

DML2000-XR & DML2000-XRM Specifications

The World's Most Sensitive Magnetic Locator



- **Audio Output - Variable Frequency (20 – 3,200) Hertz**
- **Visual Display – Model DML2000-XRM Only
3½ Digit LCD Panel Meter (0 to ± 1999)**



Figure 1 - DML2000-XRM

- **Six Sensitivity Settings**
- **40 Hours of operation from 4 “AA” Alkaline batteries (increases to over 80 hours when lithium batteries are used).**
- **Low Battery Indicator - RED Flashing LED**
- **Optional Analog/Data Logger output – available upon request**
- **Weighs only 1.8 pounds, (0.82 Kg)**

Depth chart information

The depths outlined here are typical responses. However, there have been numerous instances where targets have been located at greater depths. In almost every case, the magnetic locator operator knew how to get the maximum out of his instrument. He was magnetically clean, his search area contained a minimum amount of trash metal, and he held his instrument in a vertical position while using the instrument on the maximum sensitivity setting.

Target	Depth
Iron Marker (3/4" Dia. X 18")	8 - 11 feet, (244-305)cm
Cast-Iron Pipe (4" Pipe)	6 – 9 feet, (183 - 274)cm
Manhole Cover	5 – 7 feet, (152 - 213)cm
Well Casing	12 – 16 feet, (366 - 488)cm
PK Nail (1½")	10 – 13 inches, (25 – 33)cm
Iron Valve	6 – 9 feet, (183 – 274)cm
55 Gallon Drum	7 – 10 feet, (213 – 305)cm
Septic Tank (Handles)	6 – 9 feet, (183 – 274)cm

Lifetime Warranty – All Dunham & Morrow magnetic locators are warranted to the original purchaser to perform failure-free for the life of the product, which is no less than 25 years from the date of purchase. Dunham & Morrow will repair or replace any defective magnetic locator, provided that such magnetic locator has not been subject to abuse, misuse, neglect, modification, nor been repaired by anyone other than DMI or its authorized representative. The batteries are specifically excluded from this warranty, as is exposure of the electronics to battery acid corrosion.

TIPS TO HELP YOU FIND YOUR TARGETS & SUGGESTIONS THAT CAN HELP YOUR LOCATOR LAST A LIFETIME

1 – WORKING ABOVE ASPHALT & CRUSHED BLUE STONE

Whenever you need to search for a target buried under asphalt or crushed blue stone, lift up on the locator so the tip is between 8” and 1’ above the ground. Blue stone is magnetic but the dipoles are short and the magnetic field drops off fast. A magnetic Survey Pin on the other hand is typically 18” long, and the magnetic field of its dipole drops off much slower. Consequently, when you lift up on the locator, the magnetic field of the shallow, surface material disappears leaving only the magnetic field of your buried survey pin.

2 – WORKING NEAR CYCLONE OR CHAIN LINK FENCES

When you are searching for a target near a cyclone fence, step away from the fence. Walk along parallel to the fence about 8-10” away and you’ll find that the magnetic field of the fence drops away fast. You will hear the field of the fence and the posts increase and decrease as you walk along, but the signal of the survey pin will be much stronger and unique. You will have no difficulty distinguishing your survey pin from the cyclone fence.

3 – THE INSTRUMENT AUDIO OUTPUT WARBLER

WARNING! - DO NOT DIG IN THIS AREA. The WARBLE is an indication of nearby energized power lines.

4 - BATTERIES

The number one problem with all locators is the **BATTERIES**. It’s easy to forget that batteries contain acid and when they are old and weak, they leak. When the batteries leak, acid corrosion eats away at the battery terminals and the unit stops working. To avoid problems, remove and replace the batteries every six months even if the low battery indicator light is not flashing. If you are going to store the unit for any length of time, remove the batteries and install new, fresh batteries when work resumes.

5 – YOUR LOCATOR IS NOT A SHOVEL

Occasionally I have locators returned with broken cases. In some instances, the operator simply ran over the unit with his truck. In other cases, the operator used the locator to expose his target and not satisfied with holding the unit by the aluminum sensor tube, he decided to extend his leverage by grasping the instrument’s case. This is an invitation to disaster and in every instance the problem is still “operator error”. There is a natural tendency to want to confirm the accuracy of your search and you do this by exposing the survey marker or whatever target your locator zeroed in on. Here you stand with a locator in your hand, a strong audio output signal ringing in your ear and a narrow ended tool just inviting you to dig. But don’t. The consequences could easily be a broken locator with an expensive repair bill.

A note from the Dunham & Morrow design team:

It should be comforting to know that your DML2000 Magnetic Locator uses the same technology as the magnetometers we designed and built for Hubble Space Telescope. Those instruments have been working failure free for more than a quarter of a century and you can reasonably expect your DML2000 to last just as long if you follow these few tips.