










vLoc3 Series Sonde Locating Quick Guide V1.5

Sondes

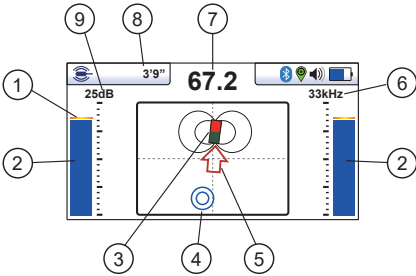
Sondes are small self-contained battery powered transmitters that are propelled through pipes and ducts and can be located on the surface by a sonde locator or buried utility locator with a sonde mode. Sondes are also built into other products such as a sewer camera, robotic crawler camera, or attached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

Sondes are available in a variety of sizes and depth ranges. Different frequencies are available to suit different locator models.

Sonde Range			
Model	Depth and Dimensions	Frequency	Battery Type
D18 Sonde			
	Depth: 15ft / 4.5m 0.72" x 3.2" 18.5 x 79mm	33kHz	2 x SR44 Button cells
D22 Sonde			
	Depth: 8ft / 2.4m 0.87" x 4.5" 22 x 114mm	9.8kHz 83kHz	4 x LR43 Button cells
D38 Sonde			
	Depth: 16ft / 5m 1.4" x 5.2" 38 x 132mm	33kHz	1 x AA Alkaline
		9.8kHz	
		83kHz	
D64 Sonde			
	Depth: 26ft / 8m 2.5" x 7.1" 64 x 179mm	33kHz	1 x 9 Volt Alkaline
		9.8kHz	
		83kHz	
D23 Sonde			
	Depth: 22ft / 7m 0.90" x 17.3" 23 x 440mm	512Hz 640Hz	1 x AA Alkaline
Please visit our website for full specifications on our sonde range.			

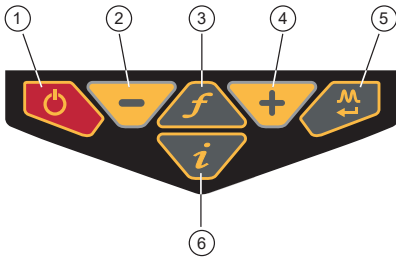
Locating sondes with a vLoc3 series receiver

The vLoc3-Cam Display



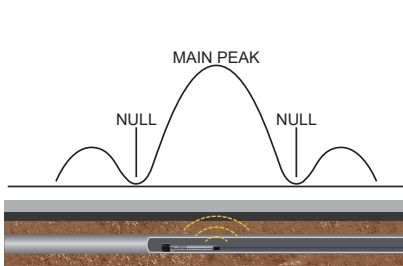
1	Peak signal detector
2	Signal strength bar graph
3	Sonde icon
4	Null point
5	Direction to sonde
6	Frequency selection
7	Numeric signal level (mirrors the bar graph)
8	Depth Reading
9	Gain setting

The vLoc3-Cam Keypad

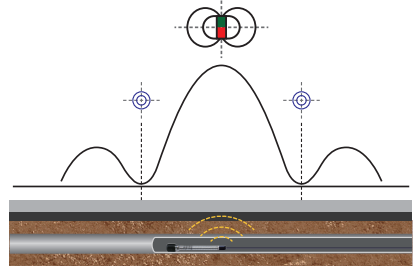


1	On/Off button
2	Reduce sensitivity
3	Select frequency
4	Increase sensitivity
5	Return button, Short press = change locate modes
6	Information button, Short press = depth reading and logging Long press = enter setup menu

Interpreting the sonde signals



The main peak with null points before the small peaks



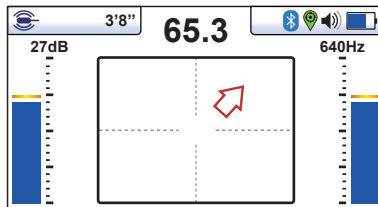
The display shows different icons for the main peak and null points

A Sonde is a transmitting coil that transmits three distinct peaks. The main peak with two smaller peaks on each side. A null is seen between each smaller peak and the main peak. The sonde position will always be located under the center of the main peak.

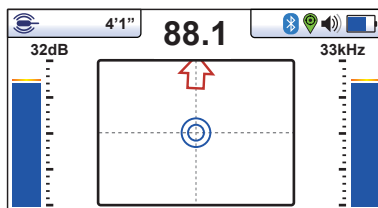
The vLoc3 series receivers detect the presence of the two null signals and the main peak position. It uses this information to provide a reliable and efficient method of sonde location.

Method

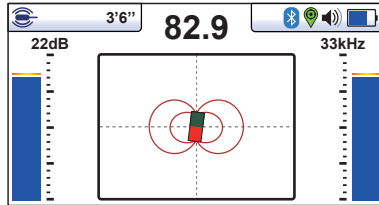
1. Insert the activated sonde into the pipeline. In the case of an inspection camera, switch on the sonde using the control unit's appropriate controls. Push the sonde or camera head about 10 to 12 feet (3 to 4m) into the pipe.
2. Switch on the vLoc3-Cam and use long presses on the **Return button** to enter the sonde mode.
3. Press the **f** key to select the sonde frequency that matches the sonde or camera sonde.
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 similar to the below will appear, the arrow will be pointing in a particular direction and will be still and steady. The bar graphs on either side of the screen are identical and indicate the sonde's signal strength. Use the + and – keys to alter the receiver gain to keep the signal within the bar graph's limits.



6. If the bar graph is not steady it will most likely be because the sonde is not within range. 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 the strongest signal and walk toward it until the arrow is steady and the bar graph shows a steady signal.
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.

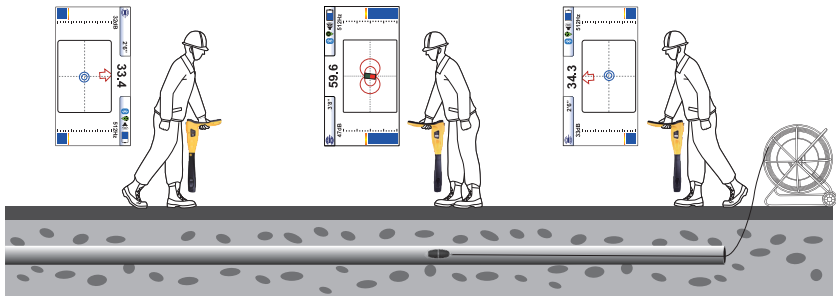


9. Keeping the null indicator on the vertical line, walk toward the arrow.
10. A Sonde icon will soon appear replacing the arrow. Keeping the locator vertical, carry on walking toward the sonde until it is positioned on the crosshairs. The locator is now directly over the sonde.



11. Press the *i* information button for a depth reading and logging options or if the receiver is setup for continuous depth the depth will be shown.

The diagram below provides an overview of the sonde locating process



When directly over the sonde it may be necessary to confirm the sonde left/right position. To do this, move the locator left to right to identify the strongest signal position as indicated on the bar graph.

Vivax-Metrotech Corp. (Headquarters)

3251 Olcott Street, Santa Clara, CA 95054, USA

T/Free: 1-800-446-3392

Tel: +1-408-734-3880

Fax: +1-408-734-1415

Email: SalesUSA@vxmt.com

Website: www.vivax-metrotech.com

Visit us at www.vivax-metrotech.com to view our full product line and worldwide locations.