
Glossary of Electrotechnical, power, telecommunication, electronics, lighting and colour terms

Part 3. Terms particular to telecommunications and electronics Group 10. Recording and reproduction of sound and video terminology

Glossaire des termes relatifs à l'électrotechnique, à l'électricité,
aux télécommunications, à l'électronique, à l'éclairage et à la couleur
Partie 3. Termes spécialisés des télécommunications et de l'électronique
Group 10. Terminologie d'enregistrement et lecture du son et des images

Glossarium von Begriffen aus der Elektrotechnik, Fernmeldetechnik, Elektronik und
Lichttechnik, sowie dem Energie- und Farbwesen
Teil 3. Bestimmung von Begriffen der Fernmeldetechnik und Elektronik
Gruppe 10. Terminologie der Schall- und Bildaufnahme und - Wiedergabe

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

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*Not yet published, as at July 1979

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Foreword

This Group of Part 3 of this British Standard glossary, prepared under the direction of the General Electrotechnical Engineering Standards Committee, contains terms and definitions relating to recording and reproduction of sound and video. The text of this British Standard is identical with the English text of Chapter 806, first edition, 1975, of the International Electrotechnical Vocabulary published 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 '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' and BS 1611 'Glossary of colour terms used in science and in industry'. These four glossaries have now been withdrawn.

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

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, e.g. 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.

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. 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. The International Electrotechnical Vocabulary employs a different numbering system and for convenience the IEV number is given in parentheses after the BS number for each term.

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 parentheses () enclose words or phrases that are not part of the term or definition and can be omitted without affecting the meaning.

British Standard Glossary of

Electrotechnical, power, telecommunication, electronics, lighting and colour terms

Part 3. Terms particular to telecommunications and electronics

Group 10. Recording and reproduction of sound and video terminology

310 1 (806-01). General terms relating to both audio and video

No.	Term	Definition
310 1001 (806-01-01)	recording	1. Action by which signals are suitably embodied in a material base. 2. Techniques whereby information is embodied in a material base with the aim of preserving them with a view to their subsequent reproduction. 3. Material base for signals after embodiment and, through extension, the signals themselves after reproduction.
310 1002 (806-01-02)	recording medium	Material suitable for recording signals.
310 1003 (806-01-03)	recording system	Apparatus whereby the state or configuration of a suitable recording medium can be changed in conformity with signals, in such a way that these signals can be reproduced.
310 1004 (806-01-04)	recording channel	A transmission channel for the purpose of carrying the signal to be recorded from a signal source to the recording medium. A recording system may have several channels.
310 1005 (806-01-05)	recording chain	A chain for transmission of signals from the input of the system to and including the recording medium.
310 1006 (806-01-06)	reproduction playback replay	The regeneration of recorded signals in their original form.
310 1007 (806-01-07)	reproducing system	Equipment for recreating signals embodied in a recording medium.
310 1008 (806-01-08)	reproducing channel	A transmission channel for the purpose of carrying the signal being reproduced from a recording medium to an output, this output then being considered as the signal source. Several channels may be included in a reproducing equipment.
310 1009 (806-01-09)	reproducing chain	A chain for transmission of the signals from the recording medium to the output of the system.
310 1010 (806-01-10)	equalization	Modification of the amplitude/frequency response characteristics of a recording or reproducing system with the purpose of compensating for deficiencies within the system.
310 1011 (806-01-11)	pre-emphasis pre-equalization	The operation which consists in modifying the amplitude/frequency characteristic of the signal to be recorded.
310 1012 (806-01-12)	de-emphasis post-equalization	The operation which consists in restoring the original amplitude/frequency characteristic of the recorded signal on reproduction.

No.	Term	Definition
310 1013 (806-01-13)	duplicating copying	An operation for simultaneously obtaining one or several examples of all or part of a recorded programme. NOTE. This operation is normally carried out at higher speed than that of the original recording.
310 1014 (806-01-14)	re-recording	An operation consisting in obtaining, by any method, on a recording medium all or part of a previously recorded programme.
310 1015 (806-01-15)	dubbing	The combination of two or more recordings into a composite recording by re-recording. The recording so obtained.
310 2 (806-02). General terms relating to audio		
310 2001 (806-02-01)	monophonic recording	Recording of audiofrequency signals via a single recording channel.
310 2002 (806-02-02)	stereophonic recording	Recording of two signals from two recording channels, in such a way that, after the reproducing process, the information on each recording channel is separately available. This process is intended to provide an impression of sound source location during reproduction.
310 2003 (806-02-03)	monophonic reproduction	Reproduction of a single or multi-channel recording through a single channel.
310 2004 (806-02-04)	stereophonic reproduction	Reproduction of a multi-channel recording through two channels.
310 2005 (806-02-05)	multi-channel recording	A recording technique using several channels. NOTE. e.g. stereophony (two channels); quadrophony (four channels).
310 2006 (806-02-06)	multi-channel reproduction	A reproducing technique using several channels. NOTE. e.g. stereophony (two channels); quadrophony (four channels).
310 2007 (806-02-07)	monophonic recording/ reproduction monophony	Recording and reproducing techniques using one channel.
310 2008 (806-02-08)	reference level	The magnitude of a significant parameter of a recorded medium. It is expressed in terms of recorded velocity in disk recording, and of short-circuit magnetic flux in magnetic recording. NOTE. It enables relative recorded programme levels or relative noise levels to be defined.
310 2009 (806-02-09)	recorded level	The magnitude of the signal level on a recorded medium defined by comparison with a reference level.
310 2010 (806-02-10)	recording level	On a recording medium, the value of the recorded level for a stated percentage of distortion. NOTE. It shall be stated whether this level is a measure of r.m.s., peak or peak-to-peak values.
310 2011 (806-02-11)	recording characteristic	The variation, with respect to frequency, of the recorded level, when a signal of constant level and variable frequency is applied to the input of a recording system. In disk recording, the recording characteristic is defined in terms of velocity; in magnetic recording in terms of short-circuit flux.
310 2012 (806-02-12)	recording loss	The attenuation, in a recording system, of the level of a recorded signal with respect to frequency. NOTE. The loss may be due to different causes, e.g. the finite dimensions of a cutting stylus.
310 2013 (806-02-13)	ideal transducer	A transducer, the losses of which are negligible.

No.	Term	Definition
310 2014 (806-02-14)	reproducing characteristic	The inverse of the recording characteristic. The variation, with respect to frequency of the output level of an ideal reproducing transducer, when reproducing a medium, recorded with a given recording characteristic. In disk recording, the reproducing characteristic is defined in terms of recorded velocity; in magnetic recording, in terms of short-circuit flux.
310 2015 (806-02-15)	reproducing loss	The attenuation, with respect to frequency, of the output of a reproducing transducer when compared to the output of an ideal reproducing transducer. NOTE. The reproducing loss may be due in disk recording to the finite dimensions of the reproducing stylus tip, or to groove wall deformations, and in magnetic recording to the magnetic head gap length and/or head core losses, during reproduction.
310 2016 (806-02-16)	background noise	Unwanted signals present at the output of a transmission channel in the absence of the wanted signal, when the channel is in normal operation.
310 2017 (806-02-17)	modulation noise	Unwanted signals generated by a wanted signal, excluding those due to harmonic and intermodulation products. Their characteristics are dependent upon the recording medium as well as the signal characteristic.
310 2018 (806-02-18)	channel separation	The ratio, expressed in decibels, between two voltages occurring at the output terminals of a given channel A, viz. U_A due to the wanted signal intended for channel A, and U'_B due to the unwanted signal produced by channel B in channel A.
310 2019 (806-02-19)	cross-talk	The ratio, expressed in decibels, between two voltages occurring at the output terminals of channels A and B, viz. U_A due to the wanted signal intended for channel A, and U'_A due to the unwanted signal produced by channel A in channel B.
310 2020 (806-02-20)	channel balancing	The operation consisting in adjusting the parameters of a stereophonic system, in order to obtain identical characteristics in each channel.
310 2021 (806-02-21)	channel phasing	The correct connection of stereophonic reproducing equipment so that signals applied in phase to the input of both channels are in phase at corresponding points in each channel.
310 2022 (806-02-22)	speed fluctuation	A spurious frequency modulation in the recorded signal, in general caused by variation of the speed of the recording medium.
310 2023 (806-02-23)	flutter	An undesired form of frequency modulation introduced into the recorded signal by an irregular motion of the recording medium during the recording/reproducing process, the frequency of which is above 10 Hz.
310 2024 (806-02-24)	wow	An undesired form of frequency modulation introduced into the recorded signal by an irregular motion of the recording medium during the recording/reproducing process, the frequency of which is included between 0.1 Hz and 10 Hz.
310 2025 (806-02-25)	drift	An undesired slow variation of the speed of the recording medium during the recording/reproducing process.
310 2026 (806-02-26)	mixing	A process for combining several signals appearing simultaneously from several sources into a single signal.

310 3 (806-03). Sound recording and reproduction on disk: Terms relating to disk

No.	Term	Definition
310 3001 (806-03-01)	disk record	A piece of plastic material in the form of a disk on which a modulation is mechanically recorded.
310 3002 (806-03-02)	groove	A track in the form of a spiral with or without modulation, inscribed or moulded in the surface of a disk.
310 3003 (806-03-03)	internal groove sidewall	The groove wall nearer to the centre of the disk.
310 3004 (806-03-04)	external groove sidewall	The groove wall nearer to the external rim of the disk.
310 3005 (806-03-05)	groove width	The radial distance between the intersections of the groove sidewalls and the surface plane of the disk.
310 3006 (806-03-06)	groove depth	The perpendicular distance from the disk surface to the groove bottom.
310 3007 (806-03-07)	groove angle	The included angle between the two sidewalls of the groove of a disk measured in a radial plane perpendicular to the disk surface.
310 3008 (806-03-08)	bottom radius	The radius of the bottom of a groove.
310 3009 (806-03-09)	groove shape	The cross-section of the groove in a radial plane. It is defined in terms of top width, included angle, and bottom radius.
310 3010 (806-03-10)	coarse groove	A groove, the width of which is normally more than 0.15 mm and is cut on disks which are recorded at the rated speed of 78 r/min.
310 3011 (806-03-11)	microgroove fine groove	A groove of small depth and width, normally less than 0.12 mm in width.
310 3012 (806-03-12)	long-playing record	A record with an appreciably increased playing time compared to a coarse groove, due to the use of a microgroove at a very fine pitch which is recorded at a rated speed of $33\frac{1}{3}$ r/min or 45 r/min.
310 3013 (806-03-13)	pitch	The reciprocal of the number of grooves per unit width. NOTE. The centimetre is generally taken as unit.
310 3014 (806-03-14)	plain groove blank groove	Any length of groove which carries no recording.
310 3015 (806-03-15)	modulated groove	A groove containing lateral or vertical, or $45^\circ \times 45^\circ$ stereophonic recording.
310 3016 (806-03-16)	lead-in groove	A plain groove that starts at the periphery of the record and the pitch of which is greater than the normal recording pitch.
310 3017 (806-03-17)	lead-out groove	A plain groove which follows the modulated groove, whose pitch is greater than the normal recording pitch.
310 3018 (806-03-18)	finishing groove	A plain circular groove which follows the lead-out groove.
310 3019 (806-03-19)	lead-over groove	A spiral groove connecting two sections or bands of a disk.
310 3020 (806-03-20)	eccentric groove	A circular groove, the centre of which is not coincident with the normal axis of rotation of the disk.
310 3021 (806-03-21)	locked groove concentric groove	An unmodulated locked continuous circular groove whose centre is coincident with the centre of the recording spiral. It follows a modulated groove and is used for the purpose of preventing further inward or outward movement of the pick-up.

No.	Term	Definition
310 3022 (806-03-22)	fast spiral	An unmodulated groove on a disk having a spacing that is much greater than that of the modulated groove.
310 3023 (806-03-23)	variable groove pitch	A groove, the spacing of which varies in relation to the lateral and/or vertical modulation displacement of the cutting stylus.
310 3024 (806-03-24)	variable groove depth	A groove, the average depth of which varies in relation to the lateral and/or vertical amplitude of the modulation.
310 3025 (806-03-25)	grouping	The non-uniformity in spacing between the spiral grooves of a disk caused by an irregular motion of the recording lathe feed screw.
310 3026 (806-03-26)	recorded surface modulated section	The portion of the surface of a disk containing modulation.
310 3027 (806-03-27)	inner diameter of the recorded surface	The diameter of the last modulated groove at the point where the lead-out groove commences.
310 3028 (806-03-28)	outer diameter of the recorded surface	The diameter of the last groove preceding the first modulated groove.
310 3029 (806-03-29)	marker space	A portion of the recorded surface where the groove pitch has been increased to mark the separation of two successive bands of recording.
310 3030 (806-03-30)	label area	The central portion of the disk between the finishing groove and the centre hole.
310 3031 (806-03-31)	groove guard	The raised outer rim and label area on a disk, used to prevent damage to the recorded surfaces when they are placed in contact with others on an automatic record changer.
310 3032 (806-03-32)	anti-slip serrations	Radial serrations in the outer part of the label area to prevent friction and slippage between records, during reproduction, when stacked on the spindle of an automatic record changer.
310 3033 (806-03-33)	groove speed	The linear speed of a disk groove with respect to a point such as a recording or reproducing stylus tip.
310 3034 (806-03-34)	eccentricity	The displacement of the centre of the recording groove spiral with respect to the centre of the disk centre hole.
310 3035 (806-03-35)	moulding	A process of forming, from a metal stamper, identical recorded plastic disks.
310 3036 (806-03-36)	injection moulding	A process of forming a disk by injection of a liquefied plastic material in a cavity.
310 3037 (808-03-37)	compression moulding	A process of forming a disk by compressing a charge of suitable plastic in a cavity.
310 3038 (806-03-38)	plastic	A resin or polymer suitable for moulding disks by application of heat to the mould cavity.
310 3039 (806-03-39)	granules	Small plastic grains manufactured to be used in moulding disks.
310 3040 (806-03-40)	binder	A resinous material which serves to bind the various component materials of a disk.
310 3041 (806-03-41)	biscuit	A small slab of plastic material for use in the compression moulding of disks.