oscilloscope

1. Connecting the UT-M26 to the oscilloscope.

Connect the probe vertically to the **[DIGITAL]** interface on the front panel of an MSO 1000HD series digital oscilloscope, following the direction indicated by the arrow in the figure below. Note: The **UNI-T** marking should face upward and the **UT-M26** marking should face downward.



2. Connecting the signal under test to the UT-M26.

Users can connect any number of signals (up to 16) to the UT-M26, depending on test requirements. Ensure that the input signal amplitude does not exceed the probe's maximum operating voltage range.

The UT-M26 provides three connection methods for different application scenarios.

Method 1: Connect the UT-M26 directly to dual-row gold pins pre-installed on the device under test (see Figure 1).

Method 2: Connect each signal individually using the front-end leads. Each channel can be identified by the colored rings on the corresponding lead (see Figure 2).

Method 3: Based on Method 2, attach a probe test clip to the front-end lead, then connect the signal node under test via the metal hook inside the clip (see Figure 3).

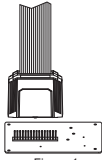


Figure 1

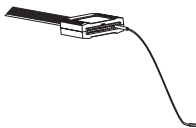


Figure 2

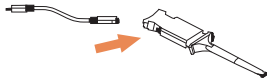


Figure 3

3. Configuring the probe.

Press the Digital button on the oscilloscope's front panel to open the probe setup menu. The following parameters can be viewed and configured:

- **Threshold:** Threshold levels for the D7 - D0 and D15 - D8 channel groups can be adjusted independently.
- **Waveform Size:** Applies to all channels. The Large option is available only when no more than eight channels are active.
- **Label and Bus:** Two independent dedicated digital buses are available, each with separate settings for clock, bit width, display format, jitter suppression, and other parameters.

4. Function check.

After completing the above steps, the signals under test should appear on their respective channels.

If no active signal is displayed:

- Adjust the oscilloscope settings, such as trigger mode and time base.
- Verify all electrical connections and parameter settings.
- If necessary, verify the signal at the test point using another probe (for example, an analog probe) to confirm its presence.

Technical Specifications

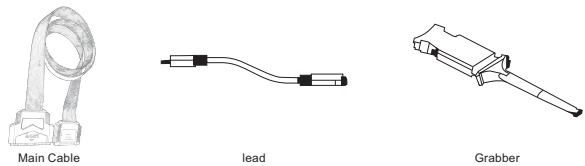
Input Channels	16
Threshold Range	± 20V
Threshold Accuracy	± (100 mV + 3% of threshold)

Maximum Swing Voltage	± 20V
Minimum Swing Voltage	500 mV
Minimum Detectable Pulse Width	5 ns
Input Impedance	101 kΩ ± 1%
Input Capacitance	9 pF ± 1 pF
Probe Cable Length	Approx. 100 cm
Front-end Lead Length	Approx. 15 cm
Operating Temperature	0 to 40°C, 0 to 80% RH
Storage Temperature	-20°C to 60°C, 0 to 90% RH

Accessories

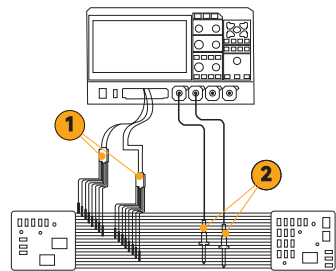
Standard	Main Cable x1
	Leads x20
	Grabbers x20
	Portable pouch x1

Attachment diagram

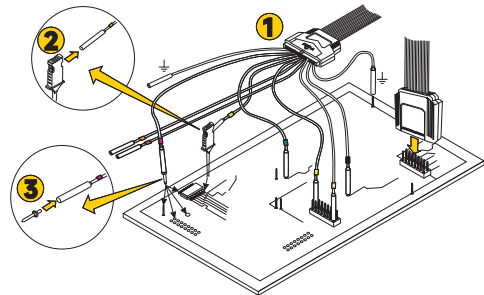


Typical Application

1. Use the logic probe UT-M26 to observe digital signals on a system bus.
2. Use a passive probe, such as the UT-P05 or UT-P06 to observe analog waveforms.



3. Connect the logic probe UT-M26 to the circuit for signal acquisition.



UNI-T

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