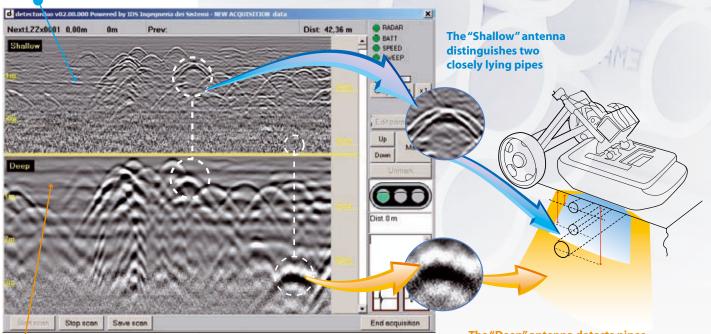# Detector*DUO*

2 see better than 1
2 locate faster than 1

The new dual frequency antenna radar for detecting metallic and non-metallic pipes

The new Detector Duo provides easy to interpret real time results of deep and shallow targets and locates the exact position of pipes and cable.

No need to replace the antenna and cover the same site twice. You can detect shallow and deep targets with a single scan saving time and costs.

Simultaneous real-time display of deep and shallow targets combines superior resolution with extra soil penetration depth.

Detector Duo

Easy-to-use

"Shallow" Antenna

The "Shallow" antenna distinguishes two closely lying pipes

"Deep" Antenna

The "Deep" antenna detects pipes buried much further below

IDS
INGEGNERIA DEI SISTEMI

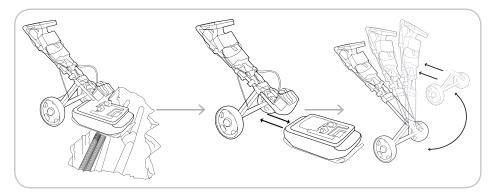*IDS: The leader in multi-frequency and multi-channel Ground Penetrating Radar*

G020157

Innovative Features

No need to replace antennas to detect both deep and shallow targets: the new dual frequency 250MHz - 700 MHz antenna in single case means all targets can be simultaneously displayed with just a single scan.
Display of deep and shallow channels on the same screen increases detection performance and reduces the possibility of errors.

Collapsible trolley, easy to transport and assemble.

Underground utilities can be detected immediately on-site.

Other Features

• Compact, flexible and lightweight design to increase manoeuvrability
• Collapsible trolley, easy to transport and assemble.
• Data storing and printing functions for easy report production
• Simple, user friendly software interface makes it suitable even for non expert users
• Automatic calibration for quick start up. Automatic recovery of soil type parameters. No need to insert propagation speed or soil dielectric constants
• Easy mark-up tool for all types of pipes and cables
• Easily repleceable antenna skid
• Optional bright sunlight readable monitor for best outdoor performance

Specifications

• Operating time: up to 10h
• Antenna Footprint: 60 x 37 cm
• Weight: 15 Kg
• Antenna: Integrated 250 +700 MHz frequency,   shielded
• Software: Multi-language
• Calibration: Automatic

Detector Duo: Technical Specification

Weight (without laptop and with battery):	15 Kilograms (33 Pounds)
Survey speed:	9 Kilometres/h (5.6 Miles/h)
Battery operating time (without laptop):	More than 10 hours
Power supply:	SLA battery
"On the fly" battery replacement:	YES
Humidity:	100% (sealed)
Plant size without handle (L x W):	68 x 80 centimetres
Data collection type:	2D (single antenna)
Survey path width:	0.5 meters
Number of recording channels:	no. 1 at 250 MHz no. 1 at 700 MHz
Antenna frequencies:	250 MHz and 700 MHz
Typical collection speed:	100 scans/second
Sampling interval:	2,5 centimetres
Type of calibration gain:	Automatic
Typical range:	Automatic (128 nanoseconds)
Data playback:	YES
Data printing (with pipe descriptions):	YES
Operative system:	Windows 2000 Pro / XP Pro
Display mode:	Colour/grey scale palette
Recommended laptop:	▪ Panasonic CF-19 Tough-book ▪ Bright sunlight readable Hammerhead

Detector Duo Software

AN ON-SITE REALTIME SOFTWARE FOR SIMULTANEOUS DISPLAY OF DEEP AND SHALLOW TARGETS

The DETECTOR DUO SW is a high performance acquisition software instrument designed for the DETECTOR DUO system.

Being very user friendly makes detection of all types of utilities on-site fast and practical.

In particular, this software permits the user to acquire raw data showing simultaneously deep and shallow targets in one display, performing one single scan saving so time and costs.

An additional feature enables you to mark recognised utilities on the map as you find them.

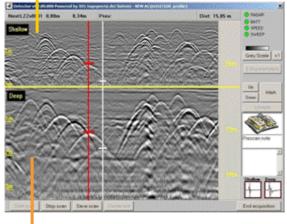Data are stored in real time on the computer hard disk.

Review mode permits you to add other utilities not seen during acquisition in order to complete the final results.

The software is also used to print a map together with indications underneath of location, depth and utility type detected.

Hardware and software requirements
- DETECTOR DUO Control Unit
- Operating System: Windows 2000/XP Professional
- Hard Disk: 6 Gb or higher
- RAM: 256 Mb