

CEA Standard

Standard for a Round Tactile Indicator

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(Formulated under the cognizance of the CEA **R4 Video Systems Committee**.)

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FOREWORD

This standard was developed under the auspices of the Consumer Electronics Association (CEA) R4 Video Systems Committee.

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Contents

1 Scope	1
2 References	1
2.1 Informative References	1
2.1.1 Informative Reference List	1
3 Definitions	1
4 Overview	1
5 Tactile Indicator	1
5.1 Numeric Keypad Layout	1
5.2 Tactile Indicator on Numeric Keypads	2
5.3 Dimensions of Tactile Indicator	2

Figures

Figure 1 - Standard 4x3 Array	2
Figure 2 - Tactile indicator	2

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Standard for a Round Tactile Indicator

1 Scope

This standard defines the size, shape and placement of a tactile indicator ("nib") to assist users who are blind or visually impaired in determining the location of numeric keys on handheld remote controls for consumer electronics products.

2 References

2.1 Informative References

The following references contain provisions, which, through reference in this text, constitute informative provisions of this Standard. At the time of publication, the editions indicated below were valid. All documents are subject to revision, and parties to agreement based on this Standard are encouraged to investigate the possibility of applying the most recent editions of the documents listed below.

2.1.1 Informative Reference List

ITU-T E.161 , Arrangement of digits, letters and symbols on telephones and other devices that can be used for gaining access to a telephone network, (02/2001)

ES 201 381 V1.1.1, Human Factors (HF); Telecommunications keypads and keyboards; Tactile identifiers, (1998-12)

AS/ACIF S040:2001, Requirements for Customer Equipment for use with the Standard Telephone Service - Features for special needs of persons with disabilities (2001)

ISO 24503:2011 - Ergonomics – Accessible design –Tactile dots and bars on consumer products (1/2011)

3 Definitions

Tactile indicator: a tactile feature, such as a raised nib, a raised dash, or an indentation on a key cap, or texture or key shape, which is designed to assist in the recognition of a key without sight, but which does not necessarily have a one-to-one relationship with a key. For example, raised dashes on some QWERTY keyboards are tactile indicators for the F and J keys.

Tactile identifier: the tactile indicator or set of tactile indicators on a key which identifies(y) the specific function of the key without the use of sight and without any ambiguity.

4 Overview

Users of consumer electronics products may be blind or visually impaired. For such consumers, some features are desirable in order to assist in their use of products. This document identifies some features of remote controls which may assist users who are blind or visually impaired.

5 Tactile Indicator

5.1 Numeric Keypad Layout

To assist users who are blind or visually impaired, numeric keypads should, whenever possible, be laid out in a standard 4 x 3 array, as shown below in Figure 1 below. The figure shows the keypad consisting of four rows of keys, in three columns. The first row consists of the numbers "1", "2" and "3" arranged left-to-right. The second row consists of the numbers "4", "5", and "6" arranged left to right. The third row consists of the numbers "7", "8" and "9" arranged left to right. The fourth (bottom) row consists of the number "0" centered below the "8".