

Live Cable Locators Whether you are on a

construction site or at the

side of the road, detecting

buried power lines before

excavating is essential.

Elcometer 701 Cable Avoidance Tool & Live Cable Locator



Elcometer 701 Rx Receiver & Tx Transmitter Set



Elcometer 701 Rx Receiver



Floometer 701 Tx Transmitter

At a glance:

- Avoid potentially dangerous electrical
- Reduce the risk of damage to underground pipes and

The Elcometer 701 Cable Avoidance Tool & Live Cable Locator has been specifically designed to accurately and effectively determine the location and depth of underground electrical cables and pipes.

Three options are available:

- Elcometer 701 Rx Receiver & Tx Transmitter Set
- Elcometer 701 Rx Receiver
- Elcometer 701 Tx Transmitter

Used on its own, the Elcometer 701 Rx Receiver, will accurately locate and determine the depth of electrical cables. When used in conjunction with the Elcometer 701 Tx Transmitter, the location and depth of metallic and non-metallic[†] pipes can also be identified.

Ideal for use by water, rail, gas, power, highways and telecommunication utilities and contractors, groundworks, construction, local authorities, civil engineering, street lighting, gardening and landscaping companies.

Cost effective:

Avoid cable damage when excavating - minimising costly accidents and inconvenient delays

Quick and Easy:

Locates underground pipes and cables quickly and reliably

Large Display:

Large display and automatic backlight for clear visibility in all conditions

Ergonomic Design:

Comfortable handle in line with the control panel for single handed operation

[†] Additional Transmitter Sonde required – see Spares & Accessories

data sheet



Technical Specifications

	ELCOMETER 701 RECEIVER (RX)				
Frequency Range					
Range 1: Radio	15 kHz to 23 kHz				
Range 2: Power Grid	50 Hz / 60 Hz (switchable). Optional 100 Hz - contact Elcometer for information				
Range 3: Transmitter	32.768 kHz				
Sensitivity (at a depth of 1m)					
Range 1: Radio	>20 µA				
Range 2: Power Network	>7 mA				
Range 3: Transmitter	>5 µA				
Dynamic Response Range					
Range 1: Radio	120 dB				
Range 2: Power Network	135 dB				
Range 3: Transmitter	120 dB				
Depth Determination					
Depth Range	0.1m to 5m (4" to 16 ft)				
Resolution	0.1m (4")				
Accuracy					
Range 1: Radio	±20%				
Range 2: Power Network	±20%				
Range 3: Transmitter	±5% up to 2m (6 ft 6") ±20% between 2m and 5m (6 ft 6" and 16 ft 4")				
Power Supply	10 x IEC R6 / AA cell / Mignon				
Operating Time	40 hours (intermittent use with alkaline batteries, 20°C)				
Temperature Range (in accordance with	th EN 60068-1)				
Operation	-20°C to +55°C (-4°F to 131°F)				
Storage	-30°C to +70°C (-22°F to 158°F)				
Weight	2.5kg (5.5lb)				
Dimensions (W x H x D)	99mm x 660mm x 252mm (3.9" x 26.0" x 9.9")				
Type of protection (in accordance with	EN 60529)				
Dust and water protected	IP 67 from the lower edge of the receiver up to the lower edge of the battery compartment, and IP 56 for all parts above this.				

ELCOMETER 701 TRANSMITTER (TX)			
Transmitted Power	0.1 W / 0.5 W (switchable)		
Frequency	32.768 kHz		
Power Supply	6 x IEC R20 / D cell / Mono		
Operating Time	40 hours (intermittent use with alkaline batteries, 20°C)		
Temperature Range (in accordance with EN 60068-1)			
Operation	-20°C to +55°C (-4°F to 131°F)		
Storage	-30°C to +70°C (-22°F to 158°F)		
Weight	1.7kg (3.75lb)		
Dimensions (W x H x D)	260mm x 255mm x 140mm (10.2" x 10.0" x 5.5")		
Type of Protection (in accordance with EN 60529)			
Dust and water protected	Dust and water protected IP 56		



LIMIT VALUES AND STANDARDS						
Sinusoidal Vibrations (in accordance with EN 60068-2-6)						
Peak Acceleration	20 m/s ²					
Frequency	10 Hz to 150 Hz					
Free Fall (in accordance with EN 60068-2-32)						
Max. Height (packaged)	800mm (31.5") (weight up to 10kg / 22lb)					
Relative Humidity	Maximum 93% at 30°C (86°F)					
Atmospheric Pressure	Maximum 4 kPa					
Protection Class (meets EN 61140)	III					
Part Number & Packing List	W701RTX	Elcometer 701 Rx Receiver & Tx Transmitter Set				
	Packing List:	Elcometer 701 Rx Receiver, Elcometer 701 Tx Transmitter, 2m (6 ft 6") Measurement Cable (x2), Alligator Clip (x2), Earth Spike, Batteries for Receiver (x10), Batteries for Transmitter (x6), Nylon Carrying Case and Operating Instructions				
	W701TX	Elcometer 701 Tx Transmitter				
	Packing List:	Elcometer 701 Tx Transmitter, Batteries (x6) and Operating Instructions				
	W701RX	Elcometer 701 Rx Receiver				
	Packing List:	Elcometer 701 Rx Receiver, Batteries (x10) and Operating Instructions				

Spares / Accessories

	Transmitter Clamp Used in conjunction with the Elcometer 701 Tx Transmitter to transmit a signal onto and along live cables without shutting off the power to the cables.			
6	Part Number:	TW70120491-1 Elcometer 701 Transmitter Clamp, 50mm (1.97") TW70120491-2 Elcometer 701 Transmitter Clamp, 100mm (3.94")		
0,0	House Connection Kit Used to quickly and easily track the services leading from a house out to the main line. The set consists of connecting cables for standard 13A safety electricity sockets, cable TV and telephone sockets. To send a signal directly to the house connection, the Elcometer 701 Tx Transmitter is connected to the relevant socket.			
/ ")	Part Number:	TW70120492-1 Elcometer 701 House Connection Kit, EUR 220V TW70120492-2 Elcometer 701 House Connection Kit, UK 240V TW70120492-3 Elcometer 701 House Connection Kit, US 110V		
	Transmitter Sonde A slim, battery powered transmitter with a range of 5m which when connected to a drain rod or flexi- rod can be used to determine the direction and depth of drains. A heavy duty protective cover is also available for use within dirty water drains and ductworks.			
	Part Number:	TW70120493 Elcometer 701 Transmitter Sonde 33kHz TW70120537 Protective Cover for Transmitter Sonde		
a	Headphones Can be connected busy road for exa	d to the Elcometer 701 Rx Receiver for use in noisy environments, at the side of a mple.		
0	Part Number:	TW70120490 Headphones for Elcometer 701 Rx Receiver		

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Spares / Accessories

Part Number	Description
TW70120494-1	Nylon Carry Case for Elcometer 701 RX Receiver & Tx Transmitter
TW70120494-2	Nylon Carry Case for Elcometer 701 RX Receiver
TW70120489	Grounding Set
TW70120498	Grounding Set Bag
TW70120495	Earth Stake
TW70120496	Earth Reel, 10m (32 ft 8")
TW70120497-1	Black Cable with Alligator Clip, 1.5m (4 ft 9")
TW70120497-2	Red Cable with Alligator Clip, 1.5m (4 ft 9")
TW70120499-1	Live Plug Connection Cable, EUR 220V
TW70120499-2	Live Plug Connection Cable, UK 240V
TW70120499-3	Live Plug Connection Cable, US 110V
TW70120500	Telephone Connection Cable
TW70120501	Coax Connection Cable

Related Products



Elcometer P500 Imp Box Locator

Elcometer P500 Imp Box Locator:

Although originally designed to accurately locate valve boxes and manhole covers, the Elcometer P500 can also be used as a general purpose metal detector. The Elcometer P500 is both deceptively simple to use and very rugged making it a favourite choice in the market.



Elcometer P520 Deep Cover Metal Detector

Elcometer P520 Deep Cover Metal Detector:

Originally designed to locate water mains, pipes and cables the Elcometer P520 is also the perfect choice for location work in cluttered areas and at depths where other metal detectors simply do not work.

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