

Alarm systems - Social alarm systems - Part 2: Trigger devices

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 50134-2:2017 sisaldab Euroopa standardi EN 50134-2:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 50134-2:2017 consists of the English text of the European standard EN 50134-2:2017.
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## English Version

**Alarm systems - Social alarm systems - Part 2: Trigger devices**

Systèmes d'alarme - Systèmes d'alarme sociale - Partie 2:  
Déclencheurs

Alarmanlagen - Personen-Hilferufanlagen - Teil 2:  
Auslösegeräte

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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## European foreword

This document (EN 50134-2:2017) has been prepared by CLC/TC 79 "Alarm systems".

The following dates are fixed:

- latest date by which this document has to be (dop) 2018-08-14  
implemented at national level by publication of an  
identical national standard or by endorsement
- latest date by which the national standards (dow) 2020-08-14  
conflicting with this document have to be  
withdrawn

This document supersedes EN 50134-2:1999.

EN 50134-2:2017 includes the following significant technical changes with respect to EN 50134-2:1999:

- The scope has been extended to provide requirements for manually and automatically activated trigger devices transmitting a triggering signal;
- The normative references have been updated to take account of latest revisions and to include ETSI EN 300 220-3-1 ETSI EN 303 406 for wireless radio trigger devices;
- The definitions have been updated to reflect changes in other parts of the series;
- in the general requirements, some requirements have been added to cover both manually and automatically activated trigger devices;
- New or amended requirements have been added to include:
  - The activation of one or many trigger devices not to inhibit the transmission of a triggering signal from any other trigger device within the same or adjacent systems.
  - Trigger devices to generate an alarm triggering signal that can be decoded and differentiated from that of another trigger device connected to the same local unit or controller.
  - Trigger devices using wire-free communications to transmit an identification code with sufficient different combinations to prevent the operation of the trigger device producing unwanted triggering in an adjacent system.
  - Trigger devices using wire-free communications to automatically generate a triggering signal at least once every 24 h to indicate their continued active presence.
  - No longer require a portable trigger devices where its only function is to be used as part of a social alarm system to use primary non-rechargeable batteries.
- Functional Requirements:
  - Require the manufacturer to state the normal expected rate of activation for the device being not less than one activation per day.
  - Require the trigger device to be capable of operating to the manufacturer's specified performance level for a period of at least 1 year or, if greater, the manufacturer's stated duration without recharging or replacement of the battery.

- For devices where the trigger device is activated by a push button require to be physically distinguishable from any other controls.
- Revise the push button of activation area to a minimum of 150 mm<sup>2</sup>, with a minimum dimension of not less than 10 mm.
- For automatically activated trigger devices where the option exists, to indicate the return to the normal condition to the local unit and controller the manufacturer to indicate the conditions by which the normal state is determined.
- In interconnections & Communications, a requirement to comply with EN 50134-5 has been added.
- Addition for a trigger device using a wireless radio interconnection require to comply with the requirements of ETSI EN 300 220-3-1 or ETSI EN 303 406 applicable to the frequency in use.
- Addition of requirements where a trigger device uses bi-directional techniques for communicating an alarm triggering signal to the local unit and controller.
- In documentation, requirements have been amended for marking and user documentation.
- Tests for manually activated trigger devices have been amended to reflect revisions to reference standards.
- Removal of the requirement to test in accordance with EN 300-220-2 and publish results of tests for wire free radio interconnections.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

EN 50134, *Alarm systems — Social alarm systems* is currently composed of the following parts:

- *Part 1: System requirements;*
- *Part 2: Trigger devices* [the present document];
- *Part 3: Local unit and controller;*
- *Part 5: Interconnections and communications;*
- *Part 7: Application guidelines* [Technical Specification].

## Introduction

A social alarm system provides 24 h facilities for alarm triggering, identification, signal transmission, alarm reception, logging and 2-way speech communication, to provide reassurance and assistance for people considered to be at risk.

A social alarm system comprises a number of system parts, which can be configured in different ways to provide this functionality.

A user can request assistance by the use of a manually activated trigger device resulting in an alarm triggering signal. In certain cases alarm triggering signals can be generated by automatic trigger devices. A local unit or controller receives the alarm triggering signal, switching from the normal to the alarm condition and indicating this to the user (some systems use an optional pre-alarm condition that allows the user to reset the alarm for a short period of time).

Failure in the operation of a social alarm system or any of its parts may compromise the ability to provide timely reassurance and assistance which may lead to a risk to a user's life. The trigger device is a part of the system and should be designed to ensure reliability beyond that of a normal consumer device.

The design should take into consideration how to make it easier for the user to activate the trigger device while preventing accidental triggering of the device.

This standard specifies the minimum requirements for the trigger device to ensure this system part provides the functionality and reliability required by a social alarm system.



## 1 Scope

This European Standard specifies the requirements for manually and automatically activated trigger devices transmitting a triggering signal.

This European Standard specifies the requirements and tests for trigger devices forming part of a social alarm system.

This European Standard applies to all trigger devices that transmit a triggering signal to a local unit or controller using wired or wire-free interconnections methods.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50134-1:2002, *Alarm systems - Social alarm systems - Part 1: System requirements*

EN 50134-5, *Alarm systems - Social alarm systems - Part 5: Interconnections and communications*

EN 60447, *Basic and safety principles for man-machine interface, marking and identification - Actuating principles (IEC 60447)*

EN 61020-1:2009, *Electromechanical switches for use in electrical and electronic equipment - Part 1: Generic specification (IEC 61020-1:2009)*

EN 50130-4, *Alarm systems - Part 4: Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder, hold up, CCTV, access control and social alarm systems*

EN 50130-5, *Alarm systems - Part 5: Environmental test methods*

ETSI EN 300 220-3-1, *Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 3-1: Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Low duty cycle high reliability equipment, Social Alarms Equipment operating on designated frequencies (869,200 MHz to 869,250 MHz)*

ETSI EN 303 406, *Short Range Devices (SRD); Social Alarms Equipment operating in the frequency range 25 MHz to 1 000 MHz*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50134-1:2002 and the following apply.

### 3.1

#### **social alarm system**

system providing 24 h facilities for alarm triggering, identification, signal transmission, alarm reception, 2-way speech communication, reassurance and assistance, for use by persons considered to be at risk

### 3.2

#### **controller**

interface between one or more local units and the alarm transmission system

### 3.3

#### **local unit**

interface between the user and the controller which enables two-way speech