



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 40694.1-2021

**Information technology - Pictograms, icons and symbols for
use with biometric systems - Part 1: General principles**

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1 Scope

GB/T 40694 defines a series of icons and symbols related to biometric registration, verification and/or identification equipment. This document describes the methods used to specify icons. It considers the development of icons and symbols. It describes the scope of biometric technology. These symbols and icons are designed to show the modality of biometric identification and explain the need for proper preparation and behavior when using a biometric system. They are also designed to help subjects use biometric identification systems by guiding them.

GB/T 40694 describes the registration and identification process. Icons and symbols specifically for biometric registration are not designated, as most registration systems will be supervised, and a support staff will explain to the biometric collection subject how to operate.

GB/T 40694 describes the interaction with the data collection subject. Operators may use this document, but they may require other symbols and information.

2 Normative references

There are no normative references in this document.

3 Compliance

If the use of illustrations, icons and symbols in the biometric identification system follows the provisions of Chapter 7, it complies with this document. If the definitions of diagrams, icons and symbols used in biometric identification systems follow the methods provided in Chapter 6, they comply with this document.

4 Terms and definitions

The following terms and definitions apply to this document.

4.1 attendant

individuals who provide guidance or assistance in enrolling (biometric collection)

subjects or verifying their biometric data modality, icons and symbols will be defined in the various parts of GB/T 40694. Each part describes the specification of how to use or display icons and symbols. Multiple symbols and icons can be used if there are multiple modalities.

Compound concepts such as retrying for help after a failure can use a series of combined icons and symbols to guide the user.

If icons and symbols are common for biometric registration and identification, they shall be used in both cases. Applicants and operators shall be familiarized with common symbols for various biometric modalities through applicant registration.

NOTE 1: Other features, such as an illuminated sign indicating that the system is running or an internally illuminated fingerprint reader, are outside the scope of this document. The use of the icons contained in this document does not preclude the use of other illuminated cues, so as to assist visually impaired persons to place their fingers in the reader.

NOTE 2: It is not excluded that other icons/symbols may be applied in biometric collection scenarios where the subject is moving.

6 Methods of icon and symbol definition

6.1 Design The defined family of icons and symbols shall achieve a high degree of association between meaning and symbols, as well as visual recognizability in a variety of situations. The development of symbols and icons for the different parts of GB/T 40694 is in line with ISO/IEC 80416 (all parts) through liaison between ISO/IEC committees and IEC/SC 3C.

6.2 Test The symbols and icons defined in different parts of GB/T 40694 shall be targeted to subjects from different genders and ages, cultures, races, religions, educational backgrounds and persons with disabilities who have been under operating conditions.

They have been tested according to ISO 9186 (all parts). Different test methods can be used and shall be described. For example, Annex A of ISO/IEC 24779-4:2017 describes the National Institute of Standards and Technology (NIST) test method used.

The testing methodology requires knowledge of real-world situations and conditions, so cultural sensitivities, including hands, faces, eyes, are carefully considered. Scenario and/or run tests need to be supplemented by tests in one or more real-world environments. For example, the test allows for multiple types of use, like, while waiting in line to use the terminal and while the terminal is in use.