



# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Digital addressable lighting interface –  
Part 102: General requirements – Control gear**

**Interface d'éclairage adressable numérique –  
Partie 102: Exigences générales – Appareillages de commande**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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ELECTROTECHNIQUE  
INTERNATIONALE

PRICE CODE **XH**  
CODE PRIX

ICS 29.140, 29.140.50

ISBN 978-2-8322-1906-5

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## CONTENTS

FOREWORD.....	12
INTRODUCTION.....	14
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.....	19
7.1 General.....	19
7.2 16 bit forward frame encoding.....	19
7.2.1 General .....	19
7.2.2 Address byte .....	19
7.2.3 Opcode byte .....	19
8 Timing .....	19
9 Method of operation.....	20
9.1 General.....	20
9.2 Control gear.....	20
9.3 Dimming curve.....	20
9.4 Calculating “ <i>targetLevel</i> ” .....	23
9.5 Fading .....	23
9.5.1 General .....	23
9.5.2 Fade time .....	24
9.5.3 Fade rate.....	25
9.5.4 Extended fade time.....	26
9.5.5 Using the fade time.....	28
9.5.6 Using the fade rate .....	28
9.5.7 Behaviour during a fade.....	28
9.5.8 Behaviour during startup.....	28
9.5.9 Stopping a fade .....	28
9.6 Min and max level.....	29
9.7 Commands .....	29
9.7.1 General .....	29
9.7.2 Level instructions without fade.....	30
9.7.3 Level instructions initiating a fade.....	30
9.7.4 Configuration instructions .....	30
9.7.5 Queries .....	30
9.7.6 Special commands .....	31
9.7.7 Application extended commands.....	31
9.8 Command iterations.....	31
9.8.1 General .....	31
9.8.2 Command iteration of “UP” and “DOWN” commands.....	31
9.8.3 DAPC SEQUENCE (deprecated) .....	31

9.9	Modes of operation .....	32
9.9.1	General .....	32
9.9.2	Operating mode 0x00: standard mode .....	32
9.9.3	Operating mode 0x01 to 0x7F: reserved .....	32
9.9.4	Operating mode 0x80 to 0xFF: manufacturer specific modes .....	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.....	34
9.10.6	Memory bank 0.....	35
9.10.7	Memory bank 1.....	37
9.10.8	Manufacturer specific memory banks.....	39
9.10.9	Reserved memory banks .....	39
9.11	Reset.....	39
9.11.1	Reset operation .....	39
9.11.2	Reset memory bank operation .....	39
9.12	System failure.....	39
9.13	Power on .....	40
9.14	Assigning short addresses .....	41
9.14.1	General .....	41
9.14.2	Random address allocation.....	41
9.14.3	Identification of a device.....	42
9.14.4	Direct address allocation .....	43
9.15	Failure state behaviour .....	43
9.16	Status information.....	43
9.16.1	General .....	43
9.16.2	Bit 0: Control gear failure.....	43
9.16.3	Bit 1: Lamp failure .....	44
9.16.4	Bit 2: Lamp on.....	44
9.16.5	Bit 3: Limit error.....	44
9.16.6	Bit 4: Fade running .....	44
9.16.7	Bit 5: Reset state .....	44
9.16.8	Bit 6: Missing short address.....	44
9.16.9	Bit 7: Power cycle seen .....	45
9.17	Non-volatile memory.....	45
9.18	Device types and features.....	45
9.19	Using scenes .....	46
10	Declaration of variables.....	47
11	Definition of commands .....	49
11.1	General.....	49
11.2	Overview Sheets.....	49
11.3	Level instructions.....	55
11.3.1	DAPC ( <i>level</i> ) .....	55
11.3.2	OFF.....	55
11.3.3	UP.....	55
11.3.4	DOWN.....	55
11.3.5	STEP UP.....	55

11.3.6	STEP DOWN .....	56
11.3.7	RECALL MAX LEVEL .....	56
11.3.8	RECALL MIN LEVEL .....	56
11.3.9	STEP DOWN AND OFF .....	57
11.3.10	ON AND STEP UP .....	57
11.3.11	ENABLE DAPC SEQUENCE .....	57
11.3.12	GO TO LAST ACTIVE LEVEL .....	58
11.3.13	GO TO SCENE ( <i>sceneNumber</i> ) .....	58
11.4	Configuration instructions .....	58
11.4.1	General .....	58
11.4.2	RESET .....	58
11.4.3	STORE ACTUAL LEVEL IN DTR0 .....	58
11.4.4	SAVE PERSISTENT VARIABLES .....	58
11.4.5	SET OPERATING MODE ( <i>DTR0</i> ) .....	59
11.4.6	RESET MEMORY BANK ( <i>DTR0</i> ) .....	59
11.4.7	IDENTIFY DEVICE .....	59
11.4.8	SET MAX LEVEL ( <i>DTR0</i> ) .....	60
11.4.9	SET MIN LEVEL ( <i>DTR0</i> ) .....	60
11.4.10	SET SYSTEM FAILURE LEVEL ( <i>DTR0</i> ) .....	60
11.4.11	SET POWER ON LEVEL ( <i>DTR0</i> ) .....	61
11.4.12	SET FADE TIME ( <i>DTR0</i> ) .....	61
11.4.13	SET FADE RATE ( <i>DTR0</i> ) .....	61
11.4.14	SET EXTENDED FADE TIME ( <i>DTR0</i> ) .....	61
11.4.15	SET SCENE ( <i>DTR0</i> , <i>sceneX</i> ) .....	62
11.4.16	REMOVE FROM SCENE ( <i>sceneX</i> ) .....	62
11.4.17	ADD TO GROUP ( <i>group</i> ) .....	62
11.4.18	REMOVE FROM GROUP ( <i>group</i> ) .....	62
11.4.19	SET SHORT ADDRESS ( <i>DTR0</i> ) .....	62
11.4.20	ENABLE WRITE MEMORY .....	63
11.5	Queries .....	63
11.5.1	General .....	63
11.5.2	QUERY STATUS .....	63
11.5.3	QUERY CONTROL GEAR PRESENT .....	63
11.5.4	QUERY CONTROL GEAR FAILURE .....	63
11.5.5	QUERY LAMP FAILURE .....	63
11.5.6	QUERY LAMP POWER ON .....	63
11.5.7	QUERY LIMIT ERROR .....	63
11.5.8	QUERY RESET STATE .....	63
11.5.9	QUERY MISSING SHORT ADDRESS .....	63
11.5.10	QUERY VERSION NUMBER .....	64
11.5.11	QUERY CONTENT DTR0 .....	64
11.5.12	QUERY DEVICE TYPE .....	64
11.5.13	QUERY NEXT DEVICE TYPE .....	64
11.5.14	QUERY PHYSICAL MINIMUM .....	64
11.5.15	QUERY POWER FAILURE .....	64
11.5.16	QUERY CONTENT DTR1 .....	64
11.5.17	QUERY CONTENT DTR2 .....	64
11.5.18	QUERY OPERATING MODE .....	65
11.5.19	QUERY LIGHT SOURCE TYPE .....	65

11.5.20	QUERY ACTUAL LEVEL .....	65
11.5.21	QUERY MAX LEVEL.....	65
11.5.22	QUERY MIN LEVEL.....	66
11.5.23	QUERY POWER ON LEVEL.....	66
11.5.24	QUERY SYSTEM FAILURE LEVEL .....	66
11.5.25	QUERY FADE TIME/FADE RATE .....	66
11.5.26	QUERY EXTENDED FADE TIME .....	66
11.5.27	QUERY MANUFACTURER SPECIFIC MODE .....	66
11.5.28	QUERY SCENE LEVEL ( <i>sceneX</i> ).....	66
11.5.29	QUERY GROUPS 0-7 .....	66
11.5.30	QUERY GROUPS 8-15 .....	66
11.5.31	QUERY RANDOM ADDRESS (H) .....	67
11.5.32	QUERY RANDOM ADDRESS (M).....	67
11.5.33	QUERY RANDOM ADDRESS (L).....	67
11.5.34	READ MEMORY LOCATION ( <i>DTR1, DTR0</i> ).....	67
11.6	Application extended commands.....	67
11.6.1	General .....	67
11.6.2	QUERY EXTENDED VERSION NUMBER .....	67
11.7	Special commands.....	68
11.7.1	General .....	68
11.7.2	TERMINATE .....	68
11.7.3	DTR0 ( <i>data</i> ) .....	68
11.7.4	INITIALISE ( <i>device</i> ) .....	68
11.7.5	RANDOMISE .....	68
11.7.6	COMPARE .....	69
11.7.7	WITHDRAW.....	69
11.7.8	SEARCHADDRH ( <i>data</i> ).....	69
11.7.9	SEARCHADDRM ( <i>data</i> ) .....	69
11.7.10	SEARCHADDRL ( <i>data</i> ) .....	69
11.7.11	PROGRAM SHORT ADDRESS ( <i>data</i> ) .....	70
11.7.12	VERIFY SHORT ADDRESS ( <i>data</i> ) .....	70
11.7.13	QUERY SHORT ADDRESS .....	70
11.7.14	ENABLE DEVICE TYPE ( <i>data</i> ).....	70
11.7.15	DTR1 ( <i>data</i> ) .....	71
11.7.16	DTR2 ( <i>data</i> ) .....	71
11.7.17	WRITE MEMORY LOCATION ( <i>DTR1, DTR0, data</i> ) .....	71
11.7.18	WRITE MEMORY LOCATION – NO REPLY ( <i>DTR1, DTR0, data</i> ) .....	71
11.7.19	PING .....	72
12	Test procedures .....	72
12.1	General notes on test.....	72
12.1.1	Abbreviations.....	72
12.1.2	Test execution.....	72
12.1.3	Data transmission.....	72
12.1.4	Test setup .....	73
12.1.5	Test output .....	73
12.1.6	Fade time measurements based on light output .....	73
12.1.7	Description of test scheme for fast fade times on PWM dimmer .....	74
12.1.8	Test notation .....	75
12.1.9	Test execution limitation .....	75

12.1.10	Test results .....	75
12.1.11	Exception handling .....	75
12.1.12	Unexpected answer .....	75
12.2	Preamble .....	77
12.2.1	Test preamble .....	77
12.3	Physical operational parameters .....	94
12.3.1	Polarity test .....	94
12.3.2	Maximum and minimum system voltage .....	94
12.3.3	Overvoltage protection test .....	95
12.3.4	Current rating test .....	96
12.3.5	Transmitter voltages .....	97
12.3.6	Transmitter rising and falling edges .....	99
12.3.7	Transmitter bit timing .....	101
12.3.8	Transmitter frame timing .....	103
12.3.9	Receiver start-up behavior .....	104
12.3.10	Receiver threshold .....	105
12.3.11	Receiver bit timing .....	106
12.3.12	Extended receiver bit timing .....	110
12.3.13	Receiver forward frame violation .....	112
12.3.14	Receiver settling timing .....	112
12.3.15	Receiver frame timing FF-FF send twice .....	113
12.4	Configuration instructions .....	115
12.4.1	RESET .....	115
12.4.2	RESET: timeout / command in-between .....	119
12.4.3	Send-twice timeout .....	121
12.4.4	Commands in-between .....	129
12.4.5	STORE ACTUAL LEVEL IN DTR0 .....	135
12.4.6	SAVE PERSISTENT VARIABLES .....	136
12.4.7	SET OPERATING MODE .....	136
12.4.8	SET MAX LEVEL .....	137
12.4.9	SET MIN LEVEL .....	137
12.4.10	SET SYSTEM FAILURE LEVEL .....	138
12.4.11	SET POWER ON LEVEL .....	139
12.4.12	SET FADE TIME .....	143
12.4.13	SET FADE RATE .....	143
12.4.14	SET SCENE / REMOVE FROM SCENE .....	144
12.4.15	ADD TO GROUP / REMOVE FROM GROUP .....	145
12.4.16	SET SHORT ADDRESS .....	146
12.4.17	SET EXTENDED FADE TIME .....	147
12.4.18	Reset/Power-on values .....	148
12.4.19	DTR0 / DTR1 / DTR2 .....	154
12.5	Memory banks .....	154
12.5.1	READ MEMORY LOCATION on Memory Bank 0 .....	154
12.5.2	READ MEMORY LOCATION on Memory Bank 1 .....	159
12.5.3	READ MEMORY LOCATION on other Memory Banks .....	161
12.5.4	Memory bank writing .....	163
12.5.5	ENABLE WRITE MEMORY: writeEnableState .....	168
12.5.6	ENABLE WRITE MEMORY: timeout / command in-between .....	171
12.5.7	RESET MEMORY BANK: timeout / command in-between .....	172

12.5.8	RESET MEMORY BANK.....	175
12.6	Level instructions.....	176
12.6.1	Level instructions: Basic behaviour.....	176
12.6.2	FADE TIME: possible values.....	181
12.6.3	FADE TIME: transitions.....	182
12.6.4	FADE TIME: fading to 0.....	184
12.6.5	FADE TIME: small steps fading.....	186
12.6.6	FADE TIME: extended fade time.....	189
12.6.7	FADE RATE: possible values.....	191
12.6.8	FADE RATE: transitions.....	194
12.6.9	FADE RATE: extended fade time.....	195
12.6.10	FADE TIME/FADE RATE: stop fading by setting MIN/MAX levels.....	196
12.6.11	FADE TIME/FADE RATE: stop fading.....	201
12.6.12	FADE TIME/FADE RATE: stop fading when a command is sent check timing.....	204
12.6.13	FADE TIME/FADE RATE: stop fading during startup.....	210
12.6.14	Level instructions: combined instructions.....	211
12.6.15	Power On Level - System Failure Level combined.....	213
12.6.16	ENABLE DAPC SEQUENCE.....	218
12.6.17	GO TO LAST ACTIVE LEVEL.....	219
12.6.18	GO TO SCENE.....	221
12.6.19	Power on: level control commands.....	222
12.6.20	Logarithmic dimming curve.....	224
12.6.21	Dimming curve: DAPC.....	225
12.6.22	Dimming curve: UP / DOWN.....	226
12.6.23	Dimming curve: STEP UP / STEP DOWN.....	227
12.6.24	FADE TIME/EXTENDED FADE TIME: light output behaviour.....	228
12.6.25	EXTENDED FADE TIME: light output behaviour.....	229
12.6.26	Behaviour during a fade.....	230
12.7	Special commands.....	232
12.7.1	INITIALISE timer.....	232
12.7.2	TERMINATE.....	234
12.7.3	INITIALISE - device addressing.....	234
12.7.4	RANDOMISE.....	235
12.7.5	COMPARE.....	236
12.7.6	WITHDRAW.....	237
12.7.7	SEARCHADDRH / SEARCHADDRM / SEARCHADDRL.....	238
12.7.8	PROGRAM SHORT ADDRESS.....	239
12.7.9	VERIFY SHORT ADDRESS.....	241
12.7.10	QUERY SHORT ADDRESS.....	242
12.7.11	IDENTIFY DEVICE.....	244
12.7.12	IDENTIFY DEVICE THROUGH RECALL MIN/MAX LEVEL.....	246
12.8	Queries and reserved commands.....	250
12.8.1	QUERY STATUS - lampFailure/lampOn.....	250
12.8.2	QUERY STATUS - lampOn.....	253
12.8.3	QUERY STATUS - limitError/lampOn.....	254
12.8.4	QUERY STATUS - powerCycleSeen.....	258
12.8.5	QUERY CONTROL GEAR PRESENT.....	259
12.8.6	QUERY VERSION NUMBER.....	259

12.8.7	PING .....	260
12.8.8	Broadcast unaddressed .....	260
12.8.9	Reserved commands: standard commands .....	262
12.8.10	Reserved commands: special commands .....	262
12.8.11	Application extended commands .....	263
12.8.12	Not supported device types .....	264
12.8.13	Removed functionality .....	264
12.9	Cross contamination .....	266
12.9.1	DTR0 .....	266
12.9.2	NVM variables .....	266
12.9.3	Random address generation .....	268
12.9.4	Addressing 1 .....	269
12.9.5	Addressing 2 .....	270
12.9.6	Addressing 3 .....	272
12.10	General subsequences .....	273
12.10.1	GetVersionNumber .....	273
12.10.2	GetExtendedVersionNumber .....	273
12.10.3	GetSupportedDeviceTypes .....	274
12.10.4	GetSupportedLightSources .....	274
12.10.5	WaitForPowerOnPhaseToFinish .....	276
12.10.6	WaitForLampOn .....	276
12.10.7	WaitForLampOnAddressed .....	277
12.10.8	WaitForLampLevel .....	277
12.10.9	WaitForFadeToFinish .....	277
12.10.10	SetShortAddress .....	278
12.10.11	GetRandomAddress .....	278
12.10.12	GetLimitedRandomAddress .....	279
12.10.13	SetSearchAddress .....	279
12.10.14	ReadMemBankMultibyteLocation .....	279
12.10.15	FindImplementedMemoryBank .....	280
12.10.16	FindAllImplementedMemoryBanks .....	280
12.10.17	GetNumberOfLogicalUnits .....	280
12.10.18	GetIndexOfLogicalUnit .....	281
12.10.19	ConnectLamps .....	281
12.10.20	DisconnectLamps .....	281
12.10.21	PowerCycle .....	282
12.10.22	PowerCycleAndWaitForBusPower .....	282
12.10.23	PowerCycleAndWaitForDecoder .....	283
Annex A (informative)	Examples of algorithms .....	284
A.1	Random address allocation .....	284
A.2	One single control gear connected to the control device .....	284
A.3	Using application extended commands .....	285
Annex B (normative)	High resolution dimmer .....	286
Bibliography	.....	288
Figure 1	– IEC 62386 graphical overview .....	14
Figure 2	– Control gear directly operating a light source .....	20
Figure 3	– Dimming curve .....	21

Figure 4 – Level over time, fading up and down .....	24
Figure 5 – Timing and response when receiving a command iteration .....	31
Figure 6 – Fading from MIN LEVEL to MAX LEVEL .....	74
Figure 7 – Fading from MAX LEVEL to off .....	74
Figure 8 – Normal fading for a PWM dimmer .....	74
Figure 9 – Fading from MAX LEVEL to off for a PWM dimmer .....	75
Figure 10 – Current rating test .....	97
Figure B.1 – Level behaviour in cases of off-grid starting points .....	287
Table 1 – 16-bit command frame encoding .....	19
Table 2 – Dimming curve tolerance (% , rounded to two decimals) .....	21
Table 3 – Dimming curve .....	22
Table 4 – Fade times .....	25
Table 5 – Fade rates .....	26
Table 6 – Extended fade time - base value .....	27
Table 7 – Extended fade time - multiplier .....	27
Table 8 – Basic memory map of memory banks .....	33
Table 9 – Memory map of memory bank 0 .....	36
Table 10 – Memory map of memory bank 1 .....	38
Table 11 – Power on timing .....	41
Table 12 – Control gear status .....	43
Table 13 – Scenes .....	46
Table 14 – Declaration of variables .....	47
Table 15 – Standard commands .....	49
Table 16 – Special commands .....	53
Table 17 – Light source type encoding .....	65
Table 18 – Device addressing with “INITIALISE” .....	68
Table 19 – Unexpected outcome .....	76
Table 20 – Parameters for test sequence CheckFactoryDefault102 .....	82
Table 21 – Parameters for test sequence CheckFactoryDefault201 .....	86
Table 22 – Parameters for test sequence CheckFactoryDefault202 .....	87
Table 23 – Parameters for test sequence CheckFactoryDefault203 .....	88
Table 24 – Parameters for test sequence CheckFactoryDefault204 .....	88
Table 25 – Parameters for test sequence CheckFactoryDefault205 .....	89
Table 26 – Parameters for test sequence CheckFactoryDefault206 .....	89
Table 27 – Parameters for test sequence CheckFactoryDefault207 .....	90
Table 28 – Parameters for test sequence CheckFactoryDefault208 .....	90
Table 29 – Parameters for test sequence CheckFactoryDefault209 .....	91
Table 30 – Parameters for test sequence Maximum and minimum system voltage .....	95
Table 31 – Parameters for test sequence Transmitter voltages .....	99
Table 32 – Parameters for test sequence Transmitter rising and falling edges .....	100
Table 33 – Parameters for test sequence Transmitter rising and falling edges .....	101
Table 34 – Parameters for test sequence Transmitter bit timing .....	102

Table 35 – Parameters for test sequence Receiver frame timing .....	104
Table 36 – Parameters for test sequence Receiver start-up behavior.....	105
Table 37 – Parameters for test sequence Receiver bit timing .....	107
Table 38 – Parameters for test sequence Extended receiver bit timing.....	111
Table 39 – Parameters for test sequence Receiver frame violation and recovering after frame size violation.....	112
Table 40 – Parameters for test sequence Receiver frame timing.....	113
Table 41 – Parameters for test sequence RESET .....	117
Table 42 – Parameters for test sequence Send twice timeout .....	122
Table 43 – Parameters for test sequence Commands in-between .....	131
Table 44 – Parameters for test sequence SET MAX LEVEL .....	137
Table 45 – Parameters for test sequence SET MIN LEVEL .....	138
Table 46 – Parameters for test sequence SET SYSTEM FAILURE LEVEL.....	139
Table 47 – Parameters for test sequence SET POWER ON LEVEL.....	142
Table 48 – Parameters for test sequence SET FADE TIME .....	143
Table 49 – Parameters for test sequence SET FADE RATE .....	144
Table 50 – Parameters for test sequence SET SCENE / REMOVE FROM SCENE .....	145
Table 51 – Parameters for test sequence ADD TO GROUP / REMOVE FROM GROUP .....	146
Table 52 – Parameters for test sequence SET SHORT ADDRESS.....	147
Table 53 – Parameters for test sequence SET EXTENDED FADE TIME .....	148
Table 54 – Parameters for test sequence Reset/Power-on values .....	151
Table 55 – Parameters for test sequence DTR0 / DTR1 / DTR2 .....	154
Table 56 – Parameters for test sequence READ MEMORY LOCATION on Memory Bank 0 .....	158
Table 57 – Parameters for test sequence READ MEMORY LOCATION on Memory Bank 1 .....	161
Table 58 – Parameters for test sequence Memory bank writing.....	166
Table 59 – Parameters for test sequence ENABLE WRITE MEMORY: writeEnableState.....	169
Table 60 – Parameters for test sequence ENABLE WRITE MEMORY: timeout / command in-between.....	172
Table 61 – Parameters for test sequence RESET MEMORY BANK: timeout / command in-between.....	174
Table 62 – Parameters for test sequence RESET MEMORY BANK.....	176
Table 63 – Parameters for test sequence Level instructions: Basic behaviour .....	178
Table 64 – Parameters for test sequence FADE TIME: possible values.....	181
Table 65 – Parameters for test sequence FADE TIME: transitions .....	184
Table 66 – Parameters for test sequence FADE TIME: fading to 0 .....	186
Table 67 – Parameters for test sequence FADE TIME: small steps fading .....	189
Table 68 – Parameters for test sequence FADE TIME: extended fade time .....	190
Table 69 – Parameters for test sequence FADE RATE: possible values.....	193
Table 70 – Parameters for test sequence FADE RATE: possible values.....	194
Table 71 – Parameters for test sequence FADE RATE: transitions .....	195
Table 72 – Parameters for test sequence FADE RATE: extended fade time .....	196
Table 73 – Parameters for test sequence FADE TIME/FADE RATE: stop fading by setting MIN/MAX levels.....	199

Table 74 – Parameters for test sequence FADE TIME/FADE RATE: stop fading .....	203
Table 75 – Parameters for test sequence FADE TIME/FADE RATE: stop fading when a command is sent, check timing .....	205
Table 76 – Parameters for test sequence FADE TIME/FADE RATE: stop fading during startup .....	210
Table 77 – Parameters for test sequence Level instructions: combined instructions .....	212
Table 78 – Parameters for test sequence PowerOnLevel and SystemFailureLevel .....	217
Table 79 – Parameters for test sequence ENABLE DAPC SEQUENCE .....	219
Table 80 – Parameters for test sequence GO TO LAST ACTIVE LEVEL .....	220
Table 81 – Parameters for test sequence GO TO SCENE .....	222
Table 82 – Parameters for test sequence Power on: level control commands .....	224
Table 83 – Parameters for test sequence Logarithmic dimming curve .....	225
Table 84 – Parameters for test sequence Dimming curve: DAPC .....	226
Table 85 – Parameters for test sequence FADE TIME/EXTENDED FADE TIME: light output behaviour .....	229
Table 86 – Parameters for test sequence Behaviour during a fade .....	232
Table 87 – Parameters for test sequence INITIALISE - device addressing .....	235
Table 88 – Parameters for test sequence COMPARE .....	237
Table 89 – Parameters for test sequence WITHDRAW .....	238
Table 90 – Parameters for test sequence PROGRAM SHORT ADDRESS .....	241
Table 91 – Parameters for test sequence VERIFY SHORT ADDRESS .....	242
Table 92 – Parameters for test sequence QUERY SHORT ADDRESS .....	243
Table 93 – Parameters for test sequence IDENTIFY DEVICE .....	246
Table 94 – Parameters for test sequence IDENTIFY DEVICE THROUGH RECALL MIN/MAX LEVEL .....	250
Table 95 – Parameters for test sequence QUERY STATUS - lampFailure/lampOn .....	253
Table 96 – Parameters for test sequence QUERY STATUS - lampOn .....	254
Table 97 – Parameters for test sequence QUERY STATUS - limitError/lampOn .....	256
Table 98 – Parameters for test sequence QUERY STATUS - powerCycleSeen .....	258
Table 99 – Parameters for test sequence QUERY CONTROL GEAR PRESENT .....	259
Table 100 – Parameters for test sequence Broadcast unaddressed .....	261
Table 101 – Parameters for test sequence Reserved commands: standard commands .....	262
Table 102 – Parameters for test sequence Reserved commands: special commands .....	263
Table 103 – Parameters for test sequence Addressing 2 .....	272

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### DIGITAL ADDRESSABLE LIGHTING INTERFACE –

#### Part 102: General requirements – Control gear

#### FOREWORD

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International Standard IEC 62386-102 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This second edition cancels and replaces the first edition published in 2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) elimination of all non-control gear relevant definitions,
- b) improvement of the requirements for control gear by clarifying the description,
- c) improvement of the test command iterations to increase the compatibility,
- d) addition of new commands, and
- e) the deletion of the requirements for:

- 1) timing;
- 2) control devices.

The requirements for timing are now in Part 101 and the requirements for control devices are in Part 103.

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

FDIS	Report on voting
34C/1099/FDIS	34C/1112/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 102 is intended to be used in conjunction with Part 101, which contains general requirements for the relevant product type (system), and with the appropriate Part 2xx (particular requirements for control gear) containing clauses to supplement or modify the corresponding clauses in Parts 101 and 102 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 maintenance result date indicated on the IEC website 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.

A bilingual version of this publication may be issued at a later date.

**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 second edition of IEC 62386-102 is published in conjunction with IEC 62386-101:2014 and with the various parts that make up the IEC 62386-2xx series for control gear, together with IEC 62386-103:2014 and 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.

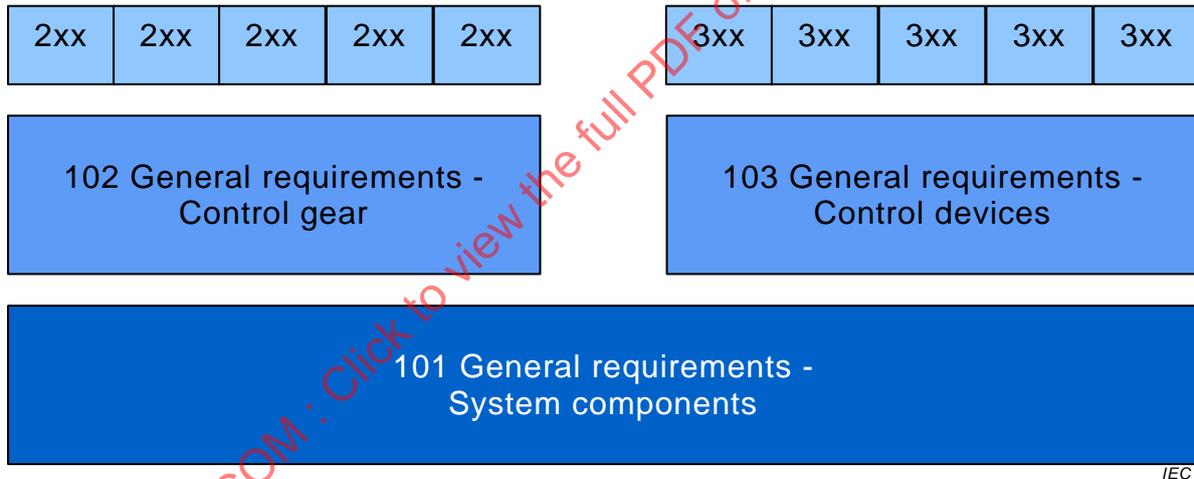


Figure 1 – IEC 62386 graphical overview

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 and "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 102: General requirements – Control gear

#### 1 Scope

This Part of IEC 62386 is applicable to control gear 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 control gear 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 61347 (all parts), *Lamp controlgear*

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

IEC 62386-103:2014, *Digital addressable lighting interface – Part 103: General requirements – Control devices*

## SOMMAIRE

AVANT-PROPOS .....	301
INTRODUCTION .....	303
1 Domaine d'application .....	305
2 Références normatives .....	305
3 Termes et définitions .....	305
4 Généralités .....	308
4.1 Généralités .....	308
4.2 Numéro de version .....	308
5 Spécifications électriques .....	309
6 Alimentation électrique de l'interface .....	309
7 Structure du protocole de transmission .....	309
7.1 Généralités .....	309
7.2 Codage de trame en avant à 16 bits .....	309
7.2.1 Généralités .....	309
7.2.2 Octet d'adresse .....	309
7.2.3 Octet de code de fonctionnement .....	310
8 Cadencement .....	310
9 Méthode de fonctionnement .....	310
9.1 Généralités .....	310
9.2 Appareillages de commande .....	310
9.3 Courbe de gradation .....	311
9.4 Calcul de "targetLevel" .....	314
9.5 Modification de l'intensité lumineuse .....	314
9.5.1 Généralités .....	314
9.5.2 Durée de modification de l'intensité lumineuse .....	316
9.5.3 Vitesse de modification de l'intensité lumineuse .....	317
9.5.4 Durée étendue de modification de l'intensité lumineuse .....	318
9.5.5 Utilisation de la durée de modification de l'intensité lumineuse .....	320
9.5.6 Utilisation de la vitesse de modification de l'intensité lumineuse .....	320
9.5.7 Comportement lors d'une modification de l'intensité lumineuse .....	320
9.5.8 Comportement lors du démarrage .....	321
9.5.9 Interruption d'une modification de l'intensité lumineuse .....	321
9.6 Niveau min et max .....	321
9.7 Commandes .....	322
9.7.1 Généralités .....	322
9.7.2 Instructions de niveau sans modification de l'intensité lumineuse .....	322
9.7.3 Instructions de niveau déclenchant une modification de l'intensité lumineuse .....	323
9.7.4 Instructions de configuration .....	323
9.7.5 Requêtes .....	323
9.7.6 Commandes spéciales .....	323
9.7.7 Commandes d'application étendues .....	323
9.8 Itérations de commandes .....	323
9.8.1 Généralités .....	323
9.8.2 Itération des commandes "UP" et "DOWN" .....	323

9.8.3	DAPC SEQUENCE (déconseillé) .....	324
9.9	Modes de fonctionnement .....	325
9.9.1	Généralités .....	325
9.9.2	Mode de fonctionnement 0x00: mode normal .....	325
9.9.3	Mode de fonctionnement 0x01 à 0x7F: réservé .....	325
9.9.4	Mode de fonctionnement 0x80 à 0xFF: modes spécifiques au fabricant .....	325
9.10	Blocs de mémoire .....	325
9.10.1	Généralités .....	325
9.10.2	Carte de mémoire .....	326
9.10.3	Sélection d'un emplacement de bloc de mémoire .....	327
9.10.4	Lecture dans le bloc de mémoire .....	327
9.10.5	Écriture dans le bloc de mémoire .....	327
9.10.6	Bloc de mémoire 0 .....	328
9.10.7	Bloc de mémoire 1 .....	331
9.10.8	Blocs de mémoire spécifiques au fabricant .....	332
9.10.9	Blocs de mémoire réservés .....	332
9.11	Réinitialisation .....	332
9.11.1	Opération de réinitialisation .....	332
9.11.2	Opération de réinitialisation des blocs de mémoire .....	333
9.12	Défaillance système .....	333
9.13	Mise sous tension .....	333
9.14	Attribution d'adresses courtes .....	335
9.14.1	Généralités .....	335
9.14.2	Affectation d'adresses aléatoires .....	335
9.14.3	Identification d'un dispositif .....	335
9.14.4	Affectation d'adresses directes .....	336
9.15	Comportement en état de défaillance .....	337
9.16	Information d'état .....	337
9.16.1	Généralités .....	337
9.16.2	Bit 0: Défaillance de l'appareillage de commande (Control gear failure) .....	337
9.16.3	Bit 1: Lampe grillée (Lampe failure) .....	338
9.16.4	Bit 2: Lampe allumée (Lamp on) .....	338
9.16.5	Bit 3: Erreur limite (Limit error) .....	338
9.16.6	Bit 4: Modification de l'intensité lumineuse en cours (fade running) .....	338
9.16.7	Bit 5: Etat réinitialisé (Reset state) .....	338
9.16.8	Bit 6: Absence d'adresse courte (Missing short address) .....	338
9.16.9	Bit 7: Observation du cycle de mise sous tension (Power cycle seen) .....	339
9.17	Mémoire non volatile (non-volatile memory) .....	339
9.18	Types et caractéristiques de dispositifs .....	340
9.19	Utilisation de scénarii .....	340
10	Déclaration des variables (Declaration of variables) .....	341
11	Définition des commandes .....	344
11.1	Généralités .....	344
11.2	Fiches de vue d'ensemble .....	344
11.3	Instructions de niveau .....	349
11.3.1	DAPC ( <i>level</i> ) .....	349
11.3.2	OFF .....	349
11.3.3	UP .....	349
11.3.4	DOWN .....	349

11.3.5	STEP UP .....	350
11.3.6	STEP DOWN .....	350
11.3.7	RECALL MAX LEVEL .....	350
11.3.8	RECALL MIN LEVEL .....	351
11.3.9	STEP DOWN AND OFF .....	351
11.3.10	ON AND STEP UP .....	351
11.3.11	ENABLE DAPC SEQUENCE .....	352
11.3.12	GO TO LAST ACTIVE LEVEL .....	352
11.3.13	GO TO SCENE ( <i>sceneNumber</i> ) .....	352
11.4	Instructions de configuration .....	352
11.4.1	Généralités .....	352
11.4.2	RESET .....	352
11.4.3	STORE ACTUAL LEVEL IN DTR0 .....	353
11.4.4	SAVE PERSISTENT VARIABLES .....	353
11.4.5	SET OPERATING MODE ( <i>DTR0</i> ) .....	353
11.4.6	RESET MEMORY BANK ( <i>DTR0</i> ) .....	353
11.4.7	IDENTIFY DEVICE .....	354
11.4.8	SET MAX LEVEL ( <i>DTR0</i> ) .....	354
11.4.9	SET MAX LEVEL ( <i>DTR0</i> ) .....	355
11.4.10	SET SYSTEM FAILURE LEVEL ( <i>DTR0</i> ) .....	355
11.4.11	SET POWER ON LEVEL ( <i>DTR0</i> ) .....	355
11.4.12	SET FADE TIME ( <i>DTR0</i> ) .....	355
11.4.13	SET FADE RATE ( <i>DTR0</i> ) .....	355
11.4.14	SET EXTENDED FADE TIME ( <i>DTR0</i> ) .....	356
11.4.15	SET SCENE ( <i>DTR0, sceneX</i> ) .....	356
11.4.16	REMOVE FROM SCENE ( <i>sceneX</i> ) .....	356
11.4.17	ADD TO GROUP ( <i>group</i> ) .....	356
11.4.18	REMOVE FROM GROUP ( <i>group</i> ) .....	357
11.4.19	SET SHORT ADDRESS ( <i>DTR0</i> ) .....	357
11.4.20	ENABLE WRITE MEMORY .....	357
11.5	Requêtes .....	357
11.5.1	Généralités .....	357
11.5.2	QUERY STATUS .....	357
11.5.3	QUERY CONTROL GEAR PRESENT .....	358
11.5.4	QUERY CONTROL GEAR FAILURE .....	358
11.5.5	QUERY LAMP FAILURE .....	358
11.5.6	QUERY LAMP POWER ON .....	358
11.5.7	QUERY LIMIT ERROR .....	358
11.5.8	QUERY RESET STATE .....	358
11.5.9	QUERY MISSING SHORT ADDRESS .....	358
11.5.10	QUERY VERSION NUMBER .....	358
11.5.11	QUERY CONTENT DTR0 .....	358
11.5.12	QUERY DEVICE TYPE .....	358
11.5.13	QUERY NEXT DEVICE TYPE .....	359
11.5.14	QUERY PHYSICAL MINIMUM .....	359
11.5.15	QUERY POWER FAILURE .....	359
11.5.16	QUERY CONTENT DTR1 .....	359
11.5.17	QUERY CONTENT DTR2 .....	359
11.5.18	QUERY OPERATING MODE .....	359

11.5.19	QUERY LIGHT SOURCE TYPE .....	359
11.5.20	QUERY ACTUAL LEVEL.....	360
11.5.21	QUERY MAX LEVEL.....	360
11.5.22	QUERY MIN LEVEL.....	360
11.5.23	QUERY POWER ON LEVEL .....	360
11.5.24	QUERY SYSTEM FAILURE LEVEL.....	361
11.5.25	QUERY FADE TIME/FADE RATE .....	361
11.5.26	QUERY EXTENDED FADE TIME .....	361
11.5.27	QUERY MANUFACTURER SPECIFIC MODE .....	361
11.5.28	QUERY SCENE LEVEL ( <i>sceneX</i> ) .....	361
11.5.29	QUERY GROUPS 0-7 .....	361
11.5.30	QUERY GROUPS 8-15 .....	361
11.5.31	QUERY RANDOM ADDRESS (H) .....	361
11.5.32	QUERY RANDOM ADDRESS (M) .....	362
11.5.33	QUERY RANDOM ADDRESS (L) .....	362
11.5.34	READ MEMORY LOCATION ( <i>DTR1</i> , <i>DTR0</i> ).....	362
11.6	Commandes d'application étendues .....	362
11.6.1	Généralités .....	362
11.6.2	QUERY EXTENDED VERSION NUMBER .....	362
11.7	Commandes spéciales .....	363
11.7.1	Généralités .....	363
11.7.2	TERMINATE .....	363
11.7.3	<i>DTR0</i> ( <i>data</i> ) .....	363
11.7.4	INITIALISE ( <i>device</i> ) .....	363
11.7.5	RANDOMISE .....	363
11.7.6	COMPARE.....	364
11.7.7	WITHDRAW.....	364
11.7.8	SEARCHADDRH ( <i>data</i> ) .....	364
11.7.9	SEARCHADDRM ( <i>data</i> ) .....	364
11.7.10	SEARCHADDRL ( <i>data</i> ) .....	365
11.7.11	PROGRAM SHORT ADDRESS ( <i>data</i> ) .....	365
11.7.12	VERIFY SHORT ADDRESS ( <i>data</i> ) .....	365
11.7.13	QUERY SHORT ADDRESS .....	365
11.7.14	ENABLE DEVICE TYPE ( <i>data</i> ).....	365
11.7.15	<i>DTR1</i> ( <i>data</i> ) .....	366
11.7.16	<i>DTR2</i> ( <i>data</i> ) .....	366
11.7.17	WRITE MEMORY LOCATION ( <i>DTR1</i> , <i>DTR0</i> , <i>data</i> ) .....	366
11.7.18	WRITE MEMORY LOCATION – NO REPLY ( <i>DTR1</i> , <i>DTR0</i> , <i>data</i> ) .....	367
11.7.19	PING .....	367
12	Procédures d'essai .....	367
12.1	Notes générales d'essai .....	367
12.1.1	Abréviations .....	367
12.1.2	Exécution des essais .....	367
12.1.3	Transmission des données .....	368
12.1.4	Configuration d'essai .....	368
12.1.5	Résultat des essais .....	369
12.1.6	Mesure de la durée de modification de l'intensité lumineuse basés sur le rendement lumineux.....	369

12.1.7	Description du programme d'essai pour les durées rapides de modification de l'intensité lumineuse sur un gradateur à modulation de largeur d'impulsion (PWM ou pulse width modulation) .....	370
12.1.8	Notation d'essai .....	371
12.1.9	Limitation d'exécution des essais .....	371
12.1.10	Résultats d'essai .....	371
12.1.11	Traitement des exceptions .....	371
12.1.12	Réponse fortuite .....	371
12.2	Préambule .....	373
12.2.1	Préambule d'essai .....	373
12.3	Paramètres fonctionnels physiques .....	391
12.3.1	Polarity test (Essai de polarité) .....	391
12.3.2	Maximum and minimum system voltage (Tension du système maximale et minimale) .....	391
12.3.3	Overvoltage protection test (Essai de protection contre la surtension) .....	392
12.3.4	Current rating test (Essai de courant assigné) .....	393
12.3.5	Transmitter voltages (Tensions de l'émetteur) .....	394
12.3.6	Transmitter rising and falling edges (Fronts montant et descendant de l'émetteur) .....	396
12.3.7	Transmitter bit timing (Cadencement des bits de l'émetteur) .....	398
12.3.8	Transmitter frame timing (Cadencement des trames de l'émetteur) .....	400
12.3.9	Receiver start-up behavior (Comportement au démarrage du récepteur) .....	401
12.3.10	Receiver threshold (Seuil du récepteur) .....	403
12.3.11	Receiver bit timing (Cadencement des bits du récepteur) .....	403
12.3.12	Extended receiver bit timing (Cadencement des bits étendus du récepteur) .....	407
12.3.13	Receiver forward frame violation (Violation de la trame en avant du récepteur) .....	409
12.3.14	Receiver settling timing (Cadencement de l'établissement du récepteur) .....	409
12.3.15	Receiver frame timing FF-FF send twice (Cadencement des trames du récepteur FF-FF 'send twice') .....	411
12.4	Instructions de configuration .....	412
12.4.1	RESET .....	412
12.4.2	RESET: timeout / command in-between (RESET: temporisation / commande intermédiaire) .....	416
12.4.3	Send-twice timeout (Temporisation de commande 'send-twice') .....	418
12.4.4	Commands in-between (Commandes intermédiaires) .....	426
12.4.5	STORE ACTUAL LEVEL IN DTR0 .....	432
12.4.6	SAVE PERSISTENT VARIABLES .....	433
12.4.7	SET OPERATING MODE .....	433
12.4.8	SET MAX LEVEL .....	434
12.4.9	SET MIN LEVEL .....	434
12.4.10	SET SYSTEM FAILURE LEVEL .....	435
12.4.11	SET POWER ON LEVEL .....	436
12.4.12	SET FADE TIME .....	440
12.4.13	SET FADE RATE .....	441
12.4.14	SET SCENE / REMOVE FROM SCENE .....	442
12.4.15	ADD TO GROUP / REMOVE FROM GROUP .....	443
12.4.16	SET SHORT ADDRESS .....	444
12.4.17	SET EXTENDED FADE TIME .....	445
12.4.18	Reset/Power-on values (Valeurs de réinitialisation/Mise sous tension) .....	446

12.4.19	DTR0 / DTR1 / DTR2 .....	452
12.5	Blocs de mémoire .....	452
12.5.1	READ MEMORY LOCATION on Memory Bank 0 (READ MEMORY LOCATION sur bloc de mémoire 0).....	452
12.5.2	READ MEMORY LOCATION on Memory Bank 1 (READ MEMORY LOCATION sur bloc de mémoire 0).....	457
12.5.3	READ MEMORY LOCATION on other Memory Banks (READ MEMORY LOCATION sur d'autres blocs de mémoire) .....	459
12.5.4	Écriture dans le bloc de mémoire.....	461
12.5.5	ENABLE WRITE MEMORY: writeEnableState.....	466
12.5.6	ENABLE WRITE MEMORY: timeout / command in-between (ENABLE WRITE MEMORY: temporisation / commande intermédiaire) .....	468
12.5.7	RESET: timeout / command in-between (RESET: temporisation / commande intermédiaire) .....	470
12.5.8	RESET MEMORY BANK.....	472
12.6	Instructions de niveau .....	473
12.6.1	Level instructions: Basic behaviour (Instructions de niveau: Comportement de base) .....	473
12.6.2	FADE TIME: possible values (FADE TIME: valeurs possibles) .....	477
12.6.3	FADE TIME: transitions .....	478
12.6.4	FADE TIME: fading to 0 (FADE TIME: processus de modification de l'intensité lumineuse pour atteindre le niveau 0) .....	480
12.6.5	FADE TIME: small steps fading (FADE TIME: processus de modification de l'intensité lumineuse par pas réduits) .....	483
12.6.6	FADE TIME: extended fade time (FADE TIME: durée étendue de modification de l'intensité lumineuse) .....	486
12.6.7	FADE RATE: possible values (FADE RATE: valeurs possibles) .....	488
12.6.8	FADE RATE: transitions .....	491
12.6.9	FADE RATE: extended fade time (FADE RATE: durée étendue de modification de l'intensité lumineuse) .....	493
12.6.10	FADE TIME/FADE RATE: stop fading by setting MIN/MAX levels (FADE TIME/FADE RATE: interrompre le processus de modification de l'intensité lumineuse par le réglage des niveaux MIN/MAX.....	494
12.6.11	FADE TIME/FADE RATE: stop fading (FADE TIME/FADE RATE: interrompre le processus de modification de l'intensité lumineuse) .....	500
12.6.12	FADE TIME/FADE RATE: stop fading when a command is sent, check timing (FADE TIME/FADE RATE: interrompre le processus de modification de l'intensité lumineuse lors de l'envoi d'une commande, vérifier le cadencement) .....	504
12.6.13	FADE TIME/FADE RATE: stop fading during startup (FADE TIME/FADE RATE: interrompre le processus de modification de l'intensité lumineuse lors du démarrage) .....	510
12.6.14	Level instructions: combined instructions (Instructions de niveau: instructions combinées) .....	511
12.6.15	Power On Level – System Failure Level combined (Niveau de mise sous tension – Niveau de défaillance système combinés) .....	514
12.6.16	ENABLE DAPC SEQUENCE .....	519
12.6.17	GO TO LAST ACTIVE LEVEL .....	521
12.6.18	GO TO SCENE .....	522
12.6.19	Power on: level control commands (Mise sous tension: commande de contrôle de niveau) .....	524
12.6.20	Logarithmic dimming curve (courbe de gradation logarithmique) .....	526
12.6.21	Courbe de gradation DAPC (contrôle direct de la puissance d'arc) .....	527

12.6.22	Courbe de gradation: UP / DOWN .....	528
12.6.23	Courbe de gradation: STEP UP / STEP DOWN.....	529
12.6.24	FADE TIME/EXTENDED FADE TIME: light output behaviour (FADE TIME/EXTENDED FADE TIME: comportement de rendement lumineux) .....	530
12.6.25	EXTENDED FADE TIME: light output behaviour (EXTENDED FADE TIME: comportement de rendement lumineux) .....	531
12.6.26	Comportement lors d'une modification de l'intensité lumineuse .....	533
12.7	Commandes spéciales .....	535
12.7.1	INITIALISE – minuterie .....	535
12.7.2	TERMINATE .....	537
12.7.3	INITIALISE – device addressing (INITIALISE – adressage de dispositif).....	537
12.7.4	RANDOMISE .....	538
12.7.5	COMPARE.....	539
12.7.6	WITHDRAW.....	540
12.7.7	SEARCHADDRH / SEARCHADDRM / SEARCHADDRL .....	541
12.7.8	PROGRAM SHORT ADDRESS .....	543
12.7.9	VERIFY SHORT ADDRESS .....	544
12.7.10	QUERY SHORT ADDRESS .....	545
12.7.11	IDENTIFY DEVICE .....	547
12.7.12	IDENTIFY DEVICE THROUGH RECALL MIN/MAX LEVEL.....	550
12.8	Queries and reserved commands (Requêtes et commandes réservées) .....	554
12.8.1	QUERY STATUS – lampFailure/lampOn .....	554
12.8.2	QUERY STATUS – lampOn .....	557
12.8.3	QUERY STATUS – limitError/lampOn .....	559
12.8.4	QUERY STATUS – powerCycleSeen .....	562
12.8.5	QUERY CONTROL GEAR PRESENT .....	563
12.8.6	QUERY VERSION NUMBER.....	564
12.8.7	PING .....	564
12.8.8	Broadcast unaddressed (Diffusion non adressée) .....	565
12.8.9	Reserved commands: standard commands (Commandes réservées: commandes normalisées) .....	566
12.8.10	Reserved commands: special commands (Commandes réservées: commandes spéciales) .....	567
12.8.11	Commandes d'application étendues.....	568
12.8.12	Types de dispositif non pris en charge.....	568
12.8.13	Fonctionnalité supprimée.....	569
12.9	Contamination croisée .....	570
12.9.1	DTR0.....	570
12.9.2	Variables NVM.....	571
12.9.3	Génération d'adresses aléatoires .....	573
12.9.4	Addressing 1 (Adressage 1).....	574
12.9.5	Addressing 2 (Adressage 2).....	575
12.9.6	Addressing 3 (Adressage 3).....	577
12.10	Sous-séquences générales .....	578
12.10.1	GetVersionNumber .....	578
12.10.2	GetExtendedVersionNumber .....	578
12.10.3	GetSupportedDeviceTypes .....	579
12.10.4	GetSupportedLightSources.....	579
12.10.5	WaitForPowerOnPhaseToFinish .....	581
12.10.6	WaitForLampOn .....	581

12.10.7	WaitForLampOnAddressed .....	581
12.10.8	WaitForLampLevel .....	582
12.10.9	WaitForFadeToFinish .....	582
12.10.10	SetShortAddress .....	583
12.10.11	GetRandomAddress .....	583
12.10.12	GetLimitedRandomAddress .....	584
12.10.13	SetSearchAddress .....	584
12.10.14	ReadMemBankMultibyteLocation .....	584
12.10.15	FindImplementedMemoryBank .....	585
12.10.16	FindAllImplementedMemoryBanks .....	585
12.10.17	GetNumberOfLogicalUnits .....	585
12.10.18	GetIndexOfLogicalUnit .....	586
12.10.19	ConnectLamps .....	586
12.10.20	DisconnectLamps .....	586
12.10.21	PowerCycle .....	587
12.10.22	PowerCycleAndWaitForBusPower .....	587
12.10.23	PowerCycleAndWaitForDecoder .....	588
Annexe A (informative)	Exemples d'algorithmes .....	589
A.1	Affectation d'adresses aléatoires .....	589
A.2	Un seul appareillage raccordé au dispositif de commande .....	589
A.3	Utilisation des commandes d'application étendues .....	590
Annexe B (normative)	Gradateur à haute résolution .....	591
Bibliographie	.....	594
Figure 1	– Vue d'ensemble graphique de l'IEC 62386 .....	303
Figure 2	– Appareillages de commande faisant fonctionner directement une source de lumière .....	310
Figure 3	– Courbe de gradation .....	312
Figure 4	– Niveau par rapport à la durée, modification ascendante et descendante de l'intensité lumineuse .....	316
Figure 5	– Cadencement et réponse lors de la réception d'une itération de commande .....	324
Figure 6	– Modification de l'intensité lumineuse de MIN LEVEL à MAX LEVEL .....	369
Figure 7	– Modification de l'intensité lumineuse de MAX LEVEL à la mise hors tension .....	370
Figure 8	– Modification normale de l'intensité lumineuse pour un gradateur à modulation de largeur d'impulsion .....	370
Figure 9	– Modification de l'intensité lumineuse de MAX LEVEL à la mise hors tension pour un gradateur à modulation de largeur d'impulsion .....	371
Figure 10	– Essai de courant assigné .....	394
Figure B.1	– Comportement des niveaux dans le cas de points de départ hors réseau .....	593
Tableau 1	– Codage de la trame en avant à 16 bits .....	309
Tableau 2	– Tolérance de la courbe de gradation (% , arrondi à deux décimales) .....	312
Tableau 3	– Courbe de gradation .....	313
Tableau 4	– Durées de modification de l'intensité lumineuse .....	317
Tableau 5	– Vitesses de modification de l'intensité lumineuse .....	318
Tableau 6	– Durée étendue de modification de l'intensité lumineuse – valeur de base .....	319
Tableau 7	– Durée étendue de modification de l'intensité lumineuse – multiplicateur .....	319

Tableau 8 – Carte de mémoire de base des blocs de mémoire.....	326
Tableau 9 – Carte de la mémoire du bloc de mémoire 0.....	329
Tableau 10 – Carte de la mémoire du bloc de mémoire 1.....	331
Tableau 11 – Cadencement de la mise sous tension.....	334
Tableau 12 – État de l'appareillage de commande.....	337
Tableau 13 – Scénarii.....	341
Tableau 14 – Déclaration des variables.....	342
Tableau 15 – Commandes normalisées.....	344
Tableau 16 – Commandes spéciales.....	348
Tableau 17 – Codage du type de source de lumière.....	360
Tableau 18 – Adressage de dispositif avec "INITIALISE".....	363
Tableau 19 – Résultat fortuit.....	372
Tableau 20 – Paramètres pour la séquence d'essai CheckFactoryDefault102.....	378
Tableau 21 – Paramètres pour la séquence d'essai CheckFactoryDefault201.....	382
Tableau 22 – Paramètres pour la séquence d'essai CheckFactoryDefault202.....	383
Tableau 23 – Paramètres pour la séquence d'essai CheckFactoryDefault203.....	384
Tableau 24 – Paramètres pour la séquence d'essai CheckFactoryDefault204.....	385
Tableau 25 – Paramètres pour la séquence d'essai CheckFactoryDefault205.....	385
Tableau 26 – Paramètres pour la séquence d'essai CheckFactoryDefault206.....	386
Tableau 27 – Paramètres pour la séquence d'essai CheckFactoryDefault207.....	386
Tableau 28 – Paramètres pour la séquence d'essai CheckFactoryDefault208.....	387
Tableau 29 – Paramètres pour la séquence d'essai CheckFactoryDefault209.....	388
Tableau 30 – Paramètres pour la séquence d'essai 'Maximum and minimum system voltage'.....	392
Tableau 31 – Paramètres pour la séquence d'essai 'Transmitter voltages'.....	396
Tableau 32 – Paramètres pour la séquence d'essai 'Transmitter rising and falling edges'.....	397
Tableau 33 – Paramètres pour la séquence d'essai 'Transmitter rising and falling edges'.....	398
Tableau 34 – Paramètres pour la séquence d'essai 'Transmitter bit timing'.....	400
Tableau 35 – Paramètres pour la séquence d'essai 'Receiver frame timing'.....	401
Tableau 36 – Paramètres pour la séquence d'essai 'Receiver start-up behavior'.....	402
Tableau 37 – Paramètres pour la séquence d'essai 'Receiver bit timing'.....	404
Tableau 38 – Paramètres pour la séquence d'essai 'Extended receiver bit timing'.....	408
Tableau 39 – Paramètres pour la séquence d'essai 'Receiver frame violation and recovering after frame size violation'.....	409
Tableau 40 – Paramètres pour la séquence d'essai 'Receiver frame timing'.....	410
Tableau 41 – Paramètres pour la séquence d'essai 'RESET'.....	414
Tableau 42 – Paramètres pour la séquence d'essai 'Send twice timeout'.....	419
Tableau 43 – Paramètres pour la séquence d'essai 'Commands in-between'.....	428
Tableau 44 – Paramètres pour la séquence d'essai SET MAX LEVEL.....	434
Tableau 45 – Paramètres pour la séquence d'essai SET MIN LEVEL.....	435
Tableau 46 – Paramètres pour la séquence d'essai SET SYSTEM FAILURE LEVEL.....	436
Tableau 47 – Paramètres pour la séquence d'essai SET POWER ON LEVEL.....	440