ISO/IEC JTC 1/SC 35 **N 0842**
DATE: 2005-09-25

ISO/IEC JTC 1/SC 35

User Interfaces

Secretariat: AFNOR

L2/05-348

DOC TYPE: Draft document

TITLE: 5th Working Draft - Information Technology - Screen icons and symbols for personal mobile communication devices

SOURCE: SC35/WG4

PROJECT:

STATUS: Work group review

DUE DATE:

DISTRIBUTION: P and O members

MEDIUM: E

NO. OF PAGES: 32

Secretariat ISO/IEC JTC 1/SC 35 - Nathalie Cappel-Souquet - 11 Avenue Francis de Pressensé 93571 Saint-Denis La Plaine Cedex - France Address
Telephone: +33 1 41 62 82 55; Facsimile: 33 1 49 17 90 00; e-mail: nathalie.cappelsouquet@afnor.org

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ISO/IEC JTC 1/SC 35 N0842

Date: 2005-8-18

ISO/IEC JTC 1/SC 35/WG 4

Secretariat: AFNOR

Information Technology - Screen icons and symbols for personal mobile communication devices

Élément introductif — Élément central — Élément complémentaire

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Document type: International Standard

Document subtype:

Document stage: (20) Preparatory

Document language: E

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.
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In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC WD 24755 was prepared by Joint Technical Committee ISO/IEC JTC 1, Subcommittee SC 35, *User Interfaces*.

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Introduction

Screen icons and symbols for personal mobile communication devices enable users to decide on the suitability of following associated services or functionality. Information provided by these icons and symbols may also be made available via text.

The icon and symbol graphics included in ISO/IEC WD 24755 have been selected on the basis of their ability to convey the desired information to a wide audience of users. The icons in this standard have been selected to be intended for use only for mobile communication devices. There are used the same icon if necessary from ISO 11581 parts 2, 3 and 6, in order to refer those category.

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Information Technology - Screen icons and symbols for personal mobile communication devices

1 Scope

This international standard defines a consistent set of screen icons and symbols – together with their related functions – that are presented by personal mobile communications devices (e.g. new types of mobile phone or personal digital assistants), which has an accessible touch screen by stylus pen or finger, or button access with personalized application, that users interact with to control the information presented by these devices. The types of graphic presentation can either be dynamic or fixed. These icons and symbols typically represent functions and actions by association with conventional controls and functions on real world objects and that prompt the user to recall the intended actions. Identifiers are specified to provide alternative means of accessing the functionality of icons and symbols.

This standard provides a consistent set of control graphics for such functions as: access/connect to log in/out to a network; searching data and save/exchange it to another appliance; and perform personal information management-related applications. This standard applies to all graphic displays with 32 x 32 pixels or higher resolution.

2 Conformance

Operating system, application software and their resource file for the entire personal mobile communication device conforms to ISO/IEC WD 24755 if all icons / symbols available to the user in the system or application conform to clauses 5 and 6 of this standard and clause 5 and sub clause 6.1 of ISO/IEC 11581-1.

3 Normative references

The following standards contain provisions, which, through reference in this text, constitute provisions of ISO/IEC WD 24755. At the time of publication, the editions indicated are valid. All standards are subject to revision, and parties to agreements based on ISO/IEC WD 24755 are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 11581-1 *Information technology - User system interfaces and symbols - Icon symbols and functions - Part 1: Icons - general*

ISO/IEC 11581-2 *Information technology - User system interfaces and symbols - Icon symbols and functions - Part 2: Object Icons*

ISO/IEC 11581-3 *Information technology - User system interfaces and symbols - Icon symbols and functions - Part 3: Pointer icons*

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4 Definitions

All definitions in clause 4 of ISO/IEC 11581-1 apply to this standard. In addition, the following definitions also apply to this standard.

4.1 status indicator

graphic symbol that represents a state within the system.

NOTE: Status indicators assist a mobile device user to confirm some system setting state without accessing the system settings. They are dynamically updated only when the state changes in real-time. Users are not able to use the status indicator to control the change.

EXAMPLE 1: A status indicator is used to show that vibration is set in a cellular phone instead of sounds to indicate ringing or alert.

EXAMPLE 2: A status indicator is used to show the remaining battery charge of a personal data assistant (PDA).

5 Requirements and recommendations

5.1 Requirements

5.1.1 Graphic and function

If an interactive system or application of a personal mobile communication device uses an icon or a symbol that has the appearance of the icon / symbol graphic specified in clause 6 of this standard, within the specific variations given, and within the global variations specified in ISO/IEC 11581-1, it shall serve the functions specified in clause 6 of this standard.

5.1.2 Identification

5.1.2.1 Internal Identifier

All icons and symbols shall be implemented with an internal identifier of the graphic object. This identifier can be used by text-based output devices (e.g. text-only screens, screen readers, Braille output device).

5.1.2.2 Identifiers specified in this standard

All icons and symbols specified in this standard shall be implemented with the internal identifiers specified in this standard.

5.1.2.3 Identifiers for other icons and symbols

Icons and symbols not specified in this standard shall be implemented with the internal identifiers specified by the developer.

5.1.2.4 Unique identifiers for other icons and symbols

Developer specified internal identifiers shall not be the same as identifiers specified in this standard.

5.1.2.5 Labels

If a label is used with an icon to clarify its meaning, it should be provided in the language of the user.

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5.1.2.6 Labels identified in this standard

When English language labels are used for icons or symbols identified in this standard, they shall be the labels identified in this standard.

5.1.2.7 Labels in other languages

Labels for use in other languages may be specified in appropriate national standards.

5.1.2.8 User control of labels

The user should be able to control:

a) whether or not labels are displayed with icons
b) the language of displayed labels
c) the positioning of the label relative to the icon

5.1.2.9 Selection

Selection of a label shall have the same result as selecting the icon or symbol. Selection shall be in accordance with ISO/IEC 11581-3.

5.2 Recommendations

5.2.1 Function and graphic

If an interactive system or application uses an icon or a symbol that serves the primary function specified in clause 6 of this standard, it is highly recommended that it have the appearance of the icon and symbol graphic specified in clause 6, within the specific variations given and within the global variations specified in clause 6.3 of ISO/IEC 11581-1.

5.2.2 Metaphor

A consistent highlighting or presentation style shall be considered which renders the graphic of the icons and symbols sufficiently prominent in comparison with other information on the screen.

5.2.3 Arrangement

There is no specific sequence for arranging these icons and symbols. Where a default sequence is supplied, the user should be provided with a facility to arrange them to their own preference.

5.2.4 Appearance

All icons and symbols of a similar selection status shall be a consistent visual strength and style.

5.2.5 Text / Typeface

The use of text inside icons and symbols should be avoided. However, if text is included, plain typefaces should be used. If text is used, it should be used in a manner that supports adaptation for cultural, linguistic and comprehensibility purposes.

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6 Icon and symbol specifications

The Icon and symbol specifications in this clause shall be used as design templates for the icon / symbol design for personal mobile communication devices and their applications.

The following format is used within this clause.

- **Icon function** is the capability of the computer system represented by an icon. [ISO/IEC 11581-1 clause 4.8]
- **Specific instance** is a realization of the generic object, corresponding to a particular object in the metaphoric environment. [ISO/IEC 11581-1 clause 5.5]
- The **graphic components** are the visible representation of the basic units necessary to construct an icon. [ISO/IEC 11581-1 clause 5.7]
- **Identifier** is to internally define (e.g. with XML) the icons and symbols. The internal identifier within this standard is tentatively set to use two capital letters, G (i.e. an initial of Graphics) and M (i.e. an initial of Mobile), followed by an ordering number of three digits.
- **Label** is used to provide language-based information to supplement the icon display.
- The **graphic** is a graphical representation of the symbol that is the intended icon. It is constructed from the graphic components. [ISO/IEC 11581-1 clause 5.8]
- **Specific variations** may be used to adapt a particular icon to specific design styles while retaining its essential perceptual characteristics. Additional information is provided for arranging and modifying graphics to meet the resolution restriction.

The graphics are shown by a bounded grey cell. The size of the cell and the location of the icon within it are shown for illustration only, and are implementation dependent. While the white inner zone should always be opaque, the grey zone may be either transparent or opaque.

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6.20 Battery status indicator

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6.1 System set-up

Icon function: Enables the user to enter the screen for individualising the system.

Specific instance: Two wrenches

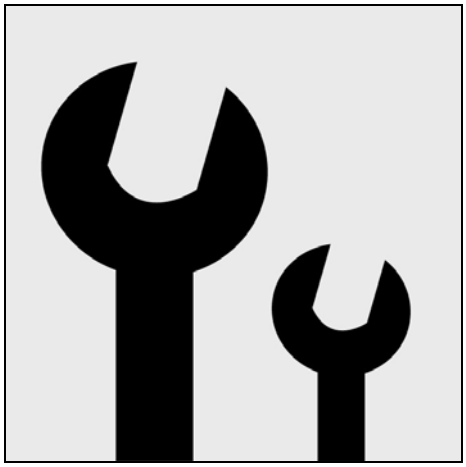
Graphic components:

- A heavy line extends midway from bottom connecting to a filled circle. A portion of the circle is cut out.
- A smaller similar figure is placed to the right.

Identifier: GM001

Label: System set-up

Graphic:



Specific variations:

- None at present.

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6.2 Address book application

Icon function: To enable the user to access personal address information, including phone, fax and e-mail.

Specific instance: Human's silhouette over an envelope

Graphic components:

- A vertical, black oval connects to a black oval one second sizes horizontal to the position that shifted a little right.
- Two thin solid lines are postponed internally while having been enclosed to the square with four fat solid lines, and it intersects squarely. Another two thin lines expand from the other two corners internally toward about there and it unites with the first fulmination.

Identifier: GM002

Label: Address Book

Graphic:

Specific variations:

- Minimum requirement for the graphic component is a human's silhouette.

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6.3 Still picture application

Icon functions: To enable the user to take a picture with a camera and/or to view stored images.

Specific instance: Main body of typical single lens reflex camera

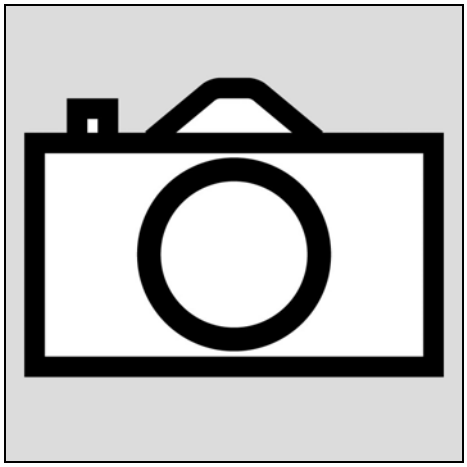
Graphic components:

- A circle inside of a big rectangle.
- A small trapezoid and a small square are placed on top of the rectangle.

Identifier: GM003

Label: Still picture

Graphic:



Specific variations:

- None at present.

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6.4 Movie application

Icon function: To enable the user to take a moving picture with a camera and/or to view stored videos.

Specific instance: A frame of movie film

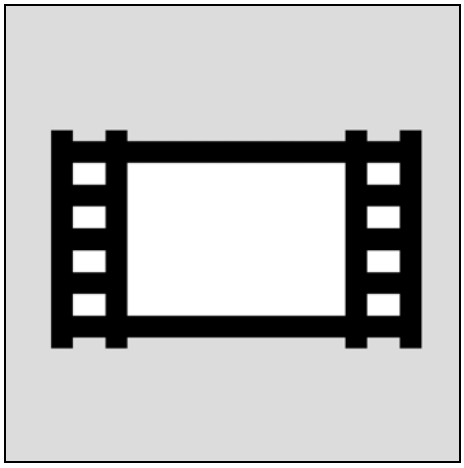
Graphic components:

- A large rectangle is assumed to be an outline, and two vertical lines are arranged in parallel near the right and left. The top and bottom of the vertical line has overflowed.
- It divides between two vertical lines into four in a short horizontal line as shown in figure.

Identifier: GM004

Label: Movie application

Graphic:



Specific variations:

- None at present.

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6.5 Audio application

Icon function: To enable the user to activate an application that works with audio.

Specific instance: An eighth note and two beamed sixteenth notes.

Graphic components:

- An interlinked shape with a slanted solid oval, a line and a wave shape.
- Two interlinked shapes with slanted solid ovals and vertical lines that are connected together by two horizontal lines

Identifier: GM005

Label: Audio application

Graphic:

Specific variations:

- The kind of musical note(s) used is decided by preference.

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6.6 Television application

Icon function: To enable the user to watch television programs.

Specific instance: Human silhouette inside TV set

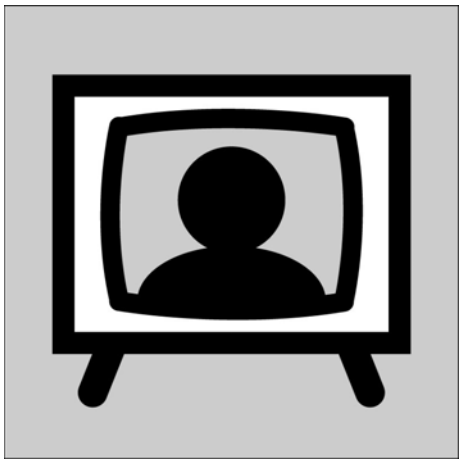
Graphic components:

- A human figure made up of a small filled circle placed on top of a filled vertical half-oval is put into a swelling rectangle.
- The swelling rectangle is placed within a larger rectangle.
- Two “feet” made up of short angled lines are set under the large rectangle.

Identifier: GM006

Label: Television

Graphic:



Specific variations:

- None at present.

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6.7 Web browser application

Icon function: To enable the user to access a web site or FTP server.

Specific instance: Globe and satellite orbit

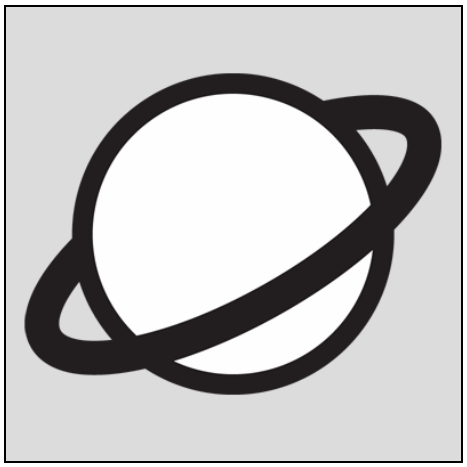
Graphic components:

- A circle
- An ellipse with one side hidden by the circle

Identifier: GM007

Label: Web browser

Graphic:



Specific variations:

- None at present.

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6.8 Dictionary application

Icon function: To enable the user to access a reference book listing alphabetically terms or words important to a particular subject or activity along with discussion of their meanings and applications. Users can also add their own unique terms or words to an individualisable User Dictionary.

Specific instance: Thick book

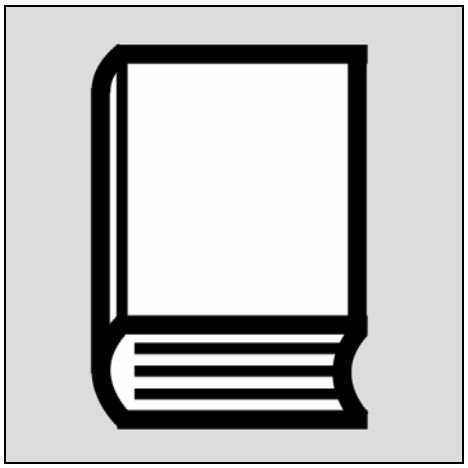
Graphic components:

- The cover of the book is made up of a rectangle with a thin left-hand edge.
- A line parallel to the bottom of the square, connected by arcs on each end contains three parallel evenly spaced lines touching the right-hand arc.
- The spine is made up of the left-hand edge of the rectangle and a prallel thicker line to its left connected on each end by arcs.

Identifier: GM008

Label: Dictionary

Graphic:



Specific variations:

- None at present.

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6.9 Notebook application

Icon function: To enable the user to work on abstract paper to record, edit, or view information.

Specific instance: A pencil and sheet of paper.

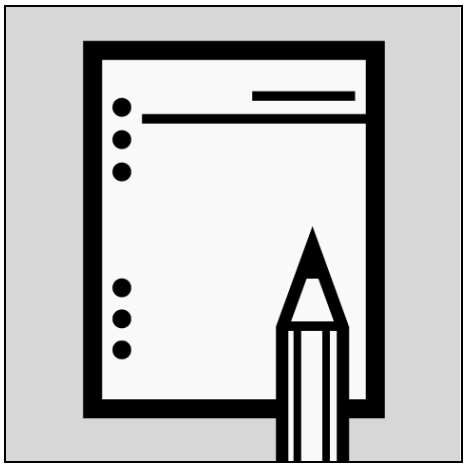
Graphic components:

- Short and long horizontal lines, as well as two sets of three dots vertically in line, inside a big rectangle.
- Four vertical lines creating a shape of the proportion that is a wider portion at the centre and two half width portions for both side of the wider portion. Then a triangle with a small similar figure at the top corner is on this shape.
- The triangle is over the big rectangle.

Identifier: GM009

Label: Notebook

Graphic:



Specific variations:

- Memo pad (e.g. paper without binding hole) could be used instead of note pad.

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6.10 Game applications

Icon function: To enable the user to choose an electronic game to play.

Specific instance: A playing card, and a die.

Graphic components:

- A cubic diagram with three surfaces. There are 1 dot on top surface, 3 dots on the left surface and 5 dots on the right surface.
- A large rectangle with rounded corners surrounds a smaller rectangle with rounded corners which contains a spade.

Identifier: GM010

Label: Game

Graphic:

Specific variations:

- None at present.

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6.11 Scheduler application

Icon function: To enable the user to manage their schedules, such as making action plans or appointments, as well as setting an alarm to each scheduled item.

Specific instance: A daily calendar pad

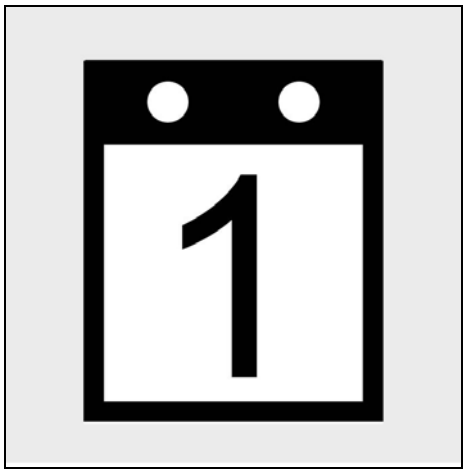
Graphic components:

- A number "1" inside of a rectangle with a thick upper line containing two circles.

Identifier: GM011

Label: Scheduler

Graphic:



Specific variations:

- The digit "1" may be updated to display current day of the month.

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6.12 Received message

Icon function: To inform the user that a new message has been received as well as the number of received new messages.

Specific instance: Message card with designation of the number of received messages within a circle.

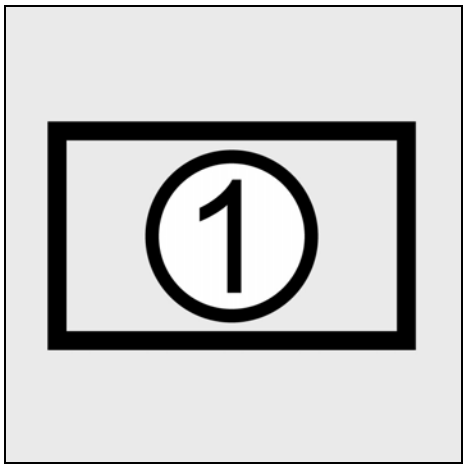
Graphic components:

- The number “1” inside a circle inside a big rectangle.

Identifier: GM012

Label: Message

Graphic:



Specific variations:

- The number may be changed to reflect the number of received messages (e.g., a “2” will be displayed if two unread messages have been received).

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6.13 Wireless carrier connection

Icon function: To show the strength of the wireless signal when it connects to the carrier connection. There are five states: very strong, strong, weak, very weak or not detected.

Specific instance: An antenna

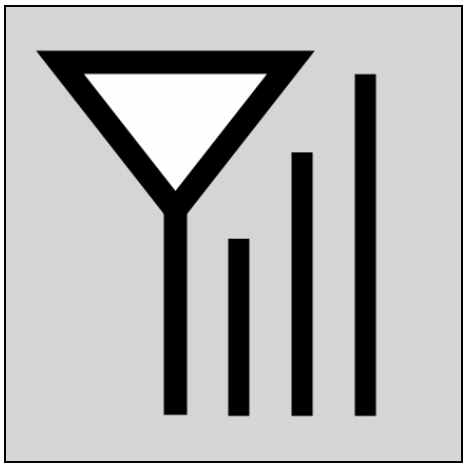
Graphic components:

- An antenna symbol made by a reversed triangle and a vertical line connected together.
- Three lines of different length: no lines for GM013-4, 1 line for GM013-3, 2 lines for GM0013-2 and 3 lines for GM013-1
- Two long lines which intersect at the centre overlap the figure of GM013-4 (for GM013-5).

Identifier: GM013-1, GM013-2, GM013-3, GM013-4 and GM013-5

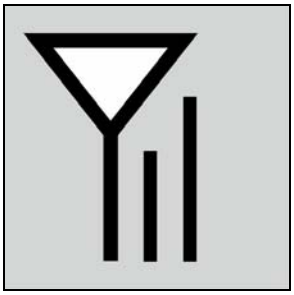
Label: Wireless carrier connection 01, 02, 03, 04 and 05

Graphic:

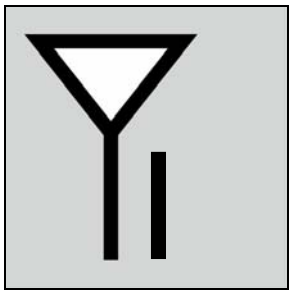


GM013-1: very strong

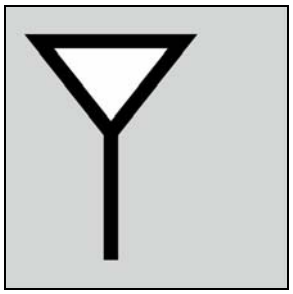
Specific variations:



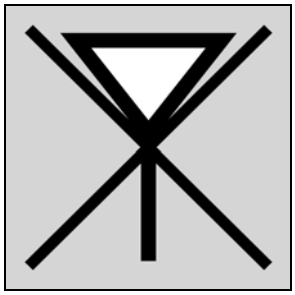
GM013-2: strong



GM013-3: weak



GM013-4: very weak



GM13-5: not detected

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6.14 Wireless network connection

Icon function: To show strength of the wireless signal when it connects to the network. There are five states: very strong, strong, weak, very weak or not detected.

Specific instance: An antenna

Graphic components:

- The line that has been postponed toward the centre connects from the vicinity in the under and the centre connects it to a small circle at the centre. (for GM014-4)
- There is one line on the circular arc right and left about the circle at the centre of GM014-4. (for GM014-3)
- There are two lines on the circular arc right and left about the circle at the centre of GM014-4. The outside of lines two circular arcs is longer. (for GM014-2)
- There are three lines on the circular arc right and left about the circle at the centre of GM014-4. The outside of lines three circular arcs is longer. (for GM014-1)
- Two lines which intersect at the centre overlap the figure of GM014-4 (for GM014-5).

Identifier: GM014-1, GM014-2, GM014-3, GM014-4 and GM014-5

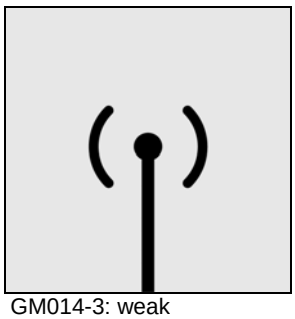
Label: Wireless network connection 01, 02, 03, 04 and 05

Graphic:

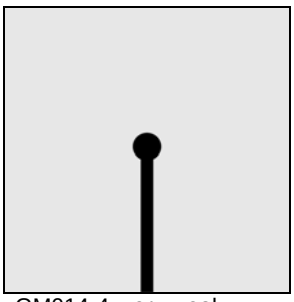
GM014-1: very strong

Specific variations:

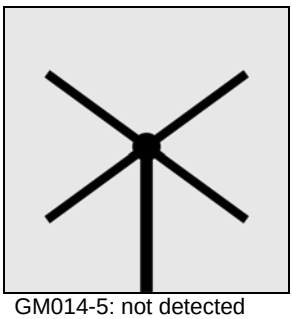
GM014-2: strong



GM014-3: weak



GM014-4: very weak



GM014-5: not detected

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6.15 Keypad locked

Icon function: To inform the user that the keypad cannot be used. This icon is only visible when the keypad is locked. Selecting this icon activates the protocol to unlock the keypad.

Specific instance: Side view of a key crossed out with an 'X'.

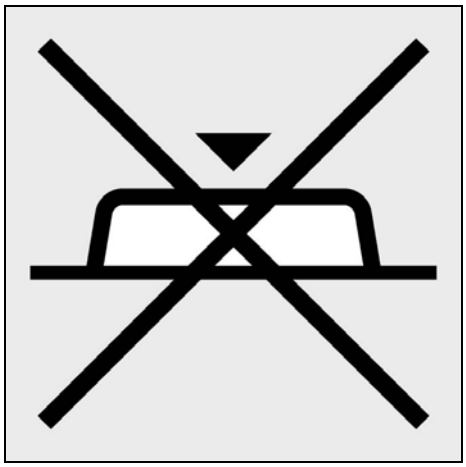
Graphic components:

- A horizontal line with a trapezoid at the centre.
- An inverted solid small triangle sits just above the trapezoid.
- Two long lines which intersect at the centre overlap the figure.

Identifier: GM015

Label: Keypad locked

Graphic:



Specific variations:

- None at present.

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6.16 Data security locked

Icon function: To inform the user that the database is protected. There are two states: locked and unlocked.

Specific instance: Padlock

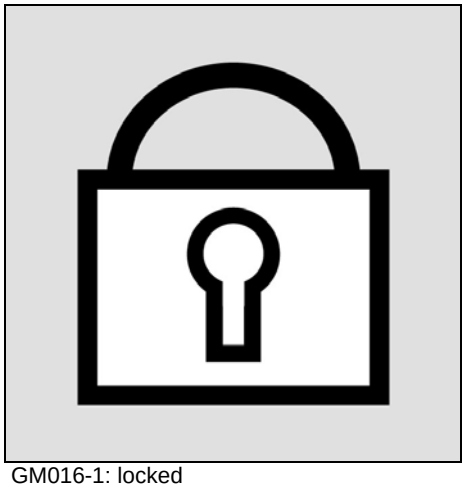
Graphic components:

- A keyhole shape inside of a rectangle with a semi-circle on top (for GM016-1).
- The figure in GM016-1 is moved to the right and the semi-circle on top is moved to the left (for GM0-16-2).

Identifier: GM016-1 and GM016-2

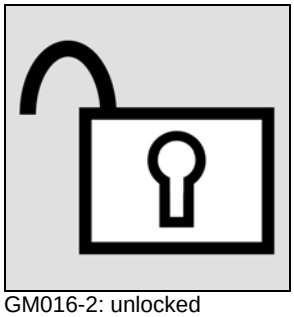
Label: Data security locked 01 and 02

Graphic:



GM016-1: locked

Specific variations:



GM016-2: unlocked

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6.17 Microphone

Icon function: To indicate the microphone's active state.

Specific instance: A microphone

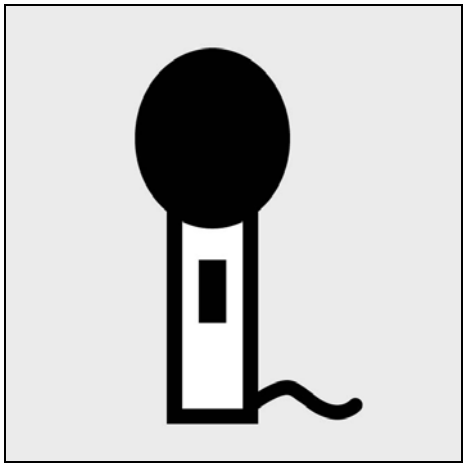
Graphic components:

- A black oval at the top.
- Two vertical lines drawn to the bottom and connected by a short horizontal line such that it resembles a longer than is wide rectangle.
- A small solid rectangle inside of the larger rectangle.
- A wave shape leading out from the larger rectangle towards the right.

Identifier: GM017

Label: Microphone

Graphic:



Specific variations:

- None at present.

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6.18 Vibration

Icon function: To show that the setting of vibration is on. There are two states: on and off. The vibration will activate to notify the user that an e-mail or telephone call has been received.

Specific instance: Vibration wave

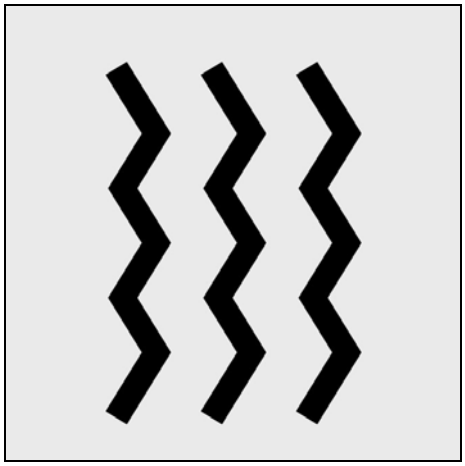
Graphic components:

- Three portrait lines that bend five times queue up (for GM018-1).
- Two long lines which intersect at the centre overlap the figure of GM018-1 (for GM018-2).

Identifier: GM018-1 and GM018-2

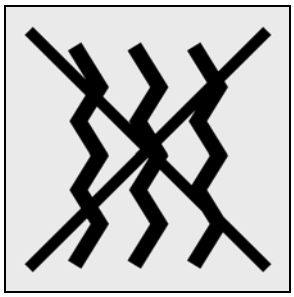
Label: Vibration 01 and 02

Graphic:



GM018-1: vibration on

Specific variations:



GM018-2: vibration off

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6.19 Ringing

Icon function: To show the setting of the ring tone. There are two states: on and off.

Specific instance: A ringing bell.

Graphic components:

- Bell shape with two round convex shapes at the top and bottom
- There is a small curve in the inside right and left. There is a large curve in the outside right and left. The curves queue up symmetrically around the bell (for GM019-1).
- Two long lines which intersect at the centre overlap the figure of GM019-1 (for GM019-2).

Identifier: GM019-1 and GM019-2

Label: Ringing 01 and 02

Graphic:

GM019-1: Ringing on

Specific variations:

GM019-2: Ringing off

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6.20 Battery status indicator

Icon function: To show the amount of the charge of an internal battery. There are four states: fully charged, charged, weak or empty.

Specific instance: Dry-cell battery.

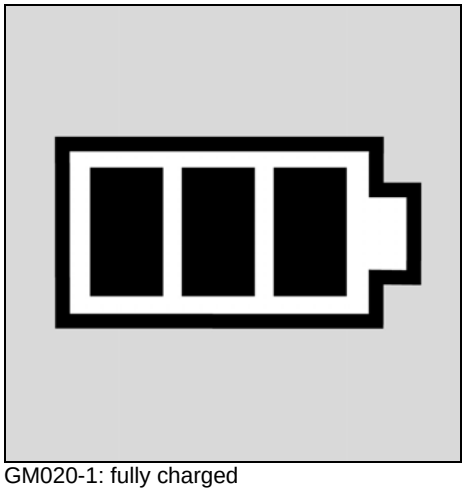
Graphic components:

- A big rectangle with an added small bump at the right side; right angle bended two corners outside.
- Small black solid rectangles inside: none for GM020-4, 1 for GM020-3, 2 for GM020-2, 3 for GM020-1

Identifier: GM020-1, GM020-2, GM020-3 and GM020-4

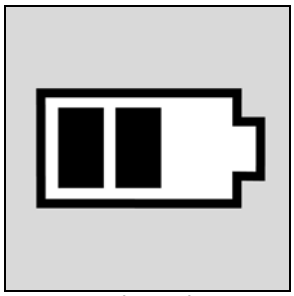
Label: Battery 01, 02, 03 and 04

Graphic:

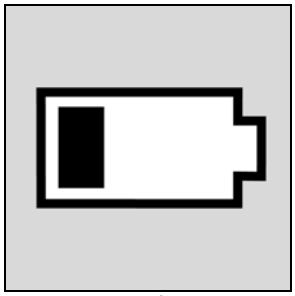


GM020-1: fully charged

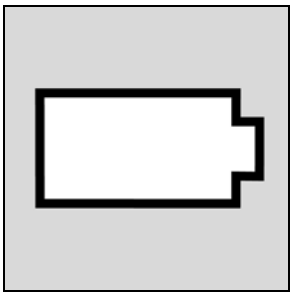
Specific variations:



GM020-2: charged



GM020-3: weak



GM020-4: empty

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