

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

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



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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

XH

ICS 29.140, 29.140.50

ISBN 978-2-8322-1905-8

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CONTENTS

FOREWORD.....	11
INTRODUCTION.....	13
1 Scope.....	15
2 Normative references	15
3 Terms and definitions	15
4 General	18
4.1 General.....	18
4.2 Version number	18
5 Electrical specification	18
6 Interface power supply	18
7 Transmission protocol structure.....	18
7.1 General.....	18
7.2 24 bit forward frame encoding.....	19
7.2.1 Frame format for instructions and queries.....	19
7.2.2 Frame format for event messages.....	20
8 Timing	21
9 Method of operation.....	21
9.1 General.....	21
9.2 Application controller	21
9.2.1 General	21
9.2.2 Single-master application controller.....	22
9.2.3 Multi-master application controller.....	22
9.3 Input device	22
9.4 Instances of input devices.....	23
9.4.1 General	23
9.4.2 Instance number.....	23
9.4.3 Instance type	23
9.4.4 Feature type	23
9.4.5 Instance groups.....	24
9.5 Commands	24
9.5.1 General	24
9.5.2 Device commands	24
9.5.3 Instance commands.....	25
9.5.4 Feature commands	25
9.6 Event messages	25
9.6.1 Response to event messages	25
9.6.2 Device power cycle event	25
9.6.3 Input notification event	25
9.6.4 Event message filter	26
9.7 Input signal and input value	27
9.7.1 General	27
9.7.2 Input resolution.....	27
9.7.3 Getting the input value.....	27
9.7.4 Notification of changes	28
9.8 System failure.....	28

9.9	Operating a control device	29
9.9.1	Enable/disable the application controller.....	29
9.9.2	Enable/disable event messages.....	29
9.9.3	Quiescent mode	29
9.9.4	Modes of operation	30
9.10	Memory banks	30
9.10.1	General	30
9.10.2	Memory map.....	31
9.10.3	Selecting a memory bank location	31
9.10.4	Memory bank reading	32
9.10.5	Memory bank writing.....	32
9.10.6	Memory bank 0.....	33
9.10.7	Memory bank 1.....	35
9.10.8	Manufacturer specific memory banks.....	37
9.10.9	Reserved memory banks	37
9.11	Reset.....	37
9.11.1	Reset operation	37
9.11.2	Reset memory bank operation	37
9.12	Power on behaviour.....	37
9.12.1	Power on	37
9.12.2	Power cycle notification	38
9.13	Priority use	38
9.13.1	General	38
9.13.2	Priority of input notifications	38
9.14	Assigning short addresses	39
9.14.1	General	39
9.14.2	Random address allocation.....	39
9.14.3	Identification of a device	39
9.15	Exception handling	40
9.16	Device capabilities and status information	40
9.16.1	Device capabilities.....	40
9.16.2	Device status.....	40
9.16.3	Instance status	41
9.17	Non-volatile memory	41
10	Declaration of variables	42
11	Definition of commands	43
11.1	General.....	43
11.2	Overview sheets	43
11.3	Event messages	48
11.3.1	INPUT NOTIFICATION (<i>device/instance, event</i>).....	48
11.3.2	POWER NOTIFICATION (<i>device</i>)	48
11.4	Device control instructions	48
11.4.1	General	48
11.4.2	IDENTIFY DEVICE	48
11.4.3	RESET POWER CYCLE SEEN	49
11.5	Device configuration instructions.....	49
11.5.1	General	49
11.5.2	RESET	49
11.5.3	RESET MEMORY BANK (<i>DTR0</i>)	49

11.5.4	SET SHORT ADDRESS (<i>DTR0</i>)	49
11.5.5	ENABLE WRITE MEMORY	49
11.5.6	ENABLE APPLICATION CONTROLLER	50
11.5.7	DISABLE APPLICATION CONTROLLER	50
11.5.8	SET OPERATING MODE (<i>DTR0</i>)	50
11.5.9	ADD TO DEVICE GROUPS 0-15 (<i>DTR2:DTR1</i>)	50
11.5.10	ADD TO DEVICE GROUPS 16-31 (<i>DTR2:DTR1</i>)	50
11.5.11	REMOVE FROM DEVICE GROUPS 0-15 (<i>DTR2:DTR1</i>).....	50
11.5.12	REMOVE FROM DEVICE GROUPS 16-31 (<i>DTR2:DTR1</i>).....	50
11.5.13	START QUIESCENT MODE	50
11.5.14	STOP QUIESCENT MODE	50
11.5.15	ENABLE POWER CYCLE NOTIFICATION	51
11.5.16	DISABLE POWER CYCLE NOTIFICATION	51
11.5.17	SAVE PERSISTENT VARIABLES	51
11.6	Device queries	51
11.6.1	General	51
11.6.2	QUERY DEVICE CAPABILITIES.....	51
11.6.3	QUERY DEVICE STATUS	51
11.6.4	QUERY APPLICATION CONTROLLER ERROR	52
11.6.5	QUERY INPUT DEVICE ERROR	52
11.6.6	QUERY MISSING SHORT ADDRESS.....	52
11.6.7	QUERY VERSION NUMBER.....	52
11.6.8	QUERY CONTENT <i>DTR0</i>	52
11.6.9	QUERY NUMBER OF INSTANCES.....	52
11.6.10	QUERY CONTENT <i>DTR1</i>	52
11.6.11	QUERY CONTENT <i>DTR2</i>	52
11.6.12	QUERY RANDOM ADDRESS (H)	53
11.6.13	QUERY RANDOM ADDRESS (M).....	53
11.6.14	QUERY RANDOM ADDRESS (L).....	53
11.6.15	READ MEMORY LOCATION (<i>DTR1</i> , <i>DTR0</i>).....	53
11.6.16	QUERY APPLICATION CONTROL ENABLED	53
11.6.17	QUERY OPERATING MODE	53
11.6.18	QUERY MANUFACTURER SPECIFIC MODE	53
11.6.19	QUERY QUIESCENT MODE.....	53
11.6.20	QUERY DEVICE GROUPS 0-7	53
11.6.21	QUERY DEVICE GROUPS 8-15	54
11.6.22	QUERY DEVICE GROUPS 16-23	54
11.6.23	QUERY DEVICE GROUPS 24-31	54
11.6.24	QUERY POWER CYCLE NOTIFICATION	54
11.6.25	QUERY EXTENDED VERSION NUMBER(<i>DTR0</i>)	54
11.6.26	QUERY RESET STATE	54
11.7	Instance control instructions	54
11.8	Instance configuration instructions.....	54
11.8.1	General	54
11.8.2	ENABLE INSTANCE	55
11.8.3	DISABLE INSTANCE	55
11.8.4	SET PRIMARY INSTANCE GROUP (<i>DTR0</i>)	55
11.8.5	SET INSTANCE GROUP 1 (<i>DTR0</i>).....	55
11.8.6	SET INSTANCE GROUP 2 (<i>DTR0</i>).....	55

11.8.7	SET EVENT SCHEME (<i>DTR0</i>).....	55
11.8.8	SET EVENT PRIORITY (<i>DTR0</i>).....	56
11.8.9	SET EVENT FILTER (<i>DTR2</i> , <i>DTR1</i> , <i>DTR0</i>)	56
11.9	Instance queries	56
11.9.1	General	56
11.9.2	QUERY INSTANCE TYPE	56
11.9.3	QUERY RESOLUTION	56
11.9.4	QUERY INSTANCE ERROR	56
11.9.5	QUERY INSTANCE STATUS.....	56
11.9.6	QUERY INSTANCE ENABLED	57
11.9.7	QUERY PRIMARY INSTANCE GROUP	57
11.9.8	QUERY INSTANCE GROUP 1.....	57
11.9.9	QUERY INSTANCE GROUP 2.....	57
11.9.10	QUERY EVENT SCHEME.....	57
11.9.11	QUERY INPUT VALUE	57
11.9.12	QUERY INPUT VALUE LATCH.....	57
11.9.13	QUERY EVENT PRIORITY	57
11.9.14	QUERY FEATURE TYPE.....	58
11.9.15	QUERY NEXT FEATURE TYPE.....	58
11.9.16	QUERY EVENT FILTER 0-7	58
11.9.17	QUERY EVENT FILTER 8-15	58
11.9.18	QUERY EVENT FILTER 16-23.....	58
11.10	Special commands.....	58
11.10.1	General	58
11.10.2	TERMINATE.....	58
11.10.3	INITIALISE (<i>device</i>).....	59
11.10.4	RANDOMISE	59
11.10.5	COMPARE	59
11.10.6	WITHDRAW.....	59
11.10.7	SEARCHADDRH (<i>data</i>).....	60
11.10.8	SEARCHADDRM (<i>data</i>)	60
11.10.9	SEARCHADDRL (<i>data</i>)	60
11.10.10	PROGRAM SHORT ADDRESS (<i>data</i>)	60
11.10.11	VERIFY SHORT ADDRESS (<i>data</i>)	60
11.10.12	QUERY SHORT ADDRESS	61
11.10.13	WRITE MEMORY LOCATION (<i>DTR1</i> , <i>DTR0</i> , <i>data</i>)	61
11.10.14	WRITE MEMORY LOCATION – NO REPLY (<i>DTR1</i> , <i>DTR0</i> , <i>data</i>)	61
11.10.15	<i>DTR0</i> (<i>data</i>)	61
11.10.16	<i>DTR1</i> (<i>data</i>)	62
11.10.17	<i>DTR2</i> (<i>data</i>)	62
11.10.18	DIRECT WRITE MEMORY (<i>DTR1</i> , <i>offset</i> , <i>data</i>)	62
11.10.19	<i>DTR1</i> : <i>DTR0</i> (<i>data1</i> , <i>data0</i>).....	62
11.10.20	<i>DTR2</i> : <i>DTR1</i> (<i>data2</i> , <i>data1</i>).....	62
11.10.21	SEND TESTFRAME (<i>data</i>)	62
12	Test procedures	63
12.1	General notes on test.....	63
12.1.1	General	63
12.1.2	Test execution	63
12.1.3	Data transmission.....	64

12.1.4	Test setup	64
12.1.5	Test output	64
12.1.6	Test notation	65
12.1.7	Test execution limitations	66
12.1.8	Test results	66
12.1.9	Exception handling	66
12.1.10	Unexpected answer	66
12.2	Preamble	68
12.2.1	Test preamble	68
12.3	Physical operational parameters	79
12.3.1	Polarity test	79
12.3.2	Maximum and minimum system voltage	80
12.3.3	Overvoltage protection test.....	80
12.3.4	Current rating test.....	81
12.3.5	Transmitter voltages	83
12.3.6	Transmitter rising and falling edges	84
12.3.7	Transmitter bit timing.....	86
12.3.8	Transmitter frame timing.....	88
12.3.9	Receiver start-up behavior.....	89
12.3.10	Receiver threshold.....	90
12.3.11	Receiver bit timing.....	91
12.3.12	Extended receiver bit timing	95
12.3.13	Receiver forward frame violation.....	97
12.3.14	Receiver settling timing	97
12.3.15	Receiver frame timing FF-FF send twice.....	98
12.3.16	Transmitter collision avoidance by priority	100
12.3.17	Transmitter collision detection for truncated idle phase.....	101
12.3.18	Transmitter collision detection for extended active phase	104
12.4	Device configuration instructions.....	107
12.4.1	RESET deviceGroups	107
12.4.2	RESET quiescentMode.....	108
12.4.3	RESET instance groups.....	109
12.4.4	RESET event filter	110
12.4.5	RESET event scheme	111
12.4.6	RESET: timeout / command in-between.....	112
12.4.7	Send twice timeout (device).....	114
12.4.8	Send twice timeout (instance).....	117
12.4.9	Commands in-between (device).....	119
12.4.10	Commands in-between (instance).....	122
12.4.11	SAVE PERSISTENT VARIABLES	125
12.4.12	SET OPERATING MODE.....	125
12.4.13	Device Disable/Enable Application Controller	126
12.4.14	Multi Master Control Device PING	127
12.4.15	Quiescent Mode	128
12.4.16	Device power cycle notification.....	129
12.4.17	SET SHORT ADDRESS.....	130
12.4.18	Reset/Power-on values (device)	131
12.4.19	Reset/Power-on values (instance)	133
12.4.20	DTR0 / DTR1 / DTR2.....	134

12.4.21	DTR1:DTR0 and DTR2:DTR1	135
12.4.22	Device Groups.....	136
12.5	Device queries.....	137
12.5.1	Device query capabilities	137
12.5.2	QUERY VERSION NUMBER.....	137
12.5.3	Device power cycle seen	138
12.5.4	Input device error	138
12.6	Device Memory banks.....	139
12.6.1	READ MEMORY LOCATION on Memory Bank 0.....	139
12.6.2	READ MEMORY LOCATION on Memory Bank 1.....	144
12.6.3	READ MEMORY LOCATION on other Memory Banks.....	146
12.6.4	Memory bank writing.....	148
12.6.5	ENABLE WRITE MEMORY: writeEnableState.....	153
12.6.6	ENABLE WRITE MEMORY: timeout / command in-between.....	155
12.6.7	RESET MEMORY BANK: timeout / command in-between	156
12.6.8	RESET MEMORY BANK.....	159
12.7	Device Special commands	160
12.7.1	INITIALISE – timer.....	160
12.7.2	TERMINATE.....	161
12.7.3	INITIALISE - device addressing	162
12.7.4	RANDOMISE	163
12.7.5	COMPARE	163
12.7.6	WITHDRAW.....	165
12.7.7	SEARCHADDRH / SEARCHADDRM / SEARCHADDRL	166
12.7.8	PROGRAM SHORT ADDRESS.....	167
12.7.9	VERIFY SHORT ADDRESS	169
12.7.10	QUERY SHORT ADDRESS	170
12.7.11	IDENTIFY DEVICE	172
12.8	Logical unit cross contamination	174
12.8.1	DTR0.....	174
12.8.2	NVM variables	174
12.8.3	Random address generation	175
12.8.4	Addressing 1	176
12.8.5	Addressing 2	177
12.8.6	Addressing 3	179
12.9	Instance addressing.....	180
12.9.1	Instance Type Addressing	180
12.9.2	Instance Primary Group	181
12.9.3	Instance Group 2	182
12.9.4	Instance Group 1	184
12.9.5	Instance Group Combinations.....	185
12.9.6	Multiple Instances Answer	187
12.10	Instance configuration instructions.....	188
12.10.1	Instance Enable/Disable	188
12.10.2	Event Scheme	190
12.10.3	Input Resolution & Input Value	195
12.10.4	Event Filter	195
12.11	Instance queries	196
12.11.1	Instance Number and Types	196

12.11.2	Instance Status.....	197
12.11.3	Instance Error.....	197
12.12	Instance cross contamination.....	198
12.12.1	Instance Event Priority.....	198
12.13	Reserved Commands.....	199
12.13.1	Reserved standard device commands.....	199
12.13.2	Reserved instance commands (instance type 0)	200
12.13.3	Reserved special commands	200
12.14	General subsequences	201
12.14.1	Reset Device	201
12.14.2	EnableApplicationControllerAndAllInstances.....	202
12.14.3	DisableApplicationControllerAndAllInstances	202
12.14.4	HasApplicationController	202
12.14.5	GetVersionNumber	203
12.14.6	AddDeviceGroups.....	203
12.14.7	RemoveDeviceGroups	203
12.14.8	ClearAllDeviceGroups.....	204
12.14.9	CheckDeviceGroups	204
12.14.10	GetDeviceGroups	205
12.14.11	PowerCycle	205
12.14.12	PowerCycleAndWaitForBusPower	205
12.14.13	PowerCycleAndWaitForDecoder	206
12.14.14	SetupTestFrame	206
12.14.15	GetNumberOfInstances	207
12.14.16	GetEventFilter	207
12.14.17	SetEventFilter.....	207
12.14.18	GetNumberOfLogicalUnits	207
12.14.19	GetIndexOfLogicalUnit.....	207
12.14.20	GetRandomAddress.....	208
12.14.21	GetLimitedRandomAddress	208
12.14.22	SetSearchAddress	208
12.14.23	SetShortAddress	209
12.14.24	ReadMemBankMultibyteLocation	209
12.14.25	FindImplementedMemoryBank.....	210
12.14.26	FindAllImplementedMemoryBanks	210
12.14.27	ShortAddress.....	211
12.14.28	GroupAddress	211
12.14.29	Broadcast	211
12.14.30	BroadcastUnaddressed.....	211
12.14.31	InstanceNumber	211
12.14.32	InstanceGroup.....	212
12.14.33	InstanceType	212
12.14.34	InstanceBroadcast.....	212
12.14.35	FeatureOfInstanceNumber.....	212
12.14.36	FeatureOfInstanceGroup	213
12.14.37	FeatureOfInstanceType	213
12.14.38	FeatureOfInstanceBroadcast	213
12.14.39	FeatureOfDevice	213
12.14.40	FeatureOfDeviceWithGroupAddress	214

12.14.41 FeatureOfDeviceWithBroadcast	214
Bibliography	215
Figure 1 - IEC 62386 graphical overview	13
Figure 2 – Current rating test	82
Table 1 – 24-bit command frame encoding	19
Table 2 – Instance byte in a command frame	19
Table 3 – 24-bit event message frame encoding	20
Table 4 – Instance types	23
Table 5 – Feature types	23
Table 6 – Instance group variables	24
Table 7 – Device address information in power cycle event	25
Table 8 – Event addressing schemes	26
Table 9 – Signal level (~50%) versus resolution and input value	27
Table 10 – Example querying sequence to read a 4-byte input value	28
Table 11 – Basic memory map of memory banks	31
Table 12 – Memory map of memory bank 0	34
Table 13 – Memory map of memory bank 1	36
Table 14 – Control device capabilities	40
Table 15 – Control device status	40
Table 16 – Instance status	41
Table 17 – Declaration of device variables	42
Table 18 – Declaration of instance variables	43
Table 19 – Instance event messages	43
Table 20 – Device event messages	43
Table 21 – Standard commands	44
Table 22 – Special commands (implemented by both application controller and input device)	47
Table 23 – Device addressing with “INITIALISE (device)”	59
Table 24 – Unexpected outcome	67
Table 25 – Parameters for test sequence Check Factory Default 103	74
Table 26 – Parameters for test sequence CheckFactoryDefault103PerLogicalUnit	77
Table 27 – Parameters for test sequence Transmitter bit timing	79
Table 28 – Parameters for test sequence Maximum and minimum system voltage	80
Table 29 – Parameters for test sequence Transmitter voltages	84
Table 30 – Parameters for test sequence Transmitter rising and falling edges	85
Table 31 – Parameters for test sequence Transmitter bit timing	88
Table 32 – Parameters for test sequence Receiver frame timing	89
Table 33 – Parameters for test sequence Receiver start-up behavior	90
Table 34 – Parameters for test sequence Receiver bit timing	92
Table 35 – Parameters for test sequence extended receiver bit timing	96
Table 36 – Parameters for test sequence Receiver frame violation and recovering after frame size violation	97

Table 37 – Parameters for test sequence Receiver frame timing	98
Table 38 – Parameters for test sequence transmitter collision avoidance by priority	101
Table 39 – Parameters for test sequence transmitter collision detection for truncated idle phase	104
Table 40 – Parameters for test sequence transmitter collision detection for extended active phase	107
Table 41 – Parameters for test sequence RESET instance groups	110
Table 42 – Parameters for test sequence Send twice timeout (device)	116
Table 43 – Parameters for test sequence Send twice timeout (instance)	118
Table 44 – Parameters for test sequence Commands in-between (device)	121
Table 45 – Parameters for test sequence Commands in-between	124
Table 46 – Parameters for test sequence SET SHORT ADDRESS	131
Table 47 – Parameters for test sequence Reset/Power-on values (device)	132
Table 48 – Parameters for test sequence Reset/Power-on values (instance)	134
Table 49 – Parameters for test sequence DTR0 / DTR1 / DTR2	134
Table 50 – Parameters for test sequence DTR1:DTR0 and DTR2:DTR1	136
Table 51 – Parameters for test sequence READ MEMORY LOCATION on Memory Bank 0	143
Table 52 – Parameters for test sequence READ MEMORY LOCATION on Memory Bank 1	146
Table 53 – Parameters for test sequence Memory bank writing	151
Table 54 – Parameters for test sequence ENABLE WRITE MEMORY: writeEnableState	154
Table 55 – Parameters for test sequence ENABLE WRITE MEMORY: timeout / command in-between	156
Table 56 – Parameters for test sequence RESET MEMORY BANK: timeout / command in-between	159
Table 57 – Parameters for test sequence RESET MEMORY BANK	160
Table 58 – Parameters for test sequence INITIALISE - device addressing	162
Table 59 – Parameters for test sequence COMPARE	164
Table 60 – Parameters for test sequence WITHDRAW	166
Table 61 – Parameters for test sequence PROGRAM SHORT ADDRESS	168
Table 62 – Parameters for test sequence VERIFY SHORT ADDRESS	170
Table 63 – Parameters for test sequence QUERY SHORT ADDRESS	171
Table 64 – Parameters for test sequence IDENTIFY DEVICE	173
Table 65 – Parameters for test sequence Addressing 2	179
Table 66 – Parameters for test sequence Reserved commands: standard device commands	199
Table 67 – Parameters for test sequence Reserved instance commands (instance type 0) ..	200
Table 68 – Parameters for test sequence Reserved special commands	201

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DIGITAL ADDRESSABLE LIGHTING INTERFACE –**Part 103: General requirements –
Control devices****FOREWORD**

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

The text of this standard is based on the following documents:

FDIS	Report on voting
34C/1100/FDIS	34C/1113/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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 this publication 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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

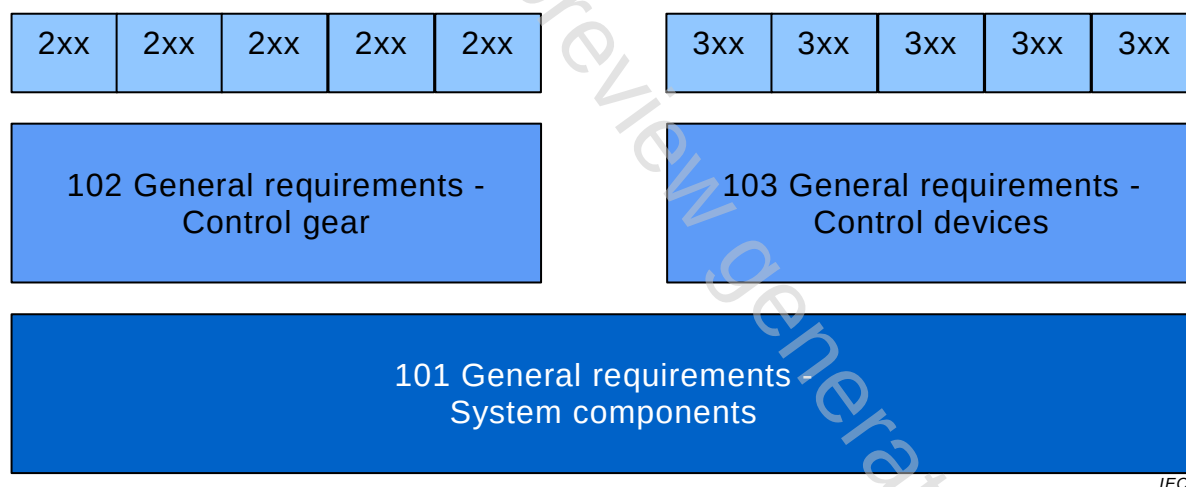
IEC 62386 contains several parts, referred to as series. The 1xx series includes the basic specifications. Part 101 contains general requirements for system components, Part 102 extends this information with general requirements for control gear and Part 103 extends it further with general requirements 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 published in conjunction with IEC 62386-101:2014, IEC 62386-102:2014 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 **Error! Reference source not found.** 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"

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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. This electronic lighting equipment should be in line with the requirements of IEC 61347, with the addition of d.c. 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, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 62386-102:2014, *Digital addressable lighting interface – Part 102: General requirements – Control gear*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62386-101:2014, Clause 3 apply, with the following additional terms and definitions.

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

3.4

device group

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