12v dc input

External ports, USB, Ethernet and serial

Portable carrying options

Icon driven menu structure

1. Field rugged IP65 housings

2. Impact resistant screen
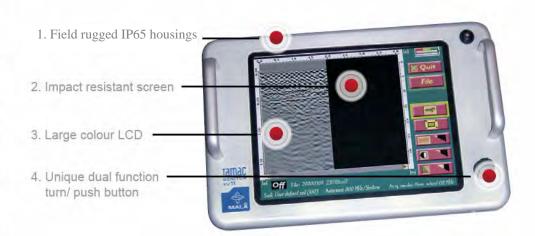
3. Large colour LCD

4. Unique dual function turn/ push button

XV Monitor™
Data Acquisition Platform and User Interface

Introducing the XV Monitor (Monitor); a dedicated data acquisition platform and user interface for with the GPR systems. Traditionally, GPR systems have been operated from a notebook pc, however, we have taken the initiative to introduce a powerful and dedicated tool that replaces this traditional approach and thereby offers several significant advantages.

Essentially, the 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 Monitor is optimized for the job in hand, i.e. the collection, handling, processing, and presentation of GPR data.

The 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 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 sunshades.

Specific Features

In addition to the benefits described above, the 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 Object Mapper™ or Easy3D™ processing 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.birds-eye view, and also enables viewing through the depth layers of the entire grid project area.

System configuration

The Monitor is compatible for use with the Easy Locator, X3M and ProEx systems: although operating firmware, user features and functionality vary. A modified XV Monitor with additional high frequency electronics is used as the basis for the CX Concrete Imaging System. However, the general user experience is consistent regardless of the system configuration.

Monitor - Easy Locator - Monitor - CX - Monitor – XV

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: 325.8 x 215 x 52 mm (with protruding details 86 mm)**

- **Weight: 2.6 kg**

- **Antennas**: **All antennas, except Borehole tomography measurement**

- **Communication: Ethernet 100Mb/s**

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

Terraplus Inc.
52 West Beaver Cr. Rd. #12, Richmond Hill, ON. Canada L4B 1L9

Tel: 905-764-5505
Fax: 905-764-8093

Email: sales@terraplus.ca
Website: www.terraplus.ca