

RECOMMENDATION ITU-R V.461-5*

**GRAPHICAL SYMBOLS AND RULES FOR THE PREPARATION
OF DOCUMENTATION IN TELECOMMUNICATIONS**

(1970-1974-1978-1982-1990-1993)

Scope

This Recommendation gives references to texts of the International Electrotechnical Commission (IEC), related to documentation and graphical symbols to be used on diagrams concerning telecommunications.

The ITU Radiocommunication Assembly,

recommends

1 that, on diagrams for international use concerning telecommunications, the administrations and recognized operating agencies and the Radiocommunication Bureau should use the graphical symbols for diagrams given in International Electrotechnical Commission (IEC) Series 617 publications and should observe the rules for the preparation of documentation and for item designation laid down in IEC Publication 113 and 750.

Administrations wishing to use symbols on equipment are recommended to refer to IEC Publication 417.

NOTE 1 – References of relevant publications (updated in 2000):

The series 617 Publications are now International Standards of the series IEC 60617. Publications 113 and 750 are replaced respectively, by series:

IEC 61082: “Preparation of documents used in electrotechnology”

- 61082-1 (1991) Part 1: General requirements
- Amendments 1 and 2 to 61082-1 (1995) (1996)
- 61082-2 (1993) Part 2: Function-oriented diagrams
- 61082-3 (1993) Part 3: Connection diagrams, tables and lists
- 61082-4 (1996) Part 4: Location and installation documents
- 61082-6 (1997) Part 6: Index

IEC 61346: “Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations”

- 61346-1 (1996) Part 1: Basic rules
- 61346-2 (2000) Part 2: Classification of objects and codes for classes
- 61346-4 (1998) Part 4: Discussion of concepts.

Publication 417 was replaced in 1998 by IEC 60417.

IEC 60416 (1988): “General principles for graphical symbols for use on equipment” (being revised)

IEC 60417: “Graphical symbols for use on equipment” (new edition in two parts was published in 1998 to replace the 1973 edition and its 15 Supplements published from 1974 to 1997)

- 60417-2 (1998) Part 2: Symbol originals

IEC 60617 “Graphical symbols for diagrams” (2nd edition, replaces Publication 617, which replaced Publication 117)

- 60617-1 Part 1: General information, general index. Cross-reference tables (1995)
- 60617-2 (1996) Part 2: Symbol elements, qualifying symbols and other symbols having general application)
- 60617-3 (1996) Part 3: Conductors and connecting devices

* This Recommendation was updated in 2005 for editorial reasons only.

- 60617-4 (1996) Part 4: Basic passive components
- 60617-5 (1996) Part 5: Semiconductors and electron tubes
- 60617-6 (1996) Part 6: Production and conversion of electrical energy
- 60617-7 (1996) Part 7: Switchgear, controlgear and protective devices
- 60617-8 (1996) Part 8: Measuring instruments, lamps and signalling devices
- 60617-9 (1996) Part 9: Telecommunications: Switching and peripheral equipment
- 60617-10 (1996) Part 10: Telecommunications: Transmission
- 60617-11 (1996) Part 11: Architectural and topographical installation plans and diagrams
- 60617-12 (1997) Part 12: Binary logic elements
- 60617-13 (1993) Part 13: Analogue elements

IEC 61082: "Preparation of documents used in electrotechnology" (replaces IEC 113)

- 61082-1 (1996) General requirements
- Amendment 2 to 61082-1 (1996)
- 61082-2 (1983) Function-oriented diagrams
- 61082-3 (1991) Connection diagrams, tables and lists
- 61082-4 (1993) Location and installation documents

IEC 61175: "Designations for signals and connections" (1993)

IEC 61346: "Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations" (replaces IEC 750)

- 61346-1 Basic rules (1996)
- 61346-2 Classification of objects and codes for classes (2000)
- 61346-3 Application guidelines (Technical Report being prepared)
- 61346-4 Discussion of concepts (Technical Report 1998)

IEC/ISO 61714: "Design of graphical symbols for use in the technical documentation of products"

- 61714-1 Basic rules (1996).
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