

## Elcometer 701 Cable Avoidance Tool & Live Cable Locator



Elcometer 701 Rx Receiver & Tx Transmitter Set



Elcometer 701 Rx Receiver



Elcometer 701 Tx Transmitter

### At a glance:

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

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<sup>†</sup> 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

### 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.

<sup>†</sup> Additional Transmitter Sonde required – see Spares & Accessories





## Technical Specifications

ELCOMETER 701 RECEIVER (RX)	
<b>Frequency Range</b>	
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
<b>Sensitivity (at a depth of 1m)</b>	
Range 1: Radio	>20 $\mu$ A
Range 2: Power Network	>7 mA
Range 3: Transmitter	>5 $\mu$ A
<b>Dynamic Response Range</b>	
Range 1: Radio	120 dB
Range 2: Power Network	135 dB
Range 3: Transmitter	120 dB
<b>Depth Determination</b>	
Depth Range	0.1m to 5m (4" to 16 ft)
Resolution	0.1m (4")
<b>Accuracy</b>	
Range 1: Radio	$\pm$ 20%
Range 2: Power Network	$\pm$ 20%
Range 3: Transmitter	$\pm$ 5% up to 2m (6 ft 6") $\pm$ 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)
<b>Temperature Range (in accordance with EN 60068-1)</b>	
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")
<b>Type of protection (in accordance with EN 60529)</b>	
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)
<b>Temperature Range (in accordance with EN 60068-1)</b>	
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")
<b>Type of Protection (in accordance with EN 60529)</b>	
Dust and water protected	IP 56

LIMIT VALUES AND STANDARDS	
<b>Sinusoidal Vibrations (in accordance with EN 60068-2-6)</b>	
Peak Acceleration	20 m/s <sup>2</sup>
Frequency	10 Hz to 150 Hz
<b>Free Fall (in accordance with EN 60068-2-32)</b>	
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
<b>Part Number &amp; Packing List</b>	<b>W701---RTX</b> Elcometer 701 Rx Receiver & Tx Transmitter Set 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 Packing List:
	<b>W701---TX</b> Elcometer 701 Tx Transmitter Packing List: Elcometer 701 Tx Transmitter, Batteries (x6) and Operating Instructions
	<b>W701---RX</b> Elcometer 701 Rx Receiver Packing List: Elcometer 701 Rx Receiver, Batteries (x10) and Operating Instructions

## Spares / Accessories

	<p><b>Transmitter Clamp</b>                      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.</p> <p><b>Part Number:</b> <b>TW70120491-1</b> Elcometer 701 Transmitter Clamp, 50mm (1.97")  <b>TW70120491-2</b> Elcometer 701 Transmitter Clamp, 100mm (3.94")</p>
	<p><b>House Connection Kit</b>                      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.</p> <p><b>Part Number:</b> <b>TW70120492-1</b> Elcometer 701 House Connection Kit, EUR 220V  <b>TW70120492-2</b> Elcometer 701 House Connection Kit, UK 240V  <b>TW70120492-3</b> Elcometer 701 House Connection Kit, US 110V</p>
	<p><b>Transmitter Sonde</b>                      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.</p> <p><b>Part Number:</b> <b>TW70120493</b> Elcometer 701 Transmitter Sonde 33kHz  <b>TW70120537</b> Protective Cover for Transmitter Sonde</p>
	<p><b>Headphones</b>                      Can be connected to the Elcometer 701 Rx Receiver for use in noisy environments, at the side of a busy road for example.</p> <p><b>Part Number:</b> <b>TW70120490</b> Headphones for Elcometer 701 Rx Receiver</p>

## 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.

### ENGLAND

Elcometer Ltd  
Edge Lane  
Manchester M43 6BU

Tel: +44 (0)161 371 6000  
Fax: +44 (0)161 371 6010  
e-mail: sales@elcometer.com  
www.elcometer.com

### USA

Elcometer Inc  
1893 Rochester Industrial Drive  
Rochester Hills Michigan 48309

Tel: +1 248 650 0500  
Toll Free: 800 521 0635  
Fax: +1 248 650 0501  
e-mail: inc@elcometer.com  
www.elcometer.com

### CANADA

Elcometer Ltd  
PO Box 622, 401 Quelette Avenue  
Windsor, Ontario N9A 6N4

Tel: +1 248 650 0500  
Toll Free: 800 521 0635  
Fax: +1 248 650 0501  
e-mail: ca\_info@elcometer.com  
www.elcometer.com

### ASIA & THE FAR EAST

Elcometer (Asia) Pte Ltd  
896 Dunearn Rd  
Sime Darby Centre #3-09  
Singapore 589472,  
Republic of Singapore

Tel: +65 6462 2822  
Fax: +65 6462 2860  
e-mail: asia@elcometer.com  
www.elcometer.com

### BELGIUM

Elcometer SA  
Rue Vallée 13  
B-4681 Hermalle /s Argenteau

Tel: +32 (0)4 379 96 10  
Fax: +32 (0)4 374 06 03  
e-mail: be\_info@elcometer.be  
www.elcometer.be

### FRANCE

Elcometer Sarl  
97 Route de Chécy  
45430 BOU

Tel: +33 (0)2 38 86 33 44  
Fax: +33 (0)2 38 91 37 66  
e-mail: fr\_info@elcometer.fr  
www.elcometer.fr

### GERMANY

Elcometer Instruments GmbH  
Ulmer Strasse 68  
D-73431 Aalen

Tel: +49 (0)7361 52806 1  
Fax: +49 (0)7361 52806 77  
e-mail: de\_info@elcometer.de  
www.elcometer.de