

Transett T-SIGN v2

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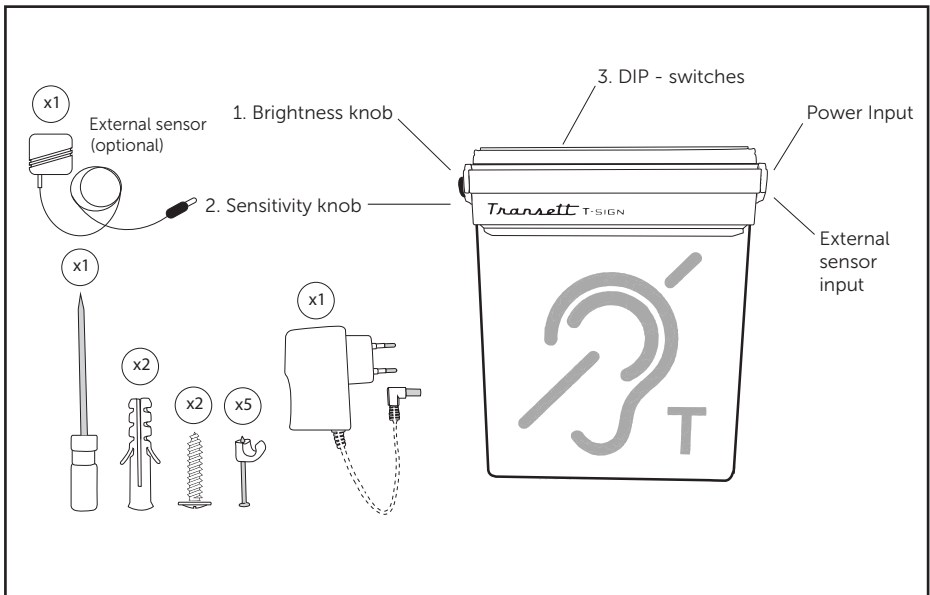
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User Manual for Transett T-SIGN

What's in the box



About Transett T-SIGN

T-SIGN, the active hearing loop indicator is designed to indicate how a hearing loop functions. T-SIGN is programmed with various kinds of indications that reflects how well the sound level is transmitted via the hearing loop.

Set up/ Installation instructions for Transett T-SIGN

Normal operation mode

In order to run T-SIGN in normal operation mode start it up by plugging in the power and let it run its startup sequence for approx. ten seconds. During the startup sequence it indicates which program it runs by the number of green flashes it does. Program one gives

one flash and program two gives two flashes (see below for program characteristics).

Very weak or no signal: T-SIGN is dark

Weak signal: Flashes green in a soft manner

Normal signal: Steady green light

Strong signal: Steady red light

Installation (Refer to the enclosed Quick Guide)

1. Preparations before the setup: A functioning hearing loop setup in accordance with the SIS 60118-4 standard and a device providing sound source to the hearing loop, e.g. a microphone, TV or a computer.
2. Choose an appropriate place for T-SIGN. It is not recommended to mount T-SIGN close to electronic devices due to signal interference.
3. Position T-SIGN at or nearby the chosen mounting place and connect power to it. Make sure the hearing loop is not in use. Verify that there is no signal interference that affects T-SIGN when the hearing loop is not in use. This is shown by that T-SIGN remains dark when it has been turned on. If T-SIGN is flashing or is indicating steady green with the hearing loop turned off then consider a different mounting location with less signal interference from the surroundings. Depending on the magnetic field strength from the hearing loop, at the chosen mounting location, sensitivity needs to be adjusted on T-SIGN. A high sensitivity setting in combination with background signal interference might cause the T-SIGN to show false indications from the hearing loop.
4. Calibrate T-SIGN in accordance with the instructions in paragraph "Calibration" below. After successful calibration continue with step 5.
5. Drill two screws onto the wall according to the enclosed drilling template (page 9) and mount T-SIGN in place.

Calibration

Calibration is done in order for T-SIGN to show correct display mode (dark/soft flashing green/steady green/red) in relation to magnetic field strength. It is made to that T-SIGN works well in regard to the SIS 60118-4 standard. When in calibration mode, sensitivity is adjusted so that T-SIGN changes color from green to red when the magnetic field strength at the listening position (most likely NOT at the mounting spot) is 400 mA/m.

How to calibrate T-SIGN:

1. Turn off T-SIGN by unplugging the DC connector or unplug the power supply. Wait a few seconds until it has shut down.
2. Turn the light intensity knob to minimum (fully counter clockwise).
3. Turn on T-SIGN by plugging in the DC connector or by plugging in the power supply.
4. After that T-SIGN has made one or two green flashes (depending on program selection) turn the light intensity knob to maximum (fully clockwise). This must be done within four seconds after the green flash(es).
5. T-SIGN now indicates that it is in **Calibration mode** by doing two short green double flashes.
6. **Calibration is done in two different ways (A or B):**
 - A) Supply the hearing loop with a 1 kHz steady or pulsating sinus tone.
 - B) Supply the hearing loop with continuous speech, e.g. via a microphone/TV/computer.
7. In the above cases (6A and 6B), make sure the hearing loop amplifier reaches its compression regime. Many loop amplifier have a compression indicator indicating this. If not, use a relatively strong signal input for the amplifier. If the hearing loop is adjusted correctly, it will now generate a magnetic field strength of 400 mA/m at the listening position. If a field strength meter is available, verify the magnetic field strength at the typical listening position.

8. Adjust T-SIGN sensitivity knob with the supplied screwdriver to that T-SIGN just turns red (or just showing red in peaks if using a pulsating sinus tone, or red in peaks if using a speech signal).

9. If it's not possible to reach red color shift in the previous step, then T-SIGN won't be able to indicate correct display (dark/soft flashing green/steady green/red). In that case use the external sensor by plugging it into the external sensor input and position the external sensor closer to the hearing loop (normally downwards if the hearing loop is floor-mounted). Repeat step 8. Another option is to mount T-SIGN in a different location closer to the hearing loop and repeat step 8.

10. To end Calibration mode pull out the DC adapter, wait approximately five seconds and then reconnect the DC adapter again.

Indications (referencing green to red color shift during calibration):

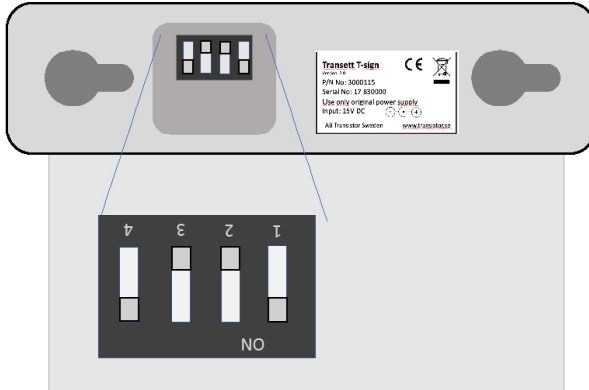
- No signal (< -16 dB) : Dark display
- Weak signal (<-10 dB to -16 dB) : Soft flashing green display
- Normal signal (0 dB to -10 dB): Steady green display
- Strong signal (> 0 dB): Steady red display

Other configurations

There are some additional configurations that can be made via DIP-switches. The switches are accessible via the backside of the T-SIGN housing and are located on the circuit board. The following configurations can be made (default settings shown in **Bold**):

- DIP-sw 1: Automatic control of light intensity related to surrounding light (off/**on**).
- DIP-sw 2: Reduce sensitivity for weak signal display with 3 dB (**off/on**). This can be a good feature when high sensitivity is needed in combination with some surrounding interference.

- DIP-sw 3: Change indication of strong signal from a steady red light to flashing red light (**off/on**).
- DIP-sw 4: Program selection 1 & 2 (**off/on**).



Program characteristics program 1:

Program 1 is a program where T-SIGN reacts relatively fast to changes in magnetic field strength. It can be e.g. in a teaching situation where the speaker is interested in knowing that the correct microphone technique is used.

- From dark to some indication: 2 sec
- From weak to normal signal indication: 2 sec
- From normal to strong signal indication: 4 sec
- From strong to normal signal indication: 3 sec
- From normal to weak signal indication: 12-15 sec
- Time to dark T-SIGN when no signal detected: 3 sec

Program characteristics program 2:

Program 2 is the default program where T-SIGN reacts slower to changes in magnetic field strength. This is useful in public venues and where the speaker can't affect the level of the sound. A normal indication shows that the hearing loop is functional and within correct limits.

- From dark to some indication: 5 sec
- From weak to normal signal indication: 4 sec
- From normal to strong signal indication: 30 - 45 sec
- From strong to normal signal indication: 3 sec
- From normal to weak signal indication: 2 – 4 minutes
- Time to dark T-SIGN when no signal detected: 60 sec

The above program characteristics are indicative numbers for a continuous speech signal and will vary depending on speech content, amplifier AGC setting and level of magnetic field strength.

Technical data

- Input power: 15 V, 1A via external power supply 110 – 230 V AC
- External sensor input: Use external sensor for T-SIGN
- Power consumption: 1 W
- Measurements: 15 cm (W) x 18 cm (H) x 4,5 cm (D)
- Weight: 360 g
- Color: Aluminum

Sensitivity, transition from normal to strong indication (steady green to red color light)

- Sensitivity knob in min position: + 9 dB signal (1 kHz, ref 400 mA/m)
- Sensitivity knob in max position: - 22 dB signal (1 kHz, ref 400 mA/m)
- Frequency range: 300 Hz – 2000 Hz (rel -3 dB)

Cleaning and maintenance

Use a damp cloth to wipe it on the outside. Never use cleaning products or solvents.

Repairs

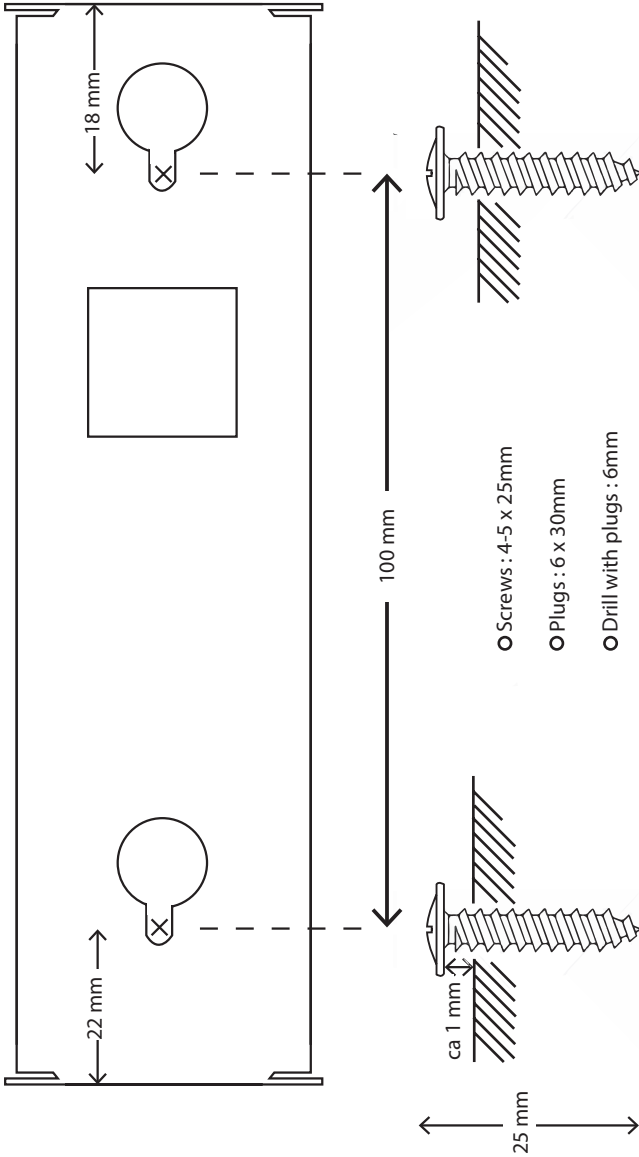
If your product malfunctions, it must be repaired by a qualified technician. Do not attempt to open the case of the device since this would invalidate the warranty. If your product requires service, please contact your hearing care professional for assistance.

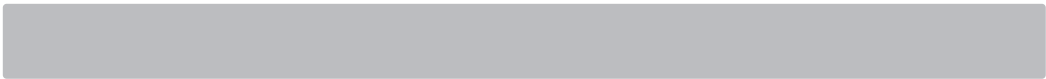
Waste disposal



This product contains electrical or electronic equipment and should be disposed of carefully in the interests of your safety and the environment. Please contact your local hearing care professional concerning disposal of the product.

Drilling template





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