



VIVAX
METROTECH



YENSTRON®
益瀚儀器

vLoc3-5000 Utility Locator

管線探測器



Locate with speed, accuracy and confidence with the
vLoc3 series of buried utility locators

www.yenstron.com.tw



vLoc3-5000 Receiver

The vLoc3-5000 utility locating system brings an innovative element of real time distortion alerts, positive line identification, data collection and cloud-based data warehousing to utility locating. The vLoc3-5000 utility locating system consist of the vLoc3-5000 receiver and 10-watt Loc3-10SiSTx transmitter.

Leading the way with breakthrough technologies that make your job easier, the vLoc3-5000 utility locating system is loaded with industry firsts. As a multi-frequency system, it builds on our long-term record of providing technological solutions that are easy-to-use. The Signal Select™ positive line ID and data logging features greatly improve productivity and open new avenues of data management from a hand-held pipe and cable locating system. The super-comfortable receiver boasts a 4.3"/10cm high visibility transmissive 16-bit color display and wireless communications link that can store and reuse data from the field. And because it's from Vivax-Metrotech, the vLoc3-5000 utility locating system delivers the high level of performance you need, plus the ease of use you count on.

The vLoc3-5000 Receiver: Breakthrough technology that's easy to grasp

The ergonomically designed vLoc3-5000 receiver is lightweight and balanced for all day use. Its clear color display the first ever on a locating instrument is intuitive and easy-to-read in all lighting conditions. The Bluetooth wireless communication technology links the receiver with other Bluetooth-enabled devices. Store virtually all display information as well as GPS date and time in our web-based data warehouses, VMMap or MyLocator3. This archived data is useful for work order ticket details, training, asset management and operation control.

This multi-frequency receiver has a built-in frequency range from 16Hz to 200kHz, passive power and radio modes, signal direction and signal select, giving you more choices than other systems on the market. Productivity is improved with the Signal Select™ and the Distortion Alerts features, reducing the subjective elements of a locate due to field distortion caused by bleed off and bleed over. From water to power to telephone to cable, one device can do it all to speed your team through more locates in a day.



vLoc3-5000 Receiver

Loc3-10SiS, 10-Watt Transmitter

- **Internal GPS** – To easily add GPS coordinates to the locate logs.
- **Optional Tx-Link** – To remotely control all transmitter functions from the receiver.
- **Signal Select and Signal Direction** – For positive line identification in congested areas.
- **Magnetic field distortion Alerts** – Color coded in active locate modes.
- **Smart accessory detection** – Allows the receiver to determine what type of accessory (clamp, antenna) has been plugged in and automatically acquires the calibration information from the accessory.
- **Self-test mode** – The self-test feature confirms that the equipment is fit for use and the calibration has not drifted from its expected settings.

vLoc3-5000 Alerts, warnings and signal distortion

Real time alerts are displayed on the LCD accompanied with a mechanical vibration in the handle



Signal Overload Warning - usually caused by operating very close to a power transformer or placing the unit very close to a transmitter in the Induction mode.



Swing Alert - indicates that the operator is swinging the locator excessively and could result in misleading information.



Shallow Cable - indicates that the locator has detected a cable that is possibly less than 5.9"/15cm deep. Proceed with caution.



Overhead Cable - indicates that the signal is mainly radiating from above. This is usually caused by the signal travelling along overhead cables.

Signal distortion indicators are shown on the receivers screen

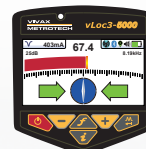
Signal distortion is an intrinsic problem and is the result of additional currents flowing in the ground other than the outgoing signal from the transmitter. The vLoc3-5000 gives 'on the fly', color coded indication of distortion on the LCD's signal strength bar graph. The bar graph will change colors depending on the level of distortion.



A green bar graph indicates clean locating conditions with very low distortion

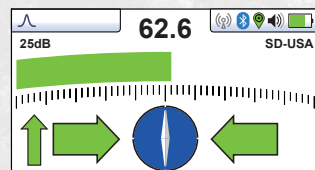


A blue bar graph indicates a medium level of distortion

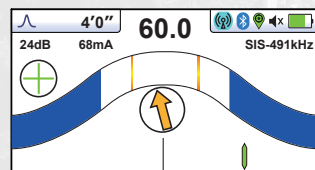


A red bar graph indicates very high distortion. Both Peak and Null locates are subject to significant positional errors

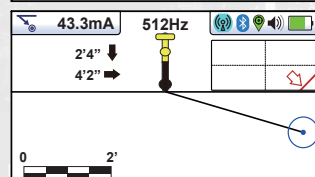
The vLoc3-5000 receiver gives the user a choice of different locate (modes) screens to use for different applications and situations



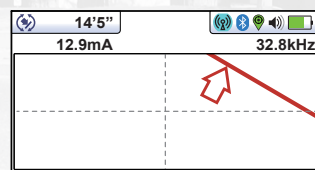
Traditional Screen - the industry standard screen with a peak bar graph and matching signal strength indicator. Our traditional screen also gives the user on-the-fly color coded distortion warnings.



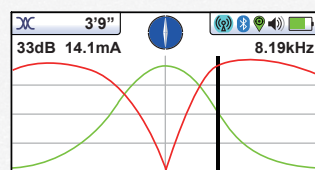
5000 Classic Screen - as in previous vLoc receivers with the addition of three color-coded distortion levels.



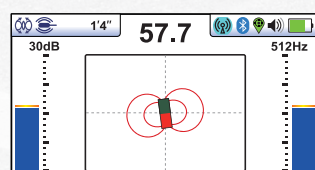
Vector Locate - shows a cross sectional view through the ground. This is particularly useful where access over the line is not possible. Depth and horizontal displacement distances are shown, even when not over the line. A plan view is also shown to help orient the user over the line.



Plan View Screen - shows a picture as if you were viewing the line from above ground. When the line is in the center and pointing forward/back then you are directly over the line and pointing in the direction of the line.



Transverse Plot Screen - is used to analyze the field shape at a particular location by showing both peak and null plots generated simultaneously.



Sonde Screen - the directional arrows will guide the user first to the front or rear locate point and then directly to the sonde's position and give a depth of cover reading.

Loc3-10SiS Transmitter

The Loc3-10SiS Transmitter: Powerfully efficient performance

The transmitter measures line parameters in absolute physical units (volts, ohms, amps, watts), to give you critical insights into the quality of a complete line circuit. Essential information is easily visible on the transmitter's display screen, including power output and line resistance notifications, which are incorporated into two easily understood icons. Options include a high capacity Li-ion rechargeable battery that lowers operating costs and Tx-Link to control transmitter functions from the receiver at distances up to 985 ft./300m.

The Loc3-10SiS transmitter provides full support for the SD (signal direction) and Signal Select (SiS) line direction line ID features. The Loc3-10SiS transmitter provides two methods of positivity identifying the target lines in congested areas. The first method is SD and the second being SiS™.

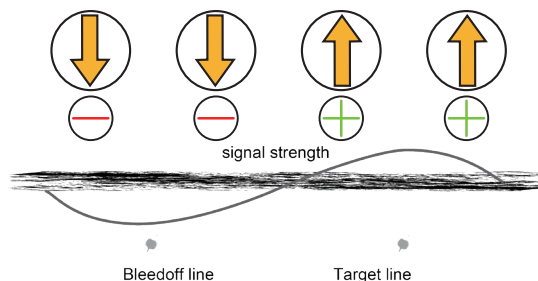
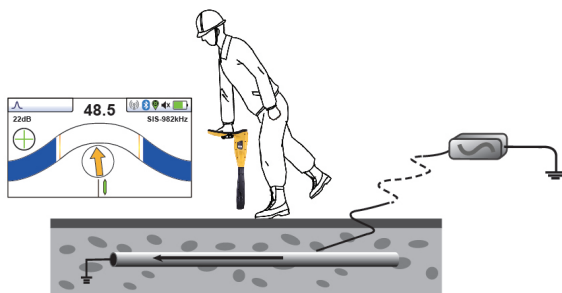
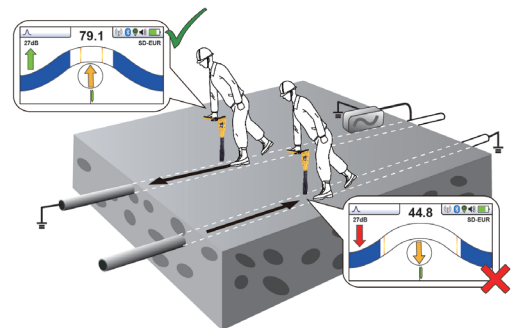
When a transmitter is connected to a target line, the signal travels along it and finds the easiest way to travel back, usually via the ground and ground stake. However, very often the signal will travel back along adjacent cables or pipes as these can offer an easier route. As a result, there can be multiple signals radiating from cables and pipes in the area making it difficult to identify the target line. These return signals are typically traveling in the opposite direction than the applied signal.

Signal Direction (SD) - When using SD, a green color forward arrow is illuminated showing the direction of the signal being sent from the transmitter. If at any time the red backward arrow illuminates, this indicates that this is a line with a return signal and the wrong line is being located.

Signal Select (SiS) - includes the SD feature along with added features of color-coded distortion alerts and a directional line compass. The direction of the signal in the targeted line is determined by analyzing the sign of the demodulated Signal Select signal. When the receiver is positioned over a signal that carries an inverted field (i.e., one in which the phase is -180° from the expected), the Guidance Compass points down (backward), as shown below for a line that carries return current.



Loc3-10SiS, 10-Watt Transmitter



vLoc3-MLA Marker Locator Adapter

The **vLoc3-MLA (Marker Locator Adapter)** is designed for easy, fast and accurate location of buried EMS markers. Once located the MLA will give depth of cover to the buried marker with the touch of a button.

The MLA attaches to the bottom of vLoc3-Pro, vLoc3-9800 and vLoc3-5000 receivers. When attached and plugged in to the receivers two marker related operating modes are enabled. In the dedicated marker mode, the receiver screens show a peak bar graph with the signal strength from the marker, the marker type and depth to the marker. In the dual marker mode all the above are shown in addition to the standard utility locate screen including left/right arrows and compass.

The plug-and-play MLA will detect any one of nine marker types, in good conditions, buried to a depth of 6'/2m and large flat markers to 9'/3m.



The MLA works with vLoc3-5000

VMap Utility mapping and cloud storage

When used with the vLoc series receivers, the VMap Utility Mapping app records data from the field which is instantly available online or can be shared by using the email function in the app to send .kml or .csv files. Field technicians using a vLoc series receiver can capture and store to the cloud depth readings, GPS coordinates, distance between locates and more.

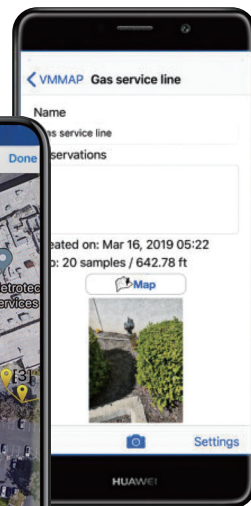
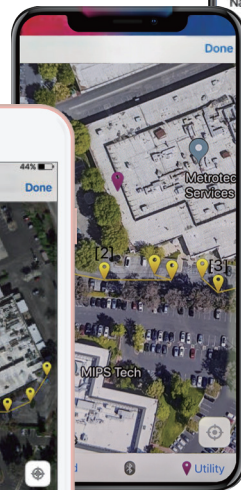
The image capture feature in the app allows the user to attach a JPEG format image to the surveys. This is useful to add points of interest or a snapshot of the completed survey. Access the image files and all the data captured in the app in the web portal or email it from within the app. The data is compatible with Google Maps, Asset Management and GIS software. The VMap app generates maps in real time giving confidence to the field technician that the data being collected is accurate. Location data is obtained from the mobile phone, the locators GPS or an external GPS device of your choice.

- Uses both Google and Apple Maps
- Low and high GPS accuracy settings
- Plug-and-play Bluetooth pairing to receivers
- Export to a .kml file for use with popular GIS programs
- Compatible with Google Maps, Asset Management and GIS software
- Show multiple utilities on one map with color coded utility drop pins

The VMap application is compatible with both iOS and Android devices.



VMap



MyLocator3 Fleet management tool

Manage a single or fleet of vLoc3 series utility locators with the free MyLocator3 app. Configure locators by turning on or off features, selecting which frequencies the user has access to and creating custom startup screens.

When a locator is connected to a computer running the MyLocator3 software, the program will automatically search our database for the latest software for both the utility locator and desktop application. The utility locator connects to the computer running MyLocator3 by the supplied USB cable.



MyLocator3

Data transfer – MyLocator3 app will download the data collected from the locator including timestamps, GPS coordinates, depth measurements, current on the line, and notes entered at the time of locate.

Software updates – MyLocator3 checks for locator software updates and app software updates whenever connected to the Internet.

Personalize – Add owner/user information, a background picture or logo, or a short message to the startup screen.

Lock Feature – The locator's configurations and settings can be locked, enabling equipment or safety officers to ensure that features selected or removed by management cannot be over ridden by the user (requires optional lockout dongle).

