

# Cable avoidance reaches a new level



Three world class cable avoidance tools

**C.A.T<sup>3</sup> | C.A.T<sup>3V</sup> | C.A.T<sup>3+</sup>**



**Radiodetection**  
AN SPX COMPANY

## Avoidance Scan™

Search in Power, Radio, and Genny modes simultaneously for improved safety and faster surveys.

## StrikeAlert™

Alerts the user to shallow power cables by flashing an alert icon.

## Precision locate

Improved pinpointing of buried services and exceptionally fast sound and meter response.

## Optimized locate

Operates effectively in congested sites, and sites with overhead cables.

# Introducing a new generation of products with ground breaking features – delivering improved safety, faster surveys and simpler operation.

Buried Utilities represent a major hazard to construction workers the world over. Poorly planned excavations can cause cable or pipe damage resulting in costly repairs, delays and personal injury.

The C.A.T and Genny range are designed to locate these services so that they can be avoided.

The C.A.T (Cable Avoidance Tool) can detect signals naturally radiating from metallic services or the Genny can be used to apply a distinctive signal that the C.A.T can detect.

The C.A.T and Genny has become the industry standard pipe and cable avoidance tool, recognized as the leader providing performance, ruggedness and reliability, together with affordability and low cost of ownership.

The C.A.T<sup>3</sup> is the latest in a line of continuous improvements. The C.A.T<sup>3</sup> utilizes the latest technologies to bring you the most optimized cable avoidance tool in the market place today.

### AvoidanceScan™

This new feature allows the user to sweep an area searching for Power, Radio and Genny signals simultaneously, dramatically speeding up pre dig survey times and encouraging the full use of all three modes reducing costs and improving safety.

### StrikeAlert™

Although work practices and guidelines insist power cables are buried below a certain depth, a common cause of cable strike is shallow cables. The StrikeAlert™ feature alerts the user to shallow power cables by flashing the ALERT icon on the display of the C.A.T<sup>3</sup>V or C.A.T+.

### Locate quality

Cutting edge technology within the new C.A.T<sup>3</sup> ensures fastest possible processing of data. This has resulted in exceptionally fast sound and meter response, improved precision pinpointing together with a smoothness that puts the user in complete control.

#### LOCATE QUALITY – fast sound and meter response

DYNAMIC RANGE: 120dB (@ 10Hz bandwidth)

SELECTIVITY: 141dBrms/√Hz

SENSITIVITY: 5x10<sup>-15</sup> Tesla (32,768Hz, 1Hz bandwidth)

### Enhanced signal processing

Latest and patented signal processing techniques have given the C.A.T<sup>3</sup> the ability to reject unwanted signals to a level never achieved before. This has optimized the C.A.T<sup>3</sup> for operation in the most demanding of environments such as congested sites and sites with overhead electrical cables.

### Backlight

Poor light conditions can lead to misread information from the meter. The auto switching backlight minimizes these effects and allows the continued use of the C.A.T<sup>3</sup> into the night.

### Pulse/Continuous switch on Genny

This switch allows the user to select the setting to their individual preference and to optimize battery saving. The new Genny is compatible not only with all the different versions of 33kHz C.A.T<sup>3</sup> but also all previous versions of 33kHz C.A.T.

### Real Sound

'Real Sound' means the sound you hear is derived from the signal radiating from the cable or pipe. With very little experience this very important feature helps the user distinguish the signal from random background noise.

### Batteries

Fed up with fumbling around with eight AA Cells? Well the new C.A.T<sup>3</sup> uses just two D Cells giving maximum use at minimum costs. Compatibility with the Genny batteries means that you only need buy one type of battery increasing convenience and reducing stock levels. New battery low indicator alerts when battery is getting low.



FOUR OPERATING MODES – INCLUDING THE ALL-NEW AvoidanceScan™



In the P mode the C.A.T<sup>3</sup> detects 'power' signals that are being radiated by loaded cables.



In the R mode the C.A.T<sup>3</sup> detects VLF radio signals re-radiated by buried metallic pipes and cables.



In the G mode the C.A.T<sup>3</sup> detects a tone radiated by the Genny+ to a buried conductor.



In AvoidanceScan™ Mode P, R and G operate simultaneously providing faster surveys.



DETACHABLE LOUDSPEAKER FOR NOISY CONDITIONS

AUTO BACKLIT LCD

BAR GRAPH FOR SIGNAL STRENGTH

UTILITY DEPTH BUTTON

TRIGGER SWITCH – SWITCHES OFF AUTOMATICALLY, WHEN NOT IN USE

SENSITIVITY CONTROL

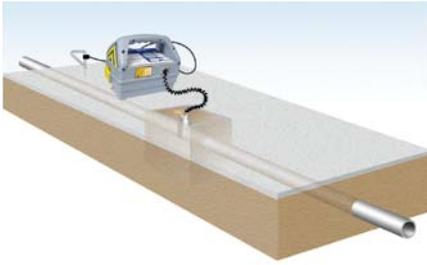
MODE SELECTOR SWITCH

LIGHTWEIGHT, ALL-WEATHER, HI-IMPACT ABS

BATTERY COMPARTMENT

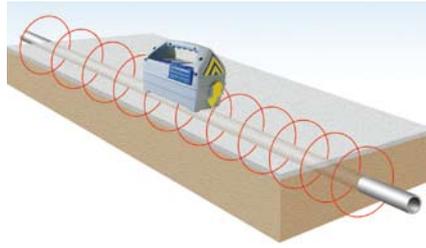
REPLACEABLE WEARFOOT

## APPLYING THE TRACE SIGNAL



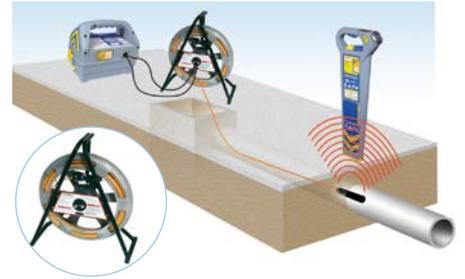
### Direct Connection

A very effective method for connecting to a valve, meter, junction box or other access point. Curly leads are compact and easier to handle and pack away.



### Induction

A convenient and quick way of applying the Genny<sup>3</sup> signal to pipe or cable, where direct connection or signal clamping is not possible.



### Flexitrace (Optional)

A self-contained flexible rod and transmitter alternative for tracing non-metallic pipes. Energized by connecting to the Genny<sup>3</sup>. The small diameter transmitting head allows access to very small diameter pipes of 15mm or above.

ON/OFF SWITCH

LOUDSPEAKER

BATTERY COMPARTMENT

STORAGE COMPARTMENT

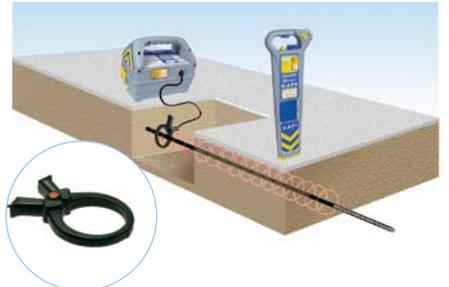
PULSE/CONTINUOUS SWITCH FOR INDIVIDUAL SELECTION LOCATED IN STORAGE COMPARTMENT

DIRECT CONNECTION SOCKET



### Mouse (Optional)

The mouse is a self-contained transmitter which is connected to a push rod and inserted into a non-metallic pipe or duct structure. The mouse can then be detected using the C.A.T<sup>3</sup>.



### Signal clamping (Optional)

Applies a Genny<sup>3</sup> signal safely to a pipe or live cable up to 76mm diameter without interrupting the supply.



### Live cable connectors (Optional)

For applying the transmitter signal to a live cable, the most certain method of locating a power distribution system in a street.

## A FULL RANGE OF OPTIONS



	C.A.T <sup>3</sup>	C.A.T <sup>3</sup> V	C.A.T <sup>3</sup> +
POWER	●	●	●
RADIO	●	●	●
AvoidanceScan™	●	●	●
GENNY	●	●	●
ACTIVE DEPTH			●
StrikeAlert™		OPTIONAL	OPTIONAL
METER WITH BACKLIGHT		●	●

C.A.T <sup>3</sup> TECHNICAL SPECIFICATIONS			LOCATING DEPTH GUIDE (M/YDS)	
MODE	FREQUENCY	SENSITIVITY @ 1m	GOOD CONDITIONS	POOR CONDITIONS
POWER	50 HZ - 3.5 KHZ	3 mA	3	2
RADIO	15 - 30 KHZ	25 µA	2	1
GENNY <sup>3</sup>	32.768 KHZ ± 20 HZ	5 µA	3	2
Avoidance Scan™	P/R/G COMBINED	AS ABOVE	AS ABOVE	AS ABOVE
LOCATE ACCURACY: ±10% of depth				
DEPTH ACCURACY: on undistorted signal and with no adjacent signals. Line - 5% 0.1 m to 3 m (4in to 10 ft), Sonde - 5% 0.1 m to 7 m. (4in to 16 ft)				
BATTERIES: 2 x LR20 (D) 1.5 V alkaline. 40 hours life, nominal @ 20°C (68°F) intermittent use. Compatible with D type NiMH rechargeable batteries				

GENNY <sup>3</sup> TECHNICAL SPECIFICATIONS		
DESCRIPTION	FREQUENCY	REMARKS
INDUCTION	32.768 kHz	Auto-selected without connection lead
CONNECTION	32.768 kHz	Auto-selected by inserting connection lead
QUALITY CONTROL:	ISO 9001/EN29001	
POWER OUTPUT:	0.1 W (automatic impedance matching on connection)	
BATTERIES:	4 x LR20 (D) 1.5V alkaline. 30 hours nominal life at 20°C (68°F) intermittent use	
WARRANTY:	12 months	

### WARNING

- Increased risk of property damage, death, or serious injury may result if buried utilities, pipes, and cables are not properly located before digging.
- Make sure to read and follow all instructions and warnings in the owner's manual when using the C.A.T<sup>3</sup> and Genny<sup>3</sup>.
- The C.A.T<sup>3</sup> detects most buried cables and conductors, BUT SOME CABLES AND CONDUCTORS (EVEN LIVE ONES) DO NOT RADIATE SIGNALS, SO THE C.A.T<sup>3</sup> WILL NOT DETECT THEM. Also, the C.A.T<sup>3</sup> does not indicate whether a signal comes from a single cable or conductor or from several cables or conductors buried in close proximity to each other.
- When using the C.A.T<sup>3</sup>, check whether the StrikeAlert™ feature is activated by looking for the 'StrikeAlert™ Activated' labels situated either side of the display.
- The StrikeAlert™ feature is activated by cables or conductors radiating a power or Genny signal that the C.A.T<sup>3</sup> can detect, BUT NOT ALL LIVE CABLES AND CONDUCTORS RADIATE A SIGNAL THAT THE C.A.T<sup>3</sup> CAN DETECT. THEREFORE, NON-ACTIVATION OF THE StrikeAlert™ FEATURE DOES NOT GUARANTEE THAT THE AREA IS CLEAR OF SHALLOW OR LIVE CABLES OR CONDUCTORS.
- Even if using a C.A.T<sup>3</sup> and Genny<sup>3</sup>, ALWAYS DIG WITH CAUTION.
- Call your local support number (available from [www.radiodetection.com](http://www.radiodetection.com)) for questions regarding the proper use, maintenance, and repair of the C.A.T<sup>3</sup> and Genny<sup>3</sup>.



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



**UK Office**

**Keison Products,**

**P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.**

**Tel: +44 (0)330 088 0560**

**Fax: +44 (0)1245 808399**

**Email: [sales@keison.co.uk](mailto:sales@keison.co.uk)**

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.