12v dc input

External ports, USB,
Ethernet and serial

Portable carrying options

Unique powerful Linux
based software

1. Field rugged IP65 housings

2. Impact resistant screen

3. Large colour LCD

4. Unique dual function
   turn / push button

MALÅ XV Monitor™

Data Acquisition Platform and User Interface

The MALÅ XV Monitor is a dedicated data acquisition platform with a unique user interface designed for the MALÅ GPR systems.

Traditionally, GPR systems have been operated from a notebook PC, however, MALÅ Geoscience has taken the initiative to introduce a powerful and dedicated tool that replaces this traditional approach and thereby offers several significant advantages.

Essentially, the MALÅ XV Monitor is a PC, however, as a dedicated tool, there are no extras or non-essential features that are present on standard commercial notebook computers; the MALÅ XV Monitor is optimized for the job in hand, i.e. the collection, handling, processing, and presentation of GPR data. The MALÅ XV Monitor is designed on a Linux platform, so the start-up is quick, it has low power consumption and the operating system is stable and reliable.

Simplicity and Ease of Use

The user interface has been designed to be simple, intuitive, easy to use and navigate. The ease of use is aided further with a unique dual function turn / push button for system operation. Therefore, no external keyboard or mouse is necessary and the turn/ push button can even be operated in cold climates where the user must wear gloves, something that can be difficult with standard notebooks, especially those utilizing touch-screens.

The MALÅ XV Monitor has been designed with field use in mind, so the rugged housing is rated to IP65 and has a tough impact resistant fascia to protect the color LCD. An optional trans-reflective LCD means that on-screen data can be seen clearly, even when operating in direct bright sunlight, without the need for covers or sun-shades.

Specific Features

MALÅ Geoscience is wellkowned for its innovative designs and the MALÅ Monitor is no exception. In addition to the benefits described above, the MALÅ XV Monitor is packed with practical and useful features to assist in all aspects of the collection, handling, processing, presentation and interpretation of GPR data.

- Project based data collection:
  - Object Mapper[1]
  - Grid Project[2]

  For fast and efficient data collection and file transfer to MALÅ Object Mapper™ Software.
- Includes internal flash memory storage media (1 Gb)
- USB port allows fast dump of data files via external Flash cards
- Fast start-up (approximately 30 seconds) for first measurement
- Automatic on-line filters and simple filter settings enable simple operation and easy data interpretation in the field
- Marker function for surface and buried objects / reflectors
- Calibration function for direct velocity / depth calibration to a known target
- GPS support via serial port (NMEA protocol)

[1]An Object Mapper Project is used to collect and handle multiple radar profiles linked to a common baseline, particularly useful for utility mapping.
[2]A Grid Project is used to collect and handle radar data from two perpendicular directions, i.e. X and Y orientations. It allows easy visualization of the entire grid or survey area in a 2.5 D birds-eye view, and also enables viewing through the depth layers of the entire grid project area.

System configuration

The MALÅ XV Monitor is compatible for use with the MALÅ Easy Locator, MALÅ X3M, MALÅ ProEx and the previous MALÅ CUII systems, although operating software, user features and functionality varies for the different systems. A modified MALÅ XV Monitor with additional high frequency electronics is used as the basis for the MALÅ CX Concrete Imaging System and for the MALÅ Easy Locator, the MALÅ Monitor is modified to MALÅ EXM / IXM Monitors. However, the general user experience [is] consistent regardless of the system configuration.

Technical Specification

Power supply:	Li-Ion 12V battery or other external source (9-18 V)
Operating time:	5 h nominal (12V battery)
Operating temp:	-20° to +50°C
Environmental:	IP65
Dimensions:	32.6 x 21.5 x 5.2 cm (with protruding details 8.6 cm)
Weight:	2.6 kg
Antennas:	All MALÅ Antennas, except when operating the MALÅ Borehole Antennas in tomographic mode
Communication:	Ethernet 100Mb/s
Display:	Color backlit TFT LCD (640 x 480 pixels), hi-brite (XV10), or trans-reflective (XV11)

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www.malags.com

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