

**SENSORS & SOFTWARE**  
from **RADIODETECTION**



**LMX<sup>®</sup>**  
**LOCATE & MARK<sup>™</sup>**

**GPR Locating Made Simple**



# LMX<sup>®</sup> System Overview

The simple, affordable way to Locate & Mark<sup>™</sup> utilities in the field

LMX Ground Penetrating Radar (GPR) systems are designed & optimized for utility locating, making the LMX a natural addition to your locating workflow.

**LMX<sup>®</sup> GPR systems complement traditional pipe and cable locators and allow you to Locate & Mark<sup>®</sup>:**

- Metal utilities, including pipes and cables
- Non-metallic pipes, including PVC and asbestos cement
- Concrete storm and sewer systems
- Utilities where installed tracer wiring has failed
- Underground storage tanks and drainage tiles
- Septic system components
- Non-utility structures such as vaults, foundation walls and concrete pads



## High visibility touch screen display unit

- Free lifetime system software updates
- User selectable languages
- Metric and US Standard units



## GPR Sensor

- Patented ultra-wideband (UWB) 250 MHz GPR antenna
- DynaT<sup>™</sup> for Dynamic Target enhancement
- Offers perfect balance of depth penetration (up to 8m/26 ft) & high resolution



## Lead Acid Gel Cell Battery

- Long lasting
- Swappable



## On-site Reports

Produce instant on-site reports from your display unit



## Integrated GPS

Integrated GPS receiver for geo-referencing data



## Lightweight Fiberglass Cart Frame

- No metal parts that would interfere with GPR signals
- Rugged, all-terrain cart with integrated odometer, easily maneuverable over any surface



## USB

USB for easy data transfer



## Wi-Fi

Built-in Wi-Fi capability

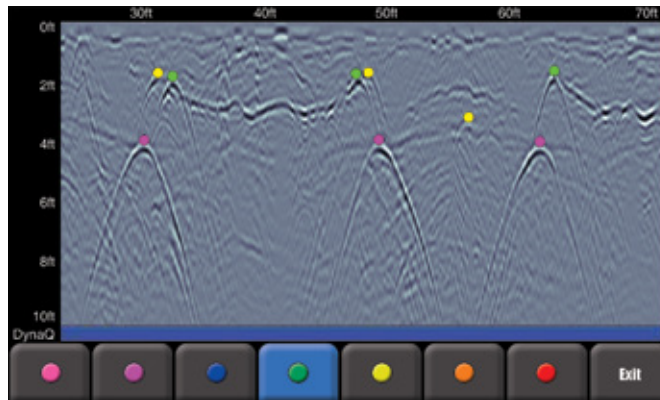
# LMX200™ Features

The premier GPR locating tool in the market today

LMX200 increases locate confidence by adding depth slice imaging and in-field interpretations

## Color-coded field interpretations

Classify your targets in real-time by selecting a color option and touching the screen

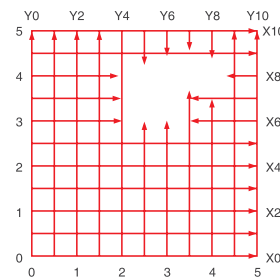


## Grids & Depth Slices

Complete coverage of complex areas

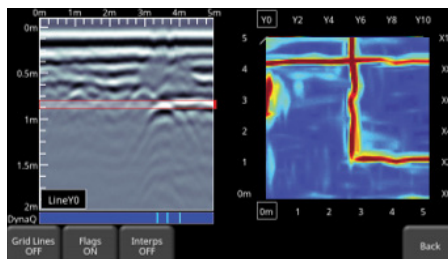
## Flexible & guided grid collection

The LMX200™ guides you through setup with pre-selected grid sizes. Stop lines early, or skip lines.



## In-field Depth slices

Process grid data into depth slices and move down through your data to visualize targets at different depths.

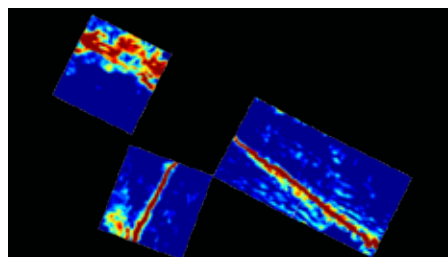


## Obstacle avoidance

System guides data collection around an obstacle in your grid.

## Depth Slice through multiple grids on-site

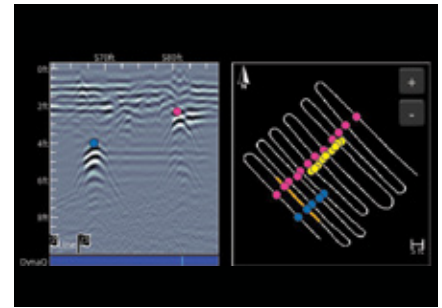
In MapView, visualize all your grids at once for a complete picture.



**Features  
unlocked  
with GPS**

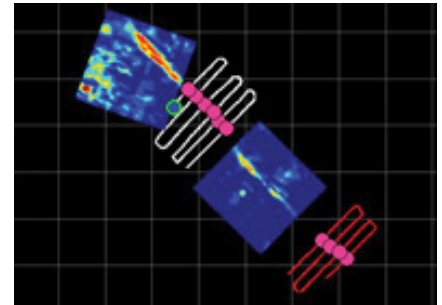
## SplitView - Real-time MapView during data collection

- Ensure full site coverage by visualizing your survey path
- See interpretations as you add them
- Review data for subtle targets that you may have missed
- Know your location, and go back to areas of interest



## Visualize your entire survey in MapView

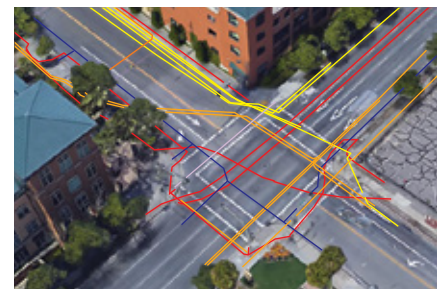
- See your survey path, depth slices, field interpretations, flags and lines
- Toggle layers on and off to focus on the elements of interest



## Export geo-referenced data

	A	B	C	D	E	F
1	Tool	Position (m)	Depth (m)	Latitude	Longitude	GPS-Elevation
2	Point	0.72	0.18	38.8345202	-9.1821844	16.63
3	Point	0.83	0.7	38.8345201	-9.1821826	16.6
4	Point	1.12	0.75	38.8345187	-9.1821798	16.59
5	Point	1.63	0.19	38.8345172	-9.1821759	16.56
6	Point	1.63	0.68	38.8345172	-9.1821759	16.56

Spreadsheet (.CSV) file with flags and interpretations



KMZ output of lines, grid locations, interpretations, and screenshots

## LMX<sup>®</sup> Family Hardware Specifications

### Weight & Dimensions

**Size:** 100 x 70 x 115 cm (39.4 x 27.6 x 45.3 in)

**Weight:** 22 kg (48 lbs)

**Display Unit size:** 21 cm (8 in) diagonal

### Power

12 Volt Sealed Lead Acid Gel Cell

**Battery Capacity:** 9.0 Ah

**Weight:** 3.6 kg (7.9 lbs)

**Battery Life:** 4 - 6 hours

**Charger:** 110 - 240V

### Environmental & Temperature

Ruggedized, environmentally sealed unit and connections

IP65

Operating temperature range: -104 to 122°F (-40 to 50°C)

### Regulatory Specifications

Meets FCC 15.509, IC RSS-220 and ETSI EN-302066



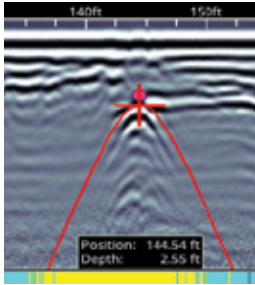
# LMX100 and LMX200 Features

## Rapidly locate metallic and non-metallic utilities

### Enhance your productivity

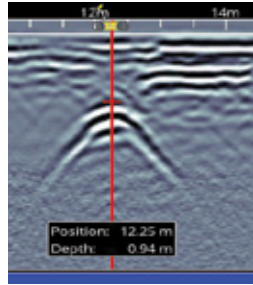
No complex settings – Just press Start and push the cart

#### Easy Depth Calibration



Use hyperbola-fitting to ensure accurate depth measurements and backup over the target to display its location and depth

#### Pinpoint Depth & Location



#### Dynamic Stacking (DynaQ®)

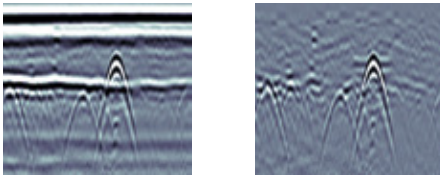


- White = No Data (too fast!)
- Yellow = Moderate quality
- Light blue = Better quality
- Dark Blue = Highest quality

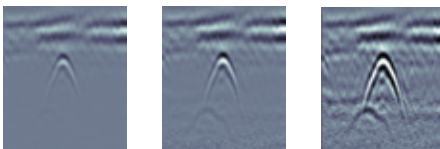
Better data quality with DynaQ - automatically adjusts stacking (averaging) based on your survey speed

## Increase your target confidence in the field with image optimization

#### Preset Filters

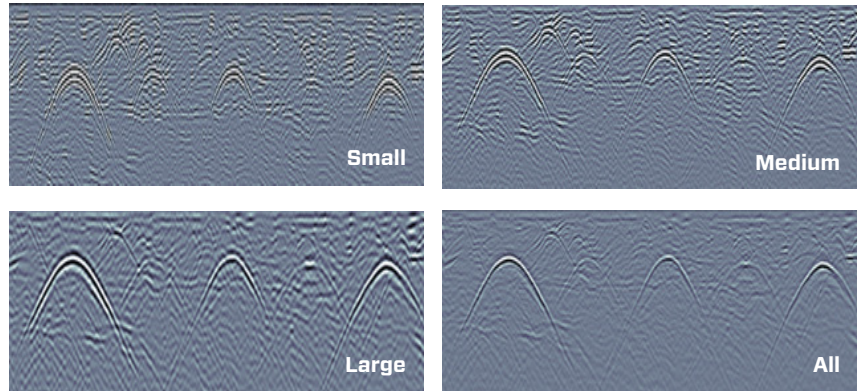


#### Adjustable Gain



Optimize visibility of your targets with preset filters & gain

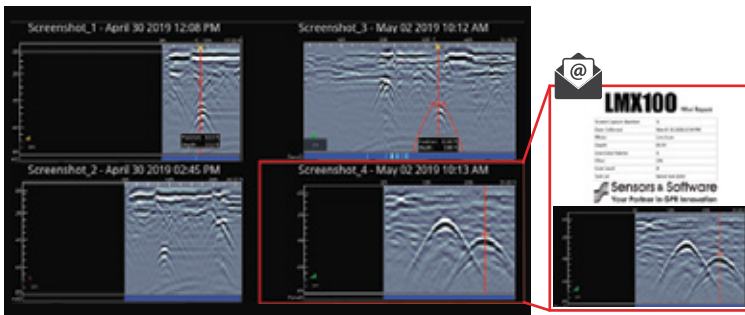
#### Dynamic Target Enhancement (DynaT™)



Enhance small, medium & large targets

## Get faster deliverables

#### In-field Screenshot Gallery & Wi-Fi mini-reports



Manage & review your screenshots and email them in a Wi-Fi mini-report from the field to share key collection information and images

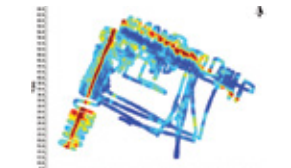
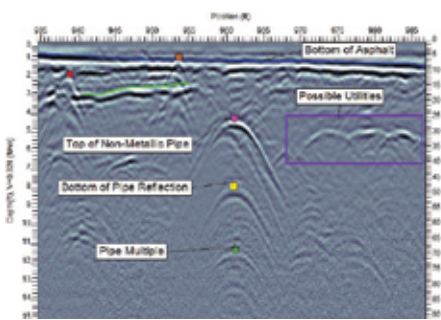
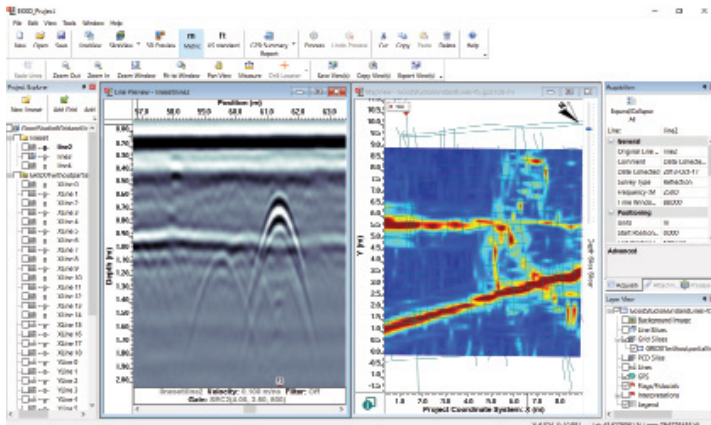
#### Geo-tagged information for reports & archiving



All screenshots are geo-tagged and exported in a KMZ file that is easily displayed in Google Earth™

# EKKO\_Project™ Software

Visualize, Understand and Report your GPR results with optional EKKO\_Project PC Software (for LMX200)

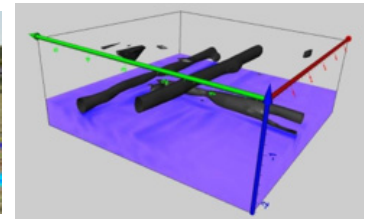


Add interpretations, photos, audio & video to GPR lines.

Create depth slices with or without a grid

Organize GPR data, photos and other files as a single project (.GPZ file)

Easily create PDF GPR summary reports of your findings.



Explore the many options for data visualizations and analysis with EKKO\_Project software bundles.

## Comparison Table

Feature	LMX100™	LMX200™
Real-time Locate & Mark	✓	✓
Grid Scan Mode		✓
In-field depth slicing		✓
External GPS option		✓
GPR Data Export functionality - allows for post-processing in optional EKKO_Project software		✓
File Management	Screenshots	9 Projects containing Lines, Grids & Screenshots

### Useful resources to make the most of your LMX:

- Webinars, Training Videos and other free online resources (available on [www.sensoft.ca](http://www.sensoft.ca))
- Utility Locating with GPR (Nulca-accredited) interactive, online and on-demand course available on [www.SensoftU.com](http://www.SensoftU.com)
- Contact us to learn more about our training offerings

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