

UtilityScan Standard



Locate Metallic and
Non-Metallic Utilities

*Integrated Ground Penetrating Radar
system designed to easily detect
and map subsurface utilities*

Features

Easy to use system for quick surveys to locate non-traceable utilities.

Rugged, affordable and versatile.

High-definition full-color screen, easy to read in daylight.

Collapsible and lightweight.

Locate utilities quickly with backup cursor feature.



Geophysical Survey Systems, Inc.

www.geophysical.com

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The Latest Utility Locating System from GSSI

The core of the UtilityScan system is the powerful, new SIR-3000 digital control unit from GSSI. The SIR-3000 represents the result of GSSI's 33 years as the world leader in Ground Penetrating Radar (GPR) research and development.

This revolutionary system is the first to incorporate a full-color display screen for clear, easy to read data images. Removable Compact Flash data memory, sealed battery compartment, and a hardened metal casing make the UtilityScan both expandable and durable. The UtilityScan is also fully self-contained on the included survey cart, which means there are no cables or wires to snag and break.



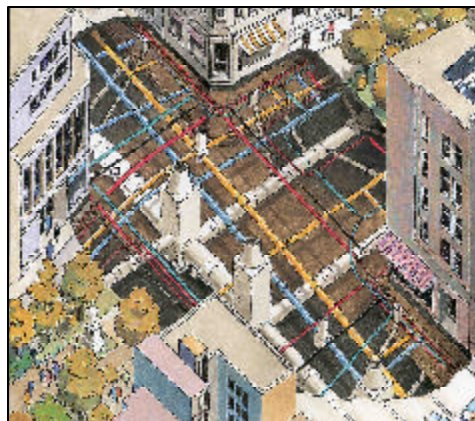
Integrated System

Fully Integrated System for Answers when you need them: **Right Now**

- Real time data display: What you see is where you are.
- Back up cursor allows you to reverse the system and zero in on a target for pinpoint accuracy.
- Unsurpassed data quality with GSSI's proven 400 MHz antenna means you can trust your results.
- All components tested for maximum durability under tough field conditions. No fragile, costly fiber optic cables to replace.
- Built with pride in the USA.

Utility Detection: Problem and Solution

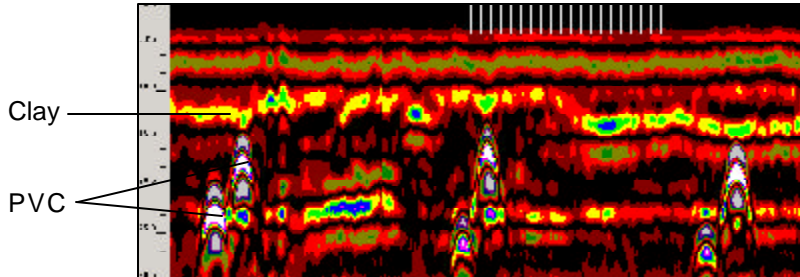
PVC pipes, water mains, concrete storm drains, clay pipes..... In today's construction environment, technology changes so fast that you never know what surprises are waiting for you on the job site. Making sure that you have the right tool in your truck is essential. That's where UtilityScan comes in. Sure, that RF locator is great, and you swear by it, but when it comes to complex utility layouts or non-traceable utilities, you need something more.



Are you putting too much faith in those 25 year-old as-built maps? How comfortable are you marking out a trench when you are not 100% sure that you've located everything? Just a quick UtilityScan survey and you can have that total confidence that comes with knowing your jobsite "inside and out."

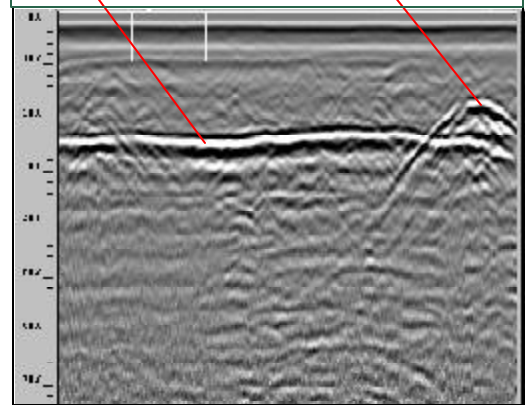
UtilityScan Data

UtilityScan's exceptional data quality, combined with full color viewing, lets you locate utilities easily and accurately.

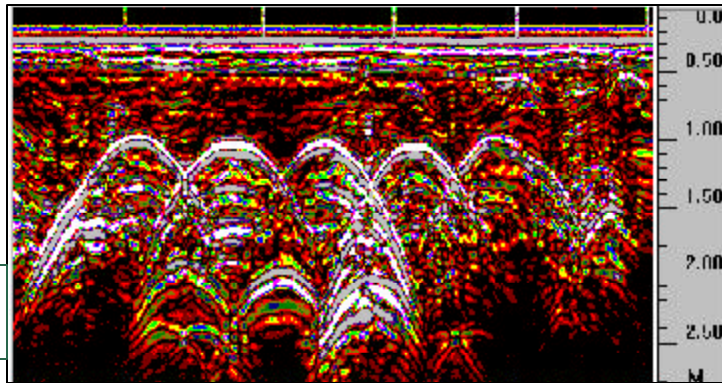


GPR data from the UtilityScan system showing PVC pipes under a layer of clay.

2D GPR profile showing long axis of a gas pipe with crossing water pipe (right).

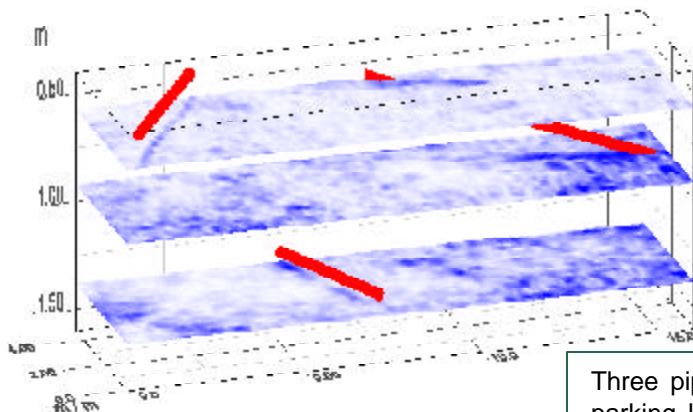


2D data showing multiple Underground Storage Tanks.

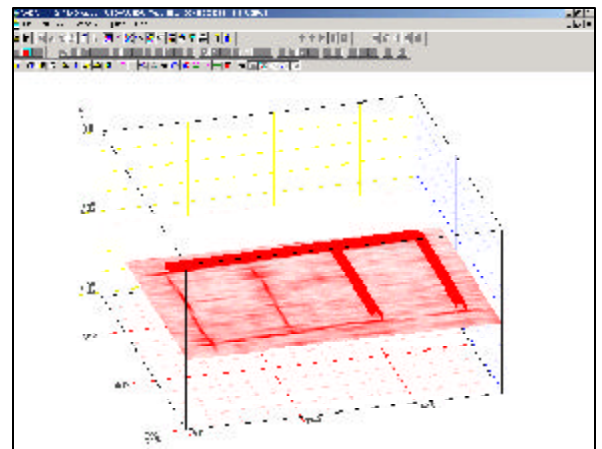


Software

GSSI's RADAN NT and 3D QuickDraw software takes a step forward from the traditional two-dimensional viewing method. Three-dimensional visualization helps you to see the whole picture, giving you a powerful tool to interpret complex utility layouts.



Three pipes under asphalt parking lot.



3D QuickDraw display showing a PVC drainage system at depth of 3 feet.

UtilityScan System Specifications (Preliminary)

System

Antennas: Compatible with all GSSI antennas

Number of Channels: 1 (one)

Data Storage:

Internal memory: 512 Mb Flash memory card

Compact Flash port: Accepts industry standard CF memory up to 1 GB (user provided)

Processor: 32-bit Intel StrongArm™ RISC processor @ 206 MHz

Display: Enhanced 8.4" TFT, 800 x 600 resolution, 64K colors

Display Modes: Line scan, O-scope

Data Acquisition

Data Format: RADAN (dzt)

Scan Rate Examples:

300 scans/sec at 256 samples/scan

150 scans/sec at 512 samples/scan

Sample size: 8-bit or 16-bit, user-selectable

Scan Interval: User-selectable

Number of samples per scan:

256, 512, 1024, 2048, 4096, 8192

Operating Modes:

Free run, survey wheel, point mode

Time Range:

0-8,000 nanoseconds full scale, user-selectable

Gain: Manual or automatic, 1-5 gain points (-20 to +80 dB)

Filters:

Vertical: Low-Pass and High-Pass IIR and FIR

Horizontal: Stacking, Background Removal

Operating

Operating Temperature:

-10°C to 40°C ambient (preliminary)

Charging Power Requirements:

15 V DC, 4 amps

Battery: 10.8 V DC, internal

Transmit Rate: Up to 192 KHz

Input/Output

Available Ports:

Antenna input

DC power input

Ethernet Input/Output

RS232 (GPS port)

Compact Flash memory

USB master/slave

Mechanical

Dimensions:

31.5 (L) x 22 (W) x 10.5 (H) cm

12.4" x 8.7" x 4.1"

Weight: 4.1 kg, (9 lbs) including battery

Environmental: Water resistant

System Includes:

SIR-3000 data acquisition system

Survey cart with encoder wheel

Model 5103 400 MHz antenna

(1) 2 meter control cable

Transit case

2 batteries

AC adapter

User manual

Sunshade

Fully FCC Compliant



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