C.SCOPE

C.SCOPE Cable Avoidance Tools & Signal Generators

cscopelocators.com

C.SCOPE
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Detect and trace buried services simply, quickly and reliably using C.SCOPE Cable Avoidance Tools & Signal Generators.

Hitting and damaging buried services when excavating can result in personal injury, costly repairs and disruption to work.
The best way to avoid damaging buried services is to pinpoint their exact position and route BEFORE work begins. C.SCOPE Cable Avoidance Tools and Signal Generators are specifically designed to be used by ALL staff in ALL site conditions and at ALL times to ensure the position of buried pipes and cables is pinpointed before each and every excavation.

PRODUCT RANGE
C.SCOPE can offer a locating package that will suit your particular locating needs with a choice of TWO Cable Avoidance Tools; the standard **CXL Cable Avoidance Tool** and our **Depth Measuring DXL**, and TWO Signal Generators; our standard **SGA Signal Generator** and our unique **High Power SGV** version with a visual display. The C.Scope Cable Avoidance Tools represent one of the most versatile locating kits available when used in conjunction with a full range of accessories including General Purpose Sondes, Duct Sondes, Plastic Pipe Tracers, Signal Clamps, Signal Injectors and Carry Bags.

EASY TO USE
The C.SCOPE range makes locating simple and lets you work with confidence. Our Cable Avoidance Tools have been designed as truly 'pick-up-and-go' products that ANYONE will
be able to use even if they have never used a Cable Avoidance Tool before.

BUILT TO LAST
Nothing comes close to matching the durability and strength of our designs, giving the typical excavation operative confidence that the C.SCOPE range will provide reliable locating, time after time.

UNIQUE & INTELLIGENT FEATURES
C.SCOPE equipment has been specifically designed to make Cable Avoidance safer and more straightforward. Packed full of innovative 'common sense' features such as an extra detecting mode plus greater sensitivity and improved signal interference rejection mean that you gain accurate information fast.

THE IDEAL CHOICE
Unparalleled 'locate and identify' performance make C.SCOPE the ideal choice for;
● All utilities (gas, water, electricity, telecom, drainage) ● All utility contractors
● Local Authorities ● Highways Contractors ● Building and Civil Engineering Industry
In fact, ANYONE who carries out any form of excavation work.

C.Scope CXL Locator

C.Scope DXL Locator

C.Scope SGA Signal Generator

C.Scope SGV Signal Generator

C.SCOPE CXL & DXL Cable Avoidance Tools

The new C.Scope CXL & DXL Cable Avoidance Tools are high performance Locators developed using the latest in advanced digital signal processing technology. It is the most modern design of Locator available and will determine the exact position of buried pipes and cables immediately prior to any form of excavation work taking place, day or night.

Building on the key features of our classic Cable Avoidance Tool, the **CXL and DXL** have added an **extra detecting mode** plus **greater sensitivity** and **improved signal interference rejection** to create a Locator that will provide valuable information about the position of buried pipes and cables more quickly than previously possible.

When combined with a C.Scope SGA or SGV Signal Generator and accessories, the CXL/ DXL Cable Avoidance Tools become a versatile, all round pipe and cable locating and tracing package.

Robustly made and equipped with LCD meter with automatic backlight, detachable loudspeaker and easy-to-operate fingertip controls, the C.Scope CXL or DXL Cable Avoidance Tools are the ideal choice for those needing to detect buried services quickly and with confidence.

Both the CXL and DXL Locators are available with **Bluetooth connectivity** to enable communication with mapping and data logging systems.

The C.Scope **DXL Cable Avoidance Tool** is the **depth measuring version** of our classic, industry standard Cable Avoidance Tool and is the ideal Locator to use to determine the exact location AND DEPTH of buried pipes and cables.

C.Scope CXL Locator | C.Scope DXL Locator

The C.Scope CXL and DXL Cable Avoidance Tools have FOUR detecting modes, each with their own unique advantages:

The **POWER mode** is the quickest way to detect most buried electricity cables by detecting the signal created by the electrical current itself.

The **RADIO mode** detects re-radiated "radio" type signals that are often present on metal pipes and cables allowing their position to be determined using just the CXL/ DXL alone.

The **GENERATOR mode** is used to detect the signal applied to a metal pipe or cable by a C.Scope SGA or SGV Signal Generator. In addition the Generator mode can be used to detect the signal being transmitted by a C.Scope Sonde for non-metallic pipe tracing.

The **UNIQUE *ALL*SCAN mode** detects ALL frequencies of signal from the lowest of the Power signals right up to and including 33kHz. This great all-in-one mode can detect unusual frequency signals often overlooked in the conventional Power, Radio and Generator modes and can often speed up the locating process with just one sweep of the site.

C.SCOPE SGA & SGV Signal Generators

A C.Scope SGA or SGV Signal Generator is a vital accompaniment to a C.Scope Cable Avoidance Tool and significantly increases the number of buried services that can be detected.

C.Scope SGA Signal Generator

The 33kHz **SGA or SGV Signal Generator** can energise a buried metal pipe or cable either by 'direct connection' to the target pipe or cable or the simpler 'induction' method from above ground.

Direct Connection allows specific pipes or cables to be individually traced, identified and their depths measured, whilst use of the **Induction** method allows previously unknown metal pipes or cables to be detected and traced.

The SGA Signal Generator has a power output of up to 0.3 Watt whilst the SGV Signal Generator boasts a class leading **ONE WATT POWER OUTPUT** to provide longer distance tracing.

The SGV Signal Generator has **FOUR POSITION POWER LEVEL ADJUSTMENT** so YOU control how much power to use and when. The SGA Signal Generator enables you to toggle between a high & low setting.

C.Scope SGV Signal Generator

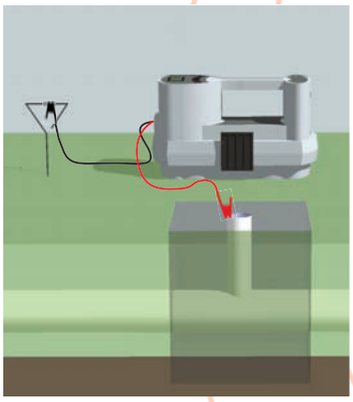
The SGA and SGV offer the choice of a **PULSED** or **CONTINUOUS SIGNAL OUTPUT**. Switch to the Pulsed Mode, at the push of a button in high interference situations and keep on tracing.

The SGA and SGV Signal Generators have a **clear audible signal output** to indicate when they are in operation and also feature an **inbuilt mute control**. The SGV has a **Multi-segment liquid crystal display** that provides clear information about the functions selected. The display also shows the all important battery condition so you always know exactly how much battery life you have at your disposal.

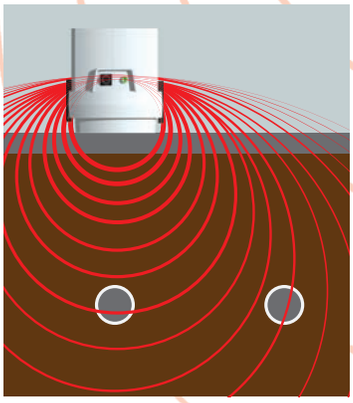
The stylish, **robust and lightweight case construction** is built to **IP65 standards** of dust and water resistance; the highest standard for any Signal Generator. The **large, easy to open, integral accessories tray** can house not only the standard accessories (Direct Connection Leads,Earth Stake, Connection Magnets and 10m Auxilliary Earth Lead) but also many of the optional extras such as Signal Clamps, Sondes and Signal Injectors.

Four **standard batteries** provide **long operating life**. No need to charge up a set of expensive rechargeable batteries the night before.

DIRECT CONNECTION



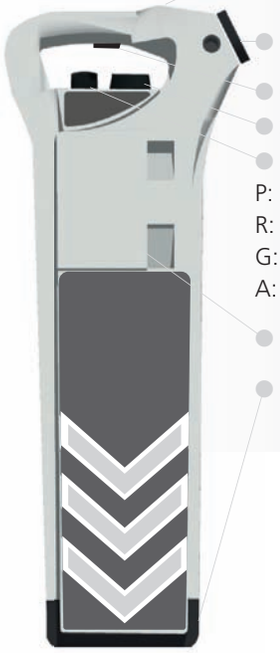
INDUCTION



TECHNICAL SPECIFICATIONS

C.SCOPE CXL / DXL CABLE AVOIDANCE TOOL
C.SCOPE SGA / SGV SIGNAL GENERATORS

C.SCOPE CXL / DXL



- Digital Display with automatic backlight
- Extendable Loudspeaker
- On/Off Switch
- Sensitivity Control
- Four Position Mode Switch
  P: Power
  R: Radio
  G: Generator
  A: *All*Scan
- Battery Compartment
- Replaceable Wear Foot

C.SCOPE CXL / DXL CABLE AVOIDANCE TOOLS TECHNICAL SPECIFICATION

Mode/ Feature	Frequency (Hertz)	Sensitivity @1m depth	Detection Depth
Power	50-400	5mA	up to 3m
Radio	10,000-30,000	25µA	up to 2m
Generator 33kHz	32,768	5µA	up to 3m
*All*Scan	50-32,768	100µA	up to 3m
DXL Depth Measurement	32,768		0.05m - 3m
Sondes Depth Range	32,768		0.2m - 9.9m

- **Product Names:** CXL / DXL **CABLE AVOIDANCE TOOL**
- **Part Nos.:** ZCSCXLCAT-33-GREY / ZCSDXLCAT-33-GREY
- **Product Dimensions:** 720 x 280 x 65mm
- **Weight:** 2.6kg incl. batteries. 2.4kg excl. batteries.
- **Batteries:** 8 x 'AA' (LR6) cells alkaline batteries typically giving up to 40 hours intermittent use at 20°C. Compatible with NiMH rechargeable batteries.
- **Temperature Range:** -20°C to +50°C
- **IP Rating:** IP65
- **Approvals:** CE
- **Warranty:** 12 months.

C.SCOPE SGA / SGV SIGNAL GENERATORS TECHNICAL SPECIFICATION

Model	Frequency (Hertz)	Tracing Distance	Direct Connection	Signal Clamp	Signal Injector	Induction
SGA Signal Generator	32,768	Medium	Yes	Yes	Yes	Yes
SGV Signal Generator	32,768	Long	Yes	Yes	Yes	Yes

C.SCOPE SGA / SGV

SGA / SGV SIGNAL GENERATOR including Direct Connection Lead, Auxiliary 10m Earth Lead, Connection Magnets, Accessory Tray and Earth Stake.

- **Product Names:** SGA / SGV **SIGNAL GENERATOR**
- **Part Nos.:** ZCSSGA-33-GREY / ZCSSGV-33-GREY
- **Output Power SGV:** Switchable through four levels up to a maximum of One Watt.
- **Output Power SGA:** High/Low toggle up to 0.3 Watt.
- **Product Dimensions:** 360 x 180 x 230mm
- **Weight:** 3.4kg incl. accessories. 2.0kg unit only.
- **Batteries:** 4 x D (LR20) alkaline batteries typically giving up to 30 hours intermittent use at 20°C. Compatible with NiMH rechargeable batteries.
- **Temperature Range:** -20°C to +50°C
- **IP Rating:** IP65
- **Approvals:** CE, EN300-330, EN301-489
- **Warranty:** 12 months.

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C.SCOPE PRODUCT RANGE

	CXL CABLE AVOIDANCE TOOL	DXL CABLE AVOIDANCE TOOL	MXL LOCATOR	SGA SIGNAL GENERATOR	SGV SIGNAL GENERATOR	MXT TRANSMITTER
Power	✓	✓	✓			
Radio	✓	✓	✓			
Generator	✓	✓	✓			
All Scan	✓	✓	✓			
Depth	✗	✓	✓			
Signal Current	✗	✗	✓			
Frequencies	33kHz	33kHz	512/640Hz, 8kHz, 33kHz	33kHz	33kHz	512/640Hz, 8kHz, 33kHz
Visual Indication	✓	✓	✓	✗	✓	✓
Pulsed / Continuous				✓	✓	✓
Max. Output				300mW	1W	1W

C.SCOPE has a range of products to suit all pipe and cable locating requirements.
For further details of the **MXL and MXT or the Classic C.SCOPE Cable Avoidance Tools** please request a brochure from head office or via our website.

C.SCOPE ACCESSORIES RANGE

C.SCOPE also produce a wide range of **LOCATOR ACCESSORIES.**
For further details on the SIGNAL CLAMP, SIGNAL INJECTOR, PLASTIC PIPE TRACERS, GENERAL PURPOSE SONDES, DUCT SONDE, SPRING COUPLING and EQUIPMENT CARRY BAGS please ask for a **C.SCOPE LOCATOR ACCESSORIES brochure**.

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C.SCOPE INTERNATIONAL LTD
Kingsnorth Technology Park
Wotton Road
Ashford
Kent TN23 6LN
United Kingdom
Telephone +44(0)1233 629181
Fax +44(0)1233 645897
email info@cscope.co.uk

All C.SCOPE products are manufactured under a quality system accredited to ISO9001:2008

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C-Scope has a policy of continuous product development and reserves the right to change the design, specification and labelling without notice. All errors and omissions excepted.