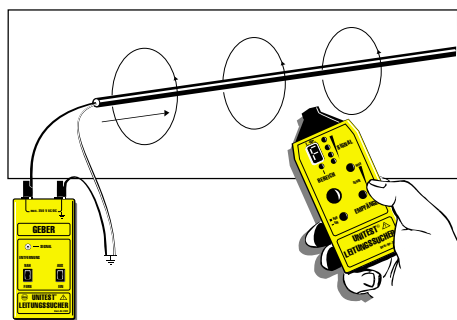


UNITEST[®] Cable Locator



Useful Information concerning the Cable Locator

The UNITEST Cable Locator is a universal cable tracing instrument ideal for fault finding in buildings.



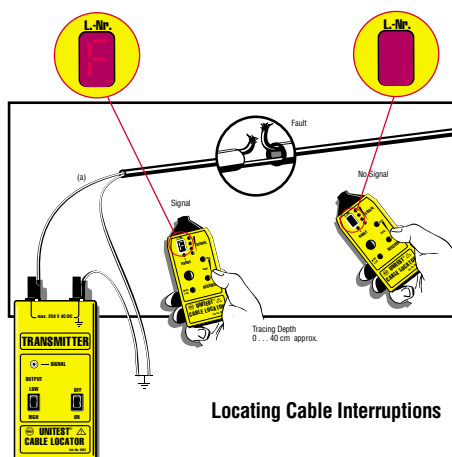
Principle

The Cable Locator functions by means of a carrier and coded signals, similar to radio signals. A transmitter sends a digitally coded signal on a carrier frequency into the cable to be traced. The receiver identifies the signal which consequentially enables the tracing of the cable.

Applications

The Cable Locator can be used for various locating applications, such as:

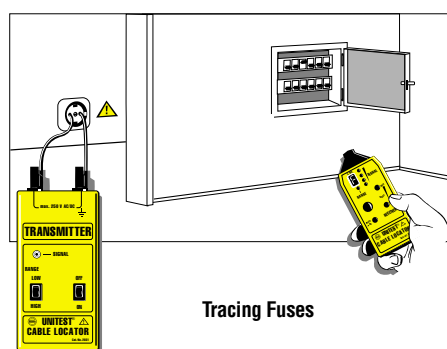
- Locating cable interruptions in walls
- Tracing cables in walls
- Locating short-circuits in cables
- Locating fuses and assignment to circuits
- Locating of concealed sockets and distribution boxes
- Tracing water and heating pipes



Locating Cable Interruptions

Tracing Depth

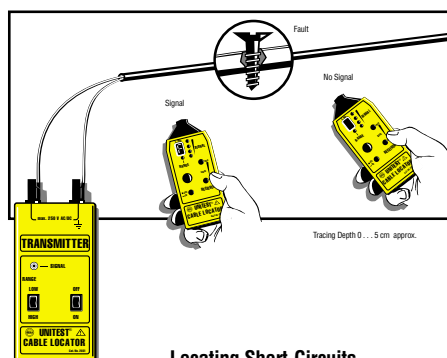
The tracing depth can be up to 40 cm depending on the material of the wall (brick-work, concrete...) and the type of operation (tracing live or voltage free cables).



Tracing Fuses

Sensitivity

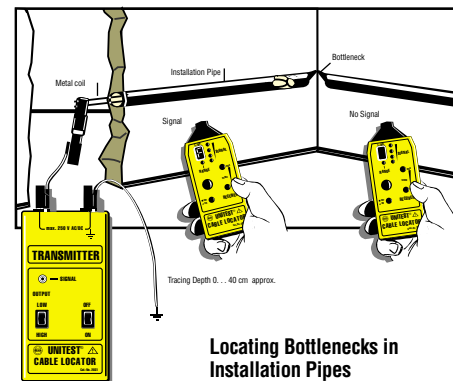
The receiver sensitivity is divided into 9 steps and is adjustable by means of a push-button. An additional contact electrode is available for coarse locating, increasing the sensitivity by a factor of 1.5. The transmitter contains two switchable signal intensities.



Locating Short-Circuits

Display on Receiver

The receiver is equipped with a 7-segment LED display and an LED row indicating the signal intensity. Either a letter (A, B, C, D, E or F) or a number (0, 1, 2, 3, 4, 5, 6, 7, 8 or 9) is indicated on the display, depending on the transmitter coding.



Locating Bottlenecks in Installation Pipes

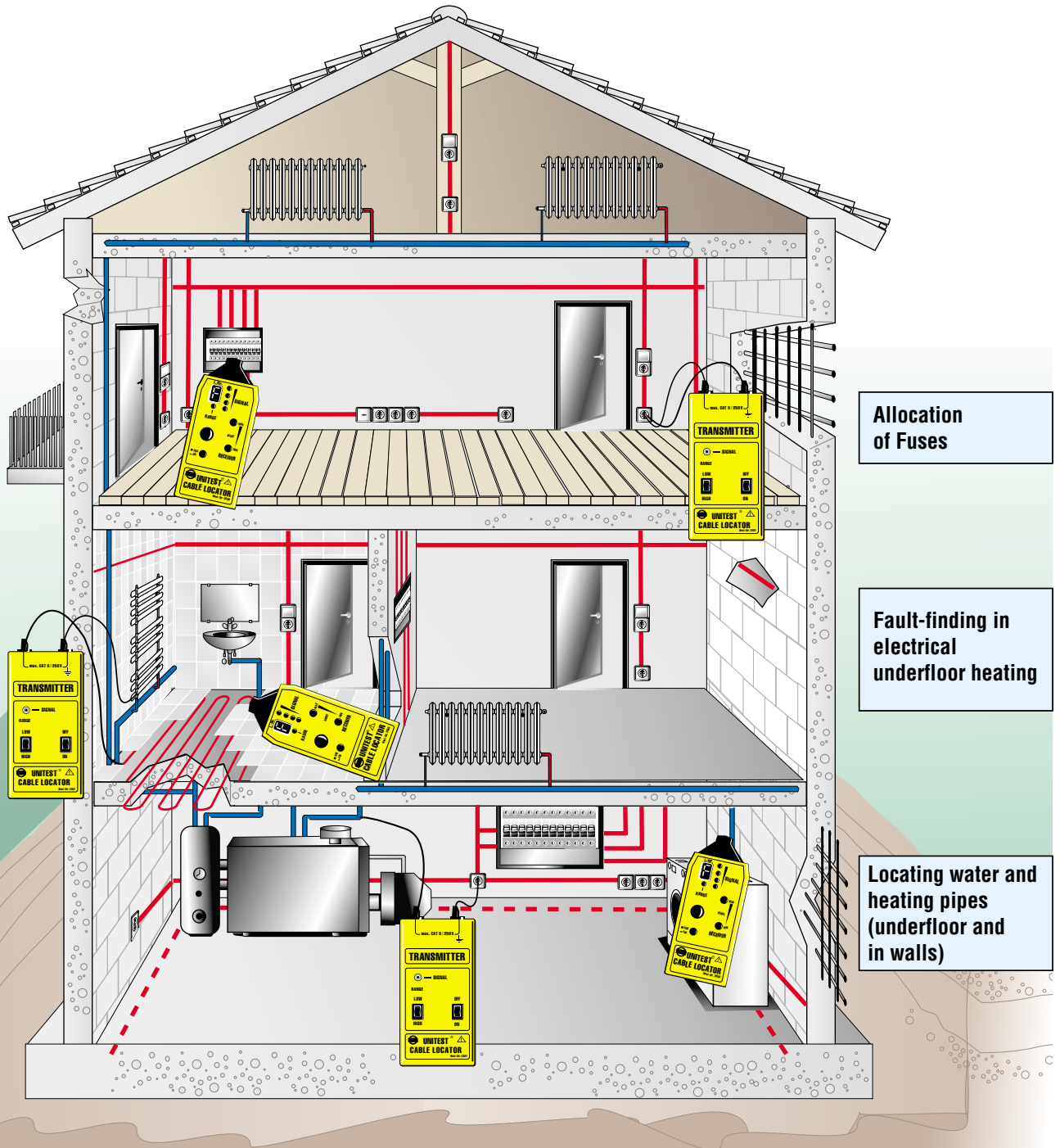
Wire Sorter

Up to 10 lines may be sorted in one process by one person.

The transmitter is connected to a cable harness with 10 numbered clamps and the reference clamp (e.g. PE). On the other end of the cable harness, the number of the particular line connected is immediately indicated on the display of the receiver. In addition, the receiver indicates any short-circuit with another line or open lines or interruptions. If the cable harness is equipped with more than 10 lines, the first 10 lines must be labelled accordingly. The next 10 lines are assigned in the same way.

The UNITEST **Teltest** enables a standard testing of 12 lines. However, by using additional transmitters, the instrument is able to sort up to 160 lines! The instrument operates by using the newest digital technology enabling error analysis.

The Wire Sorter can be used for sorting lines up to approx. 34 km length (for lines with a cross section of 1.5 mm²). This results in a multitude of applications and time saving advantages for the installation of intercoms, alarms, lighting, telephones, sprinkler systems, fire alarms, etc.



Practical Application in all House Installations

UNITEST[®] Cable Locator



USA Patent
5418447

DE Patent
4103234

Scope of Supply:

- 1 pc UNITEST Cable Locator Receiver
- 1 pc UNITEST Cable Locator Transmitter Code "F"
- 4 pc Measuring Leads Red, Black, Yellow
- 3 pc Batteries 9V, IEC 6LR61
- 2 pc Crocodile Clamp Red/Black
- 1 pc Impact and shock proofed plastic Carrying Case
- 1 pc Instruction Manual

UNITEST Cable Locator Set in Carrying Case

Key Functions

- Tracing of cable in walls and locating interruptions and short circuits in cables.
- Locating of fuses and assignment to circuits
- Locating of concealed sockets and distribution boxes

General Information

- Set comprising of a transmitter and a receiver in a shockproof carrying case
- Optic and acoustic indication of the transmitter signal
- Clear, easy-to-follow instruction manual with several application examples
- Additional transmitters are available with the codes 0...9 and A...E for extension or to distinguish between several signals

Special Features

- For all applications (live or dead cables) without additional instruments.
- Safe locating via display of a specified letter on the receiver

Accessories:

UNITEST Cable Locator Transmitter Code "C"
Cat. No. 2031

Technical Data

Display	LED row for intensity and 7 segment display for number and letter to display Transmitter code
Tracing Depth	0...40 cm
Max Voltage	250 V
Pollution degree	2
Overvoltage category	CAT II / 250 V against ground
Safety Complying with	IEC 61010-1, EN 61010-1
Power Supply	1 x 9 V, IEC 6LR61 Receiver 2 x 9 V, IEC 6LR61 Transmitter
Dimensions	380 x 305 x 90 mm (case)
Weight	approx. 1.8 kg

Order Information:

Description	Cat. No.
UNITEST Cable Locator Set	2032
UNITEST Cable Locator Transmitter Code "C"	2031

Theoretical Operation Principle

The UNITEST Cable Locator Set is comprised of a transmitter and a receiver. The signal generated by the transmitter consists of a modulated current, which generates an electromagnetic field around a conductor.

This electromagnetic field around the conductor induces a voltage in the coil of the receiver. The induced voltage is amplified and decoded by the receiver, transformed into the original signal and appears in the display.

The transmitter must always be connected in a way that ensures a closed circuit.

In Open Circuits:

(Single-Pole Application)

Finds line interruptions in walls or floors; finds and traces lines (cables/conductors), sockets, distribution boxes, switches etc., in house installations; finds bottlenecks or kinking and buckling blockages in installation pipes by means of metal rod.

Open circuits are suitable e.g. for finding sockets, switches etc. in voltage free systems. The PE must be connected properly.

A typical example would be the PE contact of an earthed socket.

In Closed Circuits:

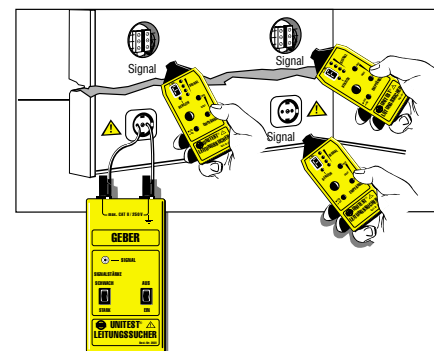
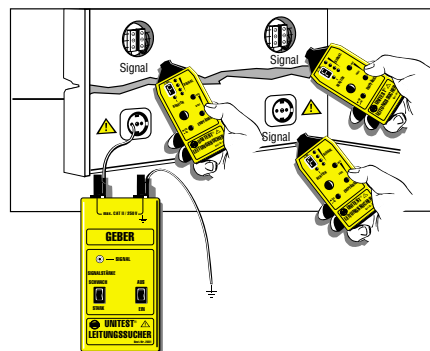
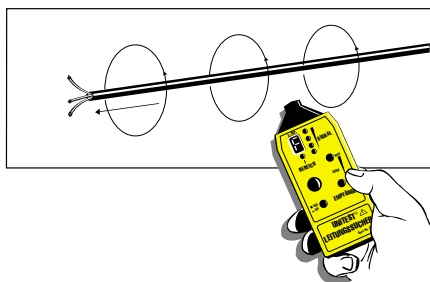
(Two-Pole Application)

Finds short circuits and sorts wires in circuits with or without voltage. When working on voltage-free circuits the battery of the instrument supplies the power for the measurement. When working on live circuits the power needed by the transmitter for the measurement is taken from that circuit. The switching between internal and external power supply is automatic.

The transmitter is overvoltage protected up to 250 V AC/DC.

Example of use in a closed circuit:

Use in closed circuits is suitable e.g. for detecting sockets, switches, protections etc. in live house installations.





UNITEST Wire Sorter 5775 in Carrying Case

Key Functions

- Sorting of up to 10 lines within one working process
- Clear indication of short circuits, open circuits, or interruptions

General Information

- Set comprising of a transmitter and a receiver in a handy carrying case
- Transmitter is supplied by receiver
- Automatic switch-off via switching system
- Ideal for telecommunication and intercom systems

Special Features

- Time consuming «peeping» and «belling out» with the help of a second person is now a thing of the past

Technical Data

Display	LED, 7-Segment-Display
Maximum Line Resistance	approx. 800 Ω
Maximum Line Length	34 km (at 1.5 mm ²),
Power Supply	2 x 9 V, IEC 6LR61 (Receiver)
Dimensions	(Carrying Case) 380 x 305 x 90 mm
Weight	approx. 1.5 kg (incl. Case)

Scope of Supply:

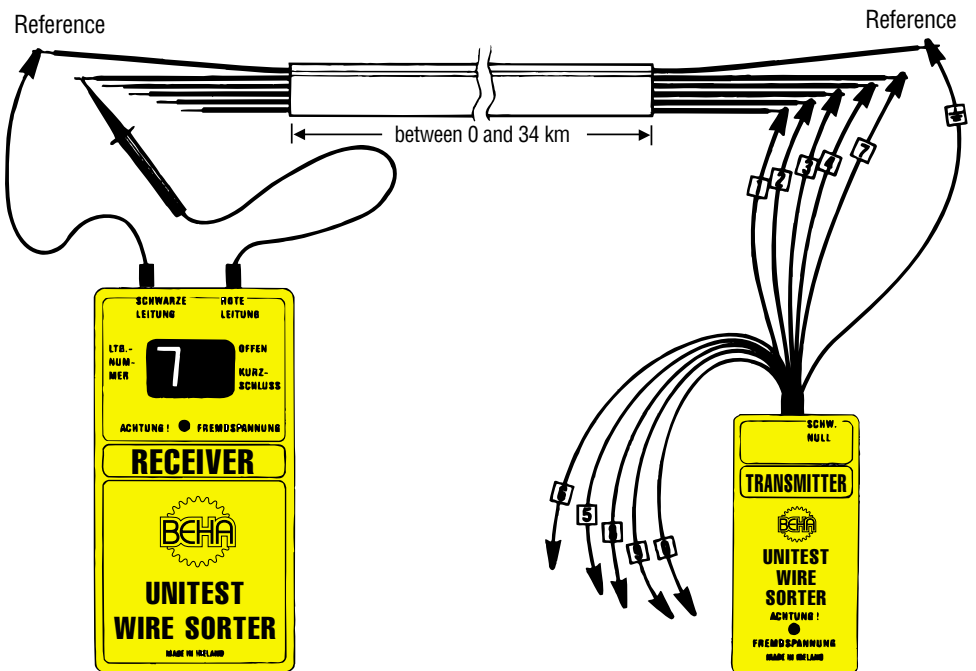
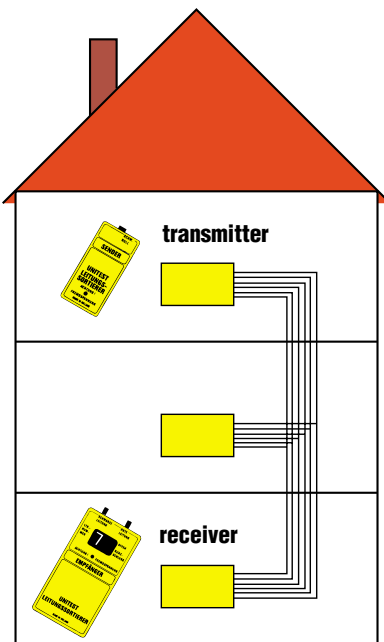
- 1 pc UNITEST Wire Sorter Transmitter
- 1 pc UNITEST Wire Sorter Receiver
- 2 pc Batteries 9 V, IEC 6LR61
- 1 pc Carrying Case
- 1 pc Instruction Manual

© Patent
3701070

Order Information:

Description	Cat. No.
UNITEST Wire Sorter in Carrying Case	5775/2

Application Example Wire Sorter:



UNITEST® Wire Sorter



UNITEST WIREsorter Wire Sorter for 3 lines

Key Functions

- Swift detection of up to 3 lines
- Clear indication of short circuits
- Integrated continuity tester

General Information

- Set comprises one transmitter and one receiver
- Transmitter is supplied by receiver
- Battery indication

Ⓟ **Patent**
3701070

Technical Data

Display	3 LEDs
Maximum Line Resistance	approx. 350 Ω
Maximum Line Length	15 km (for 1.5 mm ²)
Power Supply	1 x 9 V, IEC 6LR61 (Receiver)
Dimensions	62 x 125 x 28 mm (Transmitter), 62 x 125 x 28 mm (Receiver)
Weight	120 g (Transmitter), 230 g (Receiver)

Scope of Supply:

- 1 pc WIREsorter Transmitter
- 1 pc WIREsorter Receiver
- 1 pc Battery 9V, IEC 6LR61
- 2 pc Crocodile Clamps
- 1 pc Instruction Manual



Accessories:

Carrying Case
Cat. No. 1150

Order Information:

Description	Cat. No.
UNITEST WIREsorter	9036
Carrying Case	1150



UNITEST WIREsorter Utility

Key Functions

- Swift detection of up to 3 lines
- Clear indication of short circuits
- Integrated continuity tester

General Information

- Set comprises one transmitter and one receiver
- Transmitter is supplied by receiver
- Battery indication

Special Features

- Incl. 4 mm safety plugs according IEC61010

Ⓟ **Patent**
3701070

Technical Data

Display	3 LEDs
Maximum Line Resistance	approx. 350 Ω
Maximum Line Length	15 km (for 1.5 mm ²)
Power Supply	1 x 9 V, IEC 6LR61 (Receiver)
Dimensions	62 x 125 x 28 mm (Transmitter), 62 x 125 x 28 mm (Receiver)
Weight	120 g (Transmitter) 230 g (Receiver)

Scope of Supply:

- 1 pc UNITEST WIREsorter Utility Transmitter
- 1 pc UNITEST WIREsorter Utility Receiver
- 1 pc Battery 9V, IEC 6LR61
- 1 pc Instruction Manual



Accessories:

Carrying Case
Cat. No. 1150

Order Information:

Description	Cat. No.
UNITEST WIREsorter Utility	9055
Carrying Case	1150

SAFETY PLUG-IN TECHNOLOGY in compliance with IEC 61010/EN 61010

The UNITEST WIREsorter Utility is equipped with 4 mm safety plugs. Thus, user-specific test probes and clamps may be used.

UNITEST® Wire Sorter/Wall Scanner



USA Patent 5627474 DE Patent 4417351235

UNITESt TELtest Wire Sorter for 12 lines

Key Functions

- Wire Sorter Set for fast detection of up to 160 lines (possible with several signal transmitters)
- Standard signal transmitter identifies up to 12 lines
- Clear indication of short circuits, open circuits, or interruptions
- Integrated continuity tester

General Information

- Set comprising of a transmitter and a receiver in a handy carrying case
- Transmitter is supplied by receiver
- Simultaneous indication of 2 lines
- Indication of short circuits, interruptions, mixed wires, earth and ground connection
- Applicable up to 10 kΩ...test circuit resistance and a line capacity of up to 1 µF

Special Features

- Time consuming «beeping» and «belling out» with the help of a second person is now a thing of the past
- No reference line required

Technical Data

Display	LED, 2x7-Segment-Display
Maximum line Resistance (Line Capacity)	10 kΩ (1µF)
Maximum Line Length	10 km (for telecommunication cable)
Power Supply	1 x 9 V, IEC 6LR61 (Receiver)
Dimensions	59 x 79 x 15 mm (Transmitter), 64 x 132 x 35 mm (Receiver)
Weight	85 g (Transmitter) 180 g (Receiver)

Scope of Supply:

- 1 pc UNITESt Transmitter (for 12 Lines) with Code "1"
- 1 pc Receiver
- 1 pc Battery 9V, IEC 6LR61
- 1 pc Carrying Case
- 12 pc Crocodile Clamps
- 1 pc Instruction Manual

Accessories:

TELtest Additional Transmitter Code "2" Cat. No. 9021

TELtest Code "3" Additional Transmitter Cat. No. 9044

For additional transmitters (as from the 3" transmitter) the nomination of a code is required. (possible: 3...9 and A...F)

Order Information:

Description	Cat. No.
UNITESt TELtest Wire Sorter Code "1"	9016
TELtest Additional Transmitter Code "2"	9021
TELtest Code "3" Additional Transmitter	9044



UNITESt Wall Scanner For detection of Wood and Metal in Hollow Walls

Key Functions

- Simple aid for all drilling and mounting work
- Detects wood and metal in hollow walls

General Information

- Optic and acoustic indication
- Tracing depth up to approx. 5 cm
- Single handed operation
- Sensitivity adjustment via reference button

Technical Data

Display	LCD-Bargraph
Tracing Depth	2...5 cm
Application	Detection in Hollow Walls
Tracing Depth	Normal: 2 cm, Depth: 4 cm, Metal: 5 cm
Voltage	
Warning Signal	(Contactless-extensive) approx. 90 V...230 V AC
Power Supply	1 x 9 V IEC 6LR61
Dimensions	190 x 71 x 46 mm
Weight	250 g

Scope of Supply:

- 1 pc UNITESt Wall Scanner
- 1 pc Quick Help Card
- 1 pc Battery 9 V, IEC 6LR61
- 1 pc Instruction Manual

Accessories:



Carrying Case
Cat. No. 1150

Order Information:

Description	Cat. No.
UNITESt Wall Scanner	9038
Carrying Case	1150

To detect electric cables, we recommend the Cable Locator, UNITESt 2032, please refer to page 5.3



Detects wood
i.e. roof battens



Accurate location
of materials
(e.g. joist, stud, etc.)



Detects metal
in wall