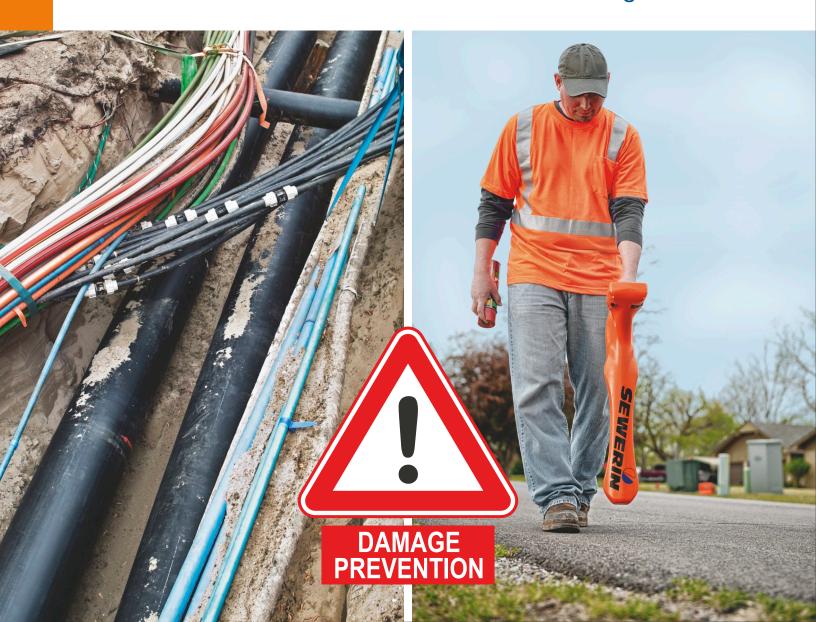


Products Locating

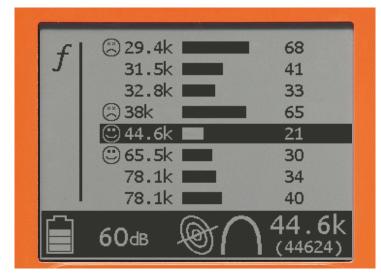


UT 9000 – The new standard for damage prevention and pipe location – easy – always – efficient











A new dimension in pipe location

When it comes to locating underground pipes and cables, precision is key. The more precise the measurement, the lower the risk of digging up the wrong spot and/or causing any damage! Performance, practical handling and simple operation are just as important for fast and efficient work. Likewise, reliability, versatility and a sturdy design are also essential for obtaining reliable measurements in difficult conditions and inaccessible environments.

The **UT 9000** is a cutting-edge location system, which fulfils these requirements with a pioneering design and sets new standards in pipe location.

So simple

Operation made easy

Use the **UT 9000** easily without extensive training. The receiver and generator have a logical operating concept. The structured menus on the clear display show both intelligible symbols and textual information and thus reliably guide you to your objective.

Intelligent frequency selection

The **UT 9000** scans the ambient noise, detects any interference signals and suggests the optimal frequency for passive or active location. This speeds up your work and makes location more reliable.

Internet updates included

You can update the software easily online and individually preset the device. From 70 frequencies you can select the relevant ones for you or you can set up and add your own frequency. This ensures the **UT 9000** is always up to date and meets your personal requirements.

Always ready for use

High protection class

Dirt, dust, extreme temperatures, rain? Not a problem thanks to the IP65 protection class and the extremely sturdy construction. The **UT 9000** is always ready for operation, no matter where you are or what the weather.

Brilliant LC display

The graphic display is perfectly legible at all times, even in the brightest sunshine or in the dark. The clear and coherent layout of directional arrows and measurements makes work easier and reliably guides you to your objective.

Maximum availability

Benefit from extremely long operating times: 30 hours for the **UT 9000 R** receiver, 100 hours for the **UT 9012 TX** generator. This maximizes the availability of the devices and means that you can work without interruption and independently of external power sources.

Direction indication

This function shows the direction of the current flow and helps with verification of the pipe to be located.

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Impressively efficient

Powerful performance

The **UT 9012 TX** generator transmits at 12 Watts, offering unrivalled performance. You can track signals for longer and reliably locate even the longest of pipe sections.

Precise location

If you're not sure about the accuracy of a depth measurement, you can easily and conveniently verify the values using the offset depth by the 45° method (triangulation method). This gives you even more reliable and accurate results.

Handy remote control

The radio remote control for the receiver is much more powerful than any of the Bluetooth connections previously available on the market. It allows you to toggle the frequency and output of the **UT 9012 TX** generator up to a distance of 2600 feet. The key advantage is that you can actually see the generator's display on you receiver! This saves tedious running back-and-forth, and thus saves time. Only a suggestion.

Flexible use

Passive location

Passive location involves locating signals already present on cables or pipes with just the receiver. This measuring method is suitable for active power and telecom cables as well as metal gas and water pipes.

Active location

With active location, the **UT 9012 TX** transmitter can energize your target pipe or cable through direct metal-to-metal connection. If there is no contact point available then by induction.

Location with probes

A glass fiber rod is fitted with an embedded copper strand so that it can be energized by the **UT 9012 TX** generator and located using the **UT 9000 R** receiver.

A sonde is used to clearly determine the end of the glass fiber rod. This small, battery-operated transmitter generates its own field, which is detected precisely can be accurately located by the **UT 9000 R** receiver. The exact depth can also be measured. The special and outstanding In the sonde mode. The **UT 9000** opens up a wide variety of uses with pipeline cleaning pigs, channel inspection cameras and many other applications.

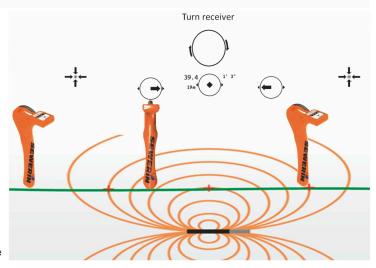
Marker ball locating

With an adaptable marker ball antenna the **UT 9000 R** receiver turns into a precise and easy marker ball locator.

GPS applications

The UT9000 R receiver connects easily with any GPS receiver via Bluetooth. Therefore the **UT 9000** offers two different solutions of storing the data. Using a simple GPS mouse the data will be stored in the **UT 9000 R** receiver and can be automatically downloaded with special software. Using the Trimble GeoExplorer, the **UT 9000** sends the data into the GPS unit for storage.







UtiliTrac - View into the ground

Design meets functionality

The **UtiliTrac** is a multi frequency locator with an ergonomically designed receiver that folds up into the same case as the transmitter.

The receiver

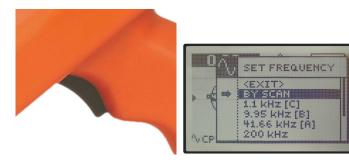
The display

In line mode you can actually see the pipe in a three-dimensional view. The "compass" display shows the user the orientation and location of the service being traced and is not dependent on the locator's orientation i.e. it works in any direction. Depth to the service and signal strength is shown allowing you to see if you are still tracing the correct service or if perhaps the signal has "jumped".



Operation

Single trigger operation provides the user with intuitive and simple navigation through the menu. The unit can automatically scan and tune to active frequencies or be tuned at the user's discretion.



The G100 signal transmitter

The compact design and patented aerial construction make the **G 100** 10 W transmitter make it the perfect partner for the receiver. The aerial construction provides above-average inductive coupling strength, allowing a greater distance between the transmitter and the receiver.

Capacitive coupling

The **G 100** offers the user two-signal outputs for the "simultaneous" tracing of two different, parallel services with different frequencies.



UT 830 – The single frequency locator you need to have for damage prevention

You have a single frequency locator and you like it? Fine. The only headache it probably gives you is checking the ground for power cables before you start digging. This is the first single frequency locator with the additional application of locating passive power or cathodically protected lines. The 83 kHz active frequency is perfect for locating gas and water pipes.

Versatile use

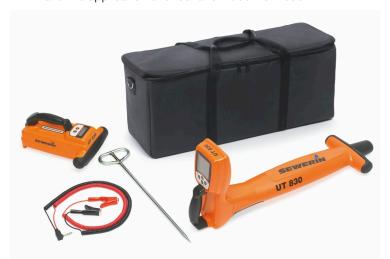
- With its IP65 protection class, extremely robust construction and compact size, the *UT 830* is equipped for all working and weather conditions – even in difficult environments.
- The *UT 830* proves particularly versatile, for example in the building trade, thanks to its ability to passively locate power and cathodically protected lines, 60 Hz, 120 Hz, 180 Hz (50 Hz, 100 Hz, 150 Hz) frequencies are available for this.
- Take advantage of exceptionally long battery life: 75 hours for the receiver, up to 150 hours for the transmitter. This guarantees maximum availability and minimum downtime.

Clear results

- Thanks to its adaptive filtering, the **UT 830** offers impressively fast response times. The extremely quick and reliable directional arrow display means that pipes can be located in very tight location corridors, thus guaranteeing a more accurate locate.
- Check your results with the exclusive PEAK verify function. This allows you to easily hide from view surrounding lines, thus preventing measurement errors and the unintentional location of parallel lines.
- The fully automated depth measurement gives you an accurate overview of the position of the pipe at all times.

One frequency

Its 83 kHz frequency means that the **UT 830** can accurately locate underground gas and water pipelines beyond insulated connection points or jump those short breaks in trace wires.
The 1-Watt transmitter has 3 different output power ranges and the application of direct and inductive mode.









COMBIPHON® – The non-metallic pipe locator

Locating plastic pipes acoustically with a pulse generator

As non-metallic pipes are not electrically conductive, they cannot be located with the classic electro-magnetic method, so another principle in pipe location is used with the acoustic method. The pipes transmit mechanical vibrations better than the surrounding soil.

The vibrations are transmitted along the pipe and over the soil to the surface where they can be detected by a microphone. Just as with the acoustic location of the water leak is located, so the highest intensity of the position of the pipe is now known as you travel along its pathway. Basically fiber cement or metallic pipes can also be located with this method. (**AQUAPHON**® or **AquaTest T10**).





AquaTest T10

Principal application

The **AquaTest T10** display shows the current and previous minimum noise levels, as well as the current noise intensity. The minimum noise levels are shown as numeric values and the actual noise intensity is displayed as a bar graph.

If a pipe is set into vibration, e.g. using the knocker or stopper of the **COMBIPHON®** system, the position of the pipe can be located using the **AquaTest T10**. This involves systematically testing the surface in short intervals with the wind protected resonance plate. The volume increases as you approach the apex of the vibrating pipeline.

Delivery contents

- AquaTest T10
- Headphones
- Probe tip
- Chargers
- Transport bag
- Tripod
- · Extensions for the probe tip
- · Wind protected resonance plate



Glass-fiber probe system

Location of non-metallic pipes

Because electrical current cannot flow through non-metallic pipes, additional equipment must be used to locate such pipes. Fiberglass probes and sonde transmitters are used for this purpose. The fiberglass probe, containing a continuous length of copper, is inserted into the pipe section to be located, connected to the transmitter and traced using a locator. With this method it is possible to follow the route of the pipe.

To detect the end-point of the fiberglass rod a sonde transmitter can be screwed onto the probe tip. This small, battery-driven transmitter generates an electro-magnetic alternating field, which can be accurately marked with a pipe locator.

Even the depth of a non-metallic pipe can be determined.

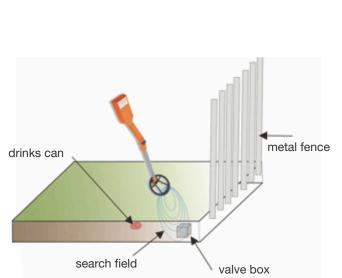
The sonde transmitters may also be used without the fiberglass rod. This opens many other options in combination with pipeline cleaning pigs, sewer inspection cameras, etc.!



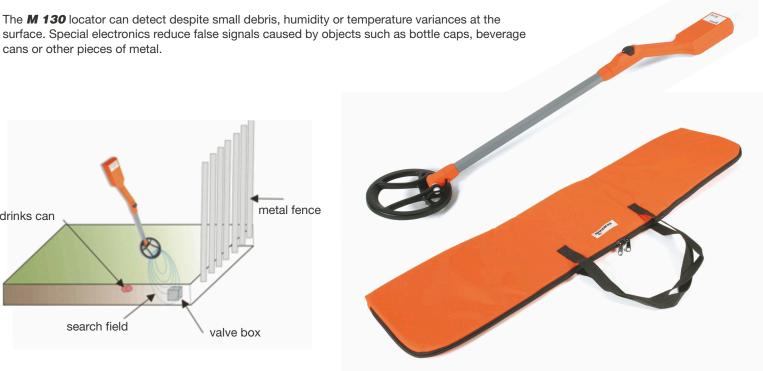




M 130 - Electronic Valve Box Locator



cans or other pieces of metal.



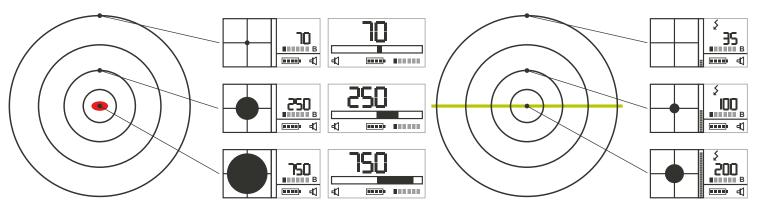
FerroTec FT 10 – Magnetometer with outstanding performance



Easy location of ferromagnetic objects

The **FerroTec FT 10** recognizes 60 Hz (50 Hz) alternating fields and directs you towards the exact position of power cables, thus preventing mix-ups and false detections and protecting you against electrocution during excavation.

The **FerroTec FT 10** recognizes polarity changes in large objects, in shaft covers for example. This means that you can, depending on the orientation of the object, classify its position and size.



Display when locating objects

Display when locating power cables



Mass of location object in lbs (kg)	Location depth in ft (m)
220.0 lbs (100.0 kg)	49 ft (15.0 m)
110.0 lbs (50.0 kg)	33 ft (10.0 m)
11.0 lbs (5.0 kg)	23 ft (7.0 m)
2.2 lbs (1.0 kg)	8.2 ft (2.5 m)
1.1 lbs (0.5 kg)	3.3 ft (1.0 m)

Maximum location depth according to object mass at a sensitivity of 3 nT

Please contact us for a comprehensive quotation, including additional technical specifications and information on accessories.