

- ▶ Cable and wire tracer with measuring properties
- ▶ Can be used even at live 400V environment
- ▶ Transmitter has voltage and frequency metering and DSLAM test
- ▶ Receiver has integrated receiving antennas and a LED work light



## ► TraceMeter TM30 - The next generation tracer

As the name hints, TraceMeter TM30 is a cable & wire tracer equipped with monitoring and measuring properties. It can be used also at mains environment, so it is well suitable for both telecom and electric installation work as well as renovation and fault spotting work and much more.

### TMT30 Transmitter

TMT30 has three very easy to use operating modes:

**Trace** mode device transmits a signal to be traced with the receiver. TMT30 withstands voltages up to 400V, so it can be well plugged into e.g. a mains wall socket. Device also displays the voltage at the outputs and the feeding signal current to the target.

In the **Meter** mode, TMT30 operates as a voltage and frequency meter.

With TM30 it is also possible to trace short length wires or single wires, which are usually hard to find.

TM30 set includes the TMT30 transmitter and the TMR30 receiver. Several accessories are available.

With a special **DSLAM test** TMT30 can be used to check whether a CO side ADSL modem is present on a seemingly unused line.

TMT30 is weather proof. It operates with six standard AA-size torch batteries and has long working time. LCD display backlight adjusts automatically according to ambient light.



### TMR30 Receiver

TMR30 is very versatile: It has three **Trace** modes to be used to trace and track signals generated by the transmitter on open wires or cables. Cables can be traced from close ranges up to several metre distance.

The three **Monitor** modes can be used to monitor, or listen, signals over wires or terminals without galvanic contact to them in several frequency ranges.

TMR30 has fixed internal antennas so it is very compact and easy to use. The LED bar display together with the audible signals reveal the traced target while tracing.

Furthermore TMR30 has an optional LED work light pointing to the traced spot.

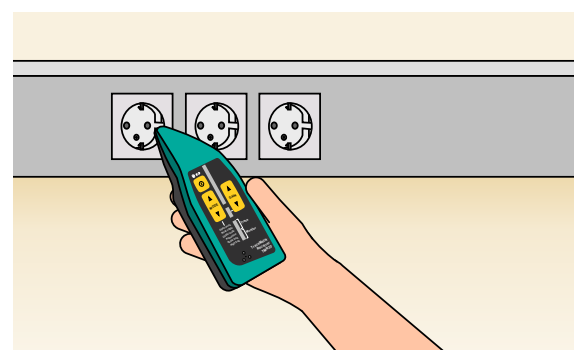


### TMR30 in monitoring work

With the **Powerline** monitor mode TMR30 can be used without the transmitter to reveal live wires and wall sockets and which side is phase.

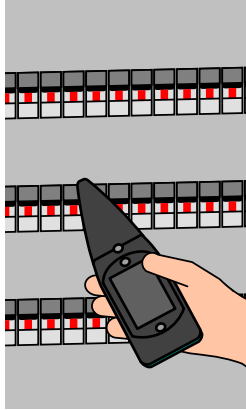
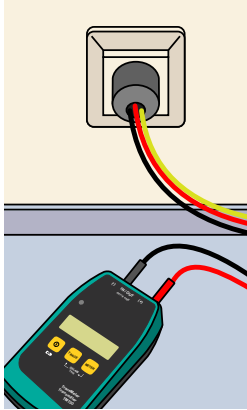
High frequency signals, such as broad band wires and terminals, can be monitored with the **High Freq** mode.

With the **Audio freq** mode audio frequencies can be listened right at the surface of wires.

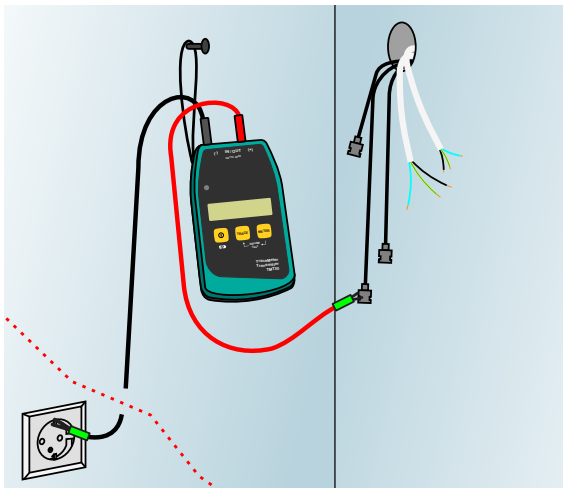
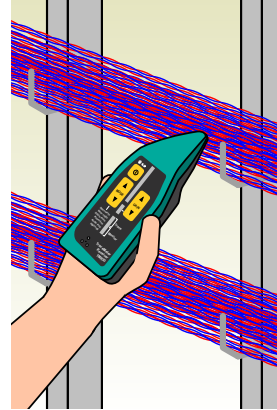
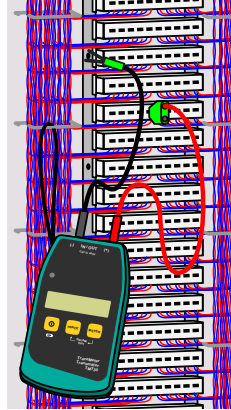


## TM30 in tracing work

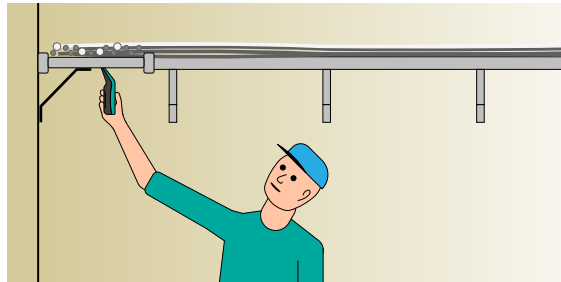
**Working with mains targets:** As TMT30 sustains up to 400V voltage, it can be used to trace live mains wires and cables, such as track down which circuit breaker (electronic fuse) is the one for a certain wall socket.



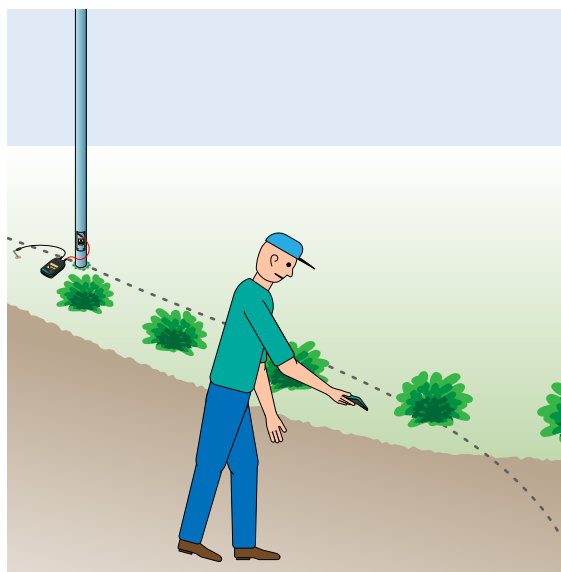
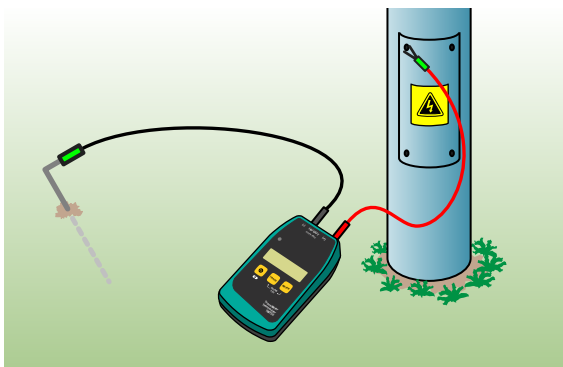
**Cross connection wires and telecom wires:** TM30 is very efficient when wire pairs need to be traced from wide bunches e.g. in a CO. Correspondingly wires from a telephone socket are easy to find at a house MDF terminals.



**Cable identification:** In renovation situations cut mains and telecom cables can be traced and identified very effectively with TM30. Also e.g. surveillance camera coaxial cables can be traced the same way.



**Cable tracing:** With TM30 even short underground telecom & mains cables can be traced easily. Below image depicts a typical situation of tracking the route of a street light pole feeding cable with the help of a ground rod.



## General information

Both the transmitter and the receiver use alkaline batteries and have low battery warning.

Receiver has an internal speaker so external headset is not needed.

In case a traced cable can't be reached for galvanic feeding, TMT30 signal can be fed with a PM34 or PM80 clamp-on transformer (accessory).

TM30 set is delivered in a handy nylon carrying bag.



### TMT30 transmitter

#### Trace mode output signal

125kHz (270Hz AM), output level 2.9Vrms, max. current 26mA rms

#### Trace mode output impedance

115ohms@125kHz, 105kohms@50Hz

#### Meter mode impedance

420kohms @ 50Hz

#### DSLAM test

According to ITU G.992.1 Annex A and ITU-T G.994.1

#### Connectors and indicators

2pcs. 4mm banana sockets, 2x16-character LCD display, buzzer for audible signals

#### Batteries and power consumption

6pcs. 1.5V IEC LR6 alkaline batteries (or similar NiMH cells), 9 ... 80mA, (typically 55mA)

#### Enclosure and weight

ABS, size approx. 155 x 90 x 50mm, weight approx. 460g (with batteries)

#### Appliance class

Rated voltage 400Vrms. Over voltage class CAT III 600V, enclosure protection rating IP55

#### Environmental conditions

Usage -20...+40C (dry or damp conditions), storage -40...+60C (dry conditions)

*Notes: VESALA is a registered trademark of H.VESALA Ltd, Finland. Consult us for more information concerning TM30 usage.  
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### TMR30 receiver

#### Receiving frequencies

Trace modes: modulated 125kHz. Powerline mode 50Hz (<200Hz), Audio freq mode <10kHz and High freq mode >10kHz

#### Adjustments and indicators

3-level gain adjustment. 12-level LED bar displays for receiving signal strength, 9 other LEDs, internal speaker for trace signal and indication tones

#### Batteries and power consumption

4pcs. 1.5V IEC LRO3 alkaline batteries (or similar NiMH cells), 16...100mA (typically 30mA)

#### Enclosure and weight

ABS 180 x 61 x 50mm, approx. 250g with batteries. Enclosure protection rating IP34

#### Environmental conditions

Usage -40...+40C (dry or damp conditions), storage -40...+60C (dry conditions)

### TM30 basic setup

TMT30 (transmitter)

TB10p and TB10m (safety banana cords, 1.0m, red and black)

XKKp and XKKm (safety crocodile)

S3TB (feeder cord 0.5m Schuko/safety banana)

TMR30 (receiver)

KPP5 (carrying bag)

User manual

### Common accessories

MP2 (ground rod, steel)

SJ12 and SJ20 (standard banana / banana cord 1.2m or 2.0m, red & black)

AP15B (banana / RJ45 cord, 1.5m)

PM34 (clamp-on transformer)

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