






vLoc3 Series Sonde User Guide V1.0

Sonde Introduction

Sondes are small self-contained battery powered transmitters which are propelled through pipes and ducts and can be located on the surface by a sonde locator or buried utility locator with a sonde mode. Sondes are also built into other products such as a sewer camera, robotic crawler camera, or attached to a jetter hose. Low frequency versions (512Hz/640Hz) can transmit through some metallic pipes like cast iron pipes, which is why they are frequently used with sewer inspection cameras.

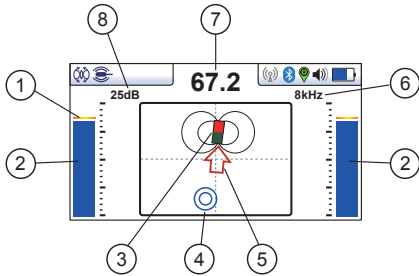
Sondes come in a variety of sizes which ties into how deep they can be located. Different frequencies are available which allow sondes to be located in metallic or non-metallic pipes and ducts.

A full range of Sondes are available to suit all applications:

Sonde Range			
Model	Depth and Dimensions	Frequency	Battery
 D18 Sonde	Depth: 15'/4.5m 7" x 3.2" 18 x 81mm	33kHz	2 x LR44 or SR44 button cells
 D22 Sonde	Depth: 16'/5m 0.87" x 4.5" 22 x 114.4mm	9.8kHz 83kHz	4 x LR43 button cells
 D38 Sonde	Depth: 16.3'/5m 1.5" x 4.1" 38 x 105mm	9.8kHz 33kHz 83kHz	1 x AA
 D64 Sonde	Depth: 26'/8m 2.5" x 7.3" 64 x 186mm	9.8kHz 33kHz 83kHz	1 x 9 Volt
 D23F Sonde	Depth: 20'/7m 1" x 18" 23 x 456mm	512Hz 640Hz	1 x AA
Please visit our website for full specifications on our sonde range.			

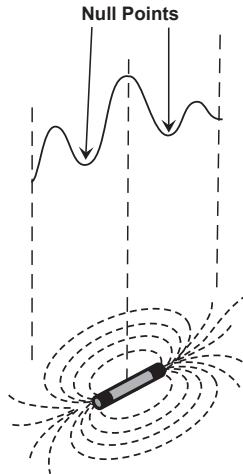
Locating sondes with a vLoc3 series receiver

Sonde screen icons:



1	Peak signal detector
2	Signal strength bar graph
3	Sonde icon
4	Null point
5	Direction to sonde
6	Frequency selection
7	Numeric signal level (mirrors the bar graph)
8	Gain setting

A Sonde is a transmitting coil, the signal radiates in a different manner than that of a line.



Due to this construction, the sonde gives a different “Peak” pattern note that there are three distinct peaks – a small peak – a large peak – a small peak with two “Nulls” between the peaks. The sonde is located under the center of the “large peak”.

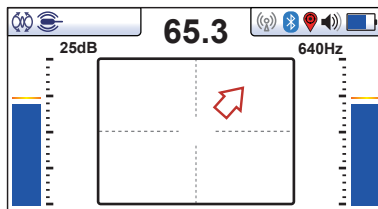
The vLoc3 series receivers detects the presence of the two “Null” signals and also the position of the main “Large Peak”. It uses this information to provide a reliable and efficient method of sonde location.

Method

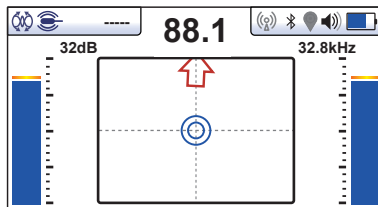
1. Insert the activated sonde into the pipeline. Push the sonde about 10 – 12 Feet (3-4m) into the pipe.
2. Switch on the vLoc3 series receiver and use long presses on the “return key” until the sonde screen appears.



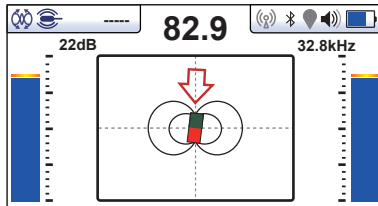
3. Press the “f” key to select the sonde frequency being used.
4. Hold the locator vertically and stationary with the tip on the ground.
5. If the locator is within the range of the sonde the screen will appear similar to the one below with an arrow pointing in a particular and steady direction. The bar graphs either side of the screen are identical and give an indication of the signal strength. Use the + and – keys to alter the receiver gain to keep the signal within the limits of the bar graph.



6. If the bar graph is not steady it will most likely be because the sonde is not within range. In this case hold the locator at approximately 45 degrees to the ground and rotate the locator around a full 360 degrees around you.
Note the direction of strongest signal and walk toward it until the bar graph shows a steady signal. Now revert to step five above.
7. Walk slowly in the direction of the arrow.
8. A double circle will appear on the screen. This indicates the position of a null signal. Walk toward it and position it over the cross hairs of the screen. Now rotate the locator so that the arrow is pointing forward.

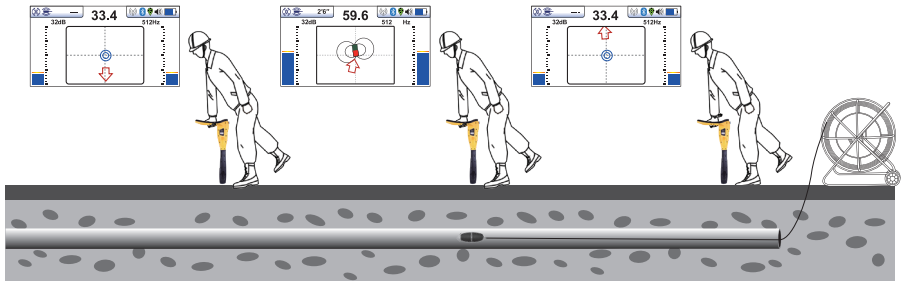


9. Keeping the null indicator on the vertical line, walk toward the arrow.
10. A Sonda icon will soon appear. Keeping the locator vertical, carry on walking toward the Sonda until it is positioned on the cross hairs. The locator is now directly over the Sonda. The arrow will flip forward and back as the position is crossed.



11. Note that when directly over the Sonda, it may be necessary to confirm the position of the Sonda, left to right. To do this move the locator left to right to identify the position of the strongest signal as indicated on the bar graph. At this time the depth to the Sonda will be displayed at the top of the display.
12. Having pinpointed the position of the Sonda, it can now be pushed in to a new location and the process repeated. It is advisable to keep the survey intervals to short distances such as six feet (two meters) as this makes the process of locating easier.
13. Pressing the Information key allows access measurement data and to data logging capabilities.

Overview



Disclaimer: Product and accessory specification and availability information is subject to change without prior notice.

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