

BRITISH STANDARD 4727 : Part 3 : Group 02 : 1971

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**GLOSSARY OF
ELECTROTECHNICAL, POWER,
TELECOMMUNICATION,
ELECTRONICS, LIGHTING AND
COLOUR TERMS**

**PART 3. TERMS PARTICULAR TO
TELECOMMUNICATIONS AND ELECTRONICS**

Group 02. Telephony terminology

BRITISH STANDARDS INSTITUTION

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Price £1.20

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The following BSI references relate to the work on this standard:
Committee references ELE/TLE/1, ELE/TLE/1/7

CO-OPERATING ORGANIZATIONS

The Electrical Industry Standards Committee and the Telecommunication Industry Standards Committee under whose supervision this British Standard was prepared consist of representatives from the following Government departments and scientific and industrial organizations:

- | | |
|---|---|
| Associated Offices' Technical Committee | Engineering Equipment Users' Association |
| *Association of Consulting Engineers | *Institution of Electrical Engineers |
| Association of Manufacturers of Domestic Electrical Appliances | *Institution of Electronic and Radio Engineers |
| Association of Mining Electrical and Mechanical Engineers | Institution of Production Engineers |
| Association of Supervisory and Executive Engineers | *Lighting Industry Federation Limited |
| *British Broadcasting Corporation | *Ministry of Defence |
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| *Electronic Valve and Semi-conductor Manufacturers' Association | Scientific Instrument Manufacturers' Association |
| | Society of British Aerospace Companies |
| | South of Scotland Electricity Board |
| | *Telecommunication Engineering and Manufacturing Association |

The Government departments and scientific and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

- | | |
|---|--|
| Institute of Physics and the Physical Society | Telephone Manufacturers' Technical Development Committee |
| Radio and Electronics Technical Press | |

GUIDE TO THE GLOSSARY

Part 1. Terms common to power, telecommunications and electronics

- Group 01. Fundamental concepts
- Group 02. General technological terminology
- Group 03. Relay terminology
- Group . Measurement terminology*
- Group . Semiconductor terminology*
- Group . Electronic tube terminology*
- Group . Magnetism terminology*
- Group . Radiological terminology*
- Group . Radio interference terminology*
- Group . Integrated electronic circuit terminology*

Titles to any further groups will be added in due course.

Part 2. Terms particular to power engineering

- Group 01. General power terminology
- Group 02. Static convertor terminology
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- Group 04. Transformer terminology*
- Group 05. Voltage fluctuation terminology*
- Group . Power switchgear terminology*
- Group . Power systems terminology*
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- Group . Traction terminology*
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Titles to any further groups will be added in due course.

* Not yet published, as at , 1971.

Part 3. Terms particular to telecommunications and electronics

- Group 01. General telecommunication and electronics terminology
- Group 02. Telephony terminology
- Group 03. Telegraphy, including facsimile, terminology
- Group 04. Broadcasting, radio and television terminology
- Group 05. Propagation and media terminology
- Group 06. Radio location and navigation terminology
- Group 07. Radiocommunication terminology

Titles to any further groups will be added in due course.

Part 4. Terms particular to lighting and colour

- Group 01. Radiation and photometry terminology
- Group 02. Vision and colour terminology
- Group 03. Lighting technology terminology*

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BRITISH STANDARD GLOSSARY OF ELECTROTECHNICAL, POWER, TELECOMMUNICATION, ELECTRONICS, LIGHTING AND COLOUR TERMS

Part 3. Terms Particular to Telecommunications and Electronics

Group 02. Telephone terminology

FOREWORD

This Group of Part 3 of this British Standard Glossary, prepared under the authority of the Electrical Industry Standards Committee and the Telecommunication Industry Standards Committee, contains terms and definitions relating to telephony and supersedes Subsections 16, 'Speech testing and acoustics', and 71, 'Telephony', of BS 204*. The terms and definitions are in close agreement with the corresponding terms in the latest edition of the International Electrotechnical Vocabulary prepared by the International Electrotechnical Commission (IEC).

In this new glossary a number of significant changes have been introduced. It has been decided to combine into one glossary the subjects previously covered by BS 204, BS 205†, BS 233‡ and BS 1611§ glossaries. The glossary is divided into four main Parts, each of which is further subdivided into groups. Each group will comprise the terms and definitions used in a particular branch of electrical engineering and will be issued individually as soon as it is completed. This arrangement makes it possible to add new groups, or revise existing groups, at any time without affecting the remainder of the glossary.

The four main Parts of the glossary are as follows:

Part 1. Terms common to power, telecommunications and electronics.

Part 2. Terms particular to power engineering.

Part 3. Terms particular to telecommunications and electronics.

Part 4. Terms particular to lighting and colour.

As groups of terms within the new framework are published, the corresponding parts of the British Standard glossaries mentioned above will be withdrawn. Ultimately the new glossary will replace these standards completely and they will then be withdrawn.

Fundamental and general terms common to power, telecommunications and electronics, respectively form the first two groups of Part 1. General terms particular to Part 2 and Part 3 similarly form the first groups of their respective Parts. The specialist groups contain only the terms and definitions relating to their subject.

As far as has been practicable all terms and definitions established in current usage and falling within the scope of this glossary have been included. Experience has shown that it is rarely possible to replace, or even to modify, a well established term no matter what the logical or aesthetic shortcomings of that term may be. Current usage has therefore been accepted as the authority for terms and their meanings except where there has been a very good reason for doing otherwise, as, for example, where terms have been considered to be fundamentally wrong, ambiguous, superfluous or in need of standardization. Where two or more synonymous terms are in use those which are deprecated are omitted from the body of the text but are entered in the alphabetical index with a cross reference to the standard term. In cases where it was felt that the time was not yet right to deprecate a synonym, preferred terms are given first and other terms are printed in less prominent type to indicate the intention to deprecate them in the course of time. Where synonyms are considered of equal value they are shown in the same type.

Where terms are used with somewhat different meanings in different branches of electrical engineering, appropriate definitions are given in the groups of the glossary corresponding to these branches. Such a definition, when taken out of the context of its group, should always be quoted with a preamble indicating its proper context.

* BS 204, 'Glossary of terms used in telecommunication (including radio) and electronics'.

† BS 205, 'Glossary of terms used in electrical engineering'.

‡ BS 233, 'Glossary of terms used in illumination and photometry'.

§ BS 1611, 'Glossary of colour terms used in science and industry'.

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It is to be noted that the given definition of a term represents the generally accepted meaning of that term. Under no circumstances should it be regarded as taking the place of a specification.

An effort has been made to arrange the terms in a logical order proceeding from the general to the specific and from the whole to the part and placing allied terms in proximity within a subsection or section of the group. Each term has assigned to it a Part number (one digit) and a Group number of two digits followed by a space and four digits, the first digit of which represents the section, the second digit the subsection and the last two digits the place within the subsection.

A general view of the arrangement of the group in the glossary can be obtained from the Guide to the Glossary. An alphabetical index of the terms of the group is provided at the end to facilitate reference to particular terms. For simplicity, only the last four digits of a term's number are quoted in the index. It is recommended that the user of any group of the glossary should consider the group in association with the groups covering general or fundamental terms within the Part, for Parts 2 and 3, and also together with Groups 01 and 02 of Part 1.

In this glossary round brackets () enclose words or phrases which are not part of the term or definition and can be omitted without affecting the meaning.

Square brackets [] enclose words which may replace a preceding part of an expression. The limiting sign [indicates, if necessary, how many of the preceding words are replaced.

302 1 SUBSCRIBERS' STATIONS AND EQUIPMENT

No.	Term	Definition
302 1001	telephone set	An assembly of apparatus including a telephone transmitter, a telephone receiver, and usually a switch hook and the immediately associated wiring and components.
302 1002	telephone station	A telephone set connected to a telephone network.
302 1003	subscriber's station	A telephone station having access to a public telephone network.
302 1004	subscriber's main station	A subscriber's station which is used for originating calls and on which incoming calls from the exchange or from an extension station are answered.
302 1005	subscriber's extension station; extension	A telephone station, associated with a subscriber's main station or branch exchange, which may be connected to the same subscriber's line(s). The setting up of incoming calls generally requires the intervention of the subscriber's main station or branch exchange.
302 1006	public call-office	A telephone station available for the use of the public on payment of a fee, which may be deposited in a coin box or paid to an attendant.
302 1007	unrestricted extension	A P.A.B.X. extension from which interconnection is possible to any other extension in the same P.A.B.X. and also to the public exchange. Exchange-line calls may be originated without the assistance of an operator.
302 1008	partially restricted extension	A P.A.B.X. station at which, in addition to automatic local traffic on the same P.A.B.X., exchange-line calls can be received. In order to originate exchange-line calls, however, the assistance of the P.A.B.X. operator is necessary.
302 1009	completely restricted extension	A P.B.X. extension restricted to internal calls only. Exchange-line calls can be neither received nor originated.
302 1010	'manager-and-secretary' station	Two special telephone sets providing direct, non-dialling connection between manager and secretary and vice versa, and enabling the secretary to answer and extend calls to the manager, and to set up outgoing calls for the manager. Furthermore, direct connections may be provided from the manager's set to important executives.
302 1011	attendant's set	A telephone set equipped with switching facilities where incoming exchange-line calls are answered and extended.
302 1012	calling subscriber	The subscriber who originates a telephone call.
302 1013	called subscriber	The subscriber required by the calling subscriber.

No.	Term	Definition
302 1014	subscriber's line	A telephone line connecting a telephone exchange and a telephone station or private branch exchange.
302 1015	exclusive exchange line	A subscriber's line with one exchange number on which only one subscriber's installation is connected to an exchange.
302 1016	party line; rural party line	A line serving two or more subscriber stations, possibly with selective calling, each station having its own exchange number.
302 1017	shared-service line	A line serving two subscriber stations each having its own exchange number.
302 1018	inter-switchboard line; tie line	A line between two private branch exchanges or private exchanges.
302 1019	house telephone system	A system without a central switchboard, for providing direct communication between any station and any other station(s) in the system. The system is not connected to the public exchange.
302 1020	house exchange system	A system without a central switchboard, for providing direct communication between any station and any other station(s) in the system. The system includes means for direct connection to the public exchange.
302 1021	P.B.X. power lead	A line used only for supplying direct current from a public exchange to a P.B.X.
302 1022	P.B.X. ringing lead	A line used only for supplying ringing current from a public exchange to a P.B.X.
302 1023	private wire (telephone) circuit; leased circuit	A circuit placed at the exclusive permanent disposal of a subscriber.
302 1024	part-time private wire (telephone) circuit; part-time leased circuit	A circuit placed at the exclusive disposal of a renter for pre-arranged regular periods.
302 1025	dial	A calling device operated by the rotation of a disc which, on its release, produces the pulses necessary to establish a connection in an automatic system.
302 1026	induction coil	A transformer in a subscriber's set for the matching of the receiver and microphone to the line and providing for the reduction of sidetone.
302 1027	anti-sidetone device	<i>In a subscriber's set.</i> A circuit designed to reduce sidetone.
302 1028	magneto bell	A polarized electric bell operated by alternating current of low frequency.
302 1029	trembler bell	A non-polarized electric bell operated by current made intermittent by a contact associated with the bell hammer.
302 1030	receiver	An electro-acoustic transducer operating from an electrical system to an acoustical system and designed to be applied to the ear.
302 1031	receiver rest; cradle switch; switch hook	A switch associated with the support for the subscriber's receiver or hand set.
302 1032	hand set	A rigid combination of telephone microphone and receiver in a form convenient for holding simultaneously to mouth and ear.
302 1033	microphone	An electro-acoustic transducer operating from an acoustical system to an electrical system.
302 1034	carbon microphone	A microphone which depends for its operation upon the variation in resistance of carbon contacts.

302 2 EXCHANGES AND POSITIONS

No.	Term	Definition
302 2001	exchange	A switching centre for inter-connecting the lines which terminate therein.
302 2002	local exchange	An exchange in which subscribers' lines terminate.
302 2003	trunk exchange	An exchange (manual or automatic) the principal function of which is to control the switching of trunk traffic.
302 2004	automatic exchange	An exchange in which the interconnections are effected by means of automatic apparatus.
302 2005	semi-automatic exchange	An exchange employing semi-automatic working.
302 2006	unit automatic exchange; U.A.X.	An automatic exchange designed to provide service for small communities.
302 2007	auto-manual exchange	A switchboard serving one or more automatic exchanges for the purpose of handling manually-operated traffic. The switchboard is usually located at one of the automatic exchanges served.
302 2008	non-parent exchange	An auto-manual or manual exchange which handles traffic from an automatic exchange but which is not the parent exchange.
302 2009	parent exchange of an automatic exchange	The auto-manual or manual exchange which handles the assistance traffic. One auto-manual or manual exchange can be the parent for a number of automatic exchanges.
302 2010	dependent exchange	An exchange which has access to its group centre via a minor exchange.
302 2011	minor exchange	An exchange which is directly connected to its group centre.
302 2012	zone centre	An exchange acting as the main switching centre for a certain number of group centres in a defined area. Each zone centre has access, directly or indirectly, to all the other zone centres. Circuits between zone centres, whether direct or indirect, are normally low loss circuits.
302 2013	sub-zone centre	An exchange acting as the major switching centre for a number of group centres in a defined part of a zone. A sub-zone centre is not directly connected to all other zone or sub-zone centres.
302 2014	trunk control centre	An auto-manual exchange, the prime function of which is the control of trunk traffic from the exchanges which it serves.
302 2015	tandem exchange	An exchange used primarily as a switching point for traffic between other exchanges.
302 2016	auto-switching centre	An exchange at which part of the automatic equipment is used as a tandem exchange.
302 2017	adjacent exchange	An exchange is regarded as adjacent to another when connected by direct junctions.
302 2018	terminal exchange	An exchange receiving incoming traffic directed only to its own subscribers.
302 2019	manual exchange	An exchange at which the interconnection of circuits is effected manually.
302 2020	main exchange	An automatic exchange which has other exchanges dependent upon it for their principal traffic outlets.
302 2021	numbering scheme	A method of allocating a range of numbers to the subscribers in a given area. The number of digits in the subscribers' numbers may be given, e.g. a five-digit numbering scheme.
302 2022	exchange area	The district served by a specified exchange.
302 2023	multi-exchange area	An area served by a linked numbering scheme.
302 2024	country satellite exchange	A small exchange serving a rural community in which all calls are controlled by an operator located at a remote exchange.
302 2025	private exchange	An exchange not connected to a public telephone network.

No.	Term	Definition
302 2026	private automatic exchange; P.A.X.	A private exchange operating on an automatic basis.
302 2027	private manual exchange; P.M.X.	A private exchange operating on a manual basis.
302 2028	private branch exchange; P.B.X.	An exchange which is usually installed on the premises of a subscriber and which is connected to a public exchange by one or more lines.
302 2029	subscriber's installation with extensions; extension plan	A telephone installation serving a private organization and directly connected to the public network by means of an exchange line. The installation consists of one main station and extension stations.
302 2030	private automatic branch exchange; P.A.B.X.	A private branch exchange operating on an automatic basis.
302 2031	private manual branch exchange; P.M.B.X.	A private branch exchange operating on a manual basis.
302 2032	private telephone network	A telephone network serving a large organization (e.g. a public utility). The network includes one or several exchanges; its lines are either owned by that organization or are leased lines. The individual exchanges of the network may have lines to the local public exchange.
302 2033	switchboard	<i>In an exchange.</i> A suite of one or more operating positions at which the interconnection of lines is manually controlled.
302 2034	manual position	That part of a switchboard or desk normally staffed by one operator.
302 2035	A-position	A manual position on which calls from subscribers' circuits are received.
302 2036	B-position	A position on which calls from other exchanges are received for completion and which has direct access to the called subscriber's lines.
302 2037	trunk record position	A position to which subscribers' circuits are extended in order that particulars may be recorded of calls which are to be completed later over a trunk circuit.
302 2038	enquiry position	A position at which enquiries and complaints are handled.
302 2039	testing position	1. A position in a manual exchange at which the operating staff makes preliminary tests of lines reported faulty. 2. A position equipped for testing purposes and forming part of a test desk or test rack.
302 2040	phonogram position	A position at which telegrams are received from, and dictated to, subscribers by telephone.
302 2041	non-director exchange	A local automatic exchange in which the routing of local traffic is not controlled by directors. NOTE 1. The routing of traffic to other subscribers in the same self-contained or linked numbering scheme is usually determined directly by the dialled digits. NOTE 2. By usage, the term includes satellite exchanges but excludes U.A.X.'s.
302 2042	director exchange	A local automatic exchange in which the routing of some of the originating traffic is controlled by directors.
302 2043	remote manual board	An automatic exchange has a remote manual board when its parent exchange is in a building other than that housing the automatic exchange.
302 2044	detached manual board	A switchboard which is in a building other than that accommodating its connecting and controlling equipment.

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No.	Term	Definition
302 2045	sleeve control switchboard	A manual switchboard in which supervisory signals are controlled over the cord circuit sleeve connection by line terminating equipment, the cord circuits having no transmission bridges.
302 2046	bridge control switchboard	A manual switchboard in which each cord circuit has a transmission bridge which controls the supervisory signals.
302 2047	double-cord switchboard	A switchboard in which incoming and outgoing lines are terminated by jacks, interconnection of two circuits being accomplished by cord circuits having a separate answering or calling plug.
302 2048	single-cord switchboard	A switchboard in which incoming lines (e.g. the exchange lines in certain types of P.B.X.'s) are terminated on cords and plugs. Thus the cord circuit contains the line terminal apparatus and one cord and plug, the latter serving as a calling plug.
302 2049	cordless switchboard	A switchboard at which interconnection of circuits is accomplished or controlled without the use of plugs or jacks.