

Third edition
2021-01

Information technology — Digitally recorded media for information interchange and storage — 120 mm Triple Layer (100,0 Gbytes single sided disk and 200,0 Gbytes double sided disk) and Quadruple Layer (128,0 Gbytes single sided disk) BD Recordable disk

Technologies de l'information — Supports enregistrés numériquement pour échange et stockage d'information — 120 mm de couche triple (100,0 Go disque unique face et 200,0 Go disque double face) et quadruple couche (128,0 Go disque unique face) sur disque enregistrable BD



Reference number
ISO/IEC 30191:2021(E)

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Published in Switzerland

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Contents

	Page
Foreword	xi
Introduction	xii
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Symbol and abbreviated terms	2
5 Conformance	3
5.1 Optical disk.....	3
5.2 Generating system.....	4
5.3 Receiving system.....	4
5.4 Compatibility statement.....	4
6 Convention and notations	4
6.1 Levels of grouping.....	4
6.2 Representation of numbers.....	4
6.3 Integer calculus.....	6
7 General description of disk	6
8 General requirements	8
8.1 Environments.....	8
8.1.1 Test environment.....	8
8.1.2 Operating environment.....	8
8.1.3 Storage environment.....	9
8.1.4 Transportation.....	10
8.2 Safety requirements.....	10
8.3 Flammability.....	11
9 Reference drive	11
9.1 General.....	11
9.2 Measurement conditions.....	11
9.3 Optical system.....	11
9.4 Optical beam.....	12
9.5 HF read channel.....	13
9.6 Radial PP read channel.....	14
9.7 Disk clamping.....	14
9.8 Rotation of disk and measurement velocity.....	14
9.9 Normalized servo transfer function.....	15
9.10 Measurement velocities and reference servos for axial tracking.....	15
9.10.1 General.....	15
9.10.2 Reference servo for axial tracking at 1x measurement velocity.....	16
9.10.3 Reference servo for axial tracking at 2x measurement velocity.....	17
9.11 Measurement velocities and reference servos for radial tracking.....	18
9.11.1 General.....	18
9.11.2 Reference servo for radial tracking at 1x measurement velocity.....	18
9.11.3 Reference servo for radial tracking at 2x measurement velocity.....	20
10 Dimensional characteristics	21
10.1 General.....	21
10.2 Disk reference planes and reference axis.....	22
10.3 Overall dimensions.....	23
10.4 First transition area.....	23
10.5 Protection ring.....	24
10.6 Clamping zone.....	24
10.7 Second transition area.....	24

10.8	Information area.....	24
10.8.1	General.....	24
10.8.2	Subdivision of information zone on TL disk.....	25
10.8.3	Subdivision of information zone on QL disk.....	26
10.9	Rim area.....	28
11	Mechanical characteristics.....	28
11.1	Mass.....	28
11.2	Moment of inertia.....	28
11.3	Dynamic imbalance.....	28
11.4	Axial runout.....	29
11.4.1	General.....	29
11.4.2	Residual axial tracking error for 1x measurement velocity.....	29
11.4.3	Residual axial tracking error for 2x measurement velocity.....	29
11.5	Radial runout.....	30
11.5.1	General.....	30
11.5.2	Residual radial tracking error on 1x measurement velocity.....	30
11.5.3	Residual radial tracking error on 2x measurement velocity.....	30
11.6	Durability of cover layer.....	31
11.6.1	Impact resistance of cover layer.....	31
11.6.2	Scratch resistance of cover layer.....	31
11.6.3	Repulsion of fingerprints by cover layer.....	31
12	Optical characteristics in information area.....	31
12.1	General.....	31
12.2	Refractive index of the transmission stacks (TS).....	31
12.3	Thickness of transmission stacks (TS).....	31
12.3.1	Thickness of transmission stack of TL disks.....	31
12.3.2	Example of target thickness of spacer layers for TL disks.....	32
12.3.3	Thickness of transmission stacks of QL disks.....	33
12.3.4	Example of target thickness of spacer layers for QL disks.....	34
12.4	Reflectivity of recording layers.....	36
12.5	Birefringence.....	37
12.6	Angular deviations.....	37
13	Data format.....	38
13.1	General.....	38
13.2	Data frame.....	40
13.3	Error detection code (EDC).....	40
13.4	Scrambled data frame.....	41
13.5	Data block.....	41
13.6	LDC block.....	42
13.7	LDC code words.....	43
13.8	LDC cluster.....	44
13.8.1	General.....	44
13.8.2	First interleaving step.....	44
13.8.3	Second interleaving step.....	44
13.9	Addressing and control data.....	46
13.9.1	General.....	46
13.9.2	Address units.....	46
13.9.3	User control data.....	51
13.9.4	Byte/bit assignments for user control data.....	51
13.10	Access block.....	53
13.11	BIS block.....	53
13.12	BIS code words.....	54
13.13	BIS cluster.....	55
13.14	ECC cluster.....	58
13.15	Recording frames.....	59
13.16	Physical cluster.....	60
13.17	17PP modulation for recordable data.....	60

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13.17.1	General	60
13.17.2	Bit conversion rules	60
13.17.3	dc-control procedure	61
13.17.4	Frame sync	61
13.18	Modulation and NRZI conversion	63
14	Physical data allocation and linking	63
14.1	General	63
14.2	Recording unit block (RUB)	64
14.2.1	General	64
14.2.2	Data run-in	64
14.2.3	Data run-out	65
14.2.4	Guard_3 field	66
14.3	Locating data relative to wobble addresses	67
15	Track format	67
15.1	General	67
15.2	Track shape	67
15.3	Track path	69
15.4	Track pitch	69
15.4.1	Track pitch in zone reserved for BCA	69
15.4.2	Track pitch in embossed HFM area	69
15.4.3	Track pitch in recordable areas	70
15.4.4	Track pitch between embossed HFM area and recordable area	70
15.5	Track layout of HFM groove	70
15.5.1	General	70
15.5.2	Data format	71
15.5.3	Addressing and control data	72
15.5.4	Recording frames	75
15.6	Track layout of wobbled grooves	77
15.6.1	General	77
15.6.2	Modulation of wobbles	78
15.6.3	Wobble polarity	79
15.7	ADIP information	79
15.7.1	General	79
15.7.2	ADIP unit types	80
15.7.3	ADIP word structure	81
15.7.4	ADIP data structure	82
15.7.5	ADIP error correction	86
15.8	Disk information in ADIP aux frame	88
15.8.1	General	88
15.8.2	Error protection for disk information aux frames	89
15.8.3	Disk information data structure	90
16	General description of information zone	137
16.1	General	137
16.2	Format of information zone on triple-layer disk	137
16.3	Format of information zone on quadruple-layer disk	137
17	Layout of recordable area of information zone	137
18	Inner zone(s)	146
18.1	General	146
18.2	Permanent information and control data (PIC) zone	153
18.2.1	General	153
18.2.2	Content of PIC zone	153
18.2.3	Emergency brake	155
18.3	Recordable area of lead-in zone of TL disk	157
18.3.1	Protection zone 2	157
18.3.2	Buffer	157
18.3.3	INFO 2/Reserved 8	157

This is a preview of "ISO/IEC 30191:2021". Click here to purchase the full version from the ANSI store.

18.3.4	INFO 2/Reserved 7	157
18.3.5	INFO 2/Reserved 6	157
18.3.6	INFO 2/Reserved 5	158
18.3.7	INFO 2/PAC 2	158
18.3.8	INFO 2/DMA 2	158
18.3.9	INFO 2/Control data 2	158
18.3.10	INFO 2/Buffer 2	158
18.3.11	OPC 0/Test zone	158
18.3.12	Usage of OPC areas	158
18.3.13	OPC 0/OPC 0 buffer	160
18.3.14	TDMA 0	160
18.3.15	INFO 1/Pre-write area	160
18.3.16	INFO 1/Drive area	160
18.3.17	INFO 1/DMA 1	161
18.3.18	INFO 1/Control data 1	161
18.3.19	INFO 1/PAC 1	161
18.4	Recordable area of inner zone 1 of TL disk	161
18.4.1	Buffer	161
18.4.2	OPC 1/Test zone	161
18.4.3	Reserved	162
18.4.4	INFO 2/Reserved 8	162
18.4.5	INFO 2/Reserved 7	162
18.4.6	INFO 2/Reserved 6	162
18.4.7	INFO 2/Reserved 5	162
18.4.8	INFO 2/PAC 2	162
18.4.9	INFO 2/DMA 2	162
18.4.10	INFO 2/Control data 2	162
18.4.11	INFO 2/Buffer 2	162
18.4.12	TDMA 1	162
18.4.13	Reserved	163
18.4.14	INFO 1/Pre-write area	163
18.4.15	INFO 1/Drive area	163
18.4.16	INFO 1/DMA 1	163
18.4.17	INFO 1/Control data 1	163
18.4.18	INFO 1/PAC 1	163
18.5	Recordable area of inner zone 2 of TL disk	163
18.5.1	Buffer	163
18.5.2	OPC 2/Test zone	163
18.5.3	OPC 2/OPC 2 buffer	163
18.5.4	Reserved	163
18.5.5	INFO 2/Reserved 8	163
18.5.6	INFO 2/Reserved 7	164
18.5.7	INFO 2/Reserved 6	164
18.5.8	INFO 2/Reserved 5	164
18.5.9	INFO 2/Reserved	164
18.5.10	INFO 2/DMA 2	164
18.5.11	INFO 2/Control data 2	164
18.5.12	INFO 2/Buffer 2	164
18.5.13	TDMA 2	164
18.5.14	Buffer	164
18.5.15	INFO 1/Pre-write area	164
18.5.16	INFO 1/Drive area	165
18.5.17	INFO 1/DMA 1	165
18.5.18	INFO 1/Control data 1	165
18.5.19	INFO 1/Reserved	165
18.6	Recordable area of lead-in zone of QL disk	165
18.6.1	Protection zone 2	165
18.6.2	Buffer	165

This is a preview of "ISO/IEC 30191:2021". Click here to purchase the full version from the ANSI store.

18.6.3	INFO 2/Reserved 8	165
18.6.4	INFO 2/Reserved 7	165
18.6.5	INFO 2/Reserved 6	165
18.6.6	INFO 2/Reserved 5	165
18.6.7	INFO 2/PAC 2	166
18.6.8	INFO 2/DMA 2	166
18.6.9	INFO 2/Control data 2	166
18.6.10	INFO 2/Buffer 2	166
18.6.11	OPC 0/Test zone	166
18.6.12	Buffer	166
18.6.13	INFO 1/Pre-write area	166
18.6.14	INFO 1/Drive area	166
18.6.15	INFO 1/DMA 1	166
18.6.16	INFO 1/Control data 1	166
18.6.17	INFO 1/PAC 1	167
18.7	Recordable area of inner zone 1 of QL disk	167
18.7.1	Buffer	167
18.7.2	OPC 1/Test zone	167
18.7.3	INFO 2/Reserved 8	167
18.7.4	INFO 2/Reserved 7	167
18.7.5	INFO 2/Reserved 6	167
18.7.6	INFO 2/Reserved 5	167
18.7.7	INFO 2/PAC 2	167
18.7.8	INFO 2/DMA 2	167
18.7.9	INFO 2/Control data 2	168
18.7.10	INFO 2/Buffer 2	168
18.7.11	TDMA 0	168
18.7.12	Buffer	168
18.7.13	INFO 1/Pre-write area	168
18.7.14	INFO 1/Drive area	168
18.7.15	INFO 1/DMA 1	168
18.7.16	INFO 1/Control data 1	168
18.7.17	INFO 1/PAC 1	168
18.8	Recordable area of inner zone 2 of QL disk	168
18.8.1	Buffer	168
18.8.2	INFO 2/Reserved 8	168
18.8.3	INFO 2/Reserved 7	169
18.8.4	INFO 2/Reserved 6	169
18.8.5	INFO 2/Reserved 5	169
18.8.6	INFO 2/Reserved	169
18.8.7	INFO 2/DMA 2	169
18.8.8	INFO 2/Control data 2	169
18.8.9	INFO 2/Buffer 2	169
18.8.10	TDMA 1	169
18.8.11	Buffer	169
18.8.12	OPC 2/Test zone	169
18.8.13	OPC 2/OPC 2 buffer	170
18.8.14	TDMA 2	170
18.8.15	INFO 1/Pre-write area	170
18.8.16	INFO 1/Drive area	170
18.8.17	INFO 1/DMA 1	170
18.8.18	INFO 1/Control data 1	170
18.8.19	INFO 1/Reserved	170
18.9	Recordable area of lead-out zone of QL disk	170
18.9.1	OPC 3/Test zone	170
18.9.2	Buffer	170
18.9.3	INFO 2/Reserved 8	170
18.9.4	INFO 2/Reserved 7	171

18.9.5	INFO 2/Reserved 6	171
18.9.6	INFO 2/Reserved 5	171
18.9.7	INFO 2/Reserved	171
18.9.8	INFO 2/DMA 2	171
18.9.9	INFO 2/Control data 2	171
18.9.10	INFO 2/Buffer 2	171
18.9.11	TDMA 3	171
18.9.12	INFO 1/Pre-write area	171
18.9.13	INFO 1/Drive area	171
18.9.14	INFO 1/DMA 1	172
18.9.15	INFO 1/Control data 1	172
18.9.16	INFO 1/Reserved	172
19	Data zone	172
20	Outer zones	172
20.1	General	172
20.2	Recordable area of outer zones	174
20.2.1	INFO 3/Buffer 4	174
20.2.2	INFO 3/DMA 3	174
20.2.3	INFO 3/Control data 3	174
20.2.4	Angular buffer	174
20.2.5	INFO 4/DMA 4	174
20.2.6	INFO 4/Control data 4	174
20.2.7	INFO 4/Buffer 6	174
20.2.8	DCZ 0/Test zone, DCZ 1/Test zone, DCZ 2/Test zone and DCZ 3/Test zone	174
20.2.9	Usage of DCZ area	174
20.2.10	Protection zone 3	176
21	Physical access control clusters	176
21.1	General	176
21.2	Layout of PAC zones	177
21.3	General structure of PAC clusters	177
21.4	IS1 and IS2 PAC clusters	181
22	Disk management	181
22.1	General	181
22.2	Recording management	182
22.2.1	General	182
22.2.2	Sequential recording mode (SRM)	182
22.2.3	Recording user data in SRR	182
22.2.4	SRR status	182
22.2.5	Closing SRR	183
22.3	Temporary disk management areas (TDMA)	183
22.3.1	General	183
22.3.2	TDMA access indicators	183
22.4	Disk management structure (DMS)	184
22.4.1	General	184
22.4.2	Temporary disk management structure (TDMS)	184
22.4.3	TDMS in sequential recording mode	185
22.4.4	Temporary disk definition structure (TDDS)	186
22.4.5	Temporary defect list (TDFL)	191
22.4.6	Sequential recording range information (SRRRI)	193
22.5	Unrecorded (blank) disk structure	195
22.5.1	General	195
22.5.2	Pre-recorded areas on unrecorded disk	195
22.5.3	Pre-recorded BCA	202
22.5.4	Pre-recorded INFO 2/Reserved 5, Reserved 8 and Pre-recorded INFO 1/ Pre-write area	202
22.5.5	Pre-recorded INFO 1/PAC 1 and Pre-recorded INFO 2/PAC 2	202

This is a preview of "ISO/IEC 30191:2021". Click here to purchase the full version from the ANSI store.

22.5.6	OPC 0/Test zone, OPC 1/Test zone, OPC 2/Test zone and OPC 3/Test zone	202
22.5.7	TDMA 0	203
22.5.8	Initialization of disk	203
22.6	Recorded (closed) disk structure	203
22.6.1	General	203
22.6.2	DMA zones	203
22.6.3	Disk management structure (DMS)	204
23	Assignment of logical sector numbers (LSNs)	206
24	Characteristics of grooved areas	207
25	Method of testing for grooved area	208
25.1	General	208
25.2	Environment	208
25.3	Reference drive	208
25.3.1	General	208
25.3.2	Read power	208
25.3.3	Read channels	208
25.3.4	Tracking requirements	208
25.3.5	Scanning velocities	208
25.4	Definition of signals	209
26	Signals from HFM grooves	210
26.1	Push-pull polarity	210
26.2	Push-pull signal	210
26.3	Wobble signal	210
26.4	Jitter of HFM signal	210
27	Signals from wobbled grooves	211
27.1	Phase depth	211
27.2	Push-pull signal	211
27.3	Wobble signal	211
27.3.1	General	211
27.3.2	Measurement of I_{NWS}	212
27.3.3	Measurement of wobble CNR	212
27.3.4	Measurement of harmonic distortion of wobble	212
28	Characteristics of recording layer	212
29	Method of testing for recording layer	213
29.1	General	213
29.2	Environment	213
29.3	Reference drive	213
29.3.1	General	213
29.3.2	Read power	213
29.3.3	Read channels	213
29.3.4	Tracking requirements	213
29.3.5	Scanning velocities	213
29.4	Write conditions	214
29.4.1	Write pulse waveform	214
29.4.2	Write powers	214
29.4.3	Average power	215
29.4.4	Write conditions for i-MLSE measurement	215
29.5	Definition of signals	215
30	Signals from recorded areas	215
30.1	HF signals	215
30.2	Modulated amplitude	215
30.3	Reflectivity-modulation product	217
30.4	Asymmetry	217
30.5	i-MLSE	217

This is a preview of "ISO/IEC 30191:2021". [Click here to purchase the full version from the ANSI store.](#)

30.6	Read stability.....	218
31	Local defects.....	219
32	Characteristics of user data.....	219
33	Method of testing for user data.....	219
33.1	General.....	219
33.2	Environment.....	220
33.3	Reference drive.....	220
33.3.1	General.....	220
33.3.2	Read power.....	220
33.3.3	Read channels.....	220
33.3.4	Error correction.....	220
33.3.5	Tracking requirements.....	220
33.3.6	Scanning velocities.....	220
33.4	Error signals.....	220
34	Minimum quality of recorded information.....	222
34.1	Symbol error rate.....	222
34.2	Maximum burst errors.....	222
34.3	User-written data.....	222
35	BCA.....	222
Annex A (normative) Thickness of transmission stacks in case of multiple layers.....		224
Annex B (normative) Measurement of reflectivity.....		227
Annex C (normative) Measurement of scratch resistance of cover layer.....		232
Annex D (normative) Measurement of repulsion of grime by cover layer.....		234
Annex E (normative) Measurement of wobble amplitude.....		237
Annex F (normative) Write pulse waveform for testing.....		242
Annex G (normative) Optimum power control (OPC) procedure for disk.....		250
Annex H (normative) HF signal pre-processing for i-MLSE(integrated maximum likelihood sequence error estimation) measurements.....		254
Annex I (normative) Measurement procedures.....		266
Annex J (informative) Measurement of birefringence.....		278
Annex K (informative) Measurement of thickness of cover layer and spacer layer.....		280
Annex L (informative) Measurement of impact resistance of cover layer.....		283
Annex M (informative) Groove deviation and the wobble amplitude.....		285
Annex N (informative) Guideline for write pulse adjustment using L-SEAT edge shift.....		287
Annex O (normative) Specific requirements for type TL/D disk.....		295
Annex P (informative) Bonding of type TL/D disk.....		297
Bibliography.....		298

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information Technology*, Subcommittee SC 23, *Digitally recorded media for information interchange and storage*.

This third edition cancels and replaces the second edition (ISO/IEC 30191:2015), which has been technically revised. It also incorporates the Amendment ISO/IEC 30191:2015/Amd.1 :2019.

The main change compared to the previous edition is the addition of requirements for physical access control and reserved area of BD application.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

In March 2002, the Blu-ray Disc Founders, or BDF, came together to create optical disk formats with the large capacity and high-speed transfer rates that would be needed for recording and reproducing high-definition video content.

The Blu-ray Disc Association (BDA) issued the first version of the Blu-ray Disc™ Recordable Format Part 1 in October 2005, and Version 1.3 of the Blu-ray Disc™ Recordable Format Part 1 in April 2008, which enabled the recording velocity up to 6x. In June 2010, the BDA issued Blu-ray Disc™ Recordable Format Part 1 Version 2.0, which specifies the TL and QL of BD recordable disk.

To keep the compatibility of the removable medium in the market, just to make a standard is not enough, and it is necessary to check that the disks and devices can satisfy the specifications. The BDA also conducts verification activities for the disks and devices and has established more than 10 testing centers in Asia, Europe and the USA.

Blu-ray™ disks, players, recorders and PC drives/software based on BDA standards became popular all over the world. The BDA gave consumer applications the highest priority in the first few years. But it was known, of course, that international standardization would be required before many government entities and their contractors would be allowed to use Blu-ray Disc™. In January and February 2011, the BDA was formally requested to consider international standardization. The reason for this was to enable the inclusion of writable BDs, along with DVDs and CDs, in an International Standard specifying test methods for the estimation of lifetime of optical storage media for long-term data storage. In October 2011, the BDA responded that it had decided to pursue international standardization of the basic physical formats for the Recordable and Rewritable Blu-ray™ Format.

In December 2011, the BDA sent project proposals for international standardization of four formats. ISO/IEC 30190, ISO/IEC 30191, ISO/IEC 30192 and ISO/IEC 30193 were published in 2013.

A few additional specifications are required in order to write and read video-recording applications, such as the BDMV and BDAV formats, which have been specified by the BDA for use on BD recordable disks. These specifications, which are related to the BD application, the file system or the content protection system, are required for the disk, the generating system and the receiving system¹⁾.

The International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) draw attention to the fact that it is claimed that compliance with this document may involve the use of a patent.

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NOTE Blu-ray™, Blu-ray Disc™ and the logos are trademarks of the Blu-ray Disc Association.

1) For more information of the BD application, the content-protection system and the additional requirements for the Blu-ray™ Format specifications, see <http://www.blu-raydisc.info>.