

Tekneka UCL15 Pipeline/Cable Locator is your essential device for confidently navigating the complexities of underground utilities. Designed with advanced detection modes and adaptable signal outputs, it empowers you to precisely track pipelines, accurately measure their depth, and reliably identify target lines with ease. This reliable instrument eliminates guesswork, ensuring safer operations and significantly boosting productivity. Discover hidden infrastructure with unparalleled clarity and efficiency, solving your most challenging locating problems.

Features

- **Many Ways to Find Things:** Classic, Plan View, Signal Curve, or Sonde Location Modes for versatile use.
- **Easy-to-Read Screen:** Classic Mode shows compass, direction, and signal strength. Plan View Mode offers a full 360° pipeline view with continuous depth, current, and relative position.
- **Signal Changes:** Signal Curve Mode displays historical signal strength to pinpoint cable locations.
- **No More Confusion:** Calibrates current direction to prevent tracking errors from nearby lines (for specific frequencies).
- **Find the Right Frequency:** Sweep Test function helps select optimal signal frequencies, avoiding interference.
- **Wide Range of Frequencies:** Features 10 active and 2 passive detection frequencies.
- **Flexible Signal Sending:** Transmitter supports direct connection, signal coupling, and induction methods.
- **Advanced Transmitter:** Boosts power output, automatically matches impedance, and includes automatic protection.
- **Optional Functions:** Add cable fault locating (with A-Frame) and Sonde Location for non-metallic pipes.

Application

The UCL15 Cable/Pipeline Locator simplifies underground utility management. It accurately traces pipeline routes, measures depth and current, and identifies cables (live or not). This tool is crucial for pinpointing grounding faults and efficiently searching areas for unknown pipes, even in complex, high-interference environments.

Technical Specification

Receiver	
Function	Buried Cables/pipeline Location: Cables/pipeline route tracing, direction display, depth measurement, and current measurement Cable Identification: (Rogowski coil and Stethoscope) Energized cable identification; DE-energized cable identification; Sonde Position (Optional) Grounding fault position (Optional, A-frame)
Receiving Configuration	Built in receiving coil; Rogowski coil; A-frame
Receiving Frequency	Active detection frequency: 128Hz, 512Hz, 577Hz, 640Hz, 1024Hz, 1280Hz, 2.56kHz, 3.20kHz, 4.09kHz, 8.19kHz, 9.50kHz, 9.80kHz, 10kHz, 33kHz, 66kHz, 82kHz, 83.1kHz, 89kHz, 133kHz, 201kHz Passive detection frequency: 50Hz, 60Hz
Detection Method	Direct connection method, Coupling method, Induction method
Depth Accuracy	±5% (depth below 3m); ±15% (depth from 3m to 20m)
Locating Mode	Broad Peak Mode, Peak Response Mode, Null Mode



Receiver	
Cable Identification	Rogowski Coil; Calibration Cable: 1~ 10 cables/signals, Calibration value: The percentage of the received signal and the transmitted signal Successful Identification: 75%~135%;
Interference Distance	<u>Pipeline detection:</u> Coupling Method: No interference beyond 5m Induction Method: No interference beyond 20m <u>Cable identification:</u> It can be confirmed that there is no interference beyond 5m when using coupling method
Detection Range	Direct connection method: 0Ω ~ 8kΩ; (up to a cable length of 20 kilometers, mainly determined by grounding resistance and cable resistance) Coupling method: 0Ω ~ 1kΩ; (up to a cable length of 10 kilometers, mainly determined by the grounding resistance and cable resistance)

Receiver General Specification	
Power Supply	7.4V DC 6400mAh rechargeable lithium battery
LCD	4.3-inch color and touch screen LCD
Size	311mm x 133mm x 750mm
Weight	2kg
Charger	DC 8.4V, 1A
External Connector	DC charging port: 1 Type-C charging port: 1 Flexible coil connection socket: 1
Operating Temperature	-10°C ~ 40°C
Storage Temperature	-10°C ~ 50°C
Safety Regulation	IEC61010-1 CAT III 600V, IEC61010-031, IEC61326, Pollution level 2



Transmitter	
Function	Multiple frequency signal transmission methods for pipeline path detection, cable identification, and fault location
Locating Mode	Direct Connection, Induction, Signal Coupling
Output Frequency	128Hz, 512Hz, 577Hz, 640Hz, 1024Hz, 1280Hz, 2.56kHz, 3.20kHz, 4.09kHz, 8.19kHz, 9.80kHz, 10kHz, 33kHz, 66kHz, 82kHz, 83.1kHz, 133kHz, 201kHz
Output Power	15W Max, 15 power gears available, fully automatic real-time impedance matching
Output Voltage for Direct Connection	150V Max
Circuit Protection	Overload and short-circuit protection
Dielectric Strength	AC 3700V/rms (Before the top and bottom of the instrument box)

Transmitter General Specification	
Power Supply	11.1V DC 12800mAh rechargeable lithium battery
LCD	5.6-inch touch and colour LCD
Size	259mm x 211mm x 105mm
Weight	Transmitter 3.00Kg; Transmitting Clamp: 1.12kg
Charger	DC 12.6V, 1A
External Connector	USB: 1 (firmware upgrade, can charge phone) DC charging port: 1 Flexible coil connection socket: 1
Operating Temperature	-10°C ~ 40°C
Storage Temperature	-10°C ~ 50°C
EMC	IEC61326(EMC)
Safety Regulation	IEC61010-1 CAT III 300V, CAT IV 150V, Pollution level 2



Transmitting Clamp Specification	
Transmitting Clamp Size	250mm×140mm×35mm
Rogowski Coil Diameter	Ø150mm
Wire Length for Transmitting Clamp	3m
Test Lead for Direct Connection	3m

Rogowski Coil Specification (Optional)	
Coil Size	L: approx 620mm Ø: 8mm
Coil Diameter	Ø200mm
Wire Length for Transmitting Clamp	3m
Test Lead for Direct Connection	3m

Package Includes

- Transmitter
- Receiver
- Toolkit bag
- Transmitting clamp
- Test lead for direct connection
- Ground pin_2 qty.
- Double ended crocodile clip test line_1 qty. black
- 8.4V Charger_1 qty. for receiver
- 12.6V Charger_1 qty. for transmitter
- Instruction manual

Box Size: 23 x 36 x 78.5cm; Weight: 12.4kg



Optional Accessories

- A-frame + connecting wire
- Rogowski coil
- Stethoscope/Detector

Ordering Info.

- UCL15-Rx.....Pipeline/Cable Locator (Receiver Only)
- UCL15-Tx.....Pipeline/Cable Locator (Transmitter Only)
- UCL15-KIT.....Pipeline/Cable Locator (Receiver & Transmitter)