

TECHNICAL DATA

Amprobe UAT-505 Underground Utilities Locator Kit



Key features

- Locate underground energized and de-energized wires and cables
- Locate underground metal pipes
- 33 kHz transmitting frequency: best frequency for general locating
- Measure depths up to 20 ft

Product overview: Amprobe UAT-505 Underground Utilities Locator Kit

The Amprobe UAT-505 Underground Utility Locator Kit is a rugged, economical solution for locating underground energized and de-energized wires, cables and pipes. The Transmitter utilizes the proven 33 kHz frequency, which is ideal for most locating applications. With the Receiver, trace the signal in Induction or Direct Test Leads Connection Modes. The Receiver features fast sound and meter response and easy depth measurements to 20 feet at the push of a button, as well as highly sensitive Power and Radio Modes which detect energized wires and radio signals on underground lines.

Expert tracing features for any situation

The UAT-505 can be used in different modes for optimal tracing in many situations.

Receiver

- Power Mode locates energized wires with a 50/60 Hz frequency. The Receiver alone detects the electromagnetic fields emitted by buried energized lines conducting currents.
- Radio Mode uses the Receiver to detect radio waves coming from cellular towers, radio stations, etc. that are picked up and carried by underground metal objects, such as cables or pipes.

Receiver and transmitter


- Induction Mode uses the Transmitter to wirelessly induce a signal into a buried pipe, cable, or wire. The Receiver then detects the signal carried by the buried utility.
- In Direct Test Leads Connection Mode, the Transmitter is connected to the buried de-energized cables or utilities with test leads (provided there is an available access point to the utility). The Transmitter then sends a signal across the wire or pipe.
- If it is not possible to gain access to a cable for making an electrical contact or it is not safe to do so, the optional Signal Clamp provides an efficient and safe method of applying a locate signal to a cable.







Note: The UAT-505 can also trace non-metallic pipes in Induction or Direct Test Leads Connection Modes. Some of these pipes have embedded metal trace that will conduct signal for tracing. For pipes without embedded metal, use a conductive tracing tape.



Note: The UAT-500-T Transmitter should never be connected to an energized circuit. The Amprobe UAT-600-T Transmitter, safety rated CAT IV 600 V, can be safely used to connect to energized circuits.

Specifications: Amprobe UAT-505 Underground Utilities Locator Kit

UAT-500-T Transmitter	
Operating voltage	De-energized circuit only for Direct Connection Mode
Transmitting frequency	33 kHz
Tracing modes	De-energized: - Induction Mode - Direct Connection Mode - Clamp Mode
Transmitting mode power output	Max. 1 watt
Output voltage	Max. 35 V rms
Output current	Max. 100 mA rms
Visual signal indication	Two LEDs indicating LO and HI signal
Audio signal indication	Continuous Signal Mode: Continuous audio tone Pulse Signal Mode: Fast pulsed audio tone
Compatible receiver	UAT-600-R Receiver
Compatible accessories	SC-600 Signal Clamp TL-UAT-500 Test lead set

Operating temperature and humidity	'-4 °F to 122 °F (-20 °C to 50 °C), ≤ 80% RH
Storage temperature and humidity	'-40 °F to 140 °F (-40 °C to 60 °C), ≤ 80% RH
Operating altitude	< 6561 ft (< 2000 m)
Pollution degree	2
IP-rating	IP54
Power supply	Four (4) 1.5 V D cell alkaline batteries
Battery life	Approx. 12 hours at 70 °F (21 °C) (Typical)
Low battery indication	Both LO and HI LEDs blink every 1.5 seconds and audio sound pulses every 1.5 seconds
Agency approval	
Safety compliance	IEC 61010-1, CSA/UL 61010-1, IEC 61010-031, CSA/UL 61010-031 (test leads)
Electromagnetic Compatibility	IEC 61326-1 Korea (KCC): Class A Equipment (Industrial Broadcasting & Communication Equipment) [1] [1] This product meets requirements for industrial (Class A) electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and is not to be used in homes.
Size (H x W x L)	Approx. 18.1 x 3.5 x 2.6 in (460 x 90 x 65 mm)
Weight	Approx. 3.9 lb (1.77 kg) (batteries installed)
UAT-600-R Receiver	
Operating voltage	0 to 600 V
Tracing modes	Active tracing: 33 kHz (32,768 Hz) and 8 kHz (8,192 Hz) Passive tracing: 50 / 60 Hz and Radio
Locating modes	Peak and Null
Sensitivity adjustment (gain control)	Yes
Depth measurement	Up to 6 m (20 ft)
Depth measurement accuracy	4 in (0.1 m) to 10 ft (3m): ± 3 % 10 ft (3 m) to 20 ft (6 m): ± 5 %

Sensitivity at 1 m (typical)	Power: 2 mA Radio: 20 μ A 8 kHz: 5 μ A 33 kHz: 5 μ A
Display backlight	Automatic
Audio indication	Increasing closer to the signal
Compatible transmitter	UAT-600-T Transmitter
Display	4.3 in (109 mm), 320 x 240 BW outdoor LC-Display with auto backlight
Update rate	Instantaneous
Operating temperature and humidity	'-4 °F to 122 °F (-20 °C to 50 °C), \leq 90% RH
Storage temperature and humidity	'-40 °F to 140 °F (-40 °C to 60 °C), \leq 90% RH
Operating altitude	< 6561 ft (< 2000 m)
Pollution degree	2
IP-rating	IP54
Drop proof	3.28 ft (1 m)
Power supply	Six (6) 1.5 V AA alkaline batteries
Auto power off	15 minutes idle Will auto turn off after 15 min of no button pressing
Battery life	Approx. 35 hours at 70 °F (21 °C) (Typical)
Low battery indication	 and/or  at upper right corner of the screen
Measurement Category	CAT IV 600 V
Agency approval	   
Safety compliance	IEC 61010-1, IEC 61010-2-033 CSA/UL 61010-1, CSA/UL 61010-2-033
Size (H x W x L)	Approx. 11.9 x 4.7 x 30.7 in (302 x 120 x 779 mm)
Weight	Approx. 4.2 lb (1.9 kg) (batteries installed)
TL-UAT-500 Test Leads	
Operating voltage and current	50 V max, 1 A
Leads length	11.5 ft (3.5 m)

Compatible transmitter	UAT-500-T Transmitter
Operating temperature and humidity	'-4 °F to 122 °F (-20 °C to 50 °C), ≤ 80% RH
Storage temperature and humidity	'-40 °F to 140 °F (-40 °C to 60 °C), ≤ 80% RH
Operating altitude	< 6561 ft (< 2000 m)
Pollution degree	2
Agency approval	
Safety compliance	IEC 61010-031, CSA/UL 61010-031
Size (H x W x L)	Approx. 9 x 3.5 x 3.1 in (230 x 90 x 80 mm)
Weight	Approx. 1.1 lb (0.5 kg)
SC-600 Signal Clamp	Not included, optional accessory
Operating voltage & current	0 to 600 V, 100 A max.
Operating frequency	33 kHz (32,768 Hz) and 8 kHz (8,192 Hz)
Signal voltage output (nominal)	23 V rms at 8 kHz 30 V rms at 33 kHz
Operating temperature and humidity	'-4 °F to 122 °F (-20 °C to 50 °C), ≤ 90 % RH
Storage temperature and humidity	'-40 °F to 140 °F (-40 °C to 60 °C), ≤90% RH
Operating altitude	< 6561 ft (< 2000 m)
Pollution degree	2
IP-rating	IP54
Drop proof	3.28 ft (1 m)
Measurement Category	CAT IV 600 V
Agency approval	
Safety compliance	IEC 61010-1, IEC 61010-2-032 CSA/UL 61010-1, CSA/UL 61010-2-032

Electromagnetic Compatibility	IEC 61326-1 Korea (KCC): Class A Equipment (Industrial Broadcasting & Communication Equipment) [1] [1] This product meets requirements for industrial (Class A) electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and is not to be used in homes.
Size (H x W x L)	Approx. 11.6 x 7.1 x 1.4 in (295 x 180 x 37 mm)
Weight	Approx. 1.9 lb (0.85 kg)

Ordering information



Amprobe UAT-505

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Fluke. *Keeping your world up and running.®*

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