



# UL 464

## **STANDARD FOR SAFETY**

Audible Signaling Devices for Fire Alarm and  
Signaling Systems, Including Accessories



UL Standard for Safety for Audible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories, UL 464

Tenth Edition, Dated January 28, 2016

### **Summary of Topics**

***The following revisions are being issued for the Tenth Edition of ANSI/UL 464, the Standard for Audible Signaling Devices for Fire Alarm Signaling Systems, Including Accessories.:***

***1. Clarification of Outdoor Use Enclosure Requirements, Abnormal Operation and Burnout Test, and Mechanical Strength Tests for Enclosures***

***2. Reference Document Changes and Editorial Corrections***

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The new requirements are substantially in accordance with Proposal(s) on this subject dated November 18, 2016.

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*Prepared by:*



**ULC Standards  
CAN/ULC-S525  
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**Underwriters Laboratories Inc  
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## **Audible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories**

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*Approved by*



**Standards Council of Canada  
Conseil canadien des normes**

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## Preface

This is the common UL and ULC Standard for Audible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories. It is the fourth edition of CAN/ULC-S525 and tenth edition of ANSI/UL 464.

This Joint Standard was prepared by Underwriters Laboratories Inc., ULC Standards, and the NEMA Technical Harmonization Committee on Notification Appliances. The standard was formally approved by the UL Standards Technical Panel on Signal Appliances and the ULC Technical Committee on Fire Alarm and Life Safety Equipment and Systems. The efforts and support of the NEMA Technical Harmonization Committee, UL Standards Technical Panel, and ULC Technical Committee are gratefully acknowledged.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

This standard has been approved as a National Standard of Canada by the Standards Council of Canada.

This standard has been approved by the American National Standards Institute as an American National Standard.

Annexes A, C, and E are identified as informative and are for informational purposes only. Annexes B and D are identified as normative and form a mandatory part of this Standard.

**Note:** *Although the intended primary application of this Standard is stated in its scope, it is important to note that it remains the responsibility of the users of the standard to judge its suitability for their particular purpose.*

## Level of Harmonization

This Standard is published as an equivalent standard for UL and ULC Standards. An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical deviations are allowed for codes and governmental regulations and those recognized as being in accordance with NAFTA Article 905, for example, because of fundamental, climatic, geographical, technological or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is to be word for word except for editorial changes.

## Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

# **Audible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories**

## **1 Scope**

1.1 This standard applies to electrically operated bells, sirens, horns, and similar audible signaling devices, rated at 300 V or less, for fire alarm and signaling systems and intended for indoor and/or outdoor installation:

- a) In Canada, in accordance with CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations; and with CAN/ULC-S524, Standard for Installation of Fire Alarm Systems. Refer to CAN/ULC-S541, Speakers for Fire Alarm and Signaling Systems, Including Accessories, for requirements pertaining to speakers.
- b) In the United States in accordance with the National Electrical Code, NFPA 70, and the National Fire Alarm and Signaling Code, NFPA 72.

1.2 This standard applies to audible signaling devices for use in ordinary (non-hazardous or non-corrosive) locations.

1.3 This standard also applies to protective covers and accessories used with audible signals.

1.4 This standard does not apply to door bells, buzzers and chimes used in household and similar applications and intended for operation on Class 2 signal circuits as defined in:

- a) In Canada, CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations,
- b) In the United States, the National Electrical Code, NFPA 70.

NOTE: In the United States, general signaling appliances are covered by the Standard for Audible Signal Appliances for General Signaling Use, UL 464A.

1.5 Audible signaling devices for use in hazardous or corrosive locations shall comply with the requirements of this Standard and the applicable requirements of:

- a) In Canada, CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, with respect to the location hazard;
- b) In the United States, the National Electrical Code, NFPA 70.

1.6 A supplementary visual signal, incorporated as part of an audible signaling device which is intended for fire alarm application shall comply with the requirements of this Standard and the applicable requirements of:

- a) In Canada, CAN/ULC-S526, Standard for Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories;
- b) In the United States, the Standard for Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories, UL 1638.

## 2 General

### 2.1 Components

2.1.1 Except as indicated in 2.1.2a component of a product covered by this Standard shall comply with the requirements for that component. See Annex A for a list of Standards covering components generally used in the products covered by this Standard.

2.1.2 A component need not comply with a specific requirement that:

- a) Involves a feature or characteristic not needed in the application of the component in the product covered by this Standard; or
- b) Is superseded by a requirement in this Standard.

2.1.3 A component shall be used in accordance with rating(s) established by its manufacturer for the intended conditions of use.

### 2.2 Units of Measurement

2.2.1 Unless otherwise indicated, all voltage and current values mentioned in this Standard are root-mean-square (rms).

2.2.2 The metric unit shall be designated as the official unit for purposes of this standard. Where values of measurement are specified in both SI and English units, either unit is used. In cases of dispute, the metric unit shall be used. Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

2.2.3 Wherever the abbreviation "AWG" appears in these requirements, it refers to American Wire Gauge.

### 2.3 Control Unit Interface

2.3.1 An audible signaling device incorporating circuitry for functional interfacing with a control unit for purposes such as supervision, point addressing, multiplexing, synchronization etc., shall also comply with the applicable functional requirements of standards such as:

- a) In Canada, CAN/ULC-S527, Standard for Control Units for Fire Alarm Systems;
- b) In the United States, the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864.