

FINAL VERSION

VERSION FINALE



**Digital addressable lighting interface –
Part 103: General requirements – Control devices**

**Interface d'éclairage adressable numérique –
Partie 103: Exigences générales – Dispositifs de commande**

CONTENTS

FOREWORD.....	12
INTRODUCTION.....	14
1 Scope.....	16
2 Normative references	16
3 Terms and definitions	16
4 General.....	19
4.1 General.....	19
4.2 Version number.....	19
5 Electrical specification	19
6 Interface power supply.....	19
7 Transmission protocol structure	20
7.1 General.....	20
7.2 24 bit forward frame encoding	20
7.2.1 Frame format for instructions and queries.....	20
7.2.2 Frame format for event messages	22
8 Timing.....	23
9 Method of operation.....	23
9.1 General.....	23
9.1.8 Device features.....	23
9.2 Application controller.....	23
9.2.1 General	23
9.2.2 Single-master application controller.....	23
9.2.3 Multi-master application controller	24
9.3 Input device	24
9.4 Instances of input devices	24
9.4.1 General	24
9.4.2 Instance number	25
9.4.3 Instance type	25
9.4.4 Instance features	25
9.4.5 Instance groups	25
9.5 Commands.....	26
9.5.1 General	26
9.5.2 Device commands.....	26
9.5.3 Instance commands	26
9.5.4 Feature commands	27
9.6 Event messages.....	27
9.6.1 Response to event messages.....	27
9.6.2 Device power cycle event.....	28
9.6.3 Input notification event.....	28
9.6.4 Event message filter	29
9.7 Input signal and input value.....	29
9.7.1 General	29
9.7.2 Input resolution	29
9.7.3 Getting the input value	30
9.7.4 Notification of changes.....	31

9.8	System failure	31
9.9	Operating a control device	31
9.9.1	Enable/disable the application controller	31
9.9.5	Application controller always active	31
9.9.2	Enable/disable event messages	32
9.9.3	Quiescent mode	32
9.9.4	Modes of operation	32
9.10	Memory banks	33
9.10.1	General	33
9.10.2	Memory map	33
9.10.3	Selecting a memory bank location	34
9.10.4	Memory bank reading	34
9.10.5	Memory bank writing	35
9.10.6	Memory bank 0	36
9.10.7	Memory bank 1	38
9.10.8	Manufacturer specific memory banks	40
9.10.9	Reserved memory banks	40
9.11	Reset	40
9.11.1	Reset operation	40
9.11.2	Reset memory bank operation	40
9.12	Power on behaviour	40
9.12.1	Power on	40
9.12.2	Power cycle notification	41
9.13	Priority use	41
9.13.1	General	41
9.13.2	Priority of input notifications	42
9.14	Assigning short addresses	42
9.14.1	General	42
9.14.2	Random address allocation	42
9.14.3	Identification of a device	42
9.15	Exception handling	43
9.16	Device capabilities and status information	43
9.16.1	Device capabilities	43
9.16.2	Device status	43
9.16.3	Instance status	44
9.17	Non-volatile memory	44
10	Declaration of variables	45
11	Definition of commands	47
11.1	General	47
11.2	Overview sheets	47
11.3	Event messages	53
11.3.1	INPUT NOTIFICATION (<i>device/instance, event</i>)	53
11.3.2	POWER NOTIFICATION (<i>device</i>)	53
11.4	Device control instructions	53
11.4.1	General	53
11.4.2	IDENTIFY DEVICE	53
11.4.3	RESET POWER CYCLE SEEN	54
11.5	Device configuration instructions	54
11.5.1	General	54

11.5.2	RESET	54
11.5.3	RESET MEMORY BANK (<i>DTR0</i>)	54
11.5.4	SET SHORT ADDRESS (<i>DTR0</i>)	54
11.5.5	ENABLE WRITE MEMORY	55
11.5.6	ENABLE APPLICATION CONTROLLER	55
11.5.7	DISABLE APPLICATION CONTROLLER	55
11.5.8	SET OPERATING MODE (<i>DTR0</i>)	55
11.5.9	ADD TO DEVICE GROUPS 0-15 (<i>DTR2:DTR1</i>)	55
11.5.10	ADD TO DEVICE GROUPS 16-31 (<i>DTR2:DTR1</i>)	55
11.5.11	REMOVE FROM DEVICE GROUPS 0-15 (<i>DTR2:DTR1</i>)	55
11.5.12	REMOVE FROM DEVICE GROUPS 16-31 (<i>DTR2:DTR1</i>)	55
11.5.13	START QUIESCENT MODE	55
11.5.14	STOP QUIESCENT MODE	56
11.5.15	ENABLE POWER CYCLE NOTIFICATION	56
11.5.16	DISABLE POWER CYCLE NOTIFICATION	56
11.5.17	SAVE PERSISTENT VARIABLES	56
11.6	Device queries	56
11.6.1	General	56
11.6.2	QUERY DEVICE CAPABILITIES	56
11.6.3	QUERY DEVICE STATUS	57
11.6.4	QUERY APPLICATION CONTROLLER ERROR	57
11.6.5	QUERY INPUT DEVICE ERROR	57
11.6.6	QUERY MISSING SHORT ADDRESS	57
11.6.7	QUERY VERSION NUMBER	57
11.6.8	QUERY CONTENT <i>DTR0</i>	57
11.6.9	QUERY NUMBER OF INSTANCES	57
11.6.10	QUERY CONTENT <i>DTR1</i>	58
11.6.11	QUERY CONTENT <i>DTR2</i>	58
11.6.12	QUERY RANDOM ADDRESS (H)	58
11.6.13	QUERY RANDOM ADDRESS (M)	58
11.6.14	QUERY RANDOM ADDRESS (L)	58
11.6.15	READ MEMORY LOCATION (<i>DTR1, DTR0</i>)	58
11.6.16	QUERY APPLICATION CONTROLLER ENABLED	58
11.6.17	QUERY OPERATING MODE	58
11.6.18	QUERY MANUFACTURER SPECIFIC MODE	58
11.6.19	QUERY QUIESCENT MODE	59
11.6.20	QUERY DEVICE GROUPS 0-7	59
11.6.21	QUERY DEVICE GROUPS 8-15	59
11.6.22	QUERY DEVICE GROUPS 16-23	59
11.6.23	QUERY DEVICE GROUPS 24-31	59
11.6.24	QUERY POWER CYCLE NOTIFICATION	59
11.6.25	QUERY EXTENDED VERSION NUMBER(<i>DTR0</i>)	59
11.6.26	QUERY RESET STATE	59
11.6.27	QUERY APPLICATION CONTROLLER ALWAYS ACTIVE	59
11.6.28	QUERY FEATURE TYPE	59
11.6.29	QUERY NEXT FEATURE TYPE	59
11.7	Instance control instructions	60

11.8	Instance configuration instructions.....	60
11.8.1	General	60
11.8.2	ENABLE INSTANCE	60
11.8.3	DISABLE INSTANCE	60
11.8.4	SET PRIMARY INSTANCE GROUP (<i>DTR0</i>)	60
11.8.5	SET INSTANCE GROUP 1 (<i>DTR0</i>).....	60
11.8.6	SET INSTANCE GROUP 2 (<i>DTR0</i>).....	61
11.8.7	SET EVENT SCHEME (<i>DTR0</i>)	61
11.8.8	SET EVENT PRIORITY (<i>DTR0</i>).....	61
11.8.9	SET EVENT FILTER (<i>DTR2, DTR1, DTR0</i>)	61
11.9	Instance queries.....	61
11.9.1	General	61
11.9.2	QUERY INSTANCE TYPE	61
11.9.3	QUERY RESOLUTION	62
11.9.4	QUERY INSTANCE ERROR.....	62
11.9.5	QUERY INSTANCE STATUS.....	62
11.9.6	QUERY INSTANCE ENABLED	62
11.9.7	QUERY PRIMARY INSTANCE GROUP	62
11.9.8	QUERY INSTANCE GROUP 1.....	62
11.9.9	QUERY INSTANCE GROUP 2.....	62
11.9.10	QUERY EVENT SCHEME	62
11.9.11	QUERY INPUT VALUE.....	63
11.9.12	QUERY INPUT VALUE LATCH.....	63
11.9.13	QUERY EVENT PRIORITY	63
11.9.14	QUERY FEATURE TYPE	63
11.9.15	QUERY NEXT FEATURE TYPE	63
11.9.16	QUERY EVENT FILTER 0-7	63
11.9.17	QUERY EVENT FILTER 8-15	64
11.9.18	QUERY EVENT FILTER 16-23	64
11.10	Special commands	64
11.10.1	General	64
11.10.2	TERMINATE	64
11.10.3	INITIALISE (<i>device</i>)	64
11.10.4	RANDOMISE	64
11.10.5	COMPARE.....	65
11.10.6	WITHDRAW.....	65
11.10.7	SEARCHADDRH (<i>data</i>)	65
11.10.8	SEARCHADDRM (<i>data</i>).....	65
11.10.9	SEARCHADDRL (<i>data</i>).....	66
11.10.10	PROGRAM SHORT ADDRESS (<i>data</i>)	66
11.10.11	VERIFY SHORT ADDRESS (<i>data</i>)	66
11.10.12	QUERY SHORT ADDRESS.....	66
11.10.13	WRITE MEMORY LOCATION (<i>DTR1, DTR0, data</i>).....	66
11.10.14	WRITE MEMORY LOCATION – NO REPLY (<i>DTR1, DTR0, data</i>).....	67
11.10.15	DTR0 (<i>data</i>)	67
11.10.16	DTR1 (<i>data</i>)	67
11.10.17	DTR2 (<i>data</i>)	67
11.10.18	DIRECT WRITE MEMORY (<i>DTR1, offset, data</i>).....	67
11.10.19	DTR1:DTR0 (<i>data1, data0</i>)	67

11.10.20	DTR2:DTR1 (<i>data2, data1</i>)	67
11.10.21	SEND TESTFRAME (<i>data</i>).....	68
12	Test procedures	68
12.1	General notes on test	68
12.1.1	General	68
12.1.2	Test execution	68
12.1.3	Data transmission	69
12.1.4	Test setup.....	69
12.1.5	Test output	70
12.1.6	Test notation.....	70
12.1.7	Test execution limitations	71
12.1.8	Test results.....	71
12.1.9	Exception handling.....	71
12.1.10	Unexpected answer.....	71
12.2	Preamble	73
12.2.1	Test preamble.....	73
12.3	Physical operational parameters.....	84
12.3.1	Polarity test	84
12.3.2	Maximum and minimum system voltage	85
12.3.3	Overvoltage protection test.....	86
12.3.4	Current rating test	87
12.3.5	Transmitter voltages	88
12.3.6	Transmitter rising and falling edges	90
12.3.7	Transmitter bit timing	92
12.3.8	Transmitter frame timing	94
12.3.9	Receiver start-up behavior	95
12.3.10	Receiver threshold	96
12.3.11	Receiver bit timing	97
12.3.12	Extended receiver bit timing	101
12.3.13	Receiver forward frame violation	103
12.3.14	Receiver settling timing	103
12.3.15	Receiver frame timing FF-FF send twice.....	104
12.3.16	Transmitter collision avoidance by priority	106
12.3.17	Transmitter collision detection for truncated idle phase	107
12.3.18	Transmitter collision detection for extended active phase.....	110
12.4	Device configuration instructions	113
12.4.1	RESET deviceGroups	113
12.4.2	RESET quiescentMode	114
12.4.3	RESET instance groups	115
12.4.4	RESET event filter	116
12.4.5	RESET event scheme	117
12.4.6	RESET: timeout / command in-between.....	118
12.4.7	Send twice timeout (device)	120
12.4.8	Send twice timeout (instance).....	123
12.4.9	Commands in-between (device).....	125
12.4.10	Commands in-between (instance).....	128
12.4.11	SAVE PERSISTENT VARIABLES	131
12.4.12	SET OPERATING MODE	131
12.4.13	Device Disable/Enable Application Controller.....	132

12.4.14	Multi Master Control Device PING	133
12.4.15	Quiescent Mode.....	134
12.4.16	Device power cycle notification.....	135
12.4.17	SET SHORT ADDRESS	136
12.4.18	Reset/Power-on values (device)	137
12.4.19	Reset/Power-on values (instance)	139
12.4.20	DTR0 / DTR1 / DTR2	140
12.4.21	DTR1:DTR0 and DTR2:DTR1	141
12.4.22	Device Groups	142
12.5	Device queries	143
12.5.1	Device query capabilities.....	143
12.5.2	QUERY VERSION NUMBER	143
12.5.3	Device power cycle seen.....	144
12.5.4	Input device error.....	144
12.6	Device Memory banks	145
12.6.1	READ MEMORY LOCATION on Memory Bank 0.....	145
12.6.2	READ MEMORY LOCATION on Memory Bank 1	150
12.6.3	READ MEMORY LOCATION on other Memory Banks	152
12.6.4	Memory bank writing	154
12.6.5	ENABLE WRITE MEMORY: writeEnableState	159
12.6.6	ENABLE WRITE MEMORY: timeout / command in-between	161
12.6.7	RESET MEMORY BANK: timeout / command in-between	162
12.6.8	RESET MEMORY BANK	165
12.7	Device Special commands.....	166
12.7.1	INITIALISE – timer	166
12.7.2	TERMINATE	167
12.7.3	INITIALISE - device addressing.....	168
12.7.4	RANDOMISE	169
12.7.5	COMPARE.....	170
12.7.6	WITHDRAW.....	171
12.7.7	SEARCHADDRH / SEARCHADDRM / SEARCHADDRL.....	172
12.7.8	PROGRAM SHORT ADDRESS.....	173
12.7.9	VERIFY SHORT ADDRESS.....	175
12.7.10	QUERY SHORT ADDRESS	176
12.7.11	IDENTIFY DEVICE.....	178
12.8	Logical unit cross contamination.....	180
12.8.1	DTR0.....	180
12.8.2	NVM variables	181
12.8.3	Random address generation.....	181
12.8.4	Addressing 1.....	182
12.8.5	Addressing 2.....	183
12.8.6	Addressing 3.....	186
12.9	Instance addressing	186
12.9.1	Instance Type Addressing	186
12.9.2	Instance Primary Group.....	187
12.9.3	Instance Group 2	189
12.9.4	Instance Group 1	190
12.9.5	Instance Group Combinations	192
12.9.6	Multiple Instances Answer.....	193

12.10	Instance configuration instructions.....	194
12.10.1	Instance Enable/Disable.....	194
12.10.2	Event Scheme.....	197
12.10.3	Input Resolution & Input Value.....	201
12.10.4	Event Filter.....	202
12.11	Instance queries.....	202
12.11.1	Instance Number and Types.....	202
12.11.2	Instance Status.....	203
12.11.3	Instance Error.....	204
12.12	Instance cross contamination.....	204
12.12.1	Instance Event Priority.....	204
12.13	Reserved Commands.....	205
12.13.1	Reserved standard device commands.....	205
12.13.2	Reserved instance commands (instance type 0).....	206
12.13.3	Reserved special commands.....	207
12.14	General subsequences.....	208
12.14.1	Reset Device.....	208
12.14.2	EnableApplicationControllerAndAllInstances.....	208
12.14.3	DisableApplicationControllerAndAllInstances.....	208
12.14.4	HasApplicationController.....	209
12.14.5	GetVersionNumber.....	209
12.14.6	AddDeviceGroups.....	209
12.14.7	RemoveDeviceGroups.....	210
12.14.8	ClearAllDeviceGroups.....	210
12.14.9	CheckDeviceGroups.....	210
12.14.10	GetDeviceGroups.....	211
12.14.11	PowerCycle.....	211
12.14.12	PowerCycleAndWaitForBusPower.....	212
12.14.13	PowerCycleAndWaitForDecoder.....	212
12.14.14	SetupTestFrame.....	213
12.14.15	GetNumberOfInstances.....	213
12.14.16	GetEventFilter.....	213
12.14.17	SetEventFilter.....	213
12.14.18	GetNumberOfLogicalUnits.....	214
12.14.19	GetIndexOfLogicalUnit.....	214
12.14.20	GetRandomAddress.....	214
12.14.21	GetLimitedRandomAddress.....	214
12.14.22	SetSearchAddress.....	215
12.14.23	SetShortAddress.....	215
12.14.24	ReadMemBankMultibyteLocation.....	216
12.14.25	FindImplementedMemoryBank.....	216
12.14.26	FindAllImplementedMemoryBanks.....	217
12.14.27	ShortAddress.....	217
12.14.28	GroupAddress.....	217
12.14.29	Broadcast.....	217
12.14.30	BroadcastUnaddressed.....	218
12.14.31	InstanceNumber.....	218
12.14.32	InstanceGroup.....	218
12.14.33	InstanceType.....	218

12.14.34 InstanceBroadcast	219
12.14.35 FeatureOfInstanceNumber	219
12.14.36 FeatureOfInstanceGroup	219
12.14.37 FeatureOfInstanceType	219
12.14.38 FeatureOfInstanceBroadcast	220
12.14.39 FeatureOfDevice	220
12.14.40 FeatureOfDeviceWithGroupAddress	220
12.14.41 FeatureOfDeviceWithBroadcast	220
Bibliography	222
Figure 1 - IEC 62386 graphical overview	14
Figure 2 – Current rating test	88
Table 1 – 24-bit command frame encoding	20
Table 2 – Instance byte in a command frame	21
Table 3 – 24-bit event message frame encoding	22
Table 4 – Instance types	25
Table 5 – Feature types	25
Table 6 – Instance group variables	26
Table 7 – Device address information in power cycle event	28
Table 8 – Event addressing schemes	28
Table 9 – Signal level (~50%) versus resolution and input value	30
Table 10 – Example querying sequence to read a 4-byte input value	30
Table 11 – Basic memory map of memory banks	34
Table 12 – Memory map of memory bank 0	36
Table 13 – Memory map of memory bank 1	39
Table 14 – Control device capabilities	43
Table 15 – Control device status	44
Table 16 – Instance status	44
Table 17 – Declaration of device variables	46
Table 18 – Declaration of instance variables	47
Table 19 – Instance event messages	47
Table 20 – Device event messages	47
Table 21 – Standard commands	48
Table 22 – Special commands (implemented by both application controller and input device)	52
Table 23 – Device addressing with “INITIALISE (<i>device</i>)”	64
Table 24 – Unexpected outcome	72
Table 25 – Parameters for test sequence Check Factory Default 103	79
Table 26 – Parameters for test sequence CheckFactoryDefault103PerLogicalUnit	82
Table 27 – Parameters for test sequence Transmitter bit timing	84
Table 28 – Parameters for test sequence Maximum and minimum system voltage	86
Table 29 – Parameters for test sequence Transmitter voltages	89
Table 30 – Parameters for test sequence Transmitter rising and falling edges	90

Table 31 – Parameters for test sequence Transmitter bit timing	94
Table 32 – Parameters for test sequence Receiver frame timing	95
Table 33 – Parameters for test sequence Receiver start-up behavior	96
Table 34 – Parameters for test sequence Receiver bit timing	98
Table 35 – Parameters for test sequence extended receiver bit timing	102
Table 36 – Parameters for test sequence Receiver frame violation and recovering after frame size violation.....	103
Table 37 – Parameters for test sequence Receiver frame timing	104
Table 38 – Parameters for test sequence transmitter collision avoidance by priority	107
Table 39 – Parameters for test sequence transmitter collision detection for truncated idle phase.....	110
Table 40 – Parameters for test sequence transmitter collision detection for extended active phase	113
Table 41 – Parameters for test sequence RESET instance groups	116
Table 42 – Parameters for test sequence Send twice timeout (device)	122
Table 43 – Parameters for test sequence Send twice timeout (instance)	124
Table 44 – Parameters for test sequence Commands in-between (device)	127
Table 45 – Parameters for test sequence Commands in-between.....	130
Table 46 – Parameters for test sequence SET SHORT ADDRESS	137
Table 47 – Parameters for test sequence Reset/Power-on values (device)	138
Table 48 – Parameters for test sequence Reset/Power-on values (instance)	140
Table 49 – Parameters for test sequence DTR0 / DTR1 / DTR2	141
Table 50 – Parameters for test sequence DTR1:DTR0 and DTR2:DTR1	142
Table 51 – Parameters for test sequence READ MEMORY LOCATION on Memory Bank 0.....	149
Table 52 – Parameters for test sequence READ MEMORY LOCATION on Memory Bank 1.....	152
Table 53 – Parameters for test sequence Memory bank writing	157
Table 54 – Parameters for test sequence ENABLE WRITE MEMORY: writeEnableState.....	160
Table 55 – Parameters for test sequence ENABLE WRITE MEMORY: timeout / command in-between	162
Table 56 – Parameters for test sequence RESET MEMORY BANK: timeout / command in-between.....	165
Table 57 – Parameters for test sequence RESET MEMORY BANK	166
Table 58 – Parameters for test sequence INITIALISE - device addressing.....	169
Table 59 – Parameters for test sequence COMPARE.....	171
Table 60 – Parameters for test sequence WITHDRAW.....	172
Table 61 – Parameters for test sequence PROGRAM SHORT ADDRESS	175
Table 62 – Parameters for test sequence VERIFY SHORT ADDRESS	176
Table 63 – Parameters for test sequence QUERY SHORT ADDRESS.....	177
Table 64 – Parameters for test sequence IDENTIFY DEVICE.....	180
Table 65 – Parameters for test sequence Addressing 2	185
Table 66 – Parameters for test sequence Reserved commands: standard device commands.....	206
Table 67 – Parameters for test sequence Reserved instance commands (instance type 0).....	207

Table 68 – Parameters for test sequence Reserved special commands.....207

INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL ADDRESSABLE LIGHTING INTERFACE –

**Part 103: General requirements –
Control devices**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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This Consolidated version of IEC 62386-103 bears the edition number 1.1. It consists of the first edition (2014-11) [documents 34C/1100/FDIS and 34C/1113/RVD] and its amendment 1 (2018-09) [documents 34/524/FDIS and 34/535/RVD]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

International Standard IEC 62386-103 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 103 is intended to be used in conjunction with Part 101, which contains general requirements for the relevant product type (system), and with the appropriate Parts 3xx (particular requirements for control devices) containing clauses to supplement or modify the corresponding clauses in Parts 101 and 103 in order to provide the relevant requirements for each type of product.

A list of all parts of the IEC 62386 series, under the general title: *Digital addressable lighting interface*, can be found on the IEC website.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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INTRODUCTION

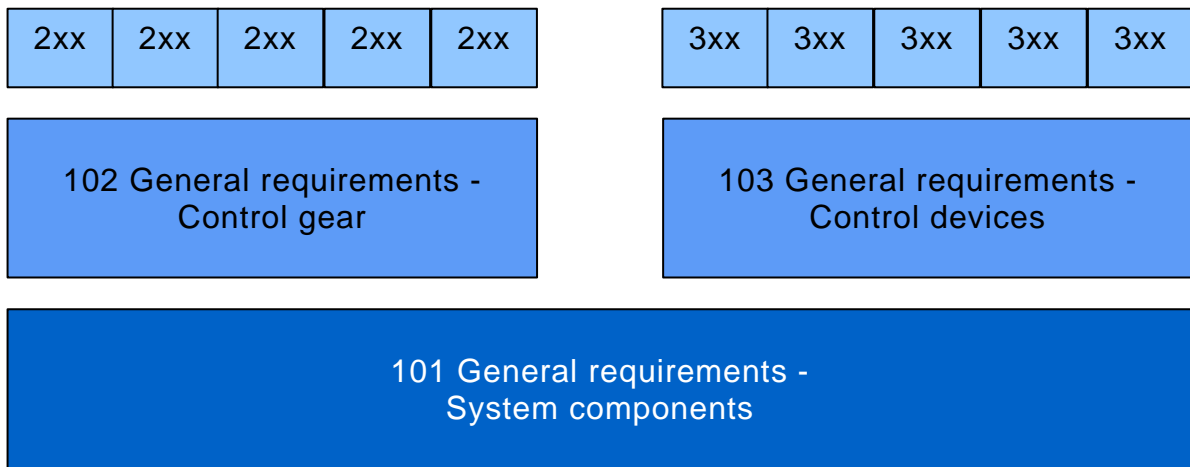
IEC 62386 contains several parts, referred to as series. The 1xx series includes the basic specifications. Part 101 contains general requirements for system components, Part 102 extends this information with general requirements for control gear and Part 103 extends it further with general requirements for control devices.

The 2xx parts extend the general requirements for control gear with lamp specific extensions (mainly for backward compatibility with Edition 1 of IEC 62386) and with control gear specific features.

The 3xx parts extend the general requirements for control devices with input device specific extensions describing the instance types as well as some common features that can be combined with multiple instance types.

This first edition of IEC 62386-103 is intended to be used in conjunction with IEC 62386-101:2014, IEC 62386-101:2014/AMD1:2018, IEC 62386-102:2014, IEC 62386-102:2014/AMD1:2018 and with the various parts that make up the IEC 62386-2xx series for control gear, together with the various parts that make up the IEC 62386-3xx series of particular requirements for control devices. The division into separately published parts provides for ease of future amendments and revisions. Additional requirements will be added as and when a need for them is recognised.

The setup of the standard is graphically represented in Figure 1 below



IEC

Figure 1 - IEC 62386 graphical overview

When this part of IEC 62386 refers to any of the clauses of the other two parts of the IEC 62386-1xx series, the extent to which such a clause is applicable and the order in which the tests are to be performed are specified. The other parts also include additional requirements, as necessary.

All numbers used in this International Standard are decimal numbers unless otherwise noted.

Hexadecimal numbers are given in the format 0xVV, where VV is the value. Binary numbers are given in the format XXXXXXXXb or in the format XXXX XXXX, where X is 0 or 1, "x" in binary numbers means "don't care".

The following typographic expressions are used:

Variables: *variableName* or *variableName[3:0]*, giving only bits 3 to 0 of *variableName*.

Range of values: [lowest, highest]

Command: "COMMAND NAME"

DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 103: General requirements – Control devices

1 Scope

This Part of IEC 62386 is applicable to control devices in a bus system for control by digital signals of electronic lighting equipment which is in line with the requirements of IEC 61347 (all parts), with the addition of DC supplies.

NOTE Tests in this standard are type tests. Requirements for testing individual products during production are not included.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62386-101:2014, *Digital addressable lighting interface – Part 101: General requirements – System components*
IEC 62386-101:2014/AMD1:2018

IEC 62386-102:2014, *Digital addressable lighting interface – Part 102: General requirements – Control gear*
IEC 62386-102:2014/AMD1:2018

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62386-101 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

broadcast

type of address used to address all control devices in the system at once

3.2

broadcast unaddressed

type of address used to address all control devices in the system that have no short address at once

3.3

device command

command which addresses the control device and has a value of 0xFE in the instance byte of the command frame