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**Guidelines for older persons and
persons with disabilities—Auditory
signals for consumer products**

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

Consequently **JIS S 0013** : 2002 is replaced with this Standard.

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Guidelines for older persons and persons with disabilities—Auditory signals for consumer products

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO 24500** published in 2010 without modifying its technical contents for the corresponding parts, but with addition of one **JIS** original specification (as for “invalid input signal”) which is not given in the corresponding International Standard.

The portion underlined with dots is the matter not included in the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

People are surrounded by various consumer products: home electrical appliances, information and communication products, office automation equipment, gas-heating equipment, toys, sanitary equipment, health-care products, cameras, etc. Auditory signals of such products must be designed so that the user can easily hear the signals in various circumstances where the product is normally used, and understand the objective and meaning of signaling.

This Standard has been developed for improving the usability and accessibility of auditory signals used in such consumer products, thereby improving the products themselves when they are used by all people, including those with visual impairments and older people with age-related hearing impairments. Older people include those aged 65 and above for whom age-related changes of hearing become obvious.

The auditory-signal patterns specified in this Standard have been selected based on results of experiments in which people of different age ranges and with different levels of visual impairment participated. Regarding the signals, it has been confirmed that the purpose of signaling is easy for listeners to understand and that the signals are not easily confused with signals in other signal categories.

This Standard adopts the principles of accessible design presented in **JIS Z 8071** and amplified in **ISO/TR 22411**.

1 Scope

This Standard specifies the auditory signals used as a means of feedback for operations or conditions of consumer products when used by a person with or without visual or auditory impairment. It is intended to be applied as appropriate to such products depending on the product type and its conditions of use.

It is applicable to auditory signals of a fixed frequency used in general applications (also called “beep sound”), but not to variable frequency or melodic sounds.

It does not specify fire or gas leak alarm sounds or crime prevention alarm sounds (determined by other laws and regulation), electronic chimes, voice guides or other sounds particular to communication instruments such as telephones; nor is it applicable to auditory danger signals for public or work areas (covered in **ISO 7731**, **ISO 8201** and **ISO 11429**).