



12v dc input



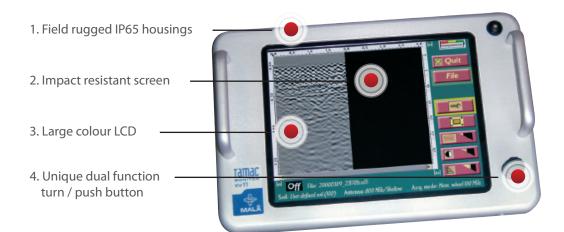
External ports, USB, Ethernet and serial



Portable carrying options



Unique powerful Linux based software



# 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<sup>1</sup>
  - Grid Project<sup>2</sup>

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)

An Object Mapper Project is used to collect and handle multiple radar profiles linked to a common baseline, particularly useful for utility mapping. <sup>2</sup>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**

Li-lon 12V battery or other external source (9-18 V) Power supply:

Operating time: 5 h nominal (12V battery)

Operating temp: -20° to +50°C

Environmental: IP65

32.6 x 21.5 x 5.2 cm (with protruding details 8.6 cm) Dimensions:

Weight:

All MALÅ Antennas, except when operating the MALÅ Borehole Antennas in tomographic mode Antennas:

Communication: Ethernet 100Mb/s

Display: Color backlit TFT LCD (640 x 480 pixels), hi-brite (XV10), or trans-reflective (XV11)

#### See our webpage for latest information



#### **Corporate Headquarters** Offices

MALÅ Geoscience Skolgatan 11, SE-930 70 Malå, Sweden Phone: +46 953 345 50 Fax: +46 953 345 67

USA: MALÅ Geoscience USA, Inc., 465 Deanna Lane, Charleston, SC 29492

Phone: +1 843 852 5021, Fax: +1 843 284 0684, E-mail: sales.usa@malags.com

China: MALÅ Geoscience (China), Room 2604, Yuan Chen Xin BLDG, No.12 Yu Min Road Chao Yang District, Beijing 100029 E-mail: sales@malags.com Phone: +86 108 225 0728, Fax: +86 108 225 0815, E-mail: sales@malags.com