



LMX<sup>®</sup> System Overview

The simple, affordable way to Locate & Mark™ 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® GPR systems complement traditional pipe and cable locators and allow you to Locate & Mark®:

- 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



#### Lead Acid Gel Cell Battery

- Long lasting
- Swappable



updates

#### **GPR Sensor**

• Free lifetime system software

Metric and US Standard units

• User selectable languages

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



### **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



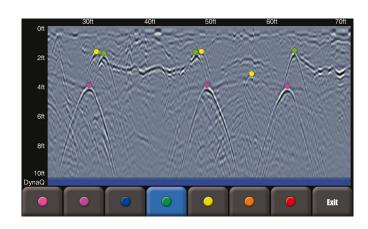
#### Wi-Fi

Built-in Wi-Fi capability



# 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.

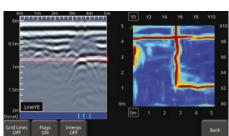
### In-field Depth slices

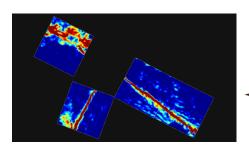
Process grid data into depth slices and move down through your data to visualize targets at different depths.

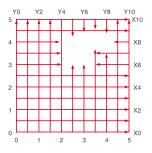
### Depth Slice through multiple grids on-site

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









## Obstacle avoidance

System guides data collection around an obstacle in your grid.

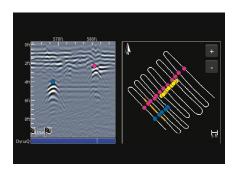
# Features unlocked with GPS

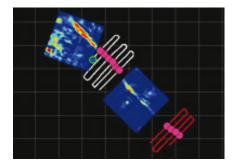
# SplitView - Real-time MapView during data collection

- 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**

$\Delta$	Α	В	С	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



#### 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

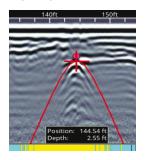
### **LMX100** and **LMX200** Features

### Rapidly locate metallic and non-metallic utilities

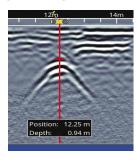
#### **Enhance your productivity**

No complex settings – Just press Start and push the cart

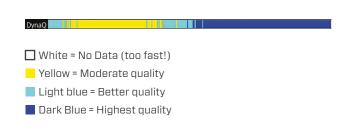
#### **Easy Depth Calibration**



#### Pinpoint Depth & Location



#### Dynamic Stacking (DynaQ®)

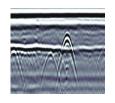


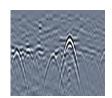
Use hyperbola-fitting to ensure accurate depth measurements and backup over the target to display its location and depth

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

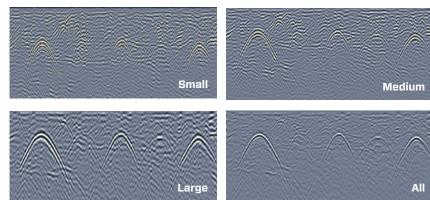






Optimize visibility of your targets with preset filters & gain

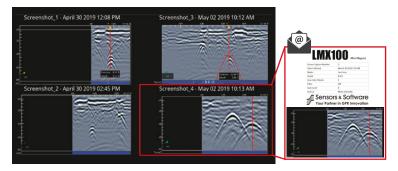
#### Dynamic Target Enhancement (DynaT™)



Enhance small, medium & large targets

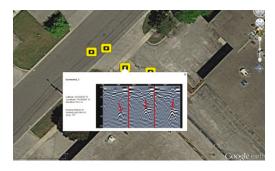
#### Get faster deliverables

#### 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

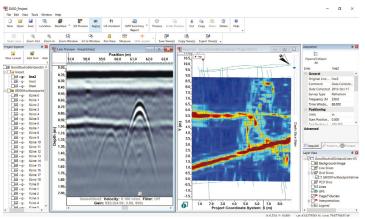
#### Geo-tagged information for reports & archiving



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

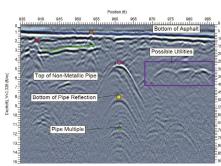
# **EKKO\_Project™ Software**

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

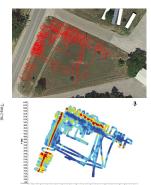


Organize GPR data, photos and other files as a single project (.GPZ file)

Easily create PDF GPR summary reports of your findings.

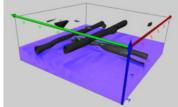


Add interpretations, photos, audio & video to GPR lines.



Create depth slices with or without a grid





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 fuctionality - 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)
- Utility Locating with GPR (Nulca-accredited) interactive, online and on-demand course available on www.SensoftU.com
- Contact us to learn more about our training offerings



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