

Transmission of audio and/or video and related signals using infra-red radiation —

Part 6: Video and audio-visual signals

The European Standard EN 61603-6:2002 has the status of a
British Standard

ICS 33.160.01; 33.040.40

National foreword

This British Standard is the official English language version of EN 61603-6:2002. It is identical with IEC 61603-6:2001.

The UK participation in its preparation was entrusted to Technical Committee EPL/100, Audio, video and multimedia systems, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

From 1 January 1997, all IEC publications have the number 60000 added to the old number. For instance, IEC 27-1 has been renumbered as IEC 60027-1. For a period of time during the change over from one numbering system to the other, publications may contain identifiers from both systems.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

This British Standard, having been prepared under the direction of the Electrotechnical Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 29 July 2002

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 16, an inside back cover and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments

© BSI 29 July 2002

ISBN 0 580 40119 7

**Transmission of audio and/or video and related signals
using infra-red radiation
Part 6: Video and audio-visual signals
(IEC 61603-6:2001)**

Transmission de signaux audio et/ou
video et de signaux similaires au moyen
du rayonnement infrarouge
Partie 6: Signaux vidéo et audiovisuels
(CEI 61603-6:2001)

Übertragung von Ton- und/oder
Bildsignalen und verwandten Signalen
mit Infrarot-Strahlung
Teil 6: Video- und audiovisuelle Signale
(IEC 61603-6:2001)

This European Standard was approved by CENELEC on 2001-12-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 100/295/FDIS, future edition 1 of IEC 61603-6, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61603-6 on 2001-12-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2002-09-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2004-12-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61603-6:2001 was approved by CENELEC as a European Standard without any modification.

CONTENTS

1	Scope	4
2	Normative references.....	4
3	Definitions.....	4
4	Abbreviations	4
5	Explanation of terms	5
6	System considerations	5
7	General conditions for measurements	6
8	Characteristics to be specified and their methods of measurement	6
9	Interface values, performance requirements and recommendations	8
10	Marking and contents of specifications.....	10
	Figure 1 – Transmission chain.....	10
	Figure 2 – Location for measuring	11
	Figure 3 – Transmitting distance	11
	Figure 4 – Angle of maximum divergence at half optical radiant intensity.....	11
	Figure 5 – Radiant intensity of transmitter or radiator	11
	Figure 6 – Irradiance of receiver.....	12
	Figure 7 – Characteristics of the transmitter	12
	Figure 8 – Directivity characteristics of the transmitter	12
	Figure 9 – Characteristics of the receiver	13
	Figure 10 – Directivity characteristics of the receiver.....	13
	Figure 11 – Measuring system for spurious emission.....	14
	Figure 12 – Transmission format (composite video signal).....	14
	Figure 13 – Transmission format (Y/C separation video signal)	15
	Figure 14 – Pre-emphasis circuit (example).....	15
	Table 1 – Marking and contents of specifications.....	10
	Annex ZA (normative) Normative references to international publications with their corresponding European publications	16

TRANSMISSION OF AUDIO AND/OR VIDEO AND RELATED SIGNALS USING INFRA-RED RADIATION –

Part 6: Video and audio-visual signals

1 Scope

IEC 61603-1 specifies general requirements and methods of measurement for equipment using infrared radiation as a carrier of information.

This part of IEC 61603 specifies requirements and methods of measurement for analogue video transmission systems which are not covered by IEC 61603-1, nor by other standards. It allows systems which make different economic use of the available bandwidth to be described in order for conclusions regarding interference and compatibility to be drawn.

NOTE For details of audio transmission systems, see IEC 61603-2.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61603. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61603 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 61603-1, *Transmission of audio and/or video and related signals using infra-red radiation – Part 1: General*

IEC 61603-2, *Transmission of audio and/or video and related signals using infra-red radiation – Part 2: Transmission systems for audio wide band and related signals*

IEC 61938, *Audio, video and audiovisual systems – Interconnections and matching values – Preferred matching values of analogue signals*

3 Definitions

For the purposes of this part of IEC 61603, the definitions given in Part 1 apply.

4 Abbreviations

IR	infrared (see IEC 61603-1)
IREDD	infrared emitting diode (see IEC 61603-1)
PD	photo diode
O/E	optical/electrical
Tx	transmitter/radiator
Rx	receiver
ND filter	neutral density filter