

vLocDM Series 2

Pipeline Defect Mapper

- Smaller & lighter
- Four times the battery life
- Removable foot for easier pipe location
- Bluetooth/GPS as standard
- Bluetooth compatible with many GPS models
- Real time data & graph review
- MyLocator2



The vLocDM2

- Used to precisely locate the target pipe and to assist in evaluating pipeline defects.
- Suitable for use on transmission or distribution pipes.
- Perform long range Low Frequency Current Attenuation Surveys.
- Use with A-frame to accurately pinpoint defects or complete a full ACVG survey.
- On distribution lines use to locate failed insulated joints.

Features (contains the following standard vLoc Series 2 features)

- Rugged ABS & Carbon Fiber construction
- IP54 rating for all weather use
- Color display
- High speed dual core processor
- Multiple location modes
- Multiple frequencies are pre-programmed
- Pushbutton & continuous depth
- Internal data logging
- Normal & modulated audio modes
(separately selectable for Power, Radio & Active modes)
- Selectable languages (over 20)
- Selectable "time off" function
- Rechargeable and alkaline battery packs
- MyLocator2 Locator and Data Management Tool

Additional Features (specific to vLocDM2)

- Real time data and graph (plots) review for "on-site" analysis
- Application specified user interface (display) specifically for Defect Mapping
- Bluetooth (standard) - compatible with most dataloggers/GPS enabled with Bluetooth
- GPS (standard) - better than 3m accuracy when receiving WAAS or EGNOS
- A-frame (standard) - for pinpointing defects
- 150W transmitter (externally powered by 12V DC - 60V DC or 100V AC - 240V AC)
- Detachable magnetometer (foot) module, reducing the weight of the vLocDM2 when used just for pipeline location

Options

- GPS better than 1m accuracy when receiving WAAS or EGNOS



MyLocator2

New with the vLoc series 2 - the MyLocator2 Configuration Management is a free desktop utility that can be downloaded from www.vivax-metrotech.com.

The main features of interest to the vLocDM2 user are:

- Easy & quick upload facility for transferring data stored in the internal memory (files can be exported includes .xls, .txt, .kml, .shp)
- Checking & downloading software updates for locator and/or MyLocator2
- Startup screen customization - add a picture or message that will show every time the locator is switched on



Pipeline Defect Mapper

The vLocDM2 Transmitter

- The vLocDM2 transmitter can be powered by a Cathodic Protection station's external AC power (100V AC to 240V AC) or by a 12V DC – 60V DC source (power output is limited when powered by 12V DC).
- One of the output cables from the transmitter is connected to the pipe, the other to ground (see diagram A for transmission pipes, diagram B for distribution pipes). The leads to the CP station are disconnected for the duration of the survey.
- A near DC signal is then applied by the transmitter for defect detection and a higher frequency is used simultaneously to locate the pipe. The current flows at both frequencies and reduces noticeably where pipe coating is damaged.

One of the biggest threats to distribution networks is damaged or degraded insulation flanges. If the insulator fails, it compromises the effectiveness of Cathodic Protection. It is essential that such failures are identified at the earliest opportunity if the CP is to be returned to an effective level. The vLocDM2 Transmitter is applied to the network at a convenient point. The low frequency (3 or 4Hz) is unaffected by well insulated joints, but the signal reduces sharply at damaged joints. To find a badly insulated joint, simply use the vLocDM2 receiver to track the loss of current from the pipe.

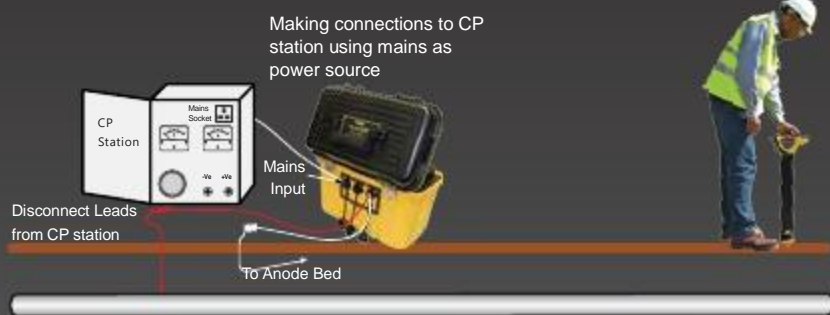


Diagram A

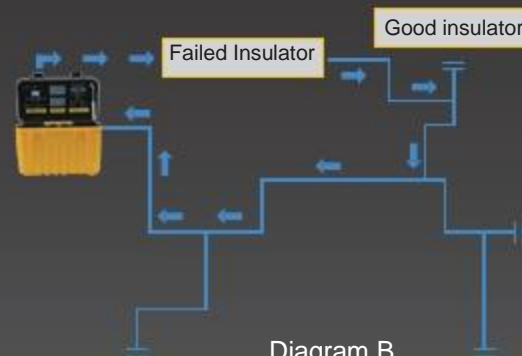


Diagram B

The vLocDM2 Receiver

The user interface of the vLocDM2 is custom designed for the location and defect mapping application

The Locate Display

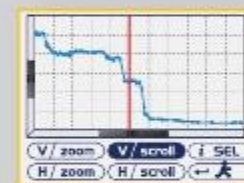
- The clear color display, provides both setup and information/data while at the same time providing dynamic locate information.
- The arrows and directional compass bar enable quick, accurate pipe location and other useful data such as continuous/depth measurement,
- GPS signal strength, Bluetooth connectivity, log number and distance from last stored reading are also displayed.

Real Time Data & Graph Display for Enhanced Productivity

Records stored together with GPS co-ordinates within the receiver. Real time graphs (plots) are created for analysis. The red line indicated on the plot indicates the true position of the operator on the graph. This feature is called the "walk back" feature and is used to return to a point of interest.

The A-frame

When using the receiver alone – the objective is to see at what point the signal (current) on the line reduces. When using the A-frame the objective is to find an increase in ground potential (voltage) where the voltage to ground increase due to poor coating. The vLocDM2 shows an application specific screen – when the A-frame is plugged in the vLocDM2 display provides forward/back arrows, signal strength and locate data – all the information needed to stay targeted on the pipe and guided to the fault.



Standard Accessories**Bluetooth Module**

Provides Bluetooth connectivity with the GPS unit supplied with the vLocDM2 or any other Bluetooth enabled GPS or datalogger.

**A-frame**

A-frame to detect exact position of defects or undertake complete ACVG survey.

**GPS**

A standard 3m accuracy (when receiving WAAS or EGNOS) is supplied with the vLocDM2, however in some applications a higher accuracy GPS may be required. The Vivax-Metrotech Bluetooth module will in most case pair with them.

**MyLocator2**

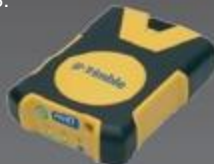
MyLocator2 supplied as standard, to manage files from the vLocDM2 into PC format. Files can be saved as: .xls, .shp, .txt, .kml. The .kml files directly compatible with Google Earth. MyLocator2 can be downloaded from www.vivax-metrotech.com.

**Optional Accessories****vLoc2 Receiver Soft Carry Bag****Charging Lead (12V DC)**

12ft (4m) long lead to charge the receiver battery in a vehicle.

**Optional GPS**

The Bluetooth Module in the vLocDM2 will pair with most commercially (Bluetooth enabled) GPS units. Products such as this Trimble ProXT provide 1m accuracy when receiving the WAAS or EGNOS.

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