Ground Penetrating Radar for Concrete scanning and inspection

The MALÅ CX solution monitor at startup
Scan, cut and core with confidence

The MALÅ GPR CX Concrete Imaging System allows you to perform ground penetrating radar scans of concrete structure simply and safely and present data clearly for real-time and in-the-box 3D data acquisition, display and analysis.

The MALÅ GPR CX solution provides accurate inspection of concrete structure such as floors, walls, slabs, bridge deck for the detection of metallic and non metallic objects and features, e.g. rebar, post tension cables, metallic and non-metallic conduits and pipes, voids, as well as the measurement of slab thickness. The CX solution gives construction professionals a safe and reliable solution to inspect work areas to locate and identify hidden features that could cause damage to machinery, or pose a danger to the operator or the structure itself.

The CX solutions support the MALÅ GPR High Frequency antennas, ranging from 1.2 to 2.3 GHz. The user-friendly built-in software may be operated by either the push-and-turn dial on the monitor, or in a fully remote mode using the buttons on the antenna. The software supports three different modes of operation: 2D; 3D Grid; Object mapper projects. For further processing, analysis and reporting, the data can be exported to stand-alone MALÅ software solutions, such as MALÅ 3D Vision and Object Mapper.

“The MALÅ CX is just a fantastic instrument and I’m amazed how effectively you can build a business around the technology.”

- C.R.I.S., Australia
The core of MALÅ CX solutions

The MALÅ CX solution is currently based around the CX12 control unit. The MALÅ CX12 is the third generation of the CX control unit and when developing the CX12, MALÅ engineers were very careful to merge all the new ideas with the best features from its predecessor (CX10, CX11). The MALÅ CX12 introduction was very well received by the market and has further strengthened the MALÅ CX solution as the market leader of ground penetrating radar devices in the concrete scanning market.

The MALÅ CX solution includes everything needed in one small case roughly the size of airplane carry-on-luggage. At site, it takes less than 10 minutes from arrival until the first 3D Grid survey is completed. The MALÅ CX solution is widely appreciated for its field worthy design. As with all MALÅ ground penetration radar solutions, the sensitive electronics is sealed and protected by an anodized aluminum casing. Cables and connectors are designed to withstand the toughest building sites and the wear and tear from daily use for years. The CX monitor screen is built for both in-door and out-door operation and is perfectly visible in direct sun light. The system supports three antenna frequencies: 1.2 GHz; 1.6 GHz; 2.3 GHz. As an option, the first two also comes with a built-in EM radiation detector to help detect live wires. With the built-in processing and interpretation software, the CX solution is designed to effectively deliver results directly in the field. But if required, data and results from the CX solution can be exported to stand-alone MALÅ proprietary software, such as MALÅ 3DVision and Object Mapper, for further processing, analysis and reporting.

Three antenna frequencies (1.2, 1.6 and 2.3 GHz) are available. Depth range varies between 0.5 - 1.0 meters in dry concrete.

As an option to the standard HF Single Wheel encoder, there is the MALÅ HF Cart, a four wheeled encoder for improved control and detail.

Other optional items include the extension handle, extension cable and a shoulder harness to simplify hard-to-reach investigation areas.

For more information, see www.malags.com

MALÅ CX solution

Technical Specification

- **POWER SUPPLY**: Li-Ion 12V/12Ah external battery
- **OPERATING TIME**: 6 hours
- **OPERATING TEMP**: -20° to +50°C or 0° to 120 °F
- **ENVIRONMENTAL**: IP65
- **DISPLAY**: 10.4" Color TFT, sunlight-readable, LCD
- **DIMENSIONS**: 56 x 46 x 26cm/22”x 18”x 10” (in-the-box)
- **TOTAL SYSTEM WEIGHT**: 19.5 kg/42.9 lbs (in-the-box incl. antenna)
- **ANTENNAS**: High Frequency 1.2, 1.6, 2.3 GHz (EM-option avail.)

Features and Accessories

- Minimal setup time for fast start-up
- Full remote capabilities using buttons on the antenna
- LINUX operating system for fast and reliable processing
- Intuitive project driven GUI for enhanced work flow
- Project modes for 2D, 3D Grid, and Object Mapper
- In-the-box processing to clear jobs on site
- Supports EM (50/60Hz) detection functionality
- Back up cursor for quick and accurate marking
- Hyperbola fitting tool for velocity calibrations
- Stand-alone Windows based software for additional processing

For more information, see www.malags.com
MALÅ Geoscience is the Global Leader in Ground Penetrating Radar (GPR) with users in 113 countries and more than 60 distributors.

With offices in Sweden, USA, China, Malaysia and Australia, and service centers in 3 continents, the company offers an outstanding level of service to customers and business partners worldwide.